UNIVERSITY OF KWAZULU-NATAL

A GROUNDED THEORY INQUIRY: ESTABLISHING COMMUNITIES OF PRACTICE AMONG HIV/AIDS NURSE PRACTITIONERS THROUGH THE USE OF CRITICAL REFLECTION AT SELECTED HOSPITALS IN KWAZULU-NATAL

JOANNE RACHEL NAIDOO

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A GROUNDED THEORY INQUIRY: ESTABLISHING COMMUNITIES OF PRACTICE AMONG HIV/AIDS NURSE PRACTITIONERS THROUGH THE USE OF CRITICAL REFLECTION AT SELECTED HOSPITALS IN KWAZULU-NATAL

A Thesis submitted to the School of Nursing, Faculty of Health Sciences, University of KwaZulu-Natal in fulfillment of the requirements for the Degree of Doctor of Philosophy (Nursing)

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DECLARATION

I declare that the thesis submitted entitled *A Grounded Theory Inquiry: Establishing Communities of Practice among HIV/Aids nurse practitioners through the use of Critical reflection at selected hospitals in KwaZulu-Natal*, conducted under the supervision of Professor N.G. Mtshali is my original work. I declare that all the sources used or quoted in this study are acknowledged means of references.

_____ _____

Joanne R. Naidoo **Prof. NG Mtshali**

_____ _____

Date **Date**

DEDICATION

This work is dedicated to all nurses working in the field of HIV/Aids, in recognition of their tireless sacrifice and commitment towards eradicating this pandemic.

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And most importantly, reminded by Alexandra singing her school anthem which has become my personal praise anthem….

"NISI DOMINUS FRUSTRA" UNLESS THE LORD BUILDS THE HOUSE, THOSE WHO BUILD IT LABOR IN VAIN (Psalms 107)

ABSTRACT

Introduction: Nurse practitioners in South Africa are challenged daily to provide comprehensive care under resource constrained conditions while at the same time trying to cope with the changes and care strategies related to HIV/Aids. The use of critical reflection within a shared learning space fostered by Communities of Practice is a plausible strategy to support ongoing meaningful learning that can support nurse practitioners to deal with the challenges related to the dynamic nature of HIV/Aids.

Aim of the Study: This study aimed to analyze the processes of developing critical reflective skills and establishing Communities of Practice among a sample of nurse practitioners working in the field of HIV/Aids and to develop a middle range theory which explains the process of establishing Communities of Practice (CoP) among HIV/Aids nurse practitioners grounded in critical reflection.

Methodology: Using a qualitative approach, a grounded theory design guided by Strauss and Corbin (1990) was used. Two district level hospitals from the province of KwaZulu-Natal, was sampled, within which a group of nurse practitioners working in the discipline of maternal and child health was sampled. Data collection was progressive over a period of seven months. The use of focus group discussion, in-depth individual interviews, reflective journals and researcher observation was used to elicit the data. Concurrent with data collection, open axial and selective coding was used to make sense of the data.

Results: The results of this study revealed that there are a number of causal conditions which relates to the need for establishing a CoP and that the process of establishing a CoP requires engagement with the relevant stakeholders and members of the group. Three phases characterized the process of participants becoming critically reflective and a fully functional CoP. The concept of a CoP for HIV/Aids nurse practitioners is made up of core characteristics namely that it is an organic practice space, it promotes flexibility in learning, it is a support network where collaborative purpose driven working occurs and that it promotes learning on demand to name a few. There were also a number of intervening conditions which influenced the process of establishing the CoP and the findings of this study led to the emergence of a middle range theory which is both process and outcomes focused. This theory and its related model, demonstrates that establishing a CoP for HIV/Aids nurse practitioners occurs within a context and is made up of six major concepts namely (i) Context; (ii) Group Formation; (iii) CoP Establishment Process; (iv) Fully Functional CoP; (v) Outcomes; (vi) Sustainability and Continuity, and several sub-concepts.

Conclusion and Recommendation: The recommendations of this study were classified into areas of practice, education and research, with regard to the usability of this theory in encouraging a transformed way of nursing aimed at improving nursing practice. In summary, this research lends insight into the complex challenges of nursing in a dynamic context of HIV/Aids. It further demonstrated that one of the overall outcomes was engagement in evidence informed practice and knowledge stewarding in HIV/Aids knowledge generation.

Keywords: Communities of Practice (CoP); HIV/Aids Nurse Practitioners; Critical Reflection; Transformation; Knowledge Generation; Process; Outcomes.

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-retroviral therapy
ANC	Antenatal Care
ARVs	Antiretrovirals
CD4	Cluster Difference 4 or better known as T-Cells
CoP	Communities of Practice
COSATU	Congress of Trade Uniions of South Africa
CR	Critical Reflection
DENOSA	Democratic Nursing Organisation of South Africa
DoH	Department of Health
FGD	Focus Group Discussion
HAART	Highly Active Antiretroviral Therapy
HIV	Human Immune-deficiency Virus
HST	Health Systems Trust
HSRC	Human Science Research Council
PCR	Phosphocreatine or creatine phosphate
PHC	Primary Health Care
PLHA	People Living with HIV/Aids
PMTCT	Prevention of Mother to Child Health Transmission of HIV/Aids
MDGs	Millennium Development Goals
NSP	National Strategic Plan
SANC	South African Nursing Council
UNAIDS	United Nation AIDS Council
UNDP	United Nations Development Programme
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

CHAPTER ONE

THE PURPOSE AND MOTIVATION OF THE STUDY

1.1 INTRODUCTION

The discourse around the burden of HIV/Aids on the health care system and its impact on health care professionals has been widely discussed in recent times (Woods, Cope and Eley, 2008; Tlou, 2001). Despite significant gains achieved by 2009, such as a 19% global reduction of new infections and a 30% increase in access to treatment (UNAIDS, 2010), HIV/Aids still remains an important health care challenge in South Africa, as is in many Sub-Saharan African countries. The current estimates indicate that there are 5.7 million people living with HIV/Aids in South Africa (UNAIDS, 2010). The high volume of patients attending healthcare facilities places an increased burden on the health care system. Van Wyk (2006) identified that nurses working in hospitals are especially challenged with the burgeoning of HIV/Aids in the workplace. This is supported by the findings of Shisana, Hall and Maluleke, et.al (2003), who reported that almost half of patients accessing care in public hospitals in South Africa were HIV positive.

Exploring HIV/ Aids in the workplace of public hospitals in South Africa, Smit (2005) identified that nurses are increasingly involved with prolonged contact and care of people living with HIV/Aids (PLWHA). Saag (2006) reports that the current demands on health care service providers in terms of the escalating rate of new infections and poor treatment plans is similar to the initial burnout which was experienced during the first reported cases of HIV. The author reports that a second round of burnout is being experienced by health care providers working in

the context of HIV/Aids, due to the incidence and complexity of co-morbid illnesses related to HIV/Aids. Supporting this, Brown, Schultz, Forsberg, et.al (2002) also found that although HIV/Aids care providers in South African public hospitals were burdened with an increase in patient volume, there was a lack of adequate training in HIV/Aids care and treatment plans.

Nurses are challenged on a daily basis trying to provide comprehensive care under resource constrained conditions while at the same time trying to cope with the changes in treatment and care strategies relating to HIV/ Aids. The current health care system in South Africa is continuously challenged by various factors, amongst which are lack of resources and loss of skilled professionals (Ehlers, 2006). The escalating dual epidemic of HIV/Aids and Tuberculosis, further exaggerates the burden on health care workers, especially within the primary health care setting (Shisana et al., 2003; Corbett, Watt, Walker et al., 2003). Studies investigating the state of health care services in South Africa have found that majority of the health care facilities accredited for providing HIV management (namely antiretroviral therapy) are predominately managed and run by nurse practitioners, who are constantly challenged with the demands to keep up with the complex management of HIV/Aids (Matjila, Hoosen, Stoltz et al., 2008; Suri, Gan and Carpenter, 2007).

Practicing in a rapidly changing health care environment, such as in the context of HIV/Aids, it is, therefore, crucial for the HIV/Aids nurse practitioners to respond to these challenges in an innovative way (Hall, 2004). The underlying stressors associated with the changing context of health increases the need for an effective, dynamic and innovative approach to nursing (Williams, 2001). Supporting this, Summer (2010) found that a nurse's capacity and ability to meet the role of being a care provider is sometimes challenged by stressors in the complex and

ever-changing healthcare delivery system. Against this background of challenges, the use of critical reflective practice can be useful in assisting nurses to respond to their changing and challenging context. As explained by Teekman (2000), reflective practice can be useful in moments of doubt and perplexity in nursing practice. Moreover, several authors (Kim, 1999; Smith, 1998; Mezirow, 1990) have established that developing critical reflective skills will support nurses in responding to complex situations and a changing context by equipping them with skills of reframing learning in practice so as to respond to a given situation in a proactive manner. Thus, critical reflection is a plausible means of igniting a new way of thinking to initiate a new way of nursing for nurse practitioners to deal with the challenges associated with HIV/Aids.

Further to this, promoting meaningful learning from critical reflective practices is considered a driver in networking nurses to collectively work through shared challenges (Scott, 2008). Supporting this premise, Lave and Wenger (1991b) suggest the notion of situated learning that is fostered within Communities of Practice (CoPs) to achieve ongoing organizational learning that can support nurse practitioners to deal with the challenges related to the dynamic nature of HIV/Aids.

1.2 BACKGROUND TO THE STUDY

The nature of HIV/Aids and its impact on nursing is multifaceted and complex, as outlined by Matjila et al., (2008). To unpack this complexity, the background of the study will focus on the various dimensions of HIV/Aids and its impact on the health care system and nursing care.

1.2.1 The state of HIV in South Africa

Despite a 19% global decline of new infections over the past decade (UNAIDS, 2010), the prevalence of HIV/Aids in South Africa (SA) places a burden on an already fragile health care system, especially in light of an estimated 5.7 million people living with HIV/Aids (UNAIDS, 2010; Dorrington and Bourne, 2008). Ongoing prevalence monitoring in the form of the national antenatal HIV sero-prevalence survey, which is conducted annually among pregnant women between the ages of 15-49 years, and the national population or household based surveys (DoH, 2010b; Shisana et al., 2003), paints a picture of the state of HIV prevalence and incidence in SA. In 2009, the national prevalence report noted above, indicated that the overall national HIV prevalence among ante-natal women aged 15-49 years was estimated at 29.4%; and the HIV prevalence among adults (i.e. between the ages of 15-49 years) was 18.3% and that, among all provinces, KwaZulu-Natal had the highest HIV prevalence of 38.7% among pregnant women (DoH, 2010b). In light of previous indicators and surveillance, the national estimate and provincial figures between the periods 2008-2010 have stablized, with the HIV prevalence among women in the age group 30-34 years showing a 1% increase (39.6% in 2007, 40.4% in 2008 and 41.5% in 2009) and the HIV prevalence among the 15-24 year olds remaining unchanged from the 2008 national data, with an estimate of 21.7% (UNAIDS, 2010; DoH, 2010b; Shisana, Rehle, Simbayi et al., 2009).

According to the National Department of Health, SA (2010b), the HIV epidemic experienced in the country can be considered a hyper-epidemic and the current prevalence can be attributed to the modes and the drivers of the HIV transmission within the general population (DoH, 2010b). Empirical evidence, in the form of annual HIV surveillance reports, agree that the predominant modes of HIV transmission in SA is through heterosexual sex, followed by mother- to- child

transmission, and that the main drivers contributing to the prevalence include migration patterns, the perceived risk of infection and multiple concurrent partners (DoH, 2010b; Shisana et al., 2009; Dorrington and Bourne, 2008).

According to the Human Science Research Council (HSRC), the state of HIV research in South Africa, which offers an empirical understanding and explanation of the physiological, psycho-social and behavioural facets of the impact of the disease, has improved enormously in the past two decades, especially between the periods 2003-2008 (HSRC, 2008). HIV/Aids prevalence and behavioural risk research, such as the national population-based and household HIV-prevalence survey (Shisana et al., 2003; Shisana and Simbayi, 2002) and the annual antenatal HIV prevalence studies (DoH, 2009) and (Rehle, Shisana, Pillay et al., 2007), have significantly illuminated the trends and patterns of the HIV/Aids related morbidity and mortality figures in the country. Such empirical evidence has helped in organizing targeted and coordinated HIV mitigation responses which has had a significant impact on the uptake of antiretroviral access in South Africa. The UNAIDS report for 2008 indicated that in South Africa, as of the end of 2007, 364 public health facilities, which serve more than 80% of the metropolitan and local authority areas, were providing access to antiretroviral treatment (ARTs). This is in comparison to the 273 health care facilities that were accredited as providing access to ARTs at the end of 2006 (UNAIDS, 2008); and (Ruud, Srinivas and Toverud, 2009).

1.2.2 The socio-political context of health and HIV/Aids in South Africa

Various global initiatives have been implemented in response to the complex nature of HIV/Aids care and treatment. These include the World Health Organization's (WHO) "3 by 5" initiative strategy to upscale access to antiretroviral therapy, which was aimed at getting antiretroviral

coverage to more than 3 million people by 2005, and the WHO Standards of HIV/Aids Care and Management for nurse practitioners (UNAIDS, 2010). UNAIDS also introduced "Treatment 2.0", which is a new approach to simplify the way HIV treatment is currently being administered and to scale up access to treatment and The Millennium Development Goals (MDGs) outlines key priority areas that are aimed to reduce HIV by 2015 (UNAIDS, 2010).

UNAIDS also introduced "Treatment 2.0", which is a new approach to simplify the way HIV treatment is currently being administered and to scale up access to treatment and The Millennium Development Goals outlines key priority areas that are aimed to reduce HIV by 2015 (Coovadia, Jewkes, Barron et al., 2009). Many of these changes have been influenced by the White Paper on the Transformation of Public Services (DoH, 1997), and geared towards creating equitable, efficient and effective health care services. Specific health care plans include the Primary Health Care Act: Healthy Nation 2006-2009 (DoH, 2006); the National Strategic Plan for the management of HIV/AIDS and STI's in adults (NSP); the National Strategic Plan for the Prevention of Mother to Child Transmission (DoH, 2009; DoH, 2007; DoH, 2002) and the National Health Act of 2003 (DoH, 2004). All of these policies served as a vehicle for establishing district health services by regulating the core responsibilities of the national and provincial health departments and the health district and health councils of each province (Coovadia et al., 2009; Matjila et al., 2008).

Many efforts have been made from a political and governmental standpoint in terms of policy development over the past two decades in response to both the global imperatives and containing the surge of HIV/Aids in the country (DoH, 2010b). Highlighted in the 2010 National surveillance on HIV/Aids and STI's (DoH, 2010b), the national budget allocation for HIV/Aids

has risen from R4.3 billion in 2006/2007 to R5.4 billion in the 2010/2011 financial year; and there has been a revision to the guidelines for the initiating HIV treatment so as to increase access and improve patient outcomes (DoH, 2010b). The HIV/ Aids and STI National Strategic Plan for South Africa, 2007-2011 (NSP) highlighted that the South African government committed itself in 2007 to addressing the HIV/Aids epidemic. This document has subsequently been revised in the form of the National Department of Health Strategic Plan (2010/11-2012/13) and contains a 10 Point Plan that seeks to create a well functioning health care system capable of producing improved health outcomes (DoH, 2010b; National Department of Health, 2010; DoH, 2007).

The overarching goals of the NSP are to address four priority areas in terms of HIV/AIDS, being: i) prevention of HIV infection; ii) provision of treatment, care and support; iii) access to justice and maintenance of human rights; and iv) monitoring, evaluation, surveillance and research. On further exploration of the NSP, it becomes evident that point (ii), of providing treatment care and support is primarily focused on patient needs, with very little attention given to nurses or health care providers' level of preparedness to comprehensively manage HIV/AIDS. This seems discordant, especially in light of the fact that public health care facilities offering Voluntary Counseling and Testing (VCT) increased from 88% in year 2005-2006 to 90% during the period 2006-2007 and that all public primary health care facilities currently offer access to Prevention of Mother-to-child Transmission Programmes (PMTCT), (WHO, 2008), the latter of which is compounded by the introduction of dual therapy earlier in 2008 (DoH, 2008).

A comparative multi-country study conducted by Dawad and Veenstra (2007) regarding the context of HIV/AIDS found that in South Africa, many health districts were finding it difficult to

deliver effective health care through the centralized local governments, and that many district health managers were battling with the task of defining their district health needs, which was further exacerbated by their (district health managers) lack of autonomy to place HIV/AIDS in the context of health priorities. These findings were congruent to other empirical studies which suggest that there are huge barriers to the implementation of relevant care and policies when a health care system which is responsible for HIV/Aids access and continuation of care is fragmented by pathways of referral (Kraak, 2008; Van Wyk, 2006; Smit, 2005). The Democratic Nursing Organization of South Africa (DENOSA), participated in a task shifting workshop in 2008, which was a consultative process with the Health System Trust of South Africa (HST) and the Congress of Trade Unions of South Africa (COSATU), with a collective membership of more than 65 000 nurses. At the workshop, DENOSA indicated that the major challenge of the clinical management of HIV/AIDS is the inadequate number of skilled health care workers. It was also noted at the workshop that in South Africa, only ten out of every fourteen professional nurse posts are filled and that, on the whole, the African region has a shortfall of 817 992 health care professionals. This means that that the existing health care professionals have to compensate for this shortfall by assuming duties that are beyond their professional scope (task shifting) (DENOSA, 2008). The report further noted that, especially in the rural facilities, many professional nurses, who are not adequately trained in HIV management, are currently performing tasks in the comprehensive management of HIV/Aids that doctors should be performing, due to the inadequate numbers of doctors in some of these primary health care facilities (Woods et al., 2008; DENOSA, 2008; HST, 2000).

1.2.3 The Demands on the Nurse in the context of HIV/Aids

The dynamic nature of HIV/Aids policies and care and training has put enormous pressure on nurse practitioners to cope with these changes. Several studies have found that because of the dynamic nature of HIV/Aids, a lack of preparation in terms of care and treatment policies altered nurses experiences in their profession (Hall, 2004; Adebajo, Bamgbala and Oyediran, 2003; Hall and Shisana, 2003). In particular, Ijumba (2008) described that the lack of training among nurses was related to their inability to provide quality patient care. Schietinger and Daniels (1996) found that weakness in the education of nurses in the discipline of HIV/Aids impacted on their attitudes and willingness to work in HIV related care. Moreover, health care workers are often thrown in the deep end without receiving adequate, on-going training and supervision (Dageid, Sedumedi and Duckert, 2007). Shisana et al., (2003), in their investigation of the impact of HIV/Aids on the SA health sector, found that a third of health workers reported heavy patient workload, staff shortages and low salaries as indicators of poor job satisfaction. Various authors have researched the experiences of nurses in SA and have described the negative impact HIV/Aids is having on the health sector (Kraak, 2008; Mackintosh and Tibandebage, 2000). These authors describe how nurses felt overloaded and ill-prepared to cope with the challenges of HIV/Aids care and suggest that the overwhelming conditions that nurses have to function in could lead to a ‘culture of abuse’ in which health workers might direct aggression, disrespect and insensitive behaviour towards HIV positive patients.

In a national survey exploring the impact of HIV/AIDS on the health sector, Shisana et al., (2003) found that among professional nurses working in both private and public health care facilities in South Africa, only one third (31.2%) of the nurses who participated in the study had received training on HIV/AIDS management and its transmission. This lack of training and

support in HIV/Aids management, coupled with the stigma and secrecy surrounding HIV/AIDS, impacted negatively on the nurses' ability to do their work, especially in terms of counseling and educating people (Shisana et al., 2003).

1.2.4. The Impact of HIV/Aids on Human Resources (HR) in Southern Africa

i. The management of antiretroviral therapy is primarily nurse driven (Hall, 2004). General nurses with inadequate training in comprehensive HIV care and management are relied upon to deliver antiretroviral treatment, provide and promote HIV counselling and testing and treat opportunistic infections (Bateman, 2007). The task of nurses caring for people living with HIV or AIDS (PLHA) is an ever-increasing challenge for a number of diverse reasons. These include: The shortage of health care workers. According to 2009 statistics for the South African Nursing Council (SANC), there are currently 24,360 registered nurses in the province of KwaZulu-Natal, which equates to a nurse-patient ratio of 437:1 (SANC, 2010). In a needs and gap analysis of human resources for health in South Africa, Geroge, Quinlan and Reardon (2009) found that in the master list of scare and critical skills reflected from the Department of Labour in South Africa, there was a shortage of 14,370 nurses. Benatar (2004) found that there was a shortage of qualified health care workers in the rural areas, despite the attraction of the rural allowance that health care workers can receive for working in such areas. They suggested that the heavy workload was a major contributing factor for this. Van Damme et al., (2006) add to this dialogue by showing that the lack of a comprehensive human resource strategy to meet the inclining health needs of the population is a major challenge facing the African public health system;

ii. The increasing number of HIV positive nurses. The HSRC human resource planner for 2007 showed that there were 18.9% nurses living with HIV. In light of the 1,896 nurses the colleges graduate annually, this translates to 2,745 nurses having Aids related illnesses (HSRC, 2008);

iii. New co-morbid illnesses, such as XDR-TB and rapid changes in the treatment plans (DoH, 2007; Liljestrand, 2004) and

iv. The increasing complexities and challenges of HIV mitigation strategies, such as behavioural interventions (HSRC, 2008); and the secrecy and sigma surrounding HIV that confront nurses with ethical dilemmas and deter them from HIV prevention strategies (Hall, 2004).

The National Strategic Plan (NSP) (DoH, 2007) notes that the greatest challenge for health care professionals and the epidemic of HIV/AIDS is the attainment of a minimum standard for health care service delivery, and that the changes in HIV treatment policies contribute largely to this challenge. The lack of knowledge or techniques of keeping abreast with such rapid changes in HIV/Aids care and practice may have grave consequences for nurses. Hall and Shisana (2003) recognize that measures need to be taken, especially in the nursing education curriculum, to address the disparity of nurses' HIV related knowledge and skills and their clinical practice. Smit (2005); and Kalvermark et al., (2004) note that as the health care system changes and becomes more complex due to HIV/Aids, the nurses feel inadequate to keep up with these changes, thus increasing their occupational stress. In most instances, it is their knowledge inadequacy that places nurses in a situation that impacts negatively on their ability to function competently and makes them feel apprehensive when nursing a patient with HIV/AIDS.

In one province, the Western Cape, Professor Bekker of the Desmond Tutu Foundation for HIV/AIDS piloted a mentoring programme in 2006 to support nurses to meet and keep up with the challenges of HIV care and prevention and improve their competencies in dispensing ARTs (DENOSA, 2008). However such measures are too few in light of the acceleration of ART roll-out in the public sector and the ever changing HIV treatment and care plans.

1.2.5 The role of critical reflection in practice development

The United Nations Development Programme (UNDP) Report (2010) recognizes that, in light of the current state of HIV care and treatment, it is time to rethink theory and practice. The report further expounds on the need for a paradigm shift to be made in response to the nature of the HIV epidemic, the human development needs and the burden on the health care system. Banuri and colleagues (cited in United National Development Plan, 2010) notes that a new approach should be geared around understanding social learning, transforming individual's perceptions and promoting a sense of personal empowerment to sustain human capital and develop an effective work practice that responds to the HIV epidemic. The same report further explains that transformation is essential in development, especially in terms of human development (such as with health care professionals); and recommends that structures and processes that promote people to becoming critically aware of their practice can result in social change. Translating this within the background which presented the dynamic nature of HIV/Aids and the challenges this poses on the HIV/Aids nurse practitioners, the use of critical reflection can be used as a mechanism to foster critical thinking and enhance problem solving abilities (Tate and Sills, 2004).

Kim (1999), in her work relating to critical reflective inquiry in nursing practice, found that the knowledge yielded through critical reflection is often tailored to the specific situations and that the knowledge generated through the process of critical reflection in action was found to be the most beneficial in her sample of nurses that were studied, since it was contextually appropriate and was meaningful for their practice.

1.2.6 The mechanism of CoP in transforming practice

The impact of changes within the health care systems, such as those highlighted earlier in the context of HIV/Aids, is associated with various pressures, which increase the need for an effective, dynamic and innovative approach in nursing, one with a holistic approach to care that is embedded in evidence based practice. The changes in health, which is associated with the changes in HIV care and managements, demands a paradigm shift in nursing, one that moves away from the traditions of the biomedical model and approach to nursing towards a transformed collaborative way of nursing. To promote accountability and improve on professional skills and expertise, nurses need to continually update their knowledge within their specialized area of training and work. Although ongoing formal training for nurses is widely available, time and lack of financial resources are all too often barriers to nurses making use of such opportunities to upskill themselves through this route. The workplace, where nurses spend most of their time engaging in clinical practice and care, therefore, should become the field of ongoing learning (Sim and Radloff, 2008).

Lave and Wenger (1991b) suggested the idea of situated learning that is fostered within Communities of Practice (CoP) to achieve ongoing organizational learning. Communities of practice promote collective learning through shared existing expertise and experiences.

Underpinned by Mezirow's (1978) theory of transformation, communities of practice are considered useful to promote social and collective learning and professional development within organizations (Boud and Middleton, 2003). In a review of 87 empirical studies between the period of 1999-2005,Taylor (2008) suggested three circumstances in which the Transformational Learning Theory can be used effectively in creating change which included: (i) a sudden or gradual disorientating dilemma requiring a change process to be initiated; (ii) circumstance where a new way of viewing life experiences and situations is required in order to provoke renewed action or to promote a perspective change; and (iii) circumstances where through critical reflection and discourse among trusted others change is part of a larger organizational or societal mandate to bring about a transformed way of learning.

Based on the premise explained by Coakes and Clarke (2006), CoPs are becoming a core knowledge strategy that should be used in all organizations. These authors further explain that through individuals coming together to share and learn from each other, they form a group (CoP) which is held together by their common interest, their experiences and problems are shared and a new body of knowledge with improved best practices is created.

1.3 THE PROBLEM STATEMENT

The high incidence of HIV infection among the profile of patients being treated by nurses is a challenge for an already depleted human resource pool of nurses (Van Wyk, 2006). Nurses are currently struggling to keep up with the demanding challenges experienced amidst the changing profile of HIV/Aids care and the nature of clinical care required to address the HIV pandemic. A new way of supported learning that fosters reflective and critical way of nursing is required. Simpson and Courtney (2002) concluded that in order for nurses to function effectively in a

rapidly changing health care context and to meet the demand for their own accountability in practice, nurses need to execute a range of higher thinking and functioning skills, which is fostered through critical reflection. Supporting this argument, authors such as Black and Plowright (2010) and Tate (2004) suggest that the use of critical reflective practice enables nurses to increase their current knowledge base and enhance nursing clinical practice.

1.4 THE PURPOSE OF THE STUDY

The purpose of this study was two-fold. Firstly the research aimed to analyze the processes of developing critical reflective skills and establishing Communities of Practice among a sample of nurse practitioners working in the field of HIV/Aids. Secondly, the purpose of this study was to develop a middle range theory which explains the process of establishing Communities of Practice (CoP) among HIV nurse practitioners grounded in critical reflection.

1.5 OBJECTIVES OF THE STUDY

The objectives of the study were to:

1. Analyze the process of developing critical reflective skills among HIV nurse practitioners;
2. Explore the process involved in the establishment of CoPs among HIV nurse practitioners;
3. Explore the experiences of nurse practitioners' exposure to critical reflective practice and their engagement in the CoPs; and
4. Develop a middle range theory describing the process of establishing CoPs among critically reflective HIV nurse practitioners.

1.6 RESESEARCH QUESTIONS

1. What is the process of developing critical reflective skills among HIV nurse practitioners?
2. What process is involved in the establishment of CoPs among HIV nurse practitioners?
3. What are the experiences of nurse practitioners exposure to critical reflective practice and their engagement in CoPs?
4. What are the potential theoretical and conceptual constructs of a middle range theory that describes the process of establishing a CoP among critically reflective HIV nurse practitioners?

1.7 SIGNIFICANCE OF THE STUDY

The HIV epidemic has illuminated many challenges for nurses. Moreover, it has widened the gap of lack of cohesion between nursing practice and the use of current appropriate discipline specific knowledge and skills to provide optimum nursing care (Woods et al., 2008). Furthermore, Lewis (2005) also noted that the greatest challenge of the HIV epidemic is creating a new ontology of caring and that in the fight against HIV/Aids, there needs to be a change in behavior, action, thinking and underlying consciousness about the way in which care is rendered. Plack and Greenberg (2005) stated that research on the process of using critical reflection in clinical practice needs to be facilitated to demonstrate its usefulness in reaching excellence in clinical practice among health care practitioners. The results of this study will add significantly to this discourse as it aims to explain that the use of critical reflection can be fostered in the social learning environment of CoPs. This will facilitate the process of a new ontology of nursing in the discipline of HIV/Aids and add to the discourse of how a more reflective and conscious

nurse practitioner can be supported and transformed through critical reflective practice within communities of practice.

The development of a middle range theory will explain the constructs, relationships and the process of how critical reflective nursing practice is developed and shared among like-minded professions within the structure of a CoP. In the form of a generalized middle-range theory, the study contributes not only to nursing practice in the discipline of HIV/Aids, but to the profession of nursing at large. Changes in any sphere, be it nursing management, education or any clinical discipline in nursing science, is unavoidable (Parse, 1999). Drawing from this premise of the dynamic nature of nursing, the emergent theory of this study will provide a platform for nurses to establish communities of practice of critically reflective health care professionals, as a vehicle to transform professional learning and behaviour and to create a paradigm shift to deal with the changing context of that discipline.

Further to this, use of CoPs is relatively new to the discipline of healthcare and more specifically to nursing issues (Berry, 2011). Very few, if any, studies are available in South Africa, that assess whether the development of critical reflective skills fostered in CoPs provides ongoing and sustainable support for the nurse practitioner that will foster lifelong learning skills of critical thinking and experiential learning. Understanding the relationship and benefit of fostering critical reflective nurses within a CoP can provide insight into how this model can be used in other disciplines where the availability of ongoing training is not feasible due to constrains such as staff shortages, time and funding.

1.8 OPERATIONAL DEFINITIONS

The following terms were operationally defined, to show the context in which they were used for the purpose of this study:

1.8.1 HIV/Aids Nurse Practitioner: As defined by the South African Nursing Council (2005), a registered nurse (RN) or a professional nurse (PN) is an individual who has completed a four year programme at university or a nursing college. This person is educated and competent to practice comprehensive nursing and midwifery. For the purpose of this study, a HIV nurse practitioner referred to a registered nurse working in a HIV unit within a hospital or an out-patient facility within a hospital. The health care facility must offer comprehensive HIV care that provides ART, counseling and comprehensive treatment of opportunistic infections.

1.8.2. Critical Reflection: Dewey (1933) cited in Boud and Walker (1985) states: "*while we cannot learn or be taught to think, we do have to learn how to think well, and acquire the general habit of reflecting"*. Since the early writings of Dewey, many authors such as Schön (1987) and Benner (1984), to name a few, have defined this term in the discipline of philosophy, education and nursing practice. The definition offered by Bough, Keogh and Walker (1985: 3) was considered appropriate for this study. These authors refer to critical reflection as "*intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciation of practice"*.

Mezirow (1990); and Brookfield (1995) added that while all reflection implies an element of critique, for reflection to be "critical reflection" it has is facilitate the ability of uncovering own assumptions and beliefs of a phenomenon and uncover the dynamics of power relationships which have interplay in the phenomenon of interest. Drawing from these definitions, for the

purpose of this study the term critical reflection was defined as the activities that the nurse practitioners engaged in to unpack their own assumptions of nursing care and HIV/Aids, and critically explore experiences to foster learning and insight for future clinical action.

1.8.3.Communities of Practice (CoPs): Defined by Wenger, McDermott and Snyder (2002: 7), a CoP is *"a group of people who share a concern, a set of problems, or a passion about a topic and who deepen their knowledge and expertise in this area by interacting on an ongoing basis"*. The concept of CoP stems from Bandura's (1977) theory of Social Learning, since the interplay of the cognitive, behavioural and environment in how knowledge is acquired is integral to the process of the CoP . Thus, in light of this, in the context of this study, the term CoP referred to a group of nurse practitioners working in the field of HIV/Aids, who come together in the formal structure of a group, to critically reflect on and share experiences, information and ideas regarding the nature of nursing practice

1.8.4. Process: Defined by Chinn and Kramer (2008), a process refers to a systematic series of actions directed to some end point; it can also be explained as continuous action or series of action taking place in a definite manner. In this study, the term process was unpacked for the two core concepts of this study, those being critical reflection and CoPs. For critical reflection, the term process refers to the activities and actions occurring within the participants to show progression in the critical reflective practice. In the context of CoPs, the term process describes the activities and stages of group formation and cohesion. It further describes the actions taken by the individual members to work towards collective goals and purposes in the discipline of HIV/Aids nursing care.

1.8.5. Middle Range Theory: As per the guidelines of Strauss and Corbin (1990), a middle range theory refers to a set of constructs, themes or set of relationships that offers an explanation of the phenomenon. In the context of this study, the middle range theory offers an explanation of the relationship between concepts, constructs and variables that describe the process of planning and establishing a CoP among the critically reflective HIV nurse practitioners.

1.8.6. HIV/AIDS Nursing Practice: Defined by the UNAIDS (2008) and the HIV/Aids and STIs National Strategic Plan for (2007), HIV/Aids nursing practice in the context of this study will refer to the provision of preventive, diagnostic and therapeutic intervention and treatment to individuals, families and communities, aimed at reducing the burden of HIV and Aids. Furthermore, HIV/Aids nursing practice refers to providing comprehensive pre and post-test counseling, initiating antiretroviral therapy, monitoring and evaluating for side-effects and adherence, and ensuring continuity of care.

1.9 CONCLUSION

This chapter presented the state of HIV/Aids in South Africa and explained the effect that the high prevalence of HIV/Aids has on the nature of nursing practice. Challenges faced by nurse practitioners working in a unit that has frequent HIV contact and care included working with a depleted pool of nurses and limited knowledge and training on HIV/Aids. These were compounded with the dynamic nature of clinical policies and guidelines that underpin HIV/Aids nursing practice. To address these challenges, the usefulness of critical reflection as a strategy was presented. Empirical evidence describing the benefit of critical reflection in supporting nurses in problem solving was presented. The concept of networked learning and social learning through Communities of Practice was also presented.

1.10 STUDY OVERVIEW

The study is represented in the following chapters.

Chapter 1: The background, aims and objectives; problem statement and significance of the study is discussed.

Chapter 2: A brief presentation of technical literature of the main study concepts have been reviewed and presented.

Chapter 3: The research paradigm; methodology; design; theoretical sampling techniques; data collection and analysis; issues of trustworthiness and ethical principles of the study were discussed.

Chapter 4: A presentation of the main study findings is discussed as per the structure of Strauss and Corbin's (1990) paradigm model

Chapter 5: The discussion of the main study findings in light of empirical evidence is presented

Chapter 6: The emergent theoretical model and middle range theory of the process of establishing a CoP is presented as well as the study conclusion, recommendations and limitations.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

Strauss and Corbin's (1990) method of conducting grounded theory research is very explicit about the use of literature. Herein, the authors state that the core function of grounded theory is aimed at *"discovering categories and relationships and putting them back in new innovative ways as opposed to standard ways"* (Strauss and Corbin, 1990: 49). These authors suggest that "technical literature" is useful in terms of stimulating theoretical sensitivity to the research phenomenon as it can provide a source from whence questions to direct theoretical sampling of the concepts and categories of the emergent theory can be drawn (Heath and Cowley, 2004; Stern, 1994; Strauss and Corbin, 1990).

Strauss and Corbin (1990) stipulate that technical literature may only be used during the conceptualization phase of the study to stimulate theoretical sensitivity and to provide some kind of loose theoretical or philosophical structure to the study, as the phenomenon being researched may be steeped in existing theories. Being mindful of the fine interplay of researcher bias that may jeopardize the authenticity and credibility of the research finding, Strauss and Corbin (1990); Heath and Cowley (2004); and Stern (1994), caution researchers to delay an extensive literature review until after data collection, analysis and emergence of theoretical concepts. Supporting this Morse and Richards (2002: 169), state that the integrity and validity of the study will be maintained as the researcher will not be *"seeking out what the literature suggests"*.

In this study, the process of utilizing theoretical and empirical literature, also referred to as technical literature in grounded theory litereature (Strauss and Corbin, 1990) was conducted in two phases. For the purpose of theoretical sensitivity and to avoid researcher bias, only an overview of the philosophical and theoretical underpinnings of critical reflection and communities of practice were briefly reviewed. The structure of this literature review is, therefore, presented in two distinct parts; critical reflection and communities of practice.

2.2 UNDERSTANDING CRITICAL REFLECTION

There is increasing popularity of the use of reflection and critical reflection in various professional disciplines, especially in nursing, adult education and organizational or management learning (Woerkom, 2010). In the dynamic and progressive context of nursing, reflective practice is noted as being integral in the development of nursing, due to the changing profile of health consumers and more complex disease profiles which impact on the psychosocial domains (Hannigan, 2001; Williams, 2001; Kinsella, 2000). Explained in various texts, reflection is seen as a tool for learning and is considered essential to allow for interconnections between what is observed and past experiences and reconstructing meaning through engaging with a deep approach to learning fostered through reflection (Boud, Cressey and Docherty, 2006; Kinsella, 2000; Boud and Walker, 1998; Boud et al., 1985). First introduced in the work of Schön (1983), reflection is considered integral in the learning process as it moves learning beyond knowledge acquisition to a renewed paradigm of ‘learning as development’ (Loughran, 2002).

Despite the popularity of reflective practice and critical reflection in the discourses of professional and organizational learning within the disciplines of nursing, education and management, to name a few, it is noted in the corpus of this evidence that the terms ‘reflection’

and ‘critical reflection’ have becomes confused and have been used interchangeably, despite their different ideologies and theoretical assumptions (Woerkom, 2010; Burton, 2000; Brooks, 1999; Reynolds, 1998). Reflective practice defined by Schön (1983) as thoughtfully considering one’s own experiences and building on those experiences by applying knowledge to practice. Brookfield (2000) argues that critical reflection is underpinned by emancipatory assumptions of learning and education and expresses a deeper more liberating way of learning, wherein assumptions and worldviews are challenged such that knowledge through critical reflective thinking and practice evokes a paradigm shift.

Critical reflection and reflective practice are underpinned by various learning theories, especially in the field of adult learning. To explore these further, the following sections will briefly discuss the philosophical underpinning and the education learning theories influencing critical reflection.

2.2.1. The philosophical thread of critical reflection: Critical Social Theory

Critical reflection is underpinned within the philosophy of critical social theory and guided by the proponents of constructivism (Kinsella, 2007; Leonardo, 2004; Boud et al., 1985). After the First World War, philosophers from the Institute of Social Research, described as the Frankfurt School in Germany, combined their efforts in developing a social theory (Boychuk Duchscher, 2000; Romyn, 2000; Holter, 1988). Philosophers such as Horkheimer, Marx and Adorno attempted to resolve the previous unsuccessful attempts of combining capitalism and socialism by creating a new approach to social development which challenged previous truths and assumptions of knowledge and power at the time (Boychuk Duchscher, 2000; Romyn, 2000; Lorenson, 1988; Mezirow, 1981). The purpose of the theory was to present a transformed way for social development, one that challenged the traditional assumptions of knowledge, truth and

power (Boychuk Duchscher, 2000; Hugh, 1989). Subsequent to this, Habermas (1987; 1978) further developed the theory and popularized it by explaining how it facilitates in understanding how individuals develop deep symbolic meanings by the way they interact with their world and uncover social disparities that may impede free social interaction (Kinsella, 2007; Boychuk Duchscher, 2000; Brookfield, 1995). In light of Habermas' contribution, the critical social theory was regarded as a significant contributor in terms of emancipatory thinking and action among sociological thinkers (Parkin, 1996; Stevens, 1989; Holter, 1988).

Critical social theory became popularized in terms of the contribution it has had in interpreting social and human behavior. The epistemological stance of the theory maintains that knowledge is socially constructed and is relevant in the lived experiences of individuals (Boychuk Duchscher, 2000; Parkin, 1996; Brookfield, 1995; Campbell and Bunting, 1991). Within the humanistic paradigm of nursing, critical social theory is useful in terms of its practical significance and application to emancipatory attributes (Boychuk Duchscher, 2000). For Habermas, emancipatory practice was understood as being congruent with autonomy and responsibility (Boychuk Duchscher, 2000; Adler, 1997). Habermas' work further expounds that emancipation and the behaviour thereof can be achieved through reflection, as the individual goes beyond the structurally frozen norms and ways of thinking towards a liberated way of reconstructing meaning and self knowledge (Brookfield, 1995; Lorenson, 1988; Mezirow, 1981).

Based on the philosophical underpinning of critical social theory, Argyris and Schön (1974) and Schön (1987; 1983) enlightened scholars on the work of critical reflection, especially in the field of education. Supporting the significance of critical social theory to nursing practice and nursing education, Boud, Keogh and Walker (1985); Argyris and Schön (1974); Boud and Walker

(1998); and Campbell and Bunting (1991) noted that reflective practice, which is underpinned on critical social theory, is seen to be emancipatory for professional development and thus changes and reforms society and societal issues and offers a new discourse of professional development. Browne (2000) found that critical social theory is increasingly being used in nursing inquiry and offers an avenue for changing normative aspects of a phenomenon and thus serves a catalyst for empowerment and social transformation.

Thus within this philosophical base, critical social theory provides a deconstructive and constructive framework for the practice of critical reflection, as meaning is continuously altered by the individual. Kincheloe and McLaren, (1994) cited in Crowe and O'Malley (2006), describe the emergence of critical reflection as a process that involves deliberate dialogue and discourse. Critical reflection makes use of reflective procedures such as journals and reflective discourse sessions, which facilitate deconstructing and reconstructing social structures. This serves as a means of emancipating nursing by transforming the current practices into new behaviour, practices and beliefs. Similarly, Holmes, Cockburn-Wootten, Motion et al., (2005) favour the application of critical social theory as it facilitates the existing conditions with the aim of transforming knowledge and social contexts through the use of reaction and action. Moreover, Calhoun (1995) asserts that critical social encourages individuals to critically reflect on their experiences in a social context as a means of knowledge generation. Benner (1985) also encapsulated the significance of critical social theory and the emancipatory proponents of the theory to nursing practice by suggesting that through reflective practice the relationship of nursing theory and practice is made more meaningful.

2.2.2. The theoretical ties of John Dewey and Donald Schön

Most literature on the discourses of reflection and critical reflection refer to Donald Schön as being the key author for developing and popularizing the use of reflective practice, especially in the context of professional practice learning (Kinsella, 2007; Freshwater, 2004; Teekman, 2000). There is also recognition, however, of the contribution of John Dewey (1933; 1916) in terms of reflective practice. Various authors have recognized John Dewey's contribution of experiential learning in nursing education and the great similarities between Dewey and Schön's interpretations of reflective practice (Erlandson and Beach, 2008; Kinsella, 2007). Donald Schön, who completed his doctoral dissertation on John Dewey's Logic Theory, acknowledged that are great parallels between his work on reflective practice and Dewey's assumptions on experiential learning in education (Kinsella, 2007). According to Dewey (1933), cited in Boud, Keogh and Walker (1985: 4), *"while we cannot learn or be taught to think, we do have to think well, especially to acquire the habit of reflect"*.

Using Dewey's theory of inquiry as a framework, Schön theorized that reflective practice in education was a mechanism for the process of learning in organizations which ultimately led to the development of critical and self reflecting practices. As explained by Schön (1991), reflective practice allows an individual to link the process of thinking and seeking information to build a repertoire or collection of ideas, resources and practice examples that can be used for further action. Dewey's theory of inquiry is also aligned to reflective practice, wherein the structured reflective action of "reflection on action", which entails deliberately looking back on one's experience, allows the individual practitioner to construct meaningful knowledge for future action (Schön, 1991; Boud et al., 1985).

Kinsella (2007) describes that like Dewey, Schön presents a view that challenges the traditional worldview that knowledge is generated from outside the individual, arguing that knowledge generation and the individual are intertwined. Moreover, Kinsella (2009; 2007); and Erlandson and Beach (2008) liken the work of Schön to Dewey by stating that as Dewey transformed education in terms of experiences of the learner and the educator, Schön draws attention to the experiential world of the practitioner in light of reflective practice and knowledge development. Another similarity of Schön's work to Dewey's is in relation to experience and education, as both highlight that the individual is in a transactional relationship with their situation and can resolve problems by first returning to the experience of the practitioner (Timmins, 2008; Erlandson and Beach, 2008).

While Schön's work on reflective thinking was influenced by the earlier work of Dewey and Kolb's (1984a) experiential learning, he did not only focus on the process of learning, but extended his theory to incorporate the outcome of the learning process (Teekman, 2000). In Schön's seminal works, namely *The Reflective Practitioner* (1983) and *Educating the Reflective Practitioner* (1987), he challenges the previously held assumption called *technical rationality.* This assumption states that professionals, who are natural problem solvers rely on technical means to solve their problems, should rather apply theory or scientific evidence to address challenging problems (Kinsella, 2009; Kinsella, 2007). Schön's idea of reflective practice transforms the idea of technical rationality by presenting a new way of viewing professional knowledge as developed from the perspective of the practitioner, and reflected in the practitioner's actions (Schön, 1987). Reflective thinking requires a continual evaluation of beliefs and assumptions about truths of the individual's reality (Schon, 1983). Knowledge in the context of reflective practice was described as two entities, namely technical rationality and

professional artistry. Technical rationality refers to the knowledge that is gained through research or empirical evidence, while professional artistry refers to intuitive knowledge or "knowing". Schön's notion of knowledge in terms of professional development was that the connection between theory and practice (technical rationality) was not enough and did not answer the demands of practice (Erlandson and Beach, 2008). It is further noted that both sources of knowledge (i.e. technical rationality and professional artistry) are essential in becoming a reflective practitioner (Boud and Walker, 1998; Boud et al., 1985; Schon, 1983). The concern of practice problems is not to be studied, but rather the problematic situations which are embedded in uncertainty (Boud et al., 1985). It is from this viewpoint that Schön developed his work on reflective practice, and coined two concepts which explained reflective practice, namely "reflection in action"; which refers to the reflective thinking while an individual is in action, and "reflection on action" which refers to reflection that occurs after the experience (Boud and Walker, 1998; Schon, 1983).

Against this background, Schön's work offers an approach of practice through the formulation and analysis of a distinct structure of reflection in action (Rolfe, Freshwater and Jasper, 2001). Schön (1983) stressed that individuals or professionals need to continuously change and transform in conjunction with the changes that the environment presents. Thus, the learning system (which may be defined as the environment in which the individual operates and functions) ought to be dynamic and capable of transforming. Schön believd that every individual has ways of knowing that offers them a way for change and learning (Kinsella, 2007; Boud et al., 1985). Schön (1983) further explains the reflective practice as *"a process that involves looking at ones experiences, feelings and embedded theories and using all of this to build new*

understandings to inform ones actions in the situation they may find themselves in."(Schon, 1983: 152).

2.2.3. David Kolb's Experiential Learning Theory and its influence on reflective practice

Kolb's experiential learning theory (1984a) provides a theoretical underpinning for critical reflections, since, as explained by Boud, Walker and Keogh (1985), reflective practice is hinged on looking back on experience and using it meaningfully to construct new learning. Therefore the experiential learning theory of Kolb plays an important role in the learning process of reflective practice (Kinsella, 2009; Budgen and Gamroth, 2008). According to Claxton (1988) and Claxton, Atikinson, Osborn et al., (1996), this theory is influenced by the earlier work of Rogers (1980), who stated that learning is a complex multifaceted process that involves the engagement of the whole person. This means that in order for deep learning to be achieved, the domains of behaviour, cognition and emotion must be supported in the learning style. Emerging from Roger's proposition, Kolb's experiential learning theory (1984a) added a concrete way of understanding how our previous experiences can be used to direct future behaviour. As noted by Høyrup (2004), discovering the relevance of experiences is necessary and plays an important role in the learning process.

Kolb's work in developing the process of experiential learning stems from the work of Dewey (1933; 1916), Lewin's (1951) social change model cited in Cummings and Worley (2005) emphasize the central role that experiences has in the learning process. Kolb's continuous model, which reflects learning as a process, is noted for being contrary to other cognitive or rationalistic learning theories which assumes that learning is an acquisition and recall of abstract symbols (Tate and Sills, 2004). The four constructs or steps in the process of learning as noted by Kolb

include; an exposure to a concrete experience; reflective observations; processing of information through abstraction and conceptualization and, lastly, initiating active experimentation (Kolb, 1984a). Due to the process being cyclical, Kolb's theory purports that there is no starting or ending point in the experiential learning process.

Aligned to critical reflective practice, Kolb's theory places value on the learners experiences, thus supporting Dewey (1933; 1916) and Schön's (1983) recognition of the experience based nature of reflective practice and the cognitive, emotive and behavioral aspects of the learning process embedded in reflective practice. Furthermore, the two cardinal tenants of critical reflective practice which are looking "back on previous experiences" and "learning" such that previous mistakes and assumptions are revisited are congruent with Kolb's theory (Kinsella, 2007; Rolfe et al., 2001; Michelson, 1996).

2.2.4. Defining reflective practice, critical reflection and their application

Against this background, White, Fook and Gardener (2006) posit three paradigms of reflective practice, those being reflection *in action* and *on action*, reflection as a *social process* and reflection as *dialogue.* In view of the varied paradigms and world views concerning reflection, one can understand the confusion attributed to trying to define the concepts of reflection and critical reflection, as each paradigm is influenced by its own theoretical underpinning (Kinsella, 2007; Freshwater and Avis, 2004; Williams, 2001). However, in the corpus of literature regarding the definitions of reflection, it is noted that reflection can be defined by the cognitive, emotional, social, cultural or political underlying tones of the theoretical stance (Fejes, 2008).

Dewey (1933: 8) defined reflection as "*the active, persistent and careful consideration of any belief or form of knowledge in the light of grounds which supports it and further conclusions can*

be made from it". According to Fook et al., (2006) this definition has a greater cognitive meaning than the definition of Boud, Keogh and Walker 's (1985: 19), which has been influenced by the emotional, cognitive and social underpinnings of the paradigm and states that reflection or reflective practice is a "*generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciation"*.

Taking reflective practice to a deeper level, the discourses in the literature define critical reflection as a critical examination of practice through a process of self reflection on prior learning to determine whether what has been learnt is relevant and justified under current contexts or circumstances (Teekman, 2000; Kim, 1999; Mezirow, 1981). Brookfield (1995) argues that reflection is critical because of the following two characteristics; (i) it has or facilitates the ability of uncovering dynamics of power relationships; and (ii) it critically engages and questions social and cultural practices that engages with the phenomenon of interest.. Kinsella (2007); and Newman (1999), are more explicit, stating that critical reflection involves a process which links the affective, cognitive and experience of reflection in examining assumptions of an individual's behavior, worldview or previous experiences. According to Kadlec (2006) and Rushmer, Kelly and Leigh (2004), critical reflection makes use of reflective thinking and skills to scrutinize and develop professional practice by assessing assumptions and beliefs on a practice or phenomenon. It is further noted that critical reflective practice offers the learner or user a challenging paradigm wherein the learning process is focused on a specific experience or event from which both inductive and deductive learning processes can occur as the learner's awareness of self in relation to the experience or event is changed (Atkins, 1993). Discussed by Boud, Keogh and Walker (1985), critical reflective learning practice occurs within

a framework wherein the learner is fostered in a reflective process involving various levels and stages.

2.2.5. Contribution of critical reflective practice to nursing

Kim (1999); and Taylor and White (2000) explain there are varying types of reflection and varying processes of reflection. In terms of the different types of reflection, Taylor and White (2000) and Williams (2001) state there is content, process, and premise reflection. *Content* reflection, as the name suggests, only explores the content of a problem, examining the "what" aspect of the problem. Williams (2001) explains that content reflection only allows the learner to describe the problem, such as comparing two procedures or pieces of equipment to note the difference between the two. *Process* reflection, however, allows the learner to engage with problem solving skills to engage with strategies and cognitive processes to find a solution to the problem. *Premise* reflection is aligned to critical assumptions, and is also known as *critical reflection*, as it evokes individual's cognitive judgment not to take things at face value, but to question the meanings behind something and to reflect on the whole problem. According to Williams (2001), each of these types of reflection is meaningful and aligned to different meaning schemas for the learner.

Exploring the use of critical reflection in nursing practice, Murphy and Timmins (2009) noted that it encourages individuals to critically reflect on their experiences within a social context with the aim of knowledge acquisition. Supporting the claim that critical reflection has a meaningful place in nursing practice, Johns (2002) states that the use of critical reflection determines whether a person repeats the same experience or learns from the experience in such a way that cognitively and affectively causes change. Murphy and Timmins (2009) support this stating that

reflection and transformational learning is fast becoming a common discourse among practicing nurses and educators as the benefits towards the quality in their practice is evidenced through the use of reflective techniques.

In an exploration of reflection in professional learning, Boud, Keogh and Walker (1985) noted that meaningful learning and a specific mode of inquiry occurs within the context of reflective practice. Teekman (2000: 415) noted that reflective thinking was especially present or "*manifest during periods of uncertainty and perplexity*". Contributing to the usefulness of critical reflection, Kim (1999) found that knowledge yielded through critical reflection is often tailored to the specific situations and that the knowledge generated through the process of critical reflection in action was found to be the most beneficial in her sample of nurses that were studied, since it was contextually appropriate and was meaningful for their practice.

Williams (2001) maintained that facilitating critical reflective practice is the cornerstone of constructing meaning and addressing the practice learning gap of nursing practice. This is further discussed by Kinsella (2009), who refers to the artistry theme (level of competence that is achieved in professional practice through the use of critical reflection), which is central to Schön (1983) and Dewey's (1933) description of critical reflective practice. Aligning the changing nature of nursing with the artistry facet of the profession, they explain that the handiwork of caring needs to be sharpened continuously to allow for excellence and improved practice and quality of care (Kinsella, 2009; Kim, 1999; Boud and Walker, 1998).

As it has been shown that the use of critical reflective practice enhances nursing care, it follows that it would be useful to explore this practice among nurse practitioners who are currently having to deal with the complexities of HIV/Aids epidemic and are struggling to cope with the

rapid changes in care and treatment strategies. This is supported by Johns (2002) who states that nurses should engage in reflective practice as it allows for continual learning, which is necessary to remain current and relevant to meet the health care demands of society.

2.3 UNDERSTANDING COMMUNITIES OF PRACTICE

The concept of communities of practice (CoP) has gained popularity in the fields of organizational learning and education (Engeström, 2001; Boud, 1999). Originated by social anthropologists Jean Lave and Etienne Wenger, the concept of CoP was based on the authors attempt to explore learning in light of groups of apprentices and to distinguish the core mechanics of apprenticeship, since both of them felt that there was looseness in how the term apprentice was being used, especially in the discipline of organizational learning (Lave and Wenger, 1991b). In their first work entitled *Situated learning:legitimate peripheral participation* Lave and Wenger (1991b) report on their study of five groups of apprentices which was comprised of butchers, non-drinking alcoholics, naval quartermasters, tailors and midwives. By exploring the process of learning among these groups, Lave and Wenger (1991b) noted that individuals or apprentices constructed knowledge by socially engaging in likeminded groups. Noting that learning is a social process and is underpinned by constructivism, these authors formulated their theory of situated learning.

Although the work of Lave and Wenger demonstrated a new understanding of the social learning process, it did not engage with aspects of power, group dynamics and varied identities in the group and how these factors impact on the social learning process (Cox, 2005). Further critiques by Brown and Duguid (1991) suggested that the legitimate process of social learning in a group as presented by Lave andWenger's Legitimate Peripheral Participation (LPP) theory, which

posits that newcomers to the group start at the periphery and migrate to the core in terms of support from the expert core group, did not address issues of how the complete network of apprentices dealt with new knowledge and learning in light of their LPP theory.

2.3.1. CoPs and situated learning as knowledge

Lave and Wenger (1991b) created a unique way of understanding learning that occurred as a social process among their sampled apprenticeship groups. Their learning theory describes how an individual begins learning by first being accepted as a *legitimate* member in a group, that is devoted to a particular skill, occupation or discipline, and engages at a *periphery* level with the group activities, and through *participation* begins to move from the periphery towards the core of the group as skills become more increased and learning is at a expert level within the discipline (Lave and Wenger, 1991b). The assumptions of CoPs and the situated nature of learning is that learning is socially and locally constructed and places the individuals at the centre of the learning process (Cox, 2005; Wenger, 1998). This assumption arose from Lave and Wenger's (1991b) work of the apprenticeship concept clarification which led to an understanding of a social learning theory through situated learning. The authors concluded from this work that situated learning focuses on comprehensive knowledge construction through engaging with the whole person as opposed knowledge acquisition only. Lave and Wenger purport that knowledge generation is an activity in and with the world and assumes that that the agent, activity and the world mutually constitute each other. They further note that learning and social engagement are intricately intertwined and evolve cyclically as apprentices (or professionals) keep moving from a space of being competent to novice in various areas of their discipline.

Drawing from this seminal work, Wenger (1998); and Brown and Duguid (1991) further explored situated learning in the context of organizational learning environments. Wenger (1998: 139) defines CoPs as *"groups of people who are informally bound together by shared expertise and passion for a joint enterprise"*. According to Wenger (1998); and Duiguid and Brown (1991), CoPs are everywhere by virtue of the fact that individuals work and function with others in some kind of pursuit (be it professional, personal, leisure, active or passive engagement), and that the interaction and exchange between individuals brings about learning.

Wenger et al (2002) explain that CoPs are formed by people who engage in a process of collective learning and are groups of people who share a common interest, set or problems or a passion of a topic in an area of expertise. Further reflected in the literature, it is observed that the members of a CoP share a common concern or passion for something that they do and, through their regular interaction, learn how to do it better, as they come together to think about these common issues and explore ideas on how to act on them. They generate new knowledge through reflection within their informal structure to develop social knowledge around their common phenomenon of interest and, it is through this inquiry, dialogue and coming together, that social change and learning takes place (Cox, 2005; Wenger, 1998; Brown and Duguid, 1991).

2.3.2 Social Learning Theory and CoPs.

Drawing from the assumptions of CoPs and situated learning, it is evident that CoPs stems from theories that are based on the idea of learning as a social process and thus have a solid underpinning on social learning theories, specifically to that of Bandura of the late 1970's (Engeström, 2001; Boud, 1999). In social learning theory, it is premised that people learn by

observing others and such observations include modeling the behaviours, attitudes and emotional reactions of others in a given context (Bandura, 1977).

Premised on the cognitive orientation of Piaget (1962) and the behaviorist orientation of Watson and Pavlov, Bandura's (1977) social learning theory views learning as a process and an outcome, noting that through observation and modeling, which is the process of learning, a change in behaviour is observed. He adds, furthermore, that in order to make the statement that learning has taken place, an individual's experience needed to be used in the process of learning (Heeter, 2005). Thus, conditioning of behaviour, which occurs as a result of modeling, is the outcome of the individual drawing from both experience and the observed behaviour, attitudes or emotional reactions of others (Bandura, 1977). Bandura believed that most human behaviour is learned through modeling and that ideas of new behaviours are formed and performed at a later occasion through information learnt from observations (Merriam, 2004; Bandura, 1977). Bandura's work, which integrated the behaviourist and cognitive assumptions of learning, constructed learning as reciprocal and continuous interaction between behavioural, cognitive and environmental influences (Merriam, 2004).

Säljö (1979), cited in Ramsdeen, (1992), perceives learning as a social construct to make sense of the world, which involves blending new insights gained from observation, cognitive processes and behaviourial change. Supporting this, Bandura notes that learning is about interpreting and understanding reality in different ways and involves comprehending new experiences by reinterpreting knowledge (Merriam, 2004; Bandura, 1977). Bandura (1977) explained that *attention, retention, reproduction and motivation* are necessary conditions for effective modeling. With regard to *attention*, Bandura notes that various environmental and cognitive

factors affects the amount of attention paid and that characteristics such as arousal to the learning event, sensory capacities and past reinforcements to a similar learning experience affects the attention. In terms of *retention*, Bandura speaks of symbolic images, motor or symbolic rehearsal as characteristics which influence the individual's learning. He describes *reproduction* as the physical capabilities of reproducing the observed behaviour and, lastly, explains that *motivation* is the reasons why certain observed behaviours are imitatated, and these include reinforcing a successful practice or learning to rectify a previous error (Bandura, 1977).

Similar to the social learning theory of Bandura (1977), Lave and Wenger (1991b; Lave and Wenger, 1991a) have developed the situated learning of legitimate peripheral participation, which argues that learning is deeply interconnected with being with others and mutually defining in terms of meaning, practice, community and identity. According to these authors, learning can be central or peripheral, but always remains a process within which new members of a group learn through observation from others. The situated nature of legitimate peripheral participation reiterates that learning is a social, rather than a psychological, process (Brown and Duguid, 1991; 1991b).

2.3.3 CoPs and group knowledge creation in nursing

Nurses are currently challenged with a changing environment of clinical practice as a result of clinical workloads and changes in treatment and care policies. Seaton and Sobeck (2007) stated that changes and disparities in the health care profession mean that innovative measures need to be fostered to enhance sustained workplace learning. These authors maintained that a CoP among nurses is especially useful in promoting workplace learning, stating that it not only allows individuals to function effectively in their role, without having to have had training on that

component (fosters experience learning), but also facilitates newcomers facing similar clinical or work challenges in the organisation to participate in the community. Wenger (1998) supports this, suggesting that members of a CoP develop an ongoing "story", in which the community is always developing and evolving as the members have an interest in the shared practice of others, thus continuing after their specific need or problem is resolved. Scott (2008) and Ousey and Gallagher (2007) believe that those who function in the context of improved health care outcomes must focus on enhancing group working relationships to succeed in information sharing and knowledge creation. This is supported by Schlager and Fusco (2003), who argue that increased learning which takes place in CoPs is a useful framework which supports new knowledge construction and the transfer of good practice. In relation to adult education, Odara-Hoppers (2002) suggests that CoPs and the situated form of learning do not focus on the transfer of knowledge, but rather on fostering a relationship between knowledge and the knowing process. This is supported by Lave and Wenger (1991a: 175), who stated that "*knowledge is not a factual commodity but rather takes on the character of a process of knowing"*.

Various researchers have conducted studies on CoPs in the context of nursing, especially among student nurses with the aim of improving the longstanding problem of the theory practice gap (Watson, Marshall and Sexton, 2006; Lamb, 2003; Greenwood, 2000). Findings showed that CoPs were successful in integrating student nurses into their roles as clinicians, as they offered a supported mechanism to build the capacity of the student nurse in applying knowledge to practice (Levett-Jones and Lathlean, 2008; Watson et al., 2006; Kupferman, 2005).

Implementing CoPs in the context of health care, especially among already practicing nurses, is a fairly new concept, only referenced in the 2000s in terms of empirical evidence (Chandler and

Fry, 2009; Parboosingh, 2002). Findings of a recent study that was conducted in Scotland among practicing gerontology nurses showed that by establishing a CoP consisting of practicing nurses in gerontology in collaboration with the university academics, it was possible to achieve scholarship and bridge the gap of evidence and practice among the nurses, thus proving that the CoP framework is a useful point of learning among nurses (Tolson, Schofield, Booth et al., 2006). Booth, Tolson and Hotchiss (2007) are of the opinion that the learning framework of CoPs provides a new method of knowledge generation among vocation professions such as nursing, wherein the social nature of learning can be integrated into the practice and professional duties of nursing.

2.4 CONCLUSION

This chapter provided a philosophical and theoretical perspective of the key concepts in this study, being critical reflection and communities of practice. The integrated learning theories of Dewey and Kolb were discussed in respect of Schön's theory of reflective practice. Brookfield's assertions of reflection and critical reflection were also discussed. This chapter also contained a brief presentation of the use of critical reflection in the context of nursing. In terms of communities of practice (CoPs), the theoretical underpinning of situated learning and its influence from social learning theories, especially that of Bandura was noted. The progression of the concept of CoP in terms of it transcending legitimate peripheral participation was also noted and its use in the context of nursing was presented.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Yin (1994) proposed that "*Every type of empirical research has an implicit if not explicit research design*". Many authors such as Denzin and Lincoln (2005), Creswell (2003), Crabtree and Miller (1999) and Crotty (1998) have added meaning to Yin's statement through their advances of social research inquiry. Yin's statement compels one to recognize that every research problem or phenomenon under study has a related approach of inquiry and, as such, it is imperative to make this approach explicit.

Defined by Babbie and Mouton (2001), research design is concerned with the methods, techniques and procedures that are used in the process of implementing the research design or the research plan, as well as the underlying assumptions of the research inquiry. This chapter provides an outline and justification or rationale relating to those three core areas, with the intention of making the selected mode of research inquiry explicit and justifying its use within the context of this study. The three core areas are guided by Creswell's (2007) principles of designing and implementing a research study and include: i) the knowledge claims which guided the researcher in conceptualizing the research phenomenon and locating the study within the theoretical paradigm; ii) strategies of the inquiry that informed the research procedures; and iii) the methods of data collection and analysis which were used.

3.2 QUALITATIVE RESEARCH PARADIGM

The philosophical and theoretical perspectives and debate around paradigms in research inquiry, especially within qualitative approach is vast. Highlighted in Denzin and Lincoln's (1994) on the five moments of research, the authors highlight that most of the philosophical and theoretical debate extended from the "traditional period" of research. The semantic difference around the correct terminology for the theoretical or philosophical concept "paradigm" can account for some of this debate. Supported by Pessut and Johnson (2008), this debate on the semantic difference of the concept paradigm has also accounted as a barrier in the correct use and positioning of one's knowledge claim and theoretical underpinning in research. First introduced by Kuhn in 1970 in his work entitled *The Structure of Scientific Revolution,* he defines a paradigm as "*the underlying assumptions and intellectual structure upon which research and development in a field of inquiry"* (Kuhn, 1970; cited in Crotty, 1998). This concept was introduced to show the process of how scientific knowledge is acquired and the process of how new knowledge, especially generated theories, replaces older knowledge (Kuhn, 1970; cited in Crotty, 1998). Moreover McNamara (1979) found that Kuhn's presentation of research paradigms offers two main assumptions or qualities that researchers should be mindful of. These include firstly, that a paradigm is a theory that facilitates researchers with a means of explaining and understanding the natural world, and indicates an accepted way of procedures and methods to explain and understand the phenomenon in the natural world. Secondly, that a researcher, exploring a phenomenon within the context of a particular paradigm, is engaged in work that is already established within an established theoretical context, thus allowing the researcher to add to that body of work.

Guba and Lincoln (1994) further explains that a paradigm is a set of beliefs that guide the formal process of inquiry within qualitative research. The role of paradigms aims to answer three fundamental constructs in guiding the research process, which include: the ontology of the study, which explores the nature of reality; the epistemology, which unpacks the relationship between the knower and what is to be known (i.e. the researcher and the phenomenon); and it explores the methodology which focuses the techniques and procedures that guide the researcher in discovering and finding out more about the desired phenomenon (Crotty, 1998). Noted by Guba and Lincoln (1994) assert that questions, or framing a research within its paradigm, are essential as a first point of research inquiry since it grounds the research within its mode or methods of investigation.

Within the discourse of research and social science inquiry, the functions or aims of a research paradigm are: (i) to define and present a mental world view of how the world and constructs within social interaction works, it offers a way of understanding how knowledge is created (Creswell, 2003; Crotty, 1998; Patton, 1990); (ii) it allows the researcher to understand the dynamics of values (i.e. axiology) the researcher and the participants bring into the research inquiry process and how this relates to a created meaning or understanding of the research phenomenon (Lincoln and Guba, 2000); and (iii) paradigms allow the researcher to identify the related methods of inquiry and ways of reporting the research findings, aligned to the paradigms assumptions (i.e. the methodology and the rhetoric of presenting research findings) (Lincoln and Guba, 2000). Establishing the qualitative paradigm or philosophical assumption of a research study is an important step towards achieving congruency between the interrelationships between the ontological, epistemological and methodological aspects that the research inquiry will pursue.

3.2.1 Establishing the Philosophical Assumption/Paradigm of the Study

Philosophical assumptions, also referred to as paradigms (Lincoln and Guba, 2000) or epistemologies or ontologies (Crotty, 1998), relate to identifying and labeling the assumption that the researcher brings into the research inquiry process. Creswell (2003) and Guba and Lincoln (1994) explain that emanating from interpretivism are four main philosophical assumptions, namely; post-positivism, critical theory, constructivism and pragmatism. Guided by the knowledge claims of the four philosophical assumptions, a constructivist philosophical assumption orparadigm was employed as a foundation of how meaning was created in this study.

3.2.2 Rationale for the use of Constructivism

Referred to as *"created realities"* Guba and Lincoln (1994) explain that every individual is influenced by conditions such as history, cultural context and values which, in turn, shape and influence the individual's view of the world. Constructivism is a research paradigm that denies the existence of an objective reality, asserting that realities are social constructions of the mind (Denzin and Lincoln, 1994; Guba and Lincoln, 1989). The premise of constructivism, or social constructivism as it is sometimes referred to, is that multiple realities of the phenomenon exist. As the name suggests, constructivism assumes that meaning is not discovered, but is constructed (Crotty, 1998). This paradigm also assumes that individuals seek understanding of the world in which they live (Crotty, 1998). Moreover, the assumption is to make sense of people's multiple realities through sustained and complex social interaction (Appleton and King, 2002; Crotty, 1998; Lincoln, 1995; Guba and Lincoln, 1994). The aim within research inquiry is to make complex meaning of the participants' viewpoints and experiences, which are negotiated socially and formed through interactions with others, thus the label of 'social' constructivism (Creswell, 2002). It is, therefore, within this premise that the aim of social constructivist research is to

explore the ‘processes’ of interaction among individuals. Thus, the paradigmatic assumptions of constructivism were explored in relation to this study in the following manner:

Ontologically: Constructivism is underpinned by relativism, which acknowledges that there are multiple realities, which are socially and experientially based. Relativists claim that concepts such as rationality, truth and reality must be understood *“as relative to a specific conceptual scheme, theoretical framework, paradigm, form of life, society, or culture, meaning that there is a plurality of such conceptual schemes”* (Crotty, 1998). In other words, the world consists of multiple individual realities influenced by context and that the nature of reality is underpinned within the local context of language, symbol and culture. The aim of inquiry is, therefore, to understand and reconstruct the meanings of the participants’ experiences while being mindful of the local context of those experiences (Crotty, 1998; Guba and Lincoln, 1994).

In the context of this study, the researcher assumes that the nature of establishing CoPs among HIV/Aids nurse practitioners would have multiple realities. These realities can be unique in terms of the participants’ experiences in terms of the setting of being in an urban or rural setting with unique experiences shaping the reality from each one. Furthermore the realities of each participant will be unique in terms of the experience of engaging in a CoP and in terms of the cognitive learning of critical reflection.

Epistemologically: Constructivism is premised on the subjectivist and transactional relationship between the researcher and the participant, and asserts that in the process of research inquiry and construction of meaning to the researched phenomenon, there is an interactive process, thus meaning is co-created (Creswell, 2002; Crotty, 1998; Guba and Lincoln, 1994).

It is noted within the discussion of epistemology and constructivism that researchers, in their "humanness", are part of the research endeavor, rather than objective observers, and their values must be acknowledged by themselves and by their readers as an inevitable part of the outcome (King and Appleton, 1997). In the context of this study, the researcher acknowledges that the interactive relationship between the researcher and participants in terms of the establishment of the CoPs and the process of capacity development in critical reflective practice among the HIV nurse practitioners will assist in the constructed meaning that will be created regarding this phenomenon.

Methodologically: Grounded theory methodology, which is premised on a Symbolic Interactionsim theoretical perspective, will be employed within this study. Crotty (1998) suggests that in establishing the philosophical assumptions, specifically the methodology assumption, researchers should be mindful of the theoretical perspective underpinning the chosen philosophical assumption. Common theoretical perspectives housed within interpretivism, include Symbolic Interactionism-Grounded Theory, Hermeneutics-Phenomenology, Critical Inquiry and Feminism, to name a few (Creswell, 2002; Crotty, 1998).

Wilson (1995) explains that the nature of qualitative research is to capture the essence of human lives, meaning to capture what other people's lives are about without inferring any preconceived categories into which the information will fit into. Explaining further Wilson (1995) mentions anthropologists such as Margaret Mead, Robert Hubert Mead and Herbert Blumer described the social nature of qualitative research within several tenants of social philosophy. One of these tenants is called Symbolic Interactionism and provides a perspective on society and people. According to Wilson (1995), Symbolic Interactionism emphasizes the need to conduct research

in natural settings, focusing primarily on the way people define their reality and construct meaning and actions thereof over time. The author further explains that there are three premises underpinning the symbolic-interactionist philosophy, these include:

1. Human beings act towards things on the premise of the meaning these things have for them.
2. The meaning of things in life is developed from the interactions a person has with others.
3. People handle and modify meaning through an interpretive process.

Relating these theoretical underpinning of Symbolic Interactionism (SI) to the study phenomenon, the researcher's philosophical assumptions of the phenomenon were aligned to SI in the following manner:

1. *Learning is emically and etically constructed:* In keeping with Mead's interpretation of SI, the researcher believed that the process of learning and engaging with critical reflection will have different meanings for each research participant.
2. *Learning is a social process:* The researcher acknowledges that learning is social in nature, that the togetherness of like-minded people coming together will foster learning and a construction of meaning to the shared experience.
3. *Dynamic nature of meaning construction*: The researcher acknowledges that the process of emergent CoP will be dynamic and evolve in relation to the participants' experiences within the CoP and the meaning they attach at varying points in terms of engagement and skill development in critical reflective practice.

3.3 QUALITATIVE RESEARCH INQUIRY

Explained by Denzin and Lincoln (1994), the word qualitative implies an emphasis on process and meanings that are not rigorously examined or measured and these authors stress the socially constructed nature of reality and the intimate relationship between the researcher and what is to be studied that underpin this nature of research inquiry. Qualitative research offers a source of well-grounded, rich descriptions and explanations of processes in identifiable local contexts and is based on a process of formal inquiry which is guided through a basic belief system (Miles and Huberman, 1994; Guba, 1990). Qualitative research strives to understand and explore the natural world of human group life and uses methods and tools to understand and yield a complex and diversified explanation (Wilson, 1995). The premise of qualitative research is that the nature of knowledge is relative and is an epistemic underpinning of how this knowledge is discovered, which is through the creation of an interaction between the researcher and the phenomenon that is being researched (Bailey, 1997). Expounded by Denzin and Lincoln (1994), qualitative research emphasizes the processes and meaning of a phenomenon as it occurs and manifests in its natural setting.

The discipline of social science, within which the humanistic philosophy of nursing is encompassed, is consistent with the qualitative research inquiry, as it seeks to explore and understand human behaviour in the natural context within which the phenomenon occurs. Qualitative methods enable the researcher to gain information about participant perspectives in a natural setting (Hatch, 2002), and allow for a complex understanding of the meaning of a phenomenon as the participants themselves have experienced it (Merriam, 1998). This emic, or insider's perspective, is the result of the participants' construction of reality (Merriam, 1998).

Qualitative research allows nurse researchers to explore the issues and questions of social practices and processes thereby gaining deeper insight into conditions that may facilitate change in terms of health interventions for improved care (Starks and Trinidad, 2007). Summarizing the fundamental and common reasons why qualitative research inquiry is used, Botma, Greeff, Mulaudzi and Wright (2010) write that this method of inquiry is often used when: (i) little is known about a topic or phenomenon, (ii) the context within which the research is poorly understood; (iii) the boundaries of the phenomenon are not well defined; (iv) the phenomenon is not quantifiable; (v) the nature of the research problem is not clear; and (vi) the researcher intended to reinvestigate a research phenomenon.

Little is known about the development of critical reflective practice within the supported structure of a CoP among South African nurse practitioners who have to deal with the challenges associated with HIV/Aids. Thus, in light of Botma, Greeff, Mulaudzi and Wright's (2010) reasons for using a qualitative mode of inquiry, it can be seen that this study's premise fits in with points 1-3 of their conditions. Moreover, Ploeg (1999) stated that qualitative research is designed to explore and describe a phenomenon in terms of asking "what is happening here?" and further commented that qualitative research is more concerned with the process of a phenomenon and how it occurs. Thus, in light of this study's aim, which is to explore the process of establishing a CoP of critically reflective HIV nurse practitioners, it further fits with the aim of qualitative research.

3.4 THE GROUNDED THEORY DESIGN

A research design is defined as *"a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research"* (Terre

Blanche, Durrheim and Painter (2006: 34); and is imperative in providing the mechanism or means for which the research aim can be achieved (Creswell, 2002). Guided by Morse and Field's (1995) explanation of choosing a research design that is aligned to the core research question underlying the research study, a grounded theory qualitative design was chosen as being the most appropriate for this study inquiry. According to Morse and Field (1995), research questions, wherein the unit of analysis is a process where the phenomenon is related to experiences that occur over time or changes that have stages or phases; is best studied with a grounded theory. Moreover the authors, together with other authors in the field of qualitative research (Creswell, 2007; Morse and Field, 1995; Strauss and Corbin, 1990) state that this design (grounded theory) is most aptly suited for research studies where the inquirer seeks to gain a general explanation of a process, action or interaction among a number of participants on a social phenomenon of interest.

Grounded theory is often described as revolutionary in terms of qualitative approaches in research due to its aspect of constant comparison of data collection and data analysis hinged on theoretical sampling (Walker and Myrick, 2006; McCann and Clarke, 2003a). Rooted in the discipline of sociology and within the philosophy of symbolic interactionism, the methodological split between the co-originators, Glaser and Straus (1967), regarding the design, has attributed the frequent discourse the design has received in qualitative literature (Babchuk, 1997; Stern, 1994). The intention of grounded theory is to generate theoretical constructs which explain the social interactions of a given phenomenon and develop a theory that emerges from the data which encompasses the core category and related categories and concepts (Speziale and Carpenter, 2007; McCann and Clark, 2003).

Grounded theory is most useful in areas where little is known about the given phenomenon, or where few, if any, theories exist to explain the phenomenon in the given study context (Munhall, 1995). Explained by Stern (1994), grounded theory design differs in five unique ways from other qualitative methodologies in the following manner; (i) the conceptual model and theoretical constructs is generated from the data as opposed to being based on previous studies; (ii) the aim of the analysis is to uncover the basic social processes in relation to the study's phenomenon, rather than merely describing the phenomenon; (iii) the data collection is guided by the emergent theoretical constructs of the theory; (iv) all data is compared with all data from the research process; and (v) data analysis starts immediately in relation to data collection, the researcher codes and categorizes the data as it is collected.

Against this background, the choice of grounded theory design was deemed appropriate, as the aim of this study was to establish CoPs among HIV nurse practitioners through the process of critical reflection, a process which aimed to map out the participants' experiences over time in terms of critical reflection development and the development of the CoPs; and was thus appropriately aligned to the assertions of Morse and Field (1995) and Strauss and Corbin (1990) that the design should be appropriate in terms of process orientated phenomena. Moreover, little, if any, study has explored the use of critical reflection practice development among HIV nurse practitioners with the aim of establishing a CoP, thus necessitating the need for a theoretical understanding of the social processes embedded in this process, which was facilitated in the theory development offered by the Straussian version of grounded theory.

3.4.1 Overview of Grounded Theory

Having its theoretical underpinnings in pragmatism and symbolic interactionism, grounded theory has evolved since its first introduction in 1967 in terms of practice, procedures and application (Stern, 1994; Strauss and Corbin, 1990). Since the seminal work of Glaser and Strauss in 1967 and despite advances in the procedure, techniques used and even philosophical paradigm adapted by several researchers to underpin this method of inquiry, what has remained core and unchanged, however, is the premise of grounded theory.Explained by Corbin and Strauss (1990: 5), grounded theory *"is designed to develop a well integrated set of concepts that provide a thorough theoretical explanation of social phenomena under study"*. Moreover, every researcher needs to be mindful of the core facets which include theoretical sensitivity, theoretical sampling, treatment of the literature, constant comparative methods, coding, identifying the core category, memoing and the measure of rigor that need to be addressed in every grounded theory study (Stern, 1994; Glaser, 1992; Strauss and Corbin, 1990).

According to Goulding (1999), the use of grounded theory is strongly associated with the earlier work of Cooley and Mead's (1930) work on pragmatic sociology and their exploration of symbolic interactionism, the characteristics of social behaviour and the nature of an individual as an etic and emic (within a social group). In the seminal work of Glaser and Strauss published in 1965, the use of grounded theory was proposed as a *general method*, independent of a particular research paradigm (Glaser and Strauss, 1965) noted that the cardinal tenants in this design are the "slices of data" collected for theoretical sampling and the fact that the data should be as varied as possible, providing researchers with limitless options for data gathering. Different collection techniques, data types and ways of analyzing the data generate '*different views or vantage points from which to understand a category and to develop its properties'*, thus, suggesting that it is not

the nature of the data that is important, but the role it has in generating conceptualizations around the phenomenon of interest (Glaser and Strauss, 1965). According to Strauss and Corbin (1990: 125), "*the data must speak for itself*", therefore the objective of grounded theory is to link the research process and findings to the reality of the participants and to allow the findings to emerge from the actual words of the participants.

From the discourses on grounded theory, it is notable that two schools of the design exist, which are aligned to Barney Strauss and Anslem Corbin, and these are often referred to as the Glaserian or the Straussian versions of grounded theory (Egan, 2002; Annells, 1997; Stern, 1994). Noted by several authors, the debate between these two authors (i.e. Glaser and Strauss) began after they co-authored their book entitled, *The discovery of Grounded Theory* (Glaser and Strauss, 1967), which received much criticism from various scholars, especially for its lack of verification and what the critiques termed its "*looseness*" in theory generation without a guiding framework (Allen, 2010; Bumard, 2006; Annells, 1997). Within this backdrop, the split between the two authors transpired. Strauss then joined Corbin in publishing their book entitled *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (Strauss and Corbin, 1990). Here the authors produced what can be considered an information guide of applying grounded theory with the main purpose of presenting a set of procedures, cautioning however that the procedures are not meant to be "*followed rigidly or to be followed dogmatically, but rather to be used creatively and flexibly by researchers as they deem appropriate"* (p. 13). Strauss and Corbin (1990) also commented that as novice researchers were experiencing difficulties in developing grounded theories in a consistent manner, they had been urged to develop a set of procedures to generate meaningful in-depth and dense theories

grounded from the emergent data (Mills, Bonner and Francis, 2006; Boychuk Duchscher and Morgan, 2004; Goulding, 1999).

In 1992, Glaser responded to Strauss and Corbin's text by producing his work entitled *Basics of grounded theory analysis* (Glaser, 1992), which contained a chapter by chapter critique to highlight the differences between the two schools of grounded theory (Heath and Cowley, 2004). These two schools of grounded theory still continue to be discussed, debated and used extensively in a wide variety of disciplines, and largely in nursing (Goulding, 1999; Benoliel, 1996). The central tenant of the Glaser style grounded theory focuses on the interpretive, contextual emergent of theory development, while the method followed by Strauss focuses on the systematic methodology used in its coding technique that facilitates the emergence of a theory grounded in its data (Glaser, 1992; Strauss and Corbin, 1990). Despite the existence of these two camps in grounded theory, both aspire to creating a theory that is grounded in the data of the phenomenon under study (McCann and Clarke, 2003a; Goulding, 1999).

The Glaserian and Straussian approaches to grounded theory differ in their epistemological and methodological underpinnings of the design. Boychuk, Duchscher and Morgan (2004) discuss these differences stating that the four main areas in which the two authors differ are (i) the formation of the research question; (ii) the use of literature; (iii) the process of data analysis; and (iv) verification and validation of the emergent theory.

3.4.1.1 The formation of the research question

Heath and Cowley (2004) and Annells (1997) explain that one of the differences between the two schools of thought is that the timing of the formation the research question varies. Strauss and Corbin (1990) maintain that the research question should be defined as a statement which

identifies the phenomenon that is to be studied, thus asserting that the research question should be formulated in the early phases of the research inquiry process. According to these authors, the purpose of the research question is to contain the research by focusing the researcher into an appropriate and researchable research problem in terms of scope and size, asserting that it is not always possible and feasible to study the entire phenomenon (McCann and Clarke, 2003b; Stern, 1994).

Glaser (1992), on the other hand, is of the opinion that the research question is emergent in nature and thus is produced within the process of constant comparison techniques and theoretical sampling of concepts. Glaser asserts that not having a research question is complementary to the emergent epistemological underpinning of his approach of grounded theory and that the identifying of a research question at the beginning of the research process is limiting and contrary to the *'emergent and discovered'* tenant of the grounded theory being developed from the corpus of data as opposed to the research question.

Strauss and Corbin (1990), in response to this assertion, stated that the research question, albeit identified at the beginning of the research process, should be flexible so that premised on the concept of theoretical sampling it will be refined and aligned to the theoretically relevant concepts emerging from the data. These authors, furthermore, maintain that not having a direction, scope or boundary to any research inquiry, which the research question brings, leads to unfocused and sometimes irrelevant concepts and categories being yielded(Kelle, 2005; McCann and Clarke, 2003b). Therefore, according to Strauss and Corbin (1990), the process of data analysis structures and refines the research question, which at the outset is identified and is

flexible, while Glaser (1992) argues that the process of data analysis will lead to discovery of the research question.

3.4.1.2 The use of literature

Strauss and Corbin (1990) support the use of literature such as reports of research studies and theoretical and philosophical paper before the research study commences. They acknowledge that researchers, being human, are not likely to start a research study without a point of reference in terms of their experience, previous work or worldview (McGhee, Maryland and Atkinson, 2007; Annells, 1997). They maintain that the use of discipline specific literature, together with personal and professional experiences, can guide the process of data collection and analysis and the formation of the research question, cautioning, however, that the researcher's previous knowledge must not be taken for granted and assumed in the emergent nature of theoretically relevant concepts, rather is should serve to as a repository of terms and inspiration for ideas to label and name concepts as they emerge from the data (McGhee et al., 2007; Strauss and Corbin, 1990).

Glaser's belief in the classic form of grounded theory contradicts the use of literature before the research commences (Heath and Cowley, 2004; Boychuk Duchscher and Morgan, 2004). Glaser argues that the use of literature causes issues of forcing the data as opposed to allowing concepts to emerge naturally from the constant comparison in data analysis and collection (McCann and Clarke, 2003b; McCallin, 2003; Glaser, 1992). Glaser's argument that the use of literature before the commencement of the research can be contaminating and force the emergent concepts, is also supported by Struebing (1999) and Kelle (2005). However, both these authors support Strauss

and Corbin's acknowledgement that the theoretical sensitivity and previous experiences of a researcher need to be factored in.

3.4.1.3 Process of data analysis

Both Glaser and Strauss note that the process of data analysis through the coding process is central to grounded theory methodology as coding allows the data to be meaningfully constructed into theoretical constructs which creates density and dimensions to the emergent categories (McCann and Clark, 2003; Goulding, 1999; Annells, 1997). In addition, both Strauss and Corbin agree that the coding levels or processes are not meant to be distinct or linear in their use (Heath and Cowley, 2004). According to Schreiber (2001), the Glaserian and Straussian ways differs in terms of the process of coding. Glaser speaks of two levels of coding whereby firstly, the data is placed into as many categories as possible, referred to as *substantive open coding* and secondly, the categories are then integrated, which is referred to as *theoretical coding.*

Strauss and Corbin (1990), however, have three levels of coding, *open, axial* and *selective* coding. Kendall (1999) states that the only difference between the two methods is the emphasis placed on emergence, but Heath and Cowley (2004) state that Strauss and Corbin's use of axial coding is the key difference in the two authors work. Axial coding in the Straussian version makes use of a framework which promotes causal relationship among the emergent categories and subcategories aligned to six constructs, namely: the causal conditions; the context: action and interaction strategies: intervening conditions; and consequences relating to the phenomenon of interest.

Kelle (2005) explains that according to Glaser, the use of axial coding can be restrictive in the emergence of the theory, as researchers may be inclined to fit their data into the preconceived constructs of the paradigm model. Mtshali (2009) contends that researchers using the Straussian version of grounded theory must be mindful of moving beyond conceptual descriptions to theorizing. This is in response to Kendall's (1999) experience of merely fitting data into the paradigm model due to the fixation of the constructs as opposed to the emergent nature that underpins the design.

Strauss and Corbin (1990), however, maintain that the model only fosters systematic thinking and encouraging greater depth and density in the data. As this study employed the Straussian version of grounded theory, the aspects of axiel coding will be discussed further in later sections.

3.4.1.4 Verification and validation of the emergent theory

This issue of theory generation and verification is also treated differently by the two schools of thought. Strauss and Corbin (1990) highlight the importance of verification in the process of theory generation, arguing that verification allows initial hypothesis of the study phenomenon to be accepted or refuted based on evidence. Glaser (1992), on the other hand, states that verification is not needed based on the emergent nature of the grounded theory.

The Straussian version of grounded theory was used for the purpose of this study. As the researcher is a novice in qualitative research, the lack of structure of the Glaserian method was a deterrent, whilst the systematic and structured procedures outlined by Struass and Corbin made the research more manageable and achievable with clear starting and ending points. Furthermore, given the nature of the phenomenon, it was necessary to engage with technical literature to establish the research question. The researcher has also previously engaged in HIV/Aids related

research studies, albeit not in the context of nursing education constructs of critical reflection, but among nurse practitioners, some of which explored the psychosocial aspects of nurses working in the context of HIV/Aids. This experience has created a worldview for the researcher and Strauss and Corbin's (1990) acknowledgement of a researcher's past experience and discipline specific knowledge in inspiring the research through theoretical sensitivity fitted more appropriately than Glaser's (1992) complete "blankness" and objectivity to a phenomenon aligned to emergence.

3.5 RESEARCH SETTING AND SETTING DESCRIPTION

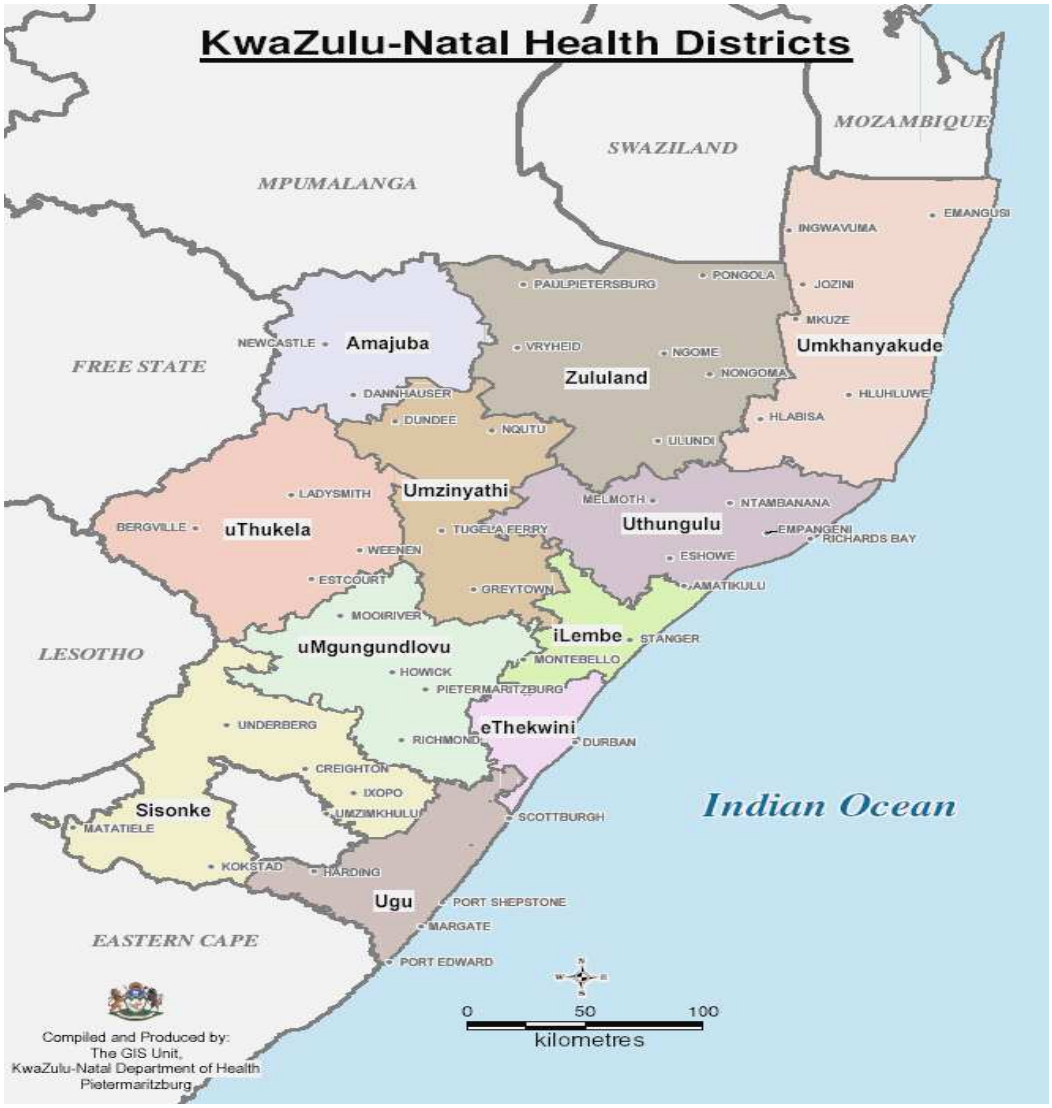
A research setting can be classified as a natural, partially or highly controlled environment within which a research phenomenon of interested is studied (Polit and Hungler, 1999). When using a qualitative approach of research inquiry, however, the research phenomenon occurs within the natural environment, where no manipulation or change in the study participants or the environment occurs, as the aim of the research inquiry is to view and study human phenomenon in the natural habitat so as to better understand the basic social processes underpinning the phenomenon of interest(Denzin and Lincoln, 2002; Crotty, 1998).

In this study, the natural setting within which the HIV nurse practitioners worked was used as the research setting to explore the process of establishing CoPs of critically reflective nurses. Two district health hospitals in the province of KwaZulu-Natal, one urban and one rural, were chosen as the research setting. The province of KwaZulu-Natal is divided into eleven health districts, each of which is governed by a district health authority (Refer to Figure 1). Aligned to the principles of grounded theory, specifically that of theoretical sensitivity, the choice of research setting was influenced by the researchers awareness of whether the theoretical concepts for the

study will be obtained from the research setting (Allen, 2010; Strauss and Corbin, 1990). In light of this study, the nature of HIV nurse practitioners, in terms of their work place and experience of HIV related challenges, was a theoretically relevant category/concept that needed to be sampled. Based on the empirical dialogue presented in the background of this study (see Chapter One), the changing nature of HIV/Aids clinical care policies and practice guidelines compounded with the increased workload and lack of adequate and appropriate HIV/Aids training were a few challenges presented in reported findings. It is within this background that the research aimed to explore the process of critical reflection within CoPs among HIV nurse practitioners, thus making the nature of the HIV nurse practitioner theoretically relevant. Bearing this in mind, the province of KwaZulu-Natal (KZN) was purposively sampled. KZN is the third smallest province in SA comprising of 34,361 SQM^2 , but it, is one of the most populated provinces, with an estimated 10 million people living in the province (DoH, 2010b), which is about 22% of the country's total population. Health estimates of HIV/Aids in this province indicate that it is at the epicenter of HIV, with antenatal HIV prevalence rates of 38.7% (DoH, 2010b). The province of KZN is divided into eleven health districts (see Figure 1.) each managed by its own district health authority (HST, 2007).

According to the national HIV/Aids Plan (DoH, 2007), each district will have at least one ARV delivery site provided by the government health service. Armed with this knowledge, the researcher purposively selected KZN as in light of its high incidence of HIV/Aids, the possibility of finding "challenged" HIV nurse practitioners was greater.

Figure 1: Map of KZN Health Districts



Source: Health Systems Trust, (2007)

3.5.1 Theoretical sensitivity

The principle of theoretical sensitivity, discussed by the originators of grounded theory Glaser and Strauss (1967), and later Strauss and Corbin (1990), guided the selection of the research setting. Theoretical sensitivity, critical in grounded theory, refers to the *"attribute of having insight"* (Strauss and Corbin, 1990: 42), and refers to the personal quality of the researcher. It has already been noted that the researcher is coming to the study with *"insight"* and a degree of

sensitivity from previous reading. The nature of theoretical sensitivity facilitated the researcher's ability to give meaning to the data collection process and data; and the capacity to discern what is important in the data.

3.5.2 Rationale for choice of setting and theoretical sensitivity.

The researcher has had the familiarity of previously working as a research assistant on a HIV/Aids related research study in the province of KZN, albeit not at the same health care facility. This research study was in connection with the Preventing Mother-to-child Transmission (PMTCT) programme and was conducted at both an urban and rural sites.It became apparent that unique context specific issues such as the lack of resources provided unique challenges in terms of how the PMTCT programme functioned. Drawing from this previous experience, the researcher felt that this aspect could be explored in terms of the phenomenon she wished to investigate. Guided by the provincial directorate, it became evident that there are a total of 41 district level hospitals in the province of KZN, each of which provide PMTCT care (DoH, 2009; HST, 2009). Through consultation with other researchers in the field of HIV research (a NGO and research organization) who maintain, support, monitor and evaluate the health care facilities in terms of attainment of the PMTCT programme goals, the researcher established that the hospital settings should be at district level because in these institutions, nurses are not only involved in general maternal and child health care, but are also involved with the PMTCT programme, which means they are providing HIV/Aids care on a daily basis. Two district level hospitals were conveniently sampled from the 41 district hospitals in the population. The researcher chose a rural and an urban health care facility from two health districts in the province of KZN to explore the process of establishing CoPs of critically reflective nurse practitioners, and whether urban and rural context conditions will influence this process.

The increased HIV prevalence reflected in the antenatal indicators (i.e. 38.7%), was one of the reasons why the researcher chose to use nurse practitioners working in the maternal and child health departments as the sample. Further to this, the nature of care in the maternal and child health department is very layered and comprehensive (Zelnick and O'Donnell, 2005). In light of this, nurse practitioners working in such areas of care have to be up to date in their knowledge of the clinical management of pregnant women and their infants through all the stages of antenatal care, labour and delivery, and postnatal care, the latter of which involves immunization and monitoring of the infant until 18 months post delivery (DoH, 2009). Moreover, HIV/Aids nurse practitioners need to completely au fait with the current HIV/Aids treatment and care guidelines so as to function optimally within the boundaries of the PMTCT programme, which all nurses working in maternal and child health departments are exposed to (Matjila et al., 2008). Because of the prevalence of antenatal HIV in KZN, the PMTCT programme has been prioritized in an endeavor to reduce the disease (DoH, 2010a).

Hospital A: This district level hospital is a 300 bedded hospital situated in the Umdoni Local Municipality in the Ugu Health District of KwaZulu-Natal. This health district covers an area of 2 470 square km. It has 31 service points and has approximately 33 715 antenatal visits and 63 733 family planning visits per annum.(HST, 2000).

Hospital B: This district level hospital is a 1200 bedded general hospital situated in the eThekwini Health District. Together with its associated 22 clinics it serves about 500 000 people who live in Umlazi, an urban community situated in the south east of Durban.

3.6 STUDY POPULATION

Defined as a set of elements which could be records, participants or events, a population is an aggregate of elements that meet the inclusion criteria of the study in terms of the phenomenon of interest (Burns and Grove, 2010). The target population for this study was all nurses working in the selected district health institutions and working with HIV/Aids patient care within the PMTCT programme. Based on hospital information from the selected health institutions this was a total of 220 nurses.

3.7 SAMPLING PROCEDURE AND SAMPLE DESCRIPTION

A cardinal aspect in determining the emergent theory, grounded theory is underpinned by theoretical sampling and theoretical saturation (Goulding, 1999; Munhall, 1995; Strauss and Corbin, 1990; Chentiz and Swanson, 1986; Glaser and Strauss, 1967). Through an iterative process of data collection and data analysis to assess saturation of categories, theoretical sampling allows researchers to select the unit of analysis (i.e. participants, events) of the conceptual construct based on constant comparison of the concept and saturation thereof from continued data collection (Stern, 1994; Strauss and Corbin, 1990; Chenitz and Swanson, 1986). Theoretical sampling, which is the application of the constant comparison method, involves comparing like with like to look for emerging patterns and themes, differences and similarities across the data, and facilitates the selection and saturation of theoretical and conceptual data (Strauss and Corbin, 1990; Chenitz and Swanson, 1986; Glaser and Strauss, 1967). Thus, the sample size is not predetermined at the beginning of the study, but is emergent on the theoretical concepts saturation and is an iterative process that is founded on the data collection and simultaneous data analysis (Strauss and Corbin, 1990).

In this study, theoretical sampling was not based on the number of participants, but rather on the theoretical concepts that emerged from the repeated sessions with the same participants over time at the respective research settings. This was premised on Strauss and Corbin's (1990) assertion that in grounded theory studies wherein the phenomenon of interest is developmental or evolving in nature, the researcher follows the same group of persons over time as opposed to theoretically sampling individuals or persons (Strauss and Corbin, 1990: 179). Since the conceptual category of interest was the process of development in terms of the participants' skills of critical reflection and the establishment of CoPs, the researcher elected to purposively sample a group of 8-10 HIV nurse practitioners from each of the two district level hospitals. Guided by this inclusion criterion, a group of ten nurses from each of the sampled hospitals were sampled. However due to attrition of two nurses during the introductory sessions of the reflective discourses, from the rual hospital; the total sample comprised of eight (8) willing nurses, purposefully selected from the rural hospital and a group of ten (10) from the urban hospital. According to Morse and Field (1995) and Merriam (1998), a purposive sample allows the researcher to choose study characteristics or attributes that will allow enable the researcher to understand discover and gain insight on the phenomenon that is known to exist and add value to the research phenomenon. The inclusion criteria for selecting the nurse practitioners from the target population stipulated that the participant be:

(i) A professional registered nurse. This criterion was used to ensure that the participants' experience would wholly capture the experiences of HIV nursing care. As per the South African Nursing Council, Nursing Act 33 of 2003 (SANC, 2005), a professional nurse is a nurse that is registered as a general nursing and midwifery. Further to this, this category of nurse has a wider scope of practice than the enrolled nurse or nursing assistant. In light

of this definition, it was necessary that participants were professional nurse practitioners so as to ascertain a fuller scope of their duties and assess the impact, if any, of the research phenomenon (i.e. critical reflection skills and shared learning in the CoP structure) on these duties, such as initiation and monitoring of ARVs within the PMTCT programme;

(ii) Currently working in a unit wherein a PMTCT programme is offered. This could be a hospital ward, such as the labour and delivery unit, or a hospital outpatient department, such as the antenatal clinic, or in a PHC clinic that is attached to the hospital.

(iii) Working for more than 1 year in the unit or ward where HIV nursing care was being provided. This criterion was used to get a wider scope of experiences in terms of the participants' challenges of working with HIV care. Experience of more than one year in the respective units wherein HIV care is provided, either through direct patient care or within the PMTCT programme, would allow the participants to draw from experience with the critical reflection capacity building aspect of this study.

(iv) willing to be part of the study over a period of time. Given the nature of the study in terms of being process orientated, the participants' willingness to be part of the study over a sustained period of time was important to the success of establishing a CoP and exploring the process of development, if any in terms of critical reflection.

3.7.1 Theoretical sampling of group sessions

Glaser and Strauss (1967) explain that all grounded theory procedures are directed towards identifying, developing and relating concept, which are the basis of analysis. According to to

Strauss and Corbin (1990), theoretical sampling is focused on sampling concepts that have theoretical relevance to the emergent theory. These authors further note that guided with the aim of theoretical sampling, the researcher samples events or incidents that are aligned to the categories, properties and dimensions and can be related conceptually to one another.

Guided by Strauss and Corbin's (1990) description of theoretical sampling, the researcher used the incidents and events that occurred within the developing CoP in terms of learning to reflect, the process of critical reflective skills enhancement and the group dynamics as the concepts and categories that emerged in the process of theoretical sampling. At the end of each focus group discussion (FGD), which served as a group discussion and a forum where critical reflective skills were facilitated, the concepts of group dynamics and the elements of the developing CoPs were captured for differences and similarities between the two groups. For example, the process of learning to reflect in the urban group was verified as being similar or different to the process of learning to reflect in the rural group. This process of constant comparison of the theoretical concepts occurred until saturation of the concepts occurred among the participants of each group, and the concepts of both study groups were compared to asses for unique contextual dimensions of the emergent theoretical categories.

Theoretical sampling and saturation of theoretically relevant concepts which added to the emergent theory of the process of the establishment of CoPs of critically reflective HIV practitioners occurred in the following manner.

(i) Concepts that were related to a process of learning to reflect, defining group norms, group engagement, identifying barriers in group and experiential learning emerged within

both groups in the first two to three session The saturation of these concepts resulted in changes in the evolving nature of the participants, these led to the emergence of,

(ii) Concepts regarding critical reflection practice among the participants, greater critical thinking, clinical reasoning, group cohesion and group autonomy began to emerge after the initial three sessions and extended for a further three to four sessions in both the groups. Greater confidence was a marked characteristic in the evolving nature of the participants and this was noted.

(iii) Lastly, concepts related to increased use of critical reflection and raised consciousness on the nurse practitioners' practices emerged after the sixth or seventh session and extended to the tenth or eleventh session at both the study settings. Conceptual categories such as sustainability, ownership and a changed identity became evident among the participants, highlighting the evolving nature of this research.

3.8 DATA COLLECTION TECHNIQUES AND PROCESS

Data collection extended over a period of six to seven months. This included the planning and implementation of the CoP and exploring the process of learning and development in terms of critical reflection and the development in terms of the CoPs that occurred across both the sampled groups. Several data collection techniques were used to ascertain the data and the emerged theoretical relevant concepts that underpinned the emerged theory.

Grounded theory research is commonly accepted to be holistic, naturalistic, and inductive, thus data collection from a variety of sources enhances methodological rigour as well as facilitates in the process of the constant comparison of findings to the emergent theory development (Tobin

and Begley, 2004; Strauss and Corbin, 1990).Furthermore, Munhall (2003) notes that data collection in grounded theory studies generally includes the use of in-depth, face to face interviews, as this provides a medium wherein co-construction of meaning from the experiences and feelings described by the participants in terms of the phenomenon can be achieved. Apart from in-depth interviews, other forms of data collection that are common in grounded theory studies include document analysis and field observations by the researcher, to name a few (Burns and Grove, 2010; Creswell, 2003; Crabtree and Miller, 1999).

In this study several techniques of data collection were employed, these included:

(i) Focus Group Discussions (FGDs). These served as reflective discourse sessions in the development of the CoP and critical reflective practice development among the participants,

(ii) The use of reflective journals, wherein participants' processes of critical reflection could be documented and analyzed;

(iii) Individual in-depth interviews of the study participants to explore their experiences of the developing CoP and crucial reflection skills in their clinical HIV nursing practice; and

(iv) Unstructured observation recorded as field-notes were captured during the FGDs /reflective discourse sessions and following the in-depth individual interviews.

3.8.1 Focus group discussions

Stewart and Shamdasani (1990) explains that this method of data collection was developed in the field of market research and is a useful tool to elicit information on complex topics that is

exploratory in nature. Becoming increasingly popular in health sciences, focus group interviews are used to explore what individuals believe, feel and experience with regards to a particular phenomenon related to health outcomes. Moreover the FGD method of data collection is often used for the development and evaluation of programmes, in-depth exploration of experience, and thoughts about an issue (Holloway, 2005; Rabbie, 2004). As the name suggests, a focus group discussion comprises of a selection of participants, purposively selected by the researcher, who have similar characteristics or personal or socio-economic attributes in terms of the background for the phenomenon of interest. Moreover, participants in a FGD come together to provide in-depth group discussions on a focused topic and are comfortable discussing the topic with the interviewer and each other (Rabbie, 2004; Creswell, 2003; Morse and Field, 1995). In this study, the FGDs were used as a form of group discussion and reflective discourse sessions at both research settings to elicit the process of the participant's development in critical reflective skills and group dynamics in the developing CoP. The discussions were focused as participants were required to share information and experiences in terms HIV nursing care to assess whether critical reflection played a part in the development of their skills.

Because the participants were all registered nurses/professional nurse practitioners working in the discipline of HIV/Aids and working in the maternal and child health department wherein PMTCT care is provided, this created a platform for sharing like-minded and similar experiences in terms of HIV nursing care and challenges thereof, as well as relating to shared practices. This similarity in clinical background also made participants feel comfortable to share among each other and with the researcher. Kitzinger, in Holloway (2005), notes that the group size for FGDs can be between 3 to 15 participants, but cautions that too many or too few may lead to problems, such as minimal contribution from all participants. The author recommends that a group of

between 6-8 participants is ideal for group cohesion. In this study, the FDGs/reflective discourse sessions, which formed the primary medium within which data was collected and theoretically relevant concepts emerged through the process of constant comparison, were made up of 8-10 nurse practitioners.

At the beginning of each session, participants were reminded of general group norm rules that were collaboratively created and agreed upon by the participants and researcher, some of which included confidentiality of all information and being reminded that what is shared in the group remains in the group. Participants were also reminded that the sessions were audio-recorded and all information yielded from the recorded session was to be aggregated for the generation of a collective meaning, Moreover, due to the nature of reflective practice that sometimes unearths intense emotions of the participants, particularly those infected with HIV/Aids, participants were reminded that they could request to have their input deleted from the audio recording.

Although the role of the researcher in the FGDs/ reflective discourse sessions was to moderate and facilitate the discussions, during the first three to six sessions of the data collection process, the researcher assumed a more teacher focused role and shared information on HIV related topics to fill certain gaps that had been identified by the participants. Being mindful of the threat of external bias that the researcher (as the initial facilitator) could infer on the nature of the FGDs, the use of Flanagan's (1945) critical incident technique was used. This technique fostered greater ownership of sharing clinical experiences by the participants. Moreover in terms of initiating the practice of critical reflection among the participants, during this period, the researcher encouraged members of the group to be reflective and share experiences that had happened to them, using Flanagan's (1945) critical incident technique to guide the reflective discourse

sessions and process. To stimulate discussion of clinical experiences and evoke reflective discourse on experiences, the researcher facilitated the sessions by asking general questions such as “Can you share with me what happened during an HIV related experience either in the ward or in your workplace?” “What did you do during this experience?” How did you feel about your action or behaviour or your skill during that event or experience?” “What do you think you will do differently if you had to be faced with a similar experience?” “What information or knowledge would you need to change that outcome if presented with the same experience?”

It became evident from the fifth or sixth session to the last session (i.e. sessions 10-13), that the group dynamics had changed, and there was more familiarity, trust, friendship and group cohesion among the participants. The facilitator assumed a less teacher centered role and became more of an observer of the process of reflective discourse and group autonomy within the CoP. Participants gained greater proficiency in reflective discourse and were able to share their issues and solutions regarding HIV among their peers. Moreover, the group dynamics among the participants facilitated greater autonomy and independence in their role of steering the group process. The researcher, therefore, served as observer of the group process and facilitated in asking probing questions related to the theoretical constructs that emerged, as opposed to promoting the reflective process. Each reflective discourse/FGD session lasted between 90-180 minutes. After the reflective discourse sessions, the data from both groups was analysed and compared to assess for emerging theoretical concepts on the study’s phenomenon. All reflective discourses shared within the medium of the FGDs were audio-taped and transcribed verbatim; refer to Appendix 1 for a sample of a FGD/reflective discourse session.

3.8.2 Individual in-depth interviews

Interviews, which can be semi or unstructured, are used widely in qualitative research approaches, and grounded theory is one such design that uses in-depth, face to face interviews to capture the richness and density in the data regarding the phenomenon from the participant's (Creswell, 2003; Crabtree and Miller, 1999; Merriam, 1998). Referred to as a focused or purpose driven conversation between the interviewee and the interviewer (Merriam, 1998; Morse and Field, 1995), in-depth, face to face interviews were used in this study to increase the density of the data collected and to verify concepts, categories, dimensions and properties that emerged from the FGDs/reflective discourse sessions. The interview sessions were open and promoted open sharing from the participants regarding the phenomenon. Probing questions were used to guide the interview in cases where further clarification on the identified theoretical concepts that were identified from the FGDs/reflective discourse sessions were needed.

The in-depth interviews were also used to explore how the participants perceived their learning process in terms of critical reflection skill development and their involvement within the CoP. The interview schedule, thus, had a formal introductory section, where the nature and purpose of the interview was explained to the participants, and this was followed by probing questions. Each interview lasted between 25-35 minutes. The interviews were audio taped and transcribed verbatim. The constant comparison technique (Strauss and Corbin, 1990) was employed on the data after each interview, to assess for deeper insight and understanding on the participants' experiences within the developing CoP, the learning process and the use of critical reflective skills on their HIV nursing practice. Refer to Appendix 2 for a sample of an individual interview. Saturation of the theoretical concepts regarding the participants' experiences was achieved after six interviews from the total eighteen participants in the study.

3.8.3 Document analysis of reflective journals

Premised on Schön's (1987; 1983) seminal work on the epistemology of reflective practice and experiential learning, reflective journals were used as a medium to assess the process of critical reflective development as participants documented their reflections "in and on action" in their daily clinical experience of HIV nursing. A hardcover note book was furnished to each participant, wherein their daily reflections could be documented. A presentation and demonstration on the use of the reflective journal was initially provided by the researcher who served as a facilitator in the developing CoP. Participants were encouraged to make use of the journals in different ways in light of their own comfort and creativity, being mindful of addressing the core aspects of describing an experience, i.e. what the participant did during that even/experience, the outcome and what action/s may have been taken or could be taken to change the outcome of the experience or event. The reflective journals were collected after every third to fifth reflective sessions to facilitate the researcher in conducting document analysis of the reflective journals. During the interim, where the participants were without their reflective diaries, a substitute diary was given to them. Some chose not to use another hardcover note book and chose to use loose pieces of paper which they attached to their diary upon its return. The journals were only kept with the researcher for a maximum of four days for data analysis and then returned to their owners. Appendix 3 provides an example of the reflective journals.

Discussed by Bowen (2009), document analysis is often used as a systematic procedure for reviewing and evaluating documents and may encompass files, letters, journals, meeting minutes, to name a few. Adding to the usefulness of document analysis, Atinkinson and Coffey (1997), cited in Bowen (2009), add that documents are "*social artifacts*" as they capture socially organized ways and meanings as they are produced and shared by the creator of the document.

Guided by Corbin and Strauss (2008) and Bowen (2009) document analysis was used to interpret and elicit meaning and gain an understanding of how the participants were processing the concept of critical reflection and applying it to their clinical practice. Moreover, it also allowed the researcher insight into the socially constructed and organized manner in which each participant uniquely documented, produced and created the journal entries. The reflective journals were thus analyzed concurrently in relation to the FGDs/reflective discourse sessions and individual interviews to saturate theoretically relevant concepts.

3.8.4 Observations

A core attribute in qualitative research is to ascertain the multiple perspectives of human behavior through interpretation and meaning of a given phenomenon. Aligned to the philosophical paradigm of this study, i.e. constructivism, the use of unstructured observation included looking, listening and probing with questions to facilitate in co-constructing meaning on the process of the developing CoPs (Munhall, 2003). Unstructured observations were conducted by the researcher during the reflective discourse sessions/FGDs to assess, understand and interpret the behaviour of the participants in terms of the group formation and interplay of group dynamics of the participants and the process of development in terms of critical reflection in this study. The unstructured observations were documented as field-notes immediately after the reflective discourse sessions. Observation as a technique of data collection allows the researcher to collect first hand information on the process or the behaviour that is being studied (Merriam, 1998). Moreover, as explained by Munhall (2003), observation provides insights into interactions between dyads (i.e. in this study the facilitator/participants relationship), group members and groups; it gives the researcher a sense of the whole picture in terms of non-verbal

gestures as well as the reflective discourses on the said phenomenon and allows researchers to capture the process and role of the context in terms of the emergent phenomenon.

Due to the nature of the reflective discourse sessions/ FGDs, which were interactive in terms of participant learning, discussion on HIV related information, shared experiences, skills development in terms of critical reflective practice and the process of critical reflection development, the role of the researcher in the research process was that of a facilitator and participant. Thus, the researcher made unstructured observations in terms of subtle non-verbal gestures such as body language, facial reactions of the participants and inter-participant reactions. Probing questions were also used in the reflective discourse process to verify or to enhance the meaning the researcher was making in terms of the observations. To reduce bias in recall, a notebook was used and kept. Notes were made during and after every data collection session and this source proved to be invaluable, as the researcher had documented every utterance, nuance, non- verbal expressions and emotions from the data collection sessions. The notebook served as a source of fieldnotes and reflexive thoughts of the researcher regarding the data collection sessions, and a source of theoretical memos wherein relationships of the emerging concepts were noted.

Field notes were recorded by hand and later typed and aggregated with the narrative information yielded from the other sources of data and analyzed simultaneously with data collection for emergence and saturation of theoretically relevant concepts. Appendix 4 provides an example of the field-notes captured during and after a reflective discourse/FGD session.

3.9 DATA ANALYSIS

Analysis of data in grounded theory is referred to as coding (McCann and Clarke, 2003a; Strauss and Corbin, 1990), and commences as soon as data is collected. It thus becomes an iterative process, which encompasses data analysis and data collection concurrently and is premised on theoretical sampling and saturation of the theoretical concepts (Walker and Myrick, 2006; Strauss and Corbin, 1990). The coding process, which is central to the design of grounded theory, involves breaking down the data, re-conceptualising it and putting the data back together with richer and denser meaning (Moghaddam, 2006; Goulding, 1999; Strauss and Corbin, 1990). Strauss and Corbin (1990) stress that analysis is about interpretations, as meanings to theoretical understanding of a phenomenon need to be constructed. The process of coding is an iterative process which ensures credibility of the emerged theory as it related to the large corpus of collected data. In the Straussian branch of grounded theory, there are three distinct levels of coding, namely open, axial and selective coding, which will be discussed hereunder.

3.9.1.Open Coding

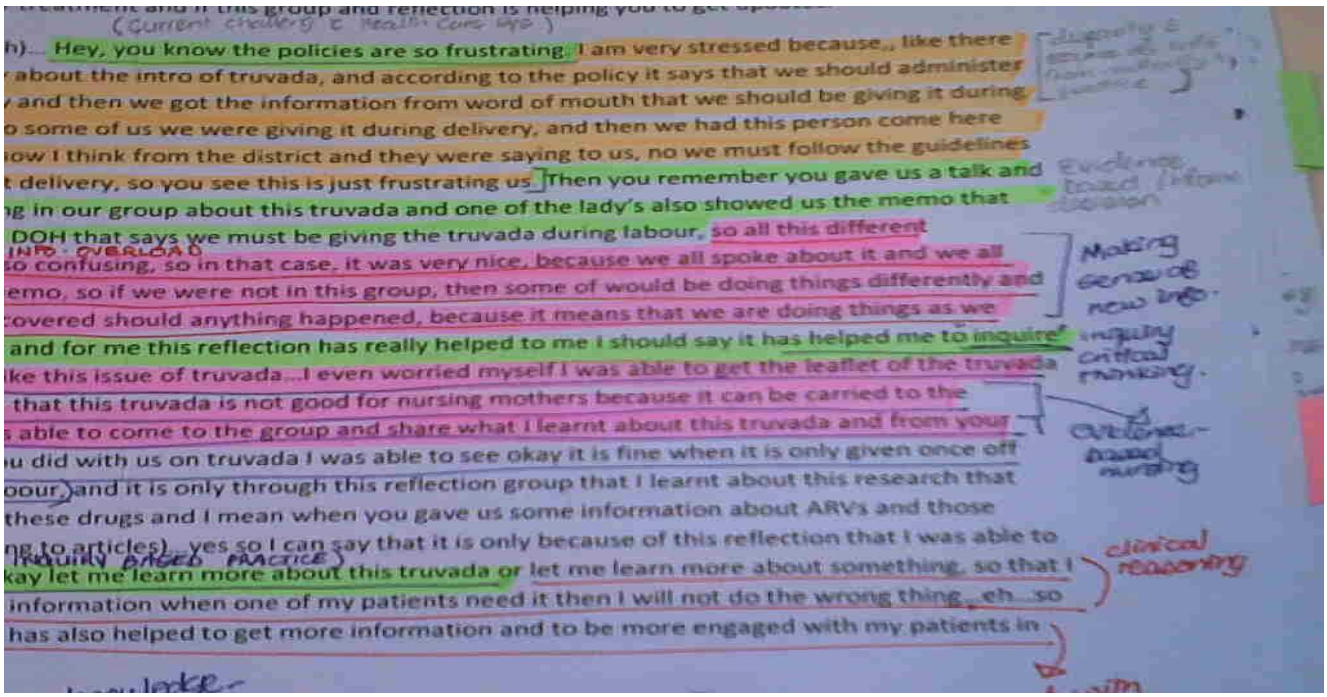
Open coding is the initial step of the analysis process, wherein the data is fractured, named and labeled, the concepts are further examined for its properties and dimensions and in this way codes are generated and categorized (Strauss and Corbin, 1990). Discussed by Strauss and Corbin (1990), the process of categorizing is at a more abstract level than the concepts that are grouped under it. Moreover, McCann and Clarke (2003a), state that a category is like a conceptual label, which describes the text which is being labeled. Babbie and Mouton (2004) summarize the process of open coding as examining the data and ascribing labels to concepts as they present themselves in the data. The two analytic procedures of open coding, as prescribed

by Strauss and Corbin (1990), were employed in this study. The first analytic procedure involved making comparisons of concepts by looking at the data sentence to sentence, which occurred during the beginning of the study and allowed for the initial categories to be generated. Thereafter, larger sections of the data was compared with each other, namely, incident to incident and then transcript to transcript was compared between the two research settings to compare and establish saturation of the emergent categories. The second analytic procedure which is referred to as neutral coding dealt with labeling the categories. To assist in this task, the researcher asked questions such as "what is this data or concept referring to?" and "what does this category represent?" By unpacking and labeling the categories in this manner, properties of the categories were established. The labels that were generated came from *in vivo* codes of the participants' words or statements, or from literature derived concepts of the researcher's knowledge of discipline specific information Table 1; represents an example of the coding process of categorization and labeling within open coding. The researcher also used various coloured pens to assist in demonstrating the various categories during the process of open coding. This assisted in especially showing sentence-by- sentence coding and categorization. Figure 2 illustrates a snap short of this coding process.

Table 1: Open coding process of sentence by sentence coding

Transcript	Categorization
Sentence by Sentence Coding and Categorization Group Member 4: So this group helped me to see that is very important that while the patient is with me that I should be giving her health education about ARVs and not just palpating and sending her. Group Member 9: In his group everybody comes together and shares…that is helpful for me, because I am learning. Group Member 2: Ja'…I too can say it has been helpful to be part of this group…err' if I can share a example…after we had the information where we looked at what was in the PMTCT policy and about the ARVs…I now made a change in my nursing…err'.. I now check with the mothers with their ARVs in the postnatal ward…I make sure I teach them well about the NVP syrup for the baby.	**Consciousness raising about practice** **Benefit of shared learning in group** **Benefit of shared learning in group** **Application of learnt knowledge** **Changed nursing practice**

Figure 2: Sentence-by- sentence open coding



3.9.2 Axial Coding

This second step in the data analysis process described by Strauss and Corbin (1990) refers to the process of the researcher putting the data back together in a new innovative way. Thus, the task of axial coding is to create relationships among the identified categories from open coding and to unpack the various concepts that made up each category in terms of their properties and dimensions (McCann and Clarke, 2003a; Strauss and Corbin, 1990). Moreover, axial coding allows the data to be put back together with greater density and meaning, wherein connections and relationships between the categories and subcategories are established (McCann and Clarke, 2003a; Strauss and Corbin, 1990). Following the aim of axial coding in terms of not only assessing the nature of the categories in terms of the concepts that aggregate under it, but also assessing similar categories for links and relationships, the researcher compiled a list of the categories that emerged from open coding. Nvivo version 8.0 was used as a data management system and to generate the list of categories through the process of line-line and sentence by sentence coding (Appendix 5, shows an example of the Nvivo output from initial coding) Similar labeled categories were grouped together. Following this exercise, the sub-lists of similarly grouped categories were teased out to assess the dimensions and properties of each category. This process allowed subcategories to emerge, since each category was examined in terms of how they relate to one another (Strauss and Corbin, 1990). Through this iterative process, all the data concepts within each category were assessed to ensure they fitted in terms of the emerging theoretical framework. This process, referred to as category reduction by Strauss and Corbin (1990), allowed for similar conceptual meaning to be aggregated. Table 2 illustrates an example of a category in relation to subcategories and dimensions.

Table 2: Category in relation to subcategories and dimensions

CATEGORY	SUB CATEGORIES	DIMENSIONS
Formation Phase of CoP (coalescing, learning and developing)	Learning to Reflect	Concept clarification Application of the concept critical reflection to practice Hesitation and resistance Transitioning and familiarity with reflection Learning how to reflect deeply
	Group Formation through norming and storming	Reservations and dependence Establishing middle ground

3.9.3 Axial Coding and the Paradigm Model

During axial coding, the connections between the categories are centered towards forming an overall theoretical formulation that will become the main categories of the emergent theory (McCann and Clarke, 2003a; Goulding, 1999; Strauss and Corbin, 1990). Axial coding focuses the researcher in describing the phenomenon of the study (which in this case was the establishment of CoPs) in terms of the *antecedents,* which described categories that led to or gave rise to the need for the CoP; the *context,* which described a set of condition within which the need for a CoP was embedded; the *action and interactional strategies,* which described the process which transpired in the development of the phenomenon; the *intervening* variables, which presented the facilitative and hindering conditions that impacted on the development of the CoP; and the *outcomes,* both intended and unintended or consequences of the phenomenon, which in this case was the functioning CoPs of critically reflective HIV practitioners (Strauss and Corbin, 1990).

The paradigm model of Strauss and Corbin (1990) was used as vehicle that allowed the researcher to think systematically about the corpus of categories and concepts yielded from open coding and to think through how the categories will relate in terms of the phenomenon of the study. Even though the illustrations of the paradigm model are depicted in a linear illustration, the process of analyzing and linking the categories for their higher order grouping was not a linear or sequential process.

3.9.4 Selective Coding

The last step in the analysis process, selective coding, is described by Strauss and Corbin (1990) as being similar to axial coding in terms of integrating categories, but is at a more abstract level of analysis. Furthermore, Strauss and Corbin (1990) assert that the categorization of axial coding forms the basis for selective coding. During selective coding, a core category was identified and it is from this core category that the theory emerged; and linked all the major categories already identified and grouped in terms of the theoretical framework of the paradigm model. This is also referred to as establishing the *story line*, which simply put, refers to labeling the central theme of the data (Strauss and Corbin, 1990). The process of selecting the core category entailed systematically relating the potential core category to the other categories of the data, validating the relationship in terms of other categories and working on categories that needed more density by development and alteration (Strauss and Corbin, 1990). Moreover the core category was tested against the data to establish the fit and credibility of the theory that emerged from the actual data set to be a true reflection of the data (McCann and Clarke, 2003a). Lastly, Strauss and Corbin (1990) advise that further development of the core category must occur in relation to selective literature to ensure the fit in relation to other studies or theories. It is through this process of comparison and concept modification that the central story line was explicated.

3.9.5 Analytical Memos and Diagrams

Throughout the interwoven process of data collection and analysis, analytical memos and diagrams were used to describe the analytical process of coding, categorizing and exploring the dynamics of the concepts in terms of dimensions and also to note the researcher's thoughts on the emergent theorizing process. Strauss and Corbin (1990: 197) state that memos are *"the written records of the analysis related to the formulation of the theory"*. These authors explain that memos can take the form of code notes which contain information of the coding process of open, axial, and selective coding, as well as the paradigm model. Memos can also be in the form of theoretical notes, which contain information about the logical thinking process of inductive or deductive reasoning of the concepts and categories in terms of their relationships. Lastly, memos can be in the form of operational notes, which contain information for the researcher in terms of direction or cues for subsequent sampling or saturation of concepts. However, memos written at any given time can have elements of all three aspects of memos (Strauss and Corbin, 1990).

In this study, memos were written throughout the process and as the data collection and emergence of the categories were saturated, the analytical memos had elements of all three aspects of memo recording. Appendix 6 provides an example of the theoretical memo.

Diagrams were also used in this study, mainly during the axial and selective coding where connections of similar categories were grouped. Diagrams allowed for the density and complexity of the theory to be illustrated and teased out through mapping and placing categories in relation to similar constructs of the paradigm model (Strauss and Corbin, 1990). Various diagrams are presented at selected phases of the data analysis write up in Chapter 4.

3.10. QUALITATIVE RIGOR

Qualitative research brought about the emergence of a new language in the need to find concepts that aptly represented validity and reliability in the naturalistic or interpretevist paradigm (Shenton, 2004; Winter, 2000). Winter, (2000), commenting on validity in qualitative and quantitative research, states that "*Reliability and validity are tools of an essentially positivist epistemology*". The term qualitative rigor has been established to describe the means through which integrity in the research process is maintained (Tobin and Begley, 2004). Moreover, Lincoln and Guba's (1985) model or ideas of trustworthiness provided naturalistic researchers new ways of ensuring validity, reliability and generalizability. These authors recommend four criteria for ensuring trustworthiness, namely, (i) credibility; (ii) transferability; (iii) dependability and (iv) confirmability.

Qualitative rigor and trustworthiness have been regarded as a cornerstone in assessing the credibility, auditability and fittingness of the substantive or middle range theory which is generated through grounded theory design (Rolfe, 2006; Chiovitti and Piran, 2003; Hall and Callery, 2001). Khalifa (1993) explains that if the qualitative research study does not explicitly indicate measures to ensure trustworthiness, the resultant theory has no credibility. Strauss and Corbin (1998; 1990) and Glaser and Strauss (1967) affirm the integral role of theoretical sampling and saturation of concepts as a means of ensuring rigor. Furthermore, Strauss and Corbin (1990) acknowledge the thick descriptions of researchers in their presentation of data collection and analysis procedures; the use of theoretical memos, which offer reflexivity on the researchers meanings and constructions of the emergent themes; and triangulation of the data sources, which ensures trustworthiness of the emergent theory from the grounded theory study.

In this study, the following four criteria of trustworthiness were maintained, namely, credibility, transferability, dependability and confirmability.

3.10.1 Credibility

Explained by Guba and Lincoln (1994), and Creswell and Miller (2000), credibility is aimed at addressing the authenticity of the data collected and assesses the degree to which the theoretical concepts which emerge are actually grounded in the data. Miles and Huberman (1994) and Merriam (1998) state that credibility addresses the fit of the data and how congruent the findings are with the reality of the collected data. Janesick (2000) and Tobin and Begley (2004) further explain that credible techniques of data collection and analysis ensure that the participants views and expressions are accurately represented in the researcher's meaning Denzin and Lincoln (1994) and Botma, Greeff, Mulaudzi and Wright (2010) suggest prolonged engagement, triangulation of data and member checking as some techniques which can be employed to ensure credibility. To achieve credibility, the following measures were used in this study.

Triangulation of data was achieved through four sources of data, namely reflective discourse sessions/FGDs, in-depth individual interviews, field-notes yielded from unstructured observations and document analysis of reflective journal entries. Emergent categories from the all four data sources were initially assessed against the data and research supervisor and a detailed outline of the data analysis and data collection process was also provided. Apart from ensuring confirmability, the use of multiple sources of data allowed the researcher to verify the data findings and ensure that diverse constructions of the reality of the participants' experience in terms of the process of critical reflective skill development and the development of the CoP were wholly captured through the various medium of data collection. Moreover, given the role of the

researcher as the initial facilitator in the critical reflective discourse sessions; the use of multiple sources of data safe-guarded the threat of bias that may have been inferred by the researcher in terms of the data collection process and the nature of information collected. In this case the use of multiple sources of data; especially that of the reflective journals and the reflective discourses minimized the threat of external bais of the researcher.

Prolonged engagement of the data collection process was achieved. The establishment of the CoPs and the development of the participants in terms of critical reflective practice was explored over an extended time period, which allowed the process to be fully assessed. Data collection extended from February 2010 to the beginning of September 2010, a total of eight months of data collection. The element of prolonged engagement of the data collection was thus achieved, and this facilitated greater insight into the participants' meanings and social symbolic attachment that were assigned to the various phases in both the group dynamics in the development of the CoPs and the stages of learning and development in terms of critical reflective practice skills. The prolonged engagement between the researcher and the participants facilitated feelings of familiarity and rapport between them. This promoted credibility in that the researcher reached a level of trust with the participants where they opened themselves to deeper sharing, which created opportunities to verify the information and theoretical concepts that had emerged. Moreover, this served to ensure honesty in the data collected from the participants and to minimize the threat of bias of the researcher on the nature of data collected, given the researcher's role as the facilitator in the initial reflective discourse sessions. Explained by Shenton (2004), sustained data collection increases the chances of participants behaving and responding more naturally as opposed to once off data collection techniques.

Member-checks were used to assess whether the theoretical concepts that emerged from the data analysis were consistent with the participants meaning. Throughout the entire period of research group participants of both groups engaged in peer debriefing at the end of each reflective discourse session/FGD, which allowed for verification of the emergent categories at the end of each data collection and data analysis session. Furthermore, at the end of the data collection sessions when the development of the CoPs was explored and documented, participants were given the opportunity in a group session to read the related transcript evidence and extracts against the written version of the data analysis to assess congruency in the researchers meaning and their intended meaning.

3.10.2 Transferability

The generalisability of the emergent theory and the research inquiry is addressed through transferability (Guba and Lincoln, 1994). Transferable measures factored into the qualitative research ensure that study findings can be applied to other situations (Munhall, 2003). Tobin and Begley (2004) caution that in naturalistic studies transferability is limited to case to case transfer or in this study, group to group transfer as the context or settings are only comparable if they are similar. Lincoln and Guba (1985) advise researchers to provide sufficient contextual information about the fieldwork sites so that reader of the findings can make a transfer to another setting. To ensure transferability of the study findings and the emergent theory of this study, the following strategies were used:

A thick and dense description of the study setting, rationale for the choice of the study setting in terms of the province, and the sampled institutions are provided. Further to this a thick description of the sampled institutions and the sampled participants and a description of the

participants in terms of their demographic attributes are provided. A full and dense description of the data collection sessions in terms of duration and time period of each phase is also described. The inclusion criteria guiding the *purposive sampling* of the participants further provides a description and a rationale for the choice of the sampled participants in terms of the demographic characteristics and the rationale for choosing those criteria. A detailed description of the process of theoretical sampling of the reflective discourse sessions/FGDs was also detailed, which allows for transferability of a similar process related study in term of assessing the development of a process, such as the establishment of a CoP over time.

3.10.3 Dependability

Likened to reliability in the positivist paradigm, dependability focuses on the stability of the research data (Creswell and Miller, 2000; Guba and Lincoln, 1994). The fluid nature of human experiences which is central to the naturalistic paradigm of qualitative research sometimes makes the stability and dependability of study findings problematic (Shenton, 2004). This author suggests that a thick description of the study setting, the data collection plan and the procedure for data collection should be specified.

In this study, a thick and dense description of the study setting, the data collection methods and a log of the data collection sessions has been provided. This provides a glimpse for future researchers wanting to transfer and replicate a similar study to engage with the data collection procedures employed in this study. This procedure is also referred to as an *audit trail* (Denzin and Lincoln, 1994; Guba and Lincoln, 1994). This ensures that the research process can be traced in logical sequence. Further to this, the expertise of the research supervisor on grounded theory and qualitative research was used to ensure the dependability of the coding process and the

emergent categories. The monitoring of the data collection process served as peer review and the examination of the emerging findings added to the dependability of the research process.

3.10.4 Confirmability

Confirmability refers to the objectivity of the study procedures and the findings thereof (Guba and Lincoln, 1994).Moreover, Shenton (2004) mentions that in order to maintain confirmability, steps must be taken to ensure that the research findings are a result of the participants' experiences and ideas, rather than the preferences of the researcher. Miles and Huberman (1994) suggest an audit trail, reflexivity and triangulation as methods to ensure confirmability. An audit trail ensures that a step by step procedure of the data collection process, reasoning for choice of design and critiques of the design of methodology are provided (Miles and Huberman, 1994).

In this study an audit trail was maintained. The rationale for the paradigm and the choice of design were detailed and all data collection procedures and reasons thereof were provided. The researcher transcribed verbatim all audio recorded data collection sessions, typed reflective journal entries as they were documented and descriptively and reflexively noted all field-notes immediately after each data collection session. All of this information was provided to the research supervisor for peer examination.

3.11 DATA MANAGEMENT

During the period of the research, all field-notes and transcribed data yielded from the FGDs/reflective discourse session and in-depth individual interviews were saved on Microsoft Office Word 2007 and the Nvivo version 8.0 software programmes. All files were backed up on the researcher's personal password-protected computer and on a removable drive (USB). Nvivo

version 8.0 was used as data management system and for initial open coding analysis because the researcher felt familiar with this version as she had received training from experts in the ICT department of the University of KwaZulu-Natal. The reflective journals of the research participants were stored in a locked cupboard to which only the researcher and research supervisor had access. All forms of data will remain stored in a password protected computer and external hard drive or a locked cupboard that is accessible to the researcher and supervisor only. All data will be destroyed five (5) years after completion of the study by shredding of reflective journals and hard copies of transcribed data. The electronic versions of the transcribed data yielded from the FGDs/reflective discourse session, the in-depth individual interviews and field-notes and audio files of the collected data will be deleted from the PC hard drive and external USB drive and deleted from the PC's recycle bin.

3.12 RESEARCH ETHICS

Ethical principles and good research conduct guide all forms of research. Burns and Grove (2010) assert that nursing research inquiry is not only hinged on the researchers' expertise and diligence in endeavoring with the research study, but also on honesty, integrity and good ethical practice. Terreblanche, Durrheim and Painter (2006) maintain that fundamental ethical principles are essential to protect the welfare of the research participants and to ensure credibility in the research process Botma, Greeff, Mulaudzi and Wright (2010) also emphasize the use of ethical principles in guiding the research study from the conceptualization through to the dissemination of findings, stressing that all aspects of research, not only data collection should be aligned to ethics. Against this backdrop, research ethics were maintained in the following manner in this study.

3.12.1 Institutional and Gatekeeper Permission

Following the development and presentation of the proposal to the School of Nursing, University of KwaZulu-Natal, institutional permission and ethics clearance was obtained from the Humanities and Social Science Ethics Committee of the University of KwaZulu-Natal in November 2009, ethical clearance number HSS/0719/09 (See Appendix 7A). Following the onset of the study and data collection and analysis, a re-application for an amendment to the study's title was made to the Humanities and Social Science Ethics Committee of the University of KwaZulu-Natal. The amendment to the title was approved with ethical clearance number HSS/0719/09D (See Appendix 7B). Gatekeeper permission was obtained from the Provincial Department of Health, KwaZulu-Natal and from the hospital managers of the two district level hospitals that were being used for the study. To obtain gatekeeper permission, a meeting was established with the relevant manager and the study protocol was discussed at the face-face meeting. This allowed for clarifications to be made and a more open discussion on the envisioned study. Following the relevant gatekeeper permission (See appendix 8), a similar information sharing meeting with the nursing management team of the maternal and child health units (i.e. midwifery units) was established. Following buy in and commitment from the department management in terms of the sustained sessions with the sampled nurse practitioners and the nature of the research process, an informal meeting was held with all nurse practitioners working in the maternal and child health units. This allowed for questions, clarification and recruitment of the participants for the study.

3.12.2 Ethical Principles

The core ethical principles of research were maintained in the following manner:

Respect for persons: The participant's right to self determination was maintained throughout the research. Participants were informed that they had the right to withdraw from the study at any time without penalty and that their participation and contribution or the lack thereof in the study did not in any manner of form have any implications on their working environment. **Confidentiality:** The nature of data collection through the use of focus group discussions, which served as reflective discourse sessions, posed a threat to internal and external confidentiality of the members of the FGD. Tollich (2009) notes that the nature of FGDs cannot guarantee absolute confidentiality, especially when participants are drawn from the same organization (as is the case in this study). One way of mitigating this threat was establishing group norms or rules in terms of how sensitive information would be handled and preventing nurses from discussing information outside the group. This was an important aspect which discouraged nurses from falling prey to the temptation of gossiping, which may have been strong, especially when participants are from the same social network (Tolich, 2009: 100). The information sheets and related informed consent (See Appendix 9) explicitly highlighted this as a threat to the participants' confidentiality, so as to create full disclosure of possible threat for the participant in terms of their participation in the study. The informed consent also had a contract that stated the above threat and that participants' agreement in the study denoted their acknowledgement of the above.

Beneficence and Anonymity: The well being of the participants was maintained through use of a private space for the FGDs and CoP meetings. Participants were informed that all information was confidential and that no names would be used in the process of analysis, as all information was aggregagted for a common meaning. Participants were also informed that they did not need to mention their real names in the FGDs, but could use a pseudonyms if they preferred.

Threat to beneficence: Due to the qualitative and enquiry nature of the study, there was a risk of exploring unresolved feelings which might have upset the participants (i.e. issues of moral distress if the participants were HIV positive or affected by HIV). In such a case, the researcher who is a qualified nurse with experience in HIV/Aids related care and counselling with experience in HIV/Aids relateted research, would use her judgment and provide counseling and refer to another support if necessary. However during the prolonged time of data collection, a trust relationship developed between the researcher and the participants which created a safe space for open discussion of personal information, and therefore there were no incidents of participants becoming extremely upset or needing counseling.

Principle of Justice: Selection of research participants was fair and directly related to the study. None of the participants were known to the researcher to avoid selection bias. Due to the trust that was established and sustained in the developing CoPs, participants were informed that they had the right to indicate the extent to which certain information could be used (e.g. instances of disclosure of own or family members HIV status). During the feedback session, which served as member checking exercise, participants had the opportunity to withdraw any information or excerpts they were not comfortable about using in the results of the study. None of the participants from either site withdrew any information and they all validated that the meaning of the information was correctly described. All tape recorded FGDs, in-depth individual interviews and reflective diaries were used for the purposes of the data analysis only. To maintain anonymity, participants were not required to label their reflective diaries with their names to ensure that data cannot be linked to a specific participant.

3.13 CONCLUSION

In this chapter the mechanics of the research study with regards to the research approach and its related philosophical underpinning was presented and justified. The research design of grounded theory was discussed in relation to the two dominant schools within the grounded theory approach, and the Struassian version, which was employed in this study, was presented. The research setting, description of the sample aligned to principles of theoretical sampling was presented, together with the various techniques for data collection. The Straussian version of data analysis was discussed in terms of the three unique stages of open, axial and selective coding was presented. Lastly issues of qualitative rigor in terms of the trustworthiness of the research process were explained. Data management and the ethical principles and considerations maintained in this study were also discussed.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF THE MAIN FINDINGS

4.1 INTRODUCTION

This chapter will present the key findings of the study. Based on Strauss and Corbin's (1990) technique of data analysis; the use of open and axial coding was used to create meaning to the empirical data that was collected through various techniques, namely FGDs, individual in-depth interviews, reflective diaries and field-notes documented by the researcher. Open coding allowed the researcher to fracture the data, which allowed the properties and dimensions of the emerging subcategories and categories to be identified. The second step of data analysis, referred to as axial coding, involved putting the fractured data back into meaningful units. The use of the paradigm model presented by Strauss and Corbin (1990) enabled the depth and dimensions of the data to be uncovered. This was achieved by linking the subcategories and categories in a systematic manner, so as to understand the **phenomenon** in terms of the **causal conditions** or **antecedents**; the **context** within which the Communities of Practice (CoPs) were established; the **action and interaction strategies** that took place in facilitating the emergence of a CoP of critically reflective HIV nurse practitioners; the **intervening conditions** and **outcomes/consequences,** which also contributed towards the development of the CoPs.

The categories, subcategories, properties and dimensions that were derived from the data analysis, emerged from the participants' actual stated or narrated words or phrases that they used during the reflective discourses, in depth interviews and/or from their reflective journals. Further to this a collection of concepts, phrases or labels was also created during the researcher's initial

engagement of technical literature, which encompassed professional and disciplinary literature that was used familiarize the reader and the researcher to the critical phenomena of interest in this study. The latter form of naming and labeling the codes is known as literature derived concepts (Strauss and Corbin, 1990).

During the collection of data, the researcher observed and noted the nuances (such as the isiZulu phrase *Nazo,* which is suggestive of agreement), the body language (such as folded hands, denoting distance from the group dynamics or frowning etc) and gestures (such as long sighs, laughing, crying, and **…**or **err** which indicates a pause in the conversation) of the participants and these have been placed in parentheses ( ) within the transcript.

4.2. SAMPLE DESCRIPTION AND REALISATION

Two district level hospitals from the province of KwaZulu-Natal were purposively sampled for this study. A fuller description of the sampling procedure and rationale for the use of the settings is described in chapter 3.

The sample in Hospital A was made up of 8 registered nurses and midwives, all of whom had a minimum qualification of a national diploma in general nursing and midwifery. The highest level of qualification within this group was a Bachelor of Nursing. The average number of years of work experience as a nurse practitioner was 17.8 years, ranging from 6 to 34 years. The ranking or the work positions of the participants ranged from professional nurses to zonal matrons (i.e. management positions). Participants sampled from hospital B included 10 nurses, all of whom were registered nurses and midwives and, similar to the rural site, were also qualified with a national diploma in general nursing and midwifery. The highest qualification in this group was a

Masters degree in nursing. The average number of years working as a nurse practitioner was 22 years, ranging from 12 to 36 years. Similar to the rural hospital, the ranking or the work positions of the participants ranged from professional nurses to zonal matrons. Table 3 depicts a fuller picture of the participants from the rural and urban setting, in terms of the demographic variables captured for this study.

Table 3: Description of demographic characteristics of the participants

Participant #	Age	# of years as nurse	Designation/Position	Highest post school qualification	Description of work setting/unit	HIV related training
RURAL						
1	49	28	Registered Midwife Operational Manager for Labour Ward	Diploma in General Nursing and Midwifery	Hospital inpatient ward (labour and delivery ward	PMTCT workshop
2	38	13	Registered Advanced Midwife and Second in charge of unit	Post Basic Advance Diploma – Midwifery	Hospital inpatient ward (labour and delivery ward)	Basic HIV/Aids Counselling & PMTCT workshop
3	28	10	Registered Midwife	Diploma in General Nursing and Midwifery	Hospital outpatient clinic (antenatal clinic)	Basic HIV/Aids Counselling workshop
4	29	6	Registered Midwife	Diploma in General Nursing and Midwifery	Hospital outpatient clinic (antenatal clinic)	Basic HIV/Aids Counselling workshop
5	37	13	Registered Midwife	Diploma in General Nursing and Midwifery	Hospital inpatient ward (labour and delivery ward)	PMTCT workshop
6	42	18	Registered Midwife	Diploma in General Nursing and Midwifery	Hospital inpatient ward (labour and delivery ward	PMTCT workshop

7	46	22	Registered Midwife	Diploma in General Nursing and Midwifery	Hospital outpatient clinic (HIV/AIDS Wellness)	Basic HIV/Aids Counselling and PMTCT & ARV workshop
8	58	34	Registered Midwife and Zonal Matron for Maternal and child health dept	Bachelor of Nursing	Zonal Manager for all midwifery and women and child health units	Basic HIV/Aids Counselling & PMTCT & ARV workshop

SUMMARY INFORMATION- RURAL PARTICIPANTS	
Mean Age in Year	41 years
Range of Age	28-58 years
Average number of years working as a nurse	18 years
Range of number of years working as a nurse	6-34 years
HIGHEST LEVEL OF EDUCATION	
• Diploma in General Nursing & Midwifery	n= 6 (75%)
• Post-basic Advanced Diploma in Midwifery	n= 1 (12.5%)
• Bachelor of Nursing	n= 1 (12.5%)
DESIGNATION/POSITION	
• Professional Nurse/Regsitered Midwife	n= 5 (62.5%)
• Unit Manager	n= 2 (25%)
• Chief Professional Nurse	n= 1(12.5%)
DESCRIPTION OF WORK SETTING/UNIT	
• Labour and Delivery Unit	n=3 (60%)
• Antenatal Clinic	n=2 (25%)
• HIV/AIDS Wellness outpatient clinic	n= 1(12.5%)
• Management- All maternal & child health units	n= 1(12.5%)
PREVIOUS HIV RELATED TRAINING	
• Basic HIV/AIDS Counselling training	n= 5(62.5%)
• PMTCT training	n= 6 (75%)
• Basic ARV Therapy training	n= 1(12.5%)

URBAN						
1	60	35	Registered advanced Midwife and Zonal Matron for Maternal and child health dept	Post Basic Advance Diploma - Midwifery and Bachelor in Nursing	Zonal Manager for all midwifery and women and child health units	Basic HIV/Aids Counselling and PMTCT, pregnancy options counseling and ARV workshop
2	47	26	Registered Advanced Midwife and Unit Manager	Post Basic Advance Diploma – Midwifery	Hospital inpatient ward (labour and delivery ward)	PMTCT workshop
3	34	14	Registered Midwife	Diploma in General Nursing and Midwifery	Hospital inpatient ward (postnatal)	PMTCT workshop
4	34	22	Registered Midwife and Unit Manager	Post Basic Advance Diploma - Midwifery and Bachelor in Nursing	Hospital inpatient ward (postnatal)	PMTCT workshop
5	52	17	Registered Midwife and Operational Manager	Post Basic Advance Diploma - Midwifery and Masters Degree in Nursing	Hospital inpatient ward (labour and delivery ward)	Basic HIV/Aids counseling and PMTCT workshop
6	49	12	Registered Midwife	Post Basic Advance Diploma – Midwifery	Hospital outpatient ward (antenatal clinic)	Basic HIV/Aids counseling and PMTCT workshop
7	49	25	Registered Midwife	Post Basic Advance Diploma - Midwifery and Bachelor in Nursing	Hospital outpatient ward (VCT and ARV clinic)	Basic HIV/Aids counseling, VCT PMTCT workshop
8	62	36	Registered Midwife	Diploma in General Nursing and Midwifery	Hospital outpatient ward (antenatal clinic)	Basic HIV/Aids counseling, VCT and pregnancy options

						and PMTCT workshop
9	46	19	Registered Midwife	Diploma in General Nursing and Midwifery	Hospital inpatient ward (labour and delivery ward)	Basic HIV/Aids counseling and PMTCT workshop
10	39	13	Registered Midwife	Post Basic Advance Diploma – Midwifery	Hospital inpatient ward (postnatal ward)	Basic HIV/Aids counseling , VCT and PMTCT workshop

SUMMARY INFORMATION- URBAN PARTICIPANTS	
Mean Age in Year	47 years
Range of Age	34-62 years
Average number of years working as a nurse	22 years
Range of number of years working as a nurse	12-36 years
HIGHEST LEVEL OF EDUCATION	
• Diploma in General Nursing & Midwifery	n = 3 (30%)
• Post-basic Advanced Diploma in Midwifery	n = 3 (30%)
• Bachelor of Nursing	n = 3 (30%)
• Masters in Nursing	n = 1 (10%)
DESIGNATION/POSITION	
• Professional Nurse/Regsitered Midwife	n= 6 (60%)
• Unit or Operational Manager	n= 3 (30%)
• Chief Professional Nurse	n= 1 (10%)
DESCRIPTION OF WORK SETTING/UNIT	
• Labour and Delivery Unit	n=3 (30%)
• Antenatal Clinic	n=2 (20%)
• HIV/AIDS Wellness outpatient clinic	n= 1(10%)
• Management- All maternal & child health units	n= 1(10%)
• Postnatal Ward	n=3 (30%)
PREVIOUS HIV RELATED TRAINING	
• Basic HIV/AIDS Counselling training	n= 7(70%)
• PMTCT training	n= 10 (100%)
• Basic ARV Therapy training	n= 1(10%)

4.3 THE RESULTS OF THE STUDY

The emergent categories and subcategories are presented hereunder under the constructs of the paradigm model described by Strauss and Corbin (1990). The meaning units are presented in a systematic manner of conceptualisation of the phenomenon; the antecedents, the context, action and interactional strategies that were undertaken in the process of the emergent CoP, the intervening conditions and outcomes of the emergent CoP of critically reflective HIV nurse practitioners.

4.3.1 Conceptualization of the process of establishing Communities of Practice

Explained by Strauss and Corbin (1990), a phenomenon is described as the main central idea, event or idea that the action and interactions relate to, or is directed at managing or handling. In this study, the phenomenon, the process of establishing a CoP of critically reflective HIV nurse practitioners, was described and understood in different ways and the meanings participants attached to the phenomenon was different at each stage of their development in becoming critically reflective practitioners and becoming cohesive as the group dynamics and togetherness of the participants in the shared space of the CoPs evolved. The subcategories that emerged to conceptualize the phenomenon included:

(i) A practice and learning community: *"better than being back at school"*; (ii) A support network:*"Feels like home…I'm with family here";* (iii) Collaborative, and purposive driven working to make a difference: *"Sisonke…together we can!";* and (iv) a space that fostered self-determination: *"staring to feel in control again…like a nurse again"*

4.3.1.1 A practice and learning community *"Better than being back at school"*

As participants progressed in their familiarity with critical reflective practice, the CoP was likened to a classroom and a space for active learning. Emerging from the data sources, the CoP was conceptualized as a learning space, where HIV/Aids related nursing practice experiences and evidence was shared, and new learning of relevant current information was transferred through co-constructed meaning of shared experiences and information. The excerpts presented below reflect this.

"...it is where we can come and share and learn new information...that we use in how we nurse...and it makes us to deal with HIV and Aids better...I enjoy this way of learning...it is like we are back in school..." (Rural FGD, participant 6)

"...being here has helped me to learn so much about this HIV....because when we come here....sometime we are just talking about what happened to us...like while we was nursing....but just from that we start to discuss issues from what we shared...and by the end we have learnt something important we can use for our practice...like one day I was just sharing about this one couple...err...saying the man is in denial...but from that we started to learn about window periods and HIV testing and this err....I think we say it like discordant couples....so I like how we learn new information like this...." (Urban FGD, participant 8)

Moreover, the approach of learning was expressed by the participants as being more meaningful and appropriate in applying the learnt information to practice. It also emerged that the CoP was a space where they could catch-up with learning that they otherwise would not have received, and special mention was made to the expanse of HIV related learning on clinical policies and psychosocial issues that were shared in the CoP learning space. The selected extracts presented below reflect this.

"when we come here err…maybe with some questions in your mind…then you leave knowing how you are going to make a difference in the ward…I was not sure about so much like with the

treatment for the ARVS…err…even when it comes to how the drugs should be given like we had this question about the Truvada…so it was good we came here….all of us spoke about it then in the end we had these papers telling us about the drugs…so you leave feeling like you got the right information…and when you are now alone in your ward...you know what needs to be done...so I liked learning like this...we could come here and make up our own topics for our needs....” (Urban-FGD, Participant 4)

*“Participant 10 …I think this space is better than learning in school (laughing from everyone)…ja…you know in the classroom…you are just taught from the text book…I like this learning we get from this group…yabona’ (*you see*) everyone shared what happened to them and how they changed it…so it makes the information like real…because we all know about the examples that we are sharing here…Participant 10 …it is good to be learning like this..i know for me...if I was not coming here...I was not going to have learnt all this information...because for some of us...we don’t have the opportunity to go study more...or we miss the hospital training...” (Urban-FGD)*

It also emerged from the participants that the learning space of the CoP created an organic practice environment where authentic HIV/Aids related nursing issues could be shared. Having the opportunity via the medium of reflective discourse to openly share real-life practice stories, lived experiences of working in the context of HIV/Aids and resources and ideas that may have been tried and tested by the other members of the CoP was noted as a meaningful and appropriate attribute of the CoP in engaging the participants in an authentic way of learning about HIV/Aids. Some excerpts of the participants note the following;

“...I think that this is such a new and nice way of learning about something...you know if you go to school you will just be learning from a text book about issues about HIV/Aids...but some of it might not be like related to what we are challenged with...so I like how we come and share our own stories of what effects us in the wards and how we deal with it.... “(Urban individual interview)

“...it makes the learning real...because when someone is telling their experience...and then maybe someone give you some advice for a problem you might have come to the group with...err...then I can say oh...what she is telling me is going to be useful because we are all seeing the same kind of patients and working in the same place...so the learning is also about our own real-life problem...” (Rural FGD participant 6)

It also emerged that the CoP was seen as a space for knowledge transfer and sharing and was referred to as a “resource hub” where evidence informed practice through active learning and

mutual engagement of all participants was fostered. This was regarded as a cardinal characteristic in the learning trajectory of the participants in not only developing skills in critical reflective practice and HIV/Aids related information, but participants also noted that the climate of the CoP cultivated lifelong inquiry focused nursing. The excerpts from the data reflect this.

"because we all come and share here...it has opened my eyes on how to use information in the way I nurse...and that was a positive learning things I have grown with in this group..."Rural FGD, participant 8)

"...I use the new information that we get from this group in my practice..... like I can share one example…when we were discussing the different drugs…so it was discussed how the HB of the mother must not be very low because it affects her if she is on this…so in the wards I make sure we check the patients iron levels ....so it is easy to use the information in our practice...because we come here and exchange information with one another...some even come with the information like a article or documents...and it makes the learning we do here more err....like in-keeping with what we do in the ward..." (Rural FGD, Participant 3)

4.3.1.2 A support network*"Feels like home…I'm with family here".*

Emerging from the data it was evident that through sustained contact and familiarity among the participants, the CoP space was characterized as a support structure, a platform where participants could come and openly reflect on emotionally charged issues which caused emotional exhaustion and stress in working with HIV/Aids on a daily basis. Participants described the CoP space as a family, where difficult experiences could be openly discussed and a source of comfort, advice and support was offered. The following extracts highlight this.

"…I sometimes wait to come here for our meetings...just being together gives you that energy that you need...err...and to share with my sisters some of my challenges…it makes you to feel lighter when you leave here…so we support one another here too…" (Rural individual interview)

"...I can say that I depend on coming here now....I can't do without out our meeting...just to come and unburden...we even exchanged our telephone numbers…because some of the thins with nursing and especially with HIV...it make you feel down...and to feel so depressed then you just want to share with someone ...even your own family at home don't understand sometimes

about what we face... but here we are one family…some of us we can even come here and cry…and we can get that support and advise to deal with your problems..." (Urban individual interview, participant 8)

The data sources also revealed that the CoP was conceptualized as a support space for best practice. Apart from the emotional support participants received from the social network of learning and participation in the CoP, it was also noted that participants received support in aligning themselves towards better practice. The openness, trust and friendship that was fostered within the CoP learning and sharing space, created a climate wherein participants were open and honest in discussing prejudicial and stigmatizing behaviour and action towards patients living with HIV/Aids. Moreover, the supported network of the CoP also fostered experimentation of new ideas and allowed room for making mistakes. The following selected conversations from the reflective discourse highlight this.

"Participant 9: ...I want to share something...it is something that I feel and I know that it affects my behaviour as a nurse....err...you know when I am nursing these women (referring to patients)...and especially when I see this rash on them...yabona'...they get this rash on their body...so I just feel sick myself to be touching them...so I know that this it affects how I see the patient...because even if they say something to me...inside me I just say...cha'(NO) these women they are asking for this disease...now we must feel sorry... Participant 4...ja...I know what my sister is sharing...because even me sometime I just feel like that....but then I think of how they must be feeling...so I just ask myself where is this thoughts in me coming from...err....you know I think that sometime we are still afraid of getting this virus...so we just act like this...because we too are scared... (Urban-FGD)

"..we also get support in how we nurse...because we are one here...then you can come and share your ideas...or talk about things like sometimes mistakes in how we nurse happen...then you get that support here...you don't feel so isolated like how it was before...and it helps you become better...because you know that even if you tried something and it is not right...you get advice and we all share and talk about...." (Rural, participant 3)

It emerged from the findings that the supportive characteristic of the CoP also extended to the co-construction of HIV/Aids related practice knowledge. Participants noted how the supportive environment of the CoP gave them the opportunity to be themselves without having the pressure

of being seen as the custodian of all practice related information. Noted in the reflective discourse, participants shared that the familiarity among one another created a space for engaging and experimenting with new ideas on HIV/Aids related nursing practices. The following excerpts presented below highlights this.

"...you get so much support from the other nurses in our group...you feel like yourself...you don't have to try and be something else...where you have to act like you know all the information..." (Urban individual interview)

'...you feel comfortable to even make mistakes in front of the others...because we are here to grow and there is no....barriers with us...so even to come and share something new that maybe you want to try....and to get the opinion of the others...it is supportive and it encourages you to try and do something different in how we nurse....so I can say with being in the group and getting that support...I feel more confident in trying new things in my practice...." (Urban FGD, participant 6)

4.3.1.3 Collaborative and purpose driven working *"Sisonke…together we can!"*

Emerging from the data, it was expressed that the CoP contributed towards a collaborative and unified practice of nursing. Participants accounted their new way of working together to solve commonly shared HIV related problems as being a characteristic of the learning and interaction within the CoP. Participants used the expression, *"Sisonke"*, an isiZulu term which denotes togetherness, to refer to the shared interactions of the CoP and the bond of sisterhood which had been created in the context of nursing HIV/Aids. Their new found way of working together was a common thread that emerged and they likened it to *"uBuntu"*, a term denoting community spirit. The following selected excerpts presented below highlights this.

"we come together as a group...and we work towards making a change in our units...err...because as we are together...we can make a difference because we are all working towards this common goal...yabona' iSisonke...where we come together in this spirit of togetherness...because we want to make a difference in how we nurse..." (Urban FGD, participant 1)

"Participant 7...we are like this big family...err...and as we have started to grow and learn in pur nursing...err...i can say there is more unity in us as nurses...we want to go out there in our wards and make a difference...Participant 1you see how we are one like this uBuntu in our community...we are this same family here...and we are using all our efforts together to work to make a difference..." (Urban-FGD)

Data sources reflected that the, camaraderie among the participants created a greater work ethic and desire to move forward in ways to bring about change in their institutions regarding HIV/Aids practice. It was noted that this camaraderie contributed towards the development of inter-collaborative working relationships with other members of the multi-disciplinary team and that the collaborative approach empowered the participants to take control of their nursing practices. They were able to reaffirm their role of care provider, and the space of the CoP became synonymous to a platform for administering fair treatment to patients in the context of HIV/Aids nursing care. The following excerpts presented below highlight this.

"...I can say because we came together in this group...we were able to get that confidence...and you get that control again to be a nurse...to seek fair treatment for our patients...and to take care of them....so you learn how to be part of a group...err...not only in this group but how to work with others in the hospital... to speak out for things we could see were not going right ...like having meetings with different teams of the hospital to make sure we make a difference for our patients...'(Urban, FGD, participant 1)

"...when you approach other people because you are not alone...like you are in a group...so it makes it easier for your voice to be heard....and for change to happen soon...it was also easy for us to get information...like how we noticed this one testing kit was just giving us a problem...so it was easier to approach the PMTCT co-ordinator and share our experiences...so that something can get done...so if it wasn't for the group....we was going to be alone...and not strong like when we are now like this..." (Urban, FGD, participant 10)

4.3.1.4 A space that fostered self-determination and self-reliance *"staring to feel in control again…like a nurse again".*

It emerged that participants saw the CoP as a space which fostered a transformed way of nursing. Participants acknowledged that the culture of learning, inquiry and support which underpinned

the CoP gave rise to a new self determined way for their nursing practice in the context of HIV/Aids. It was noted that the identities of participants matured and transformed parallel to the continuum of the learning trajectories of critical reflective development which occurred in the the evolving CoP. Expressed in the reflective discourses, it was noted that a deeper understanding of self was illuminated through the dialogue and discovery of hidden assumptions, beliefs and values regarding HIV/Aids and nursing. The following selected excerpt illustrates this further.

" ....I can see in how I think...and how I see nursing again...I can say I have taken charge of my nursing again...before...I used to feel so overwhelmed...you know err...i used to feel so lost and to think sometimes....if I am still doing the nursing I wanted to do when I first started my training....err...now I have taken charge of how I practice again...and I feel confident...because as I was growing in this reflective practice...I could see that even how I think and work with the rest of the group was changing...." (Rural individual interview)

"...err...when we come and share...you even start to see things about yourself...and how we are towards people with this HIV...and even in myself...I can say that I am feeling changed...how I used to nurse is different now...err...if I can say that I can see that I look at the bigger picture...of how I can help as a nurse...and even together as a group...I can see we are more in control...we don't let the problems take over us...." (Rural FGD participant 6)

Another attribute that was noted from the participants was that of a professional identity that grew over time within the CoP space. Participants spoke of the learning that the CoP had cultivated and how it had led to self actualization of learning outcomes, such as critical thinking and skill development. For example, many of the nurse participants had not been familiar with the use of computers prior to their engagement in the CoP. This fostered an identity of self worth and empowerment in terms of their identities as a nurse and their professional development. The selected excerpt presented below highlight this.

"....learning new things like how to use the computer...and how to read these documents and even my thinking it has changed me...I can now see the value in learning....to grow...before even

when we did this in-service training on things like PMTCT counseling in the hospital...err....like it was part of the in-service training...but it did not make much of a difference in our nursing practice...but now....I can say we have this skills and it makes you to feel different of how you think..." (Urban FGD participant 5)

"...being in the group helps you to change you as a nurse...before it was like you feel ashamed of nursing...even your neighbours who know you are nursing...it was like you are beneath them...especially because of this HIV...because there is this shame that comes with it....and now you too get that same feeling...because you are not confident in what you know...but now...we come here...we grow and learn from one another...even new things like how to do this group discussions....and the reflection...it changed your thinking of being a nurse...now you are proud....again to be a nurse....because we are stronger in what we know..." (Rural individual interview)

4.3.2 Antecedents for establishing a CoP

In their discussion of axial coding, Strauss and Corbin (1990) explained that an antecedent is a set of conditions which can refer to events, incidents or happenings that give rise to the development of a phenomenon. Within this study, two categories emerged from the data which described the conditions that gave rise to the need for establishing CoPs of critically reflective HIV/Aids nurse practitioners. These categories included the (i) external domain, which described the challenges that occurred within the environmental or workplace setting, and (ii) the internal domain which described the emotional challenges and burdens experienced by the nurses which fuelled the need for the CoPs to be established.

4.3.2.1 External Domain: Work Structure. This category described the challenges experienced by the participants within their work environment which led to the need for the establishment of a CoP. The subcategories that emerged from the data included: (a) the changing nature of nursing in the dynamic climate of HIV/Aids; and (b) the culture of working in isolation and the need for the supporting structure of the CoP.

The changing nature of nursing in a climate of HIV/Aids. As evidenced from the data sources, one of the driving forces behind the establishment of CoPs of critically reflective HIV nurse practitioners was the changing nature of nursing. Participants shared that they are increasingly challenged to function at a level beyond their preparation and training. Furthermore, participants noted that the recent changes in their role and function as nurses and midwives are due to the changing nature of public health as a result of HIV/Aids.

"…we are being challenged from all sides…and everything is about this HIV and AIDS…hai…we are just feeling like we can't cope…sometime you don't know if this is the nursing we trained for…because so much as changed" (Urban,FGD,participant 2)

"…we are seeing so much of new things in our nursing…err…now we have new programmes like this PMTCT programme....so we can see how our role as a nurse is also changing…because now the focus is on HIV….in all the whole hospital and all the nurses…we are just treating HIV everywhere…" (Rural,FGD, participant 6)

The data revealed that a key attribute to the challenges the participants experienced was that the training they received outdated in relation to the current situation. It emerged that because the participants had done their basic training several years ago and were not au fait with more recent practices, they experienced feelings of uncertainty in terms of their practice which resulted in constant second guessing, especially in HIV interventions such as the PMTCT programme. This is depicted in the selected excerpts presented below.

"…we are always feeling uncertain about what we are doing with this PMTCT program...because we are not sure about what is the right treatment…we keep second guessing…"(Rural, FGD, participant 5)

"I...find it very difficult…things we hear about are new to us…we never covered them in our training…one wonders all the time whether the way we nursing is what should be really done for these patients…" (Urban, FGD, participant 4)

To illustrate the gap between what they had learnt in their training the current demands as a result of the disease profile, participants gave the example of antenatal care given to a pregnant woman. They compared the very basic and standard antenatal care that had been trained in with the care that that they are now expected to provide within the current context of HIV/Aids. The dynamic changes in nursing care now include having to do new HIV related tasks such as assessing the patient's or the infant's CD4 levels or the PCR levels (i.e.HIV viral load value). Participants noted that they felt uncomfortable performing such tasks as they did not know how to interpret the results or how to act on them. The selected excerpts from the data illustrate this.

*"…what we are seeing in midwifery is something new…when we did our training… at six weeks check up…we only did a physical assessment of the mother and baby and give the baby's immunization…hai (*loud sigh) *but know we have to check the mother for her CD4…and send her for ARVs…there is also the baby and the PCRs to take… these are all new things…we never had training for this…you also don't know what these results mean…so even if the mother asks you…what do you say to her…" (Urban-FGD, Participant 1)*

"…how I nurse now is very challenging…it is different…what we learnt in our training has all changed… I started nursing in 1982 or 83… with all this new changes like this program for PMTCT, you find that every time the doctors or the management send us these new memos and we have to know what to do" (Rural-FGD Participant 2)

In addition to recognizing the evolving nature of nursing in light of new disease profiles and renewed care and treatment strategies to address these changes; the data sources revealed certain properties which described the plethora of challenges experienced by the participants, themselves. The analysis demonstrated that it was on account of these challenges that the need for a CoP was evident. These challenges included (i) inadequate preparation for the changing role; and (ii) pressure to cope with an informed society.

Inadequate preparation for the changing role. Embedded in the changing environment of nursing, the data revealed that the participants experienced a feeling of being "thrown in the deep

end", since they felt inadequate, reporting that they had neither the skills nor supervision to respond to the demands of nursing in a fluid public health context. Participants' feelings of incompetency in making informed clinical decisions was an underlying discussion thread that emerged from the data. As a result of inadequate knowledge and training in HIV/Aids issues, participants were unable to recognize the clinical reasoning behind their actions, such as the use of AZT as a prophylaxis in the PMTCT programme. This is illustrated in the following excerpts:

"…we are just expected to cope…we are not even asked if we know what needs to be done, we just get told you must follow this new memo… we are drowning in the wards… we have much more patients…over and above…we must also know all this latest HIV information…I am really feeling it...it is like someone pushed you in the deep end…we are drowning…"(Rural FGD, participant 6)

"…there is so much we do not know and we are practicing…we all are just guessing with what we are telling the patients what to do." (Urban FGD, participant 7)

"…we are just doing things routinely…even myself I do not know what is the reason behind the things we do…like with this AZT…I do not know why they must take it 3 hourly and when to start it…I have learnt now that it is a prophylaxis for the mother…so at least we can put some reason into our practice…." (Urban FGD, participant 5)

Having to cope with the influx of policies, guidelines and treatment protocols underpinning HIV/Aids emerged as another challenge. An inability to keep updated on the numerous changes to national health policies and guidelines that underpinned the participants' nursing practice, compounded by their lack of preparation in being able to translate the information borne in such policies as the current PMTCT policy, further illuminated the challenge participants were experiencing and the need for a structure to support the nurses in the changing culture of HIV/Aids clinical practice.

"…there are so many policies, or what do they say err practice guidelines…there is the PMTCT one…then there is the infant feeding one…we also have one for adults and ARVs…and this one

of PMTCT…Cha' it changes all the time…but no training!hai…we are just expected to cope…with no training" (Rural FGD, participant 3)

Aligned to the changing nature of policies, with specific reference to the PMTCT policy, it was evident that the reflective discourse session created a climate of uncertainty in respect to whether what they were practicing was aligned to the current information reflected in guiding documents. In addition to this, it emerged that frustrated by the lack of guidance on what to align their practice on, participants felt increasingly overwhelmed with the corpus of information. The selected excerpts presented below are evidence of this concept.

"… change is good… we too need to know what it is exactly that our patients must follow so that we can help with this HIV, but it becomes very frustrating and challenging for us… there is so much new information…and there is no place you can go to discuss these"(Urban FGD, participant 7)

" there are new memo's or guidelines discussed at the meetings we go to…you end up feeling lost, and confused with all these changes…so many programmes…and we are nurses are expected to know all the new information…you end up being alone with this struggle…there is no one to go to…."(Rural FGD, participant 2)

Data analysis further illustrated that participants felt increasingly isolated, having no source of support in terms of a space to discuss and interrogate new information to create meaning of the new changes and apply it their practice. Participants noted that the overwhelming amount of change to guiding policies also challenged other health care professionals, who were equally perplexed about certain treatment guideline changes. They highlighted the need for a CoP where new developments can be shared and where collective learning can be promoted. The following selected excerpts from the data sources illustrate this.

" If we can come together like this to share and talk about what we are going through…like some of the challenges… this PMTCT is changing all the time…we need to learn about it…to discuss how we can apply it to our nursing…"(Rural FGD, participant 6)

"…even some of our doctors are confused about what treatment plan to follow…like we had this doctor …she came to work in ANC (referring to the antenatal department… she instructed us to not issue the AZT to the patients if they are on the PMTCT program…I don't know she was saying it is a new criteria…so we stopped for about a month….HA! when the usual doctor came he was angry ...because we were not supposed to do that... even some of the doctors are challenged by this changes in the drugs and what to do..." (Urban FGD, participant 6)

While participants were sharing experiences within the FGDs, it came to light that because of their inadequacies in terms of preparation and training, and lack of knowledge on current practices as per the revised guideline such as the PMTCT policy, they resorted to habitual and routine ways of nursing as a coping mechanism. The lack of experts to consult regarding HIV treatment and the increased workload further compounded the problem. Selected excerpts from the FGDs are presented below in evidence of this:

"…what for me is a concern is all these policies and changes with PMTCT…because we are not trained for this we don't know what to do…so for me I can say that at times we just follow one another…if I can share about the issue of this medication called Truvada…so no one knew for sure whether we must give it during labour or post-delivery...everyone was saying different things about this particular drug...so we just follow one another…I just follow what the others are doing…it is the only thing we can do…where must we go to find out if you are right or wrong?" (Urban FGD, participant 7)

*"…there is no place to find out what these drugs are for…you will just look stupid to go and ask…it means what have we been doing…there is just none even some of our interns are learning from us….so what does it say really! (*long sigh*) …it is easier to follow the chart of the previous day and just do the same routine." (Rural FGD, participant 4)*

The qualifications of the participants were varied with some having post graduate degrees in nursing and others having the minimum qualification of a diploma in general nursing and midwifery. In addition, it also became apparent that some participants had had the benefit of a better education than others, and some had received informal training on HIV related issues, while others had not. (Table 2 presentes a description of the sample). It was interesting to note, however, that these diverse educational experiences of the participants did not translate into

better coping skills with regards to the challenges they faced in providing HIV related nursing care. It emerged from the reflective dialogues that all participants were equally challenged by the pressures and demands of working in the dynamic context of HIV/Aids. Furthermore, participants who had received further education and training related that the advanced nursing training they had attended had not adequately prepared them to deal with the changes in and the management of HIV/Aids. The following excerpts illustrate this.

*"Participant 4…even some of us we have these degrees….but in the wards we are all the same…we are all going through the same challenges….so there is no difference to have these papers (*referring to qualifications/degrees*)…because we all don't know what we must be doing for this program…Participant 7:me too I can also say...now that I even finished this training...that classes it only gave us the basic information like about what is HIV...and something about counseling...so here in the wards it is different problems with this HIV...so others will think you have ama Degree you should be knowing more,..but it not like that..." (Urban, FGD)*

"…ja' I am still to finish with my studies at UNISA…(laughs)…but that is not helping me here with my patients…I have learnt nice things about theories…and other things…but this things of the drugs and the other HIV issues…they are complicated in our practice….and my training was not helpful to cope here…" (Rural-FGD, participant 4)

Related to this, the disempowered nature of the nurse practitioner emerged from the data. Due to the lack of HIV/Aids training and information, participants expressed feeling unable to practice effectively in terms of patient care, such as educating the patient based on current and comprehensive information. It emerged that participants needed a space where they could access relevant information as a supporting mechanism for improved nursing care. The selected extracts are evidence of this.

"…sometime you know that you need to look something up…even it is a simple thing like to check if the drugs are correct…some of our patients because they don't disclose at home…so they come with these pills in different container…so you too are just lost not knowing what is what…(Urban FGD, participant 2)

" you feel so helpless…like you are not in charge of this nursing anymore…before at least we knew about the normal deliveries…all of this new drugs…this program we are supposed to know all the things to do…but we have not foundation…no training…so it means you are just blindly nursing….it makes you feel powerless.." (Rural FGD, participant 4)

Pressure to cope with an informed society. Emerging from the reflective discourses, participants described the pressure they experienced in light of many of their patients who are well informed about their HIV/Aids needs. Participants shared that, at times, the informed patients had more insight and knowledge of their HIV/Aids illness and care than they, as caregivers, did, which left them feeling threatened and intimidated. Open access to information from the media and the many NGOs has made society, in general, more knowledge focused and driven. The data sources also revealed that because there was so much information available on HIV/Aids related issues, it meant that patients no longer viewed nurses as being the custodians of their care or assumed a submissive role in terms of their care and treatment. Patients were becoming more demanding in what type of care they expected in terms of the information they had gained from external sources. This emerged as an additional challenge for the nurse practitioners to keep updated with the HIV related information, so as not to seem ignorant in light of a well informed society. The following selected excerpts highlight this.

*"…they (*referring to patients*) all heard the president's speech about ARVs on AIDS Day on the news… about them getting ARVs early…like if they CD$ is still high…err... so they come demanding to get their CD4 levels checked and to start this treatment…. Hai…so you feel so much pressure…one side it is all this duties to do for this program…and then we have such patients…they come knowing everything…" (Rural,FGD, participant 3)*

*"….you feel like you must be always ahead of the patient…because we look so stupid inform of them…some they even tell you….hai sister…this is what the other…err like from the M-Plus (*Referring to a HIV NGO*) are telling us…so you find you are under pressure to please the patients…because they come ready with their facts…" (Urban, FGD, participant 6)*

Another factor that emerged in connection with the informed nature of patients coupled with the lack of knowledge and information on the part of nurses, was mistrust and a diminished nurse-patient relationship. Participants noted that this imbalance was evident on occasions when patients who had been exposed to NGOs providing HIV/Aids intervention programmes, would inform the nurse of some crucial information that she was unaware of. Such instances caused the participants to lose faith in their ability to function as a professional nurse in the context of HIV/Aids. The informed nature of the patient in conjunction with the lack of knowledge on the part of the nurses left them feeling uneasy and created tensions in how the participants perceived their roles as they felt as custodians of care, they should be teaching their patients, rather than the other way around. The following excerpts presented hereunder illustrate this.

"you find that when you are with your patient and they can see you are unsure about something, like I could not give this one patient a proper answer about this one ARV drug that makes your feet itch… so she just said, okay this is what the lady from the "M2M" program told me…so even the patients can see we don't know and it make you feel bad…it's like we are no longer nurses… we should be the ones telling the patients… not them telling us" (Urban FGD, participant 4)

"…the patients…they can sense that we are clueless about some of these things…some will just stop listening to you…thinking what do you know…they don't believe us…they think we change our treatment because we are confused about this HIV…"(Urban FGD, participant 6)

It emerged from the data that the participants also experienced a loss of trust within themselves and a diminished professional identity fuelled by their evident lack of knowledge. The participants expressed how patients were able to see the deficits in their knowledge with regards to HIV/Aids care and management and as a result patients would not heed the advice given by them. Patients' disregard of their role as health care providers caused the participants to question themselves and their professional identities, in terms of the value of being a nurse and the self sacrifice involved in the profession. This is illustrated in the selected extracts below.

"…sometimes when we tell the mother how to do certain things…like taking the medicines… you find at the next visit she just tells you…oh…I just followed my neighbour or friend. Because they don't believe us anymore...they can see we too are confused …err…like with our nursing and these HIV drugs…"(Rural FGD, participant 7)

"when we give group health education in the mornings,…it is like you are talking to yourself, the patients they are not listening to you…they know when they leave they just follow others way of taking these pills and even with the babies and feeding. There is no more faith in what we as nurses are telling them, they think it is a joke…so you question yourself what is the use to do this nursing…when you have to sacrifice your family to be here yet they (i.e. patients) behave like this…." (Urban FGD, participant 8)

"it is very distressing especially when the patients start to not trust us anymore because we keep changing what we say to them…"(Rural FGD, participant 6)

A culture of working in isolation. Emerging from the data, the fragmented nature of how the participants were working was seen as a challenge that they experienced and highlighted the need for a supportive structure, such as a CoP, to foster a sense of collaborative nursing. It emerged from the reflective discourses that the participants felt that they were working in isolation from other nurses, even although they all belong to the same maternal and child health department. Nurses in the neonatal units had no working relationship with the nurses from the antenatal ward or the labour ward in providing continuity of care. Moreover, it became evident that the main reason for this was that the nurses shied away from engaging with their colleagues in fear of peer judgment because they were aware of their lack of knowledge and skills. Participants also noted that there was a lack of togetherness and partnership in how they were currently working and this made it difficult for them to keep updated with changes and made it difficult to work as a system in terms of new policies affecting HIV care. The participants also noted that working in silos further fragmented the wholeness of care that was optimally aimed at being provided to ensure aspects such as medication compliance for both mother and baby to address issues such as decreasing maternal to child transmission rates. This is evident in extracts displayed below.

*"I moved to the nursery in April, and before this I was working in ANC (*i.e. antenatal clinic*). So when I started there, I did not understand much of the routine, because I could see that their way here is different to what I was used to. So I can see that what we do in the ANC, it also affects the mother after she has the baby, like how we give her health education and to tell her how to take the NVP syrup when she has the baby, all these things can help her to adjust when she is on the nursery side, because here everything is so fast…and maybe she can get scared hearing all this for the first time…so we can all work together because we are see this mother at different stages" (Rural,FGD, participant3)*

"…there was this patient who came from quiet a distance…more than 100KMs to come and collect formula …so the this patient had received the wrong information…because she should have went to the nearest PHC clinic..but the patient was advised from that clinic near her home to come to us because she delivered her…she can come to the postnatal ward to get another 5 tins of formula…this is not the correct procedure…these things make our job more difficult…we have to educate the public and our own nurses who do not know the correct procedures…it is because we do not work together…" (Urban FGD participant 7)

The fragmented nature of nursing and not providing holistic HIV related nursing care, emerged as another key determinate for the supportive structure of a CoP. Participants shared how they did not engage wholly with the patient and provide complete health care. One of the participants noted that the pressure to make sure that the minimum standards of maternal care was completed, compounded with their nervousness with the care and treatment they were providing due to their own limited knowledge, caused a fragmentation in how they were nursing. They illustrated this point by referring to what they called the "Shoprite" syndrome, wherein the participants felt they were just ticking off checkboxes to show that essential, care had been provided. During the reflective sessions participants admitted to engaging in this checkbox way of nursing and taking shortcuts in the treatment of patient due to two main reasons. Firstly, the heavy workload, which was compounded by the tasks that needed to be performed by the midwife in HIV prevention programmes such as the PMTCT programme, demanded prolonged contact with the patient. This was further compounded by an increase in the number of patients being attended to, which was seen in the long lines queued outside their consulting rooms or having more than one laboring mother to attend to at a given time. This fuelled the practice of just completing the perceived

"essential" tasks. The second reason that emerged from the data was their fear of doing the wrong thing due to their lack of knowledge and training, and this resulted in them just rushing through mandatory tasks in the fear that the patient would see through their inadequacies. This concern is demonstrated in the following excerpts:

" I am not really engaging with all her problems, and it is because I myself am unsure about what information I should be giving her… it is only now that I learnt from the others that when the mother comes to the clinic for her follow-up visit that I should have been checking how much of the NVP syrup she has and assessing for adherence and reasons for default…but in our practice that is not done, because we just follow the task routinely trying to nurse the line that is outside your clinic door and asking about such things like why is there remainder syrup when it should be finished, so it means there is no adherence…you know such things that can also assist with patients health" (Rural,FGD,participant 7)

*"…cha(no)' it is like we are nursing in uShoprite Checkers…(*laughing from others*)…I mean we are just making sure all the ticks are there so that when we are audited everything is done…hai…but really we don't know truly why these things are done or why we are making sure that they are done for the patients…" (Urban,FGD,participant 5)*

Lack of support from management. Perceived lack of support from the management was identified as a dimensional property of enabling the culture of working in isolation. This was demonstrated through poor channels of communication and lack of resources to optimize translation of policies into current practice. Participants shared their frustration of having to cope with an influx of new information and the expectations that objectives in their nursing care would be met without them having the resources to do this. Apart from the lack of training or debriefing on the cardinal points of new changes and how these translate into operational practice, participants noted that there was often no human resource to facilitate in meeting their objectives. Moreover, the disparity of resources across the satellite facilities of the larger institution, such as the feeder PHC clinics, is another challenge that nurses face in terms of trying to promote continuity of care with limited resources. Furthermore, the lack of support from management in terms of information sharing to all relevant stakeholders also contributes to

fuelling the isolating nature of HIV nursing experienced among the participants. The following extracts highlight this.

"err…if I can make an example, with the president's speech about giving ARVs to everyone with CD4 more than 350…so we heard it like everyone on the news…there was no debriefing with the all the nurses…but the very next week…we were asked what we was planning to meet this new memo of providing ARVs from CD4 of 350…" (Urban FGD participant 2)

"… it is not all the clinics that have fax machine or e-mails to get these things and we find the district coordinator is taking too long to brief them yet we have already started the new changes here, so such things becomes a source of many of our problems as well when it comes to implementing the policies" (Rural FGD participant 6)

*"…we just want the information to be given to everyone…like the same memo we are all talking about, the one of giving HAART to all mothers with CD4 of 350 or less, so we got told we must start, but yet the pharmacy was not told, so when we started requesting for more ARVs they were querying it, so change must happen from the top (*referring to management*) and be communicated properly" (Urban FGD participant 7)*

"…You know for me too this is a great challenge…. this memo of starting all patients with 350 or less CD4, I think it should have been communicated to all the stakeholders…" (Urban FGD participant 5)

4.3.2.2 The Internal Domain: The Emotive Challenges

Within this category, it was apparent that the challenges experienced within the participants work environment also created emotional challenges for them. These challenges were classified as the internal domain, and described causal conditions that related to the emotive or intrinsic dimensions that the participants experienced. It emerged from a variety of data sources that the emotional challenges of dealing with HIV/Aids and the complexities that embodied it, created dimensions of distress for the participants. These were described as two subcategories, namely (a) workplace distress and emotional exhaustion and (b) a loss of professional identity.

Workplace Distress and emotional exhaustion

Emerging from the data, lack of training, shortage of staff, increased patient care and lack of resources were some of the contributors to distress experienced by the participants. Further analysis of this subcategory showed that coupled with workplace distress, participants also experienced emotional exhaustion. This subcategory illuminated the lack of space or forum where emotional issues experienced by the HIV nurse practitioners could -be discussed and supported, and further showed the relevance of CoPs to fill this gap.

The nature of HIV counseling and acceptance of the HIV diagnosis by the patient was a source of emotional exhaustion and ethical dilemma for participants. Revealed from the data, participants shared that patients were reluctant to disclose their HIV status to partners and deliberately engaged in risky behaviour, which made them feel demoralized in their nursing practice. Despite their best efforts of trying to provide optimum care in a climate where they felt overwhelmed due to the lack of training, participants were of the opinion that they were always coming out on the short side on account of the patients' attitudes and unwillingness to adhere to HIV interventions and care. The selected extracts below reflect this.

Participant 8*: "I find it is difficult to get through with the counseling with some of our patients…they just tell you such things like…I know I am going to die…so why should I save the others…so you end up feeling so low in your spirit to keep working.*…Participant 4*: Ja' it is also emotionally tiring when you hear such things…because these women…err they will just end up infecting many….because of them not being ready to accept this HIV…" (Urban FGD)*

"…one patient said to me…when I spoke to her about partner disclosure and bring in the boyfriend for testing as well…she just said…why should I…it is for him to discover it like me…I will take as many with me… they are purposively spreading this HIV…and we are trying to stop it…it is a losing battle this HIV" (Rural FGD participant 3)

Participants spoke of having to see a younger profile of patients, who perceived having HIV as a social and fashion symbol. This compounded their challenge of trying to succeed with mandated

HIV intervention programmes from the management, and left them feeling that they were not achieving their goal in preventing harm. Participants further noted that there was no avenue they currently had where they could deliberate in these issues and find possible solutions. The extracts hereunder illustrate this.

"…we are seeing younger patients coming for in…when they hear they are HIV positive…some are so excited with this…it is like a new fashion or craze with them...some will even say to you… "oh I am happy now…because now my boyfriend will be happy to sleep with me..."you feel deflated to hear these things…what are we doing as nurses…when our children are happy to have this" (Rural FGD, participant 5)

"…our job as nurses is to prevent illnesses…not to step back because it is the patients right because of confidentiality…and in the process we are causing death….we are seeing a culture in our patients where this HIV is not taken seriously…they take it so lightly…like it is some fashion to have this thing…" (Urban FGD, participant 3)

"…everyday it is the same thing…the same type of patients and you know most are sick with HIV…they don't want to take the treatment…some are in denial…others are just happy to have it…we are feeling deflated with this… there is no place…no one who we can take this forward to…maybe to look at what we can do in our hospital to find some solutions…" (Rural FGD, participant 6)

Apart from the physical strain of sometimes having to work extra shifts to fill the gaps, shortage of staff and lack of adequately trained nursing staff put more pressure on the participants to cope with the increased workload.. There were also emotional consequences to the lack of resources as in some circumstances; death or malpractice could have been avoided. The emotional burden of having to deal with grave outcomes of care due to under-resourced health facilities caused a great amount of guilt within the participants. Participants also noted that they had no support in such circumstances, which resulted in feelings of isolation in their emotional challenge. The following excerpt illustrates this.

"…sometime I am the only Advanced Midwife in the ward…and I have to end up working in a extra shift…we are so short staffed in the labour ward…and you know that because there are so

many patients, and there are so few hands to do the job…you end up cutting corners…and you feel bad to do this…but you have no choice…" (Rural FGD participant 3)

"….I was the only advanced midwife in labour ward over the weekend, and we had a maternal death…it just makes you feel bad…we should not be losing mothers…but sometimes you are not skilled…or you are too few nurses on duty…so one is not sure why this mother had to die…whether it was us as nurses…or something just went wrong…but you sometimes want to just talk about such things…instead of keeping it in you…but where does one go?" (Urban FGD, participant 5)

Workplace distress was also translated into moral dilemmas experienced by the participants. Evident from the data, participants spoke of institutional or policy restrictions that put boundaries to the nature of nursing care they could afford the patient. Participants related how such restrictions made them feel guilty of not providing optimum care that they would ordinarily provide. A common discussion thread that illustrated this was the issue of providing treatment for the patient. Policy and institutional restrictions meant that nurse participants had to turn away some patients who wanted assistance knowing, however, the grave consequence it would have. Another aspect was because of the lack of skilled and trained staff and heavy workload, certain tasks were sometimes delegated to an inexperienced or ill-prepared staff member. This caused participants the ethical dilemma of deciding which patient to delegate to them, being mindful of the inexperienced care that the patient would be likely to receive. The following extracts illustrate various such moral dilemmas.

"…some patients come to us for the repeat of milk formula…maybe this patient was not counseled properly about breastfeeding and feeding choices…now she is crying in your clinic…wanting this…but our hands are tied…we cannot just issue this formula…so you know that this mother when she leaves….she is just going to mix feed…so how are we going to win with this HIV transmission…" (Urban FGD participant 3)

"…you find that there are many patients that need to be attended to… you end up delegating to the students from the colleges that come for their training…they are very much inexperienced...they are only learning about midwifery…some never had HIV training before…but what do you do…you just need the patients to be seen…knowing that the care is not going to be what they must get…." (Rural FGD participant 7)

Another dimension to the workplace distress experienced by the participants was that of **emotional exhaustion**. Participants experienced fatigue and emotional exhaustion as a result of work overload, which was compounded by continually working within an emotionally charged environment. A sense of hopelessness resonated due to poor patient outcomes when dealing with a condition such as HIV. Participants shared that they no longer felt any personal accomplishment in their jobs, and this was characterized by decreased motivation and commitment in their job, having a negative perception of their work and duties and feelings of failure and inadequacy. Emerging from the reflective sessions, however, it was noted that despite feeling demoralized and de-motivated; participants felt an intrinsic pressure to continue to function in their professional role.

"…sometimes I find that even when my patient is sharing their problems with me, I start to think about how many more patients I got to see and how this person is holding me up, you get so tired or hearing the same things from the patients, and there is no cure for this, so it makes you feel so heavy…I sometimes switch off and wait to finish with them…because we still are expected to finish all the patients…"(Urban FGD participant 7)

"After spending the whole day hearing the same thing, and we know that our patients will not get well, or that the baby will not survive…because even they share with you how they are not adhering because of disclosure…so you feel like you are nursing the dead…and what is the use… this job is draining you emotionally …" (Rural FGD participant 3)

From the various sources of data, participants noted that they experienced diminished work related self esteem. The nature of the patient's problems often left them feeling emotionally and mentally exhausted. Some participants drew parallels between some the clinical incidents they encountered and their own personal lives, making it difficult for them to separate their personal life from their professional life. Caring for people who were close to them also added to the emotional strain as some of the participants spoke of the strain of nursing members of their own

families who had HIV related illnesses. They shared what an impact this had on their work life, especially in terms of not having a break, thus making them feel "emptied" to go any further.

*"We also have our family and relatives that are having this thing (*referring to HIV/Aids*) and you find that there is just no escape…you come to work and it is here… you go home and find it there as well… it can be very tiring. For me, I find that this is draining me because I have no outlet for this thing" (Urban FGD participant 1)*

"…when you see how young the patients are that are testing positive…you just think about what might be happening in your own home…I have a younger daughter too…so it takes over your whole life…and how you see everything like it is HIV…"(Rural FGD participant 2)

*"…even now as we are talking, my son is dying in his bed at home...hai (*long silence*)…this monster is everywhere, even in my home…and I am so tired of seeing this, it is like we cannot get a break…sometimes when I see these young children coming and getting their results…and being so happy…I just want to scream (Urban FGD participant 7)*

***Loss of Professional Identity*:** Low staff morale due to high work demands, increase in patient rate and less time to cover everything were the core properties that described how the participants felt about their work. An entry in one of the participant's reflective journal entry indicated that she had lost her meaning of being a nurse. The external demands placed on her in terms of nursing an ever increasing number of patients, who all have very emotionally distressing stories to share, made her no longer feel like a nurse, but rather a "porter of death" .

"when I think of why I started nursing and now..I can see a lot had changed, every day I feel challenged to be here…I mean there is death all around and some of patients are going through such trying time...what is the sense of nursing like this, there is no good I am doing...it is like we are porters not nurses...just transporting them to their death…" (Rural nurse journal entry-April 2010).

This phenomenon of meaningless nursing was a theme that resonated with many of the participants. Further to this, it also emerged from the data that the participants felt a way coping with the despair and hopelessness of nursing was to look at avenues of getting out of the current

health care system or looking towards migrating from their current institution, as illustrated in the following extracts:

"I am looking all the time for another job...at least in private you don't have to see so much of this...because there the doctor sees to the antenatal care"(Urban-Individual interview)

"…I have even gone back to school (laughing) but now to learn about business, so that I can get out of nursing...because what is the sense of nursing…you put your life at risk for these patients that don't think about what they are doing"(Urban FGD participant 2)

It also emerged that participants perceived that they had lost some of the core nursing values. The nurses described their lack of emotion and altruism to go beyond the minimum requirements to assist the patients. This was primarily in response to the heavy work load and to the apathy of the patients in response to their own status. Many participants also spoke of having prejudicial attitudes towards the patients, due to the familiarity and predictable nature of their patients presenting with the same problems. The participants justified their negative attitudes by explaining that they become frustrated when dealing with patients who don't take their illness seriously, and thus perpetuate poor outcomes. This is depicted in the following extracts:

"at times you have no choice but to judge these women. I know it is not right to ask them why are they keep coming to the clinic pregnant when they know their status…so such things makes you not to have a choice and to ask them such things, because even they are not taking it seriously…" (Rural FGD, participant 2)

Sometimes I get angry with some of the patients that come, because some of them are so sick and then they just keep coming to us pregnant, yet you can see even the previous baby died with this HIV, but when you try and make them understand, they just say no, they know they are not sick…so it is a real challenge and depressing for us to keep seeing this type of patients(Rural FGD participant 1)

I mean what do these women expect, and then they come pregnant for the 5th time…I mean are they looking for marriage or to trap this boyfriend, and yet they can see how thin they are..what are they wanting to get?..maybe marriage? (Urban FGD participant 3)

Continuous contact with HIV/Aids also created an attitude of disregard for their patients. The participants related that they tended to generalize all patients as the same, with a prejudicial outlook of their illness, and therefore did not waste time on comforting them or fostering an interpersonal relationship with them. As one participant describes below, the work demand of seeing an increased load of patients, also exacerbates this attitude:

"… when they come to the hospital they think that they are going to be treated differently…like s HIV is now a privilege…because there is so much attention on them… and we must have sympathy towards them…then they see there is no room for that…we are very busy and got no time to listen to their stories about why they got this disease…CHA-No we got no time for this…" (Urban FGD participant 5)

Patients' beliefs and attitudes concerning the existence of HIV was also another determining factor that contributed towards the nurses' experiences of powerlessness and fatigue.. The participants expressed how difficult it is to motivate the patients to comply with the recommended treatment. The midwives reported feeling lost with this aspect, especially as many of their patients were in denial about their illness and often sought counsel from traditional doctors. Participants found this challenging and explained that as trained midwives, they felt patients should value their expert knowledge. They acknowledged that the era of HIV has led to a fragmentation of this role in society, as patients resort to other avenues of care.

"so you think what is the point in even telling them any advice because they will just end up coming back pregnant…they just tell you that they went to the traditional healer and they know they are bewitched or something…" (Rural FGD participant 7)

*"….sometimes things happen out of work...like we are having relatives that are ill. They are denying, saying this things calling it in Zulu "uGobongo" some are even becoming amaSangoma (*i.e. traditional healers*) to run away from this, they come to you or the neighbours come to you because they know you are a nurse, when they are very ill, but only wanting medication, so these things challenge you as a person" (Urban FGD participant 3)*

4.3.3 The context of establishing communities of practice

Defined by Strauss and Corbin (1990), the context refers to a particular set of conditions within which the researcher constructs action and interactional strategies to manage, carry out and respond to the specific phenomenon. In the context of this study a set of conditions which emerged included (i) the national health priorities; and (ii) national frameworks and policy documents. These emerged due to the dynamic and changing nature of HIV/Aids care and management which stemmed from this set of conditions and grounded the need for the development of Communities of Practice to support users (namely nurse practitioners) to cope with the dynamic nature of these clinical guidelines which underpin HIV/Aids care, and to create a platform wherein the objective of the national health priorities and policy documents can be achieved.

4.3.3.1 The National Health Imperatives

Two national health imperatives were identified in the data sources, namely (i) the United Nations Millennium Development Goals and (ii) the HIV/Aids and STI National Strategic Plan 2007-2011.

The United Nations Millennium Development Goals. From the data it was evident that the participants recognized that the MDGs were pivotal in guiding national policies such as the PMTCT policy and guidelines, which were imperative in their practice. According to participants, what was needed, though, was a platform to share and learn about changes in polices that underpin their nursing practice. Explained by one participant:

" …the MDGs have guided many of our policies…we are always reminded that we are working towards these MDGs which are international goals…and all our districts will be assessed by this MDGs…" (Rural FGD participant 5)

Reflections from the participants resonated with the transforming climate of health care, and they recognized the need to address priority areas of HIV/Aids, such as reducing the transmission rate of HIV/Aids of mother to child transmission to below 7%. Participants elaborated that it is crucial to have a space where they are able to unpack policies and directives that underpin their practice, thus equipping them with information so as to address the imperatives of the guidelines, such as reducing maternal to child transmission of HIV, in keeping with global directives such as the Millennium Development Goals (MDGs); as shown in one participant's reflection:

"…you see there are many changes now with HIV care…like we just heard from the district coordinator for PMTCT that our goal in keeping with the MDGs with to reduce child transmission to less than 7%...that is a huge challenge, because we know that we have such high rates…so something is needed…where one can come and get the necessary information about this policies so we can work towards them…" (Urban FGD participant 3)

Participants acknowledged that district health officers were responsible for setting benchmarks for HIV/Aids care and management and performed functions of monitoring and evaluation to ensure that international guidelines were being adhered to. Participants identified some tasks and activities that were part of the HIV/Aids nursing care which were underpinned by the MDG, such as assessing an infant at 6 weeks for viral load (PCR) and promoting safe infant feeding choices to prevent mix feeding and transmission, However, participants highlighted the need for a platform to address the MDGs to help them attain a better working knowledge of the policy in terms of the various MDG goals, specifically goals 4,5 and 6, which they considered crucial to their discipline of maternal and child health and HIV/Aids care. The following extracts highlight the evidence from the data.

"…even the PMTCT policy we are using...it comes from this MDGs...this means that tasks such as taking the baby's PCR level at 6 weeks…these are all being guided by the MDGs and to reduce the transmission rate to below 7%...but a lot of our nurses we unaware of this… there is no place where these are discussed…" (Urban FGD participant 6)

"…when the people from the district health office come…they are checking to see if we are complying with the standards of the MDGs…to ensure quality in the hospital…so the MDG we keep hearing this about such goals like goals 4..5 and I think goal 6…so we can see it is something important to understand…but many of us don't even know what they are…" (Rural FGD participant 8)

The HIV/Aids and STI National Strategic Plan 2007-2011. Participants also noted that that the HIV/Aids and STI National Strategic Plan for 2007-2011(referred to as the NSP) were national directives that that champion change for improving interventions and outcomes in curbing the spread of HIV/Aids. Participants recognized that the role of the NSP was similar to the MDGs, and that all their efforts in their nursing practice were aligned towards addressing the imperatives outlined in this document. The selected extracts below illustrate this.

"…I know we have this NSP…it is also something that guides our practice…to assist us with this battle of HIV/Aids and especially with PMTCT program…" (Urban FGD participant 4)

"…sometimes the managers tell us of some policies that we are using for our interventions…and they talk of this NSP…that is a national plan for our country of where we should be in five years…like the MDGs" (Rural FGD participant 7)

However, it emerged from the data that while participants recognized the aim of this national directive in aligning health care efforts towards reducing and managing the spread of HIV/Aids at a macro-level, at a micro-level, they were unable to relate the relevance of its directives to the functions and activities in their work -setting.Participants also revealed that more user-friendly versions of the document and similar policies, such as the PMTCT policy, would make them easier to understand and, thus, more transferable and usable for their practice. They believed that this could be achieved within the envisioned structure of the CoP.

"…this NSP is important for our practice…but like the MDGs very little is known about it…we hear the managers use these terms of NSP or MDG… goals 4,5,6 but I am yet to know what it means for me as a midwife in the labour ward…" (Urban FGD participant 6)

"…we have no direction on these policies…we don't even know how to start to read or make sense out of these…like the NSP…I know it is there to guide our practice...but some of use we have never even seen this book or know how to use it in our practice..." (Rural FGD participant 5)

4.3.3.2 The dynamic nature of national policy guidelines.

The dynamic nature of clinical guidelines and policies underpinning HIV nursing care, especially within the disciple of maternal and child health, was expressed as a challenge experienced by the participants. Participants identified ***The National Revised Guidelines on the Preventions of Mother-to-Child Transmission (PMTCT)*** as the only national policy guideline, and their initiative in making the agenda of the PMTCT policy clearer amongst themselves was evidence of the development of the CoPs as a support mechanisms.

According to the participants, the implementation of the PMTCT policy and guidelines was at the core of transformation in nursing and midwifery care, at both district and national health levels. They explained that since the inception of the PMTCT programme, the revised 2010 PMTCT Policy and Guidelines was the cornerstone of their practice as it provides the midwives with targeted guiding principles on the comprehensive management of pregnant women who are HIV positive, with the ultimate goal of reducing vertical transmission of HIV.

"… what we do in nursing is based on the PMTCT guidelines… now our efforts are focusing on bringing down HIV transmission, so in whatever we do…err...our practice in midwifery is guided by the principles of PMTCT and making sure that we follow the correct pathway of care according to the guidelines strategies…"(Rural- individual interview)

However, the numerous changes to the PMTCT policy since its inception has caused much confusion among the participants in terms of the most current treatment protocol and, thus, was the source of many potential clinical problems, as illustrated in the following text.

"from the time PMTCT started…there has been one change after another…it is so dangerous because at times you are still issuing the wrong medication because you are still on the old policy yet there is something else…like when we changed again this year (2010)...some of our clinics were still issuing AZT syrup from I think two policies before…" (Urban FGD participant 7)

It emerged from the data that participants recognized that one of the barriers to the success of the PMTCT programme in meeting its objectives as outlined in the current PMTCT policy document, was the lack of integration among the participants and other health care professionals. One example, in particular, that was noted was that the PMTCT policy calls for a multi-team approach to the nursing care provided which follows through from the antenatal to postnatal and later to community health clinics (namely PHC for immunization). It was noted that due to a lack of space for networking, this objective of the PMTCT policy was not being wholly addressed as there were no pathways for continuation of care, which highlighted the need for a CoP as a platform for information sharing and policy application. The selected extracts demonstrate this.

"…what we know about this new PMTCT policy is that there are these core activities…I think it is 15 in all… they talk to what is needed to be done by the nurse to ensure that PMTCT coverage is being done properly…like I can say for the antenatal screening …some people say we should be taking the CD4 and other things…all the relevant nurses should come together..so we point out how one departments care affects another..like from the ANC to the labour ward.." (Rural-FGD participant 5)

The new policy (PMTCT) has really made us change our nursing care…we are now focused on the 15 core activities of the guideline…you know from ANC to postnatal, there are steps we have to do...like taking the CD4…even with the CD4 we can see that there is a change from giving ARVs when the CD4 was 200…now we are starting them on ARVs at CD4 350…we are now basing our practice on this new policy" (Urban FGD participant 2)

It was further noted that this particular policy was seen as being contentious and the source of frustrations and ill-preparedness experienced by the midwives, especially with regards to the various amendments and changes that were made to it. This context of change within important policies underpinning the participants practice was the catalyst within which the CoP emerged as

a mechanism to support the participants through the changing nature of care that is needed in the context of HIV/Aids care in the discipline of midwifery. The following excerpts capture the respondent's expressions of this category.

"The PMTCT guideline is very important for us… because every nurse knows…that she must remember that we are trying to bring this infection rate down…especially with our mothers and babies…but it keeps changing…every time it changes we are supposed to have training…but that never happens…so we are just left to figure out what is new with our care…it is not easy…when you have other things to see to in your job…." (Urban FGD participant 1)

*"…it is our biggest challenge…this PMTCT programme and all this changes we are seeing…everytime the government changes things…and we are just expected to keep up with this changes….as nurses we are being called upon to also start ARVs…our scope is broadening with this new policy(*PMTCT*)…so it is very important to know what is expected…we need so forum where we can learn or where we can come just to hear what is it that is new…so we too can be up to date with the nursing care…" (Rural FGD participant 6)*

4.3.4 The Action and Interactional Strategies

Explained by Strauss and Corbin (1990), the essence of theory building through the methodology of grounded theory is action or interactional orientated. The authors further discuss that action or interaction strategies are directed at managing, handling, carrying out and responding to a phenomenon as it exists under a specific condition. Strauss and Corbin (1990) described the properties of action and interactional strategies. Firstly, they are processual and evolving in nature. This suggests that the phenomenon can be studied and described in terms of a sequence or change over time. Secondly, the action and interaction strategies need to be goal or purpose orientated, this suggests that the interactions are in response to something and thus occur through tactics or strategies. Thirdly, Strauss and Corbin (1990) indicate that failed interaction strategies are equally important to understanding and analyzing the depth and dimensions of the phenomenon. Actions that should have been taken within or under a particular circumstance, but

were not taken also need to be explored to understand the implications it has towards the studied phenomenon.

In the context of this study, an analysis of the data which was yielded from the FGDs (which served as reflective discourse sessions), in-depth interviews, document analysis of the reflective journals and researcher's field notes, illuminated two categories which described the action and interactional strategies and activities that emerged in the process of how the CoPs were established among HIV/Aids nurse practitioners. These categories included: (a) planning and preparing (designing) for the Communities of Practice of reflective HIV/Aids nurse practitioners; and (b) implementing (launching) the Communities of Practice of critically reflective HIV nurse practitioners.

4.3.4.1 Planning and preparing the CoPs

The following subcategories emerged that explain the process involved in planning and designing the proposed CoP among the HIV nurse practitioners. These included: (a) conceiving the establishment of the CoPs; (b) negotiating with stakeholders and garnering support; (c) establishing a shared vision and goal; (d) collaboratively tailoring the logistics; and (e) the participation in in the planning process.

4.3.4.1.1 Conceiving the establishment of the CoP.

Analysis of the various data sources, namely the FGDs, individual interviews, researcher's field-notes and text analysis of the reflective diaries illuminated the many challenges participants experienced in terms of the changing nature of nursing in a climate of HIV/Aids. As evidenced in the discussion of the causal conditions or antecedents (refer to section 4.4 several challenges

emerged as determining factors which illuminated the need for establishing a CoP. Subsequent to the emergence of these challenges, the researcher, as facilitator, created a platform that would be used to raise the consciousness of the participants to the issues experienced. Bringing participants together triggered them to think and reflect on their state of being in a field of HIV and to come up with a host of issues. During an individual interview, one participant stated the following:

"…we all were excited to come together in the group to discuss our issues in HIV nursing…something like this was not done with us nurses before …and for me I could see this was going to address of the challenges we are experiencing as nurses…"(Urban- individual interview)

The participants identified various issues or challenges, which included their inadequate training; how they felt confused and frustrated with the state of change; the fragmented practice of nursing; lack of support and a culture of working in isolation; the emotional burden and loss of professional identity; and the absence of a platform for information and knowledge sharing, to name a few. These themes are illustrated in the following extracts:

"nurses feel challenged on many levels to cope with the many changes in how they nurse in the context of HIV/Aids… they spoke about their training needs where they felt unprepared with the policies and treatment plans…they spoke of how these are changing all the time and this causes frustrations and confusion among the nurses…" (Researcher Fieldnotes-Session 1, urban group)

"very often nurses work alone…you feel alone and lost all at the same time because you are really unsure what you are doing…and there is no space where we can come and talk about these things or even learn new things that can help us improve the way we do things…"(Urban-FGD2)

"…lots of confusion and a break in communication and practice is evidenced from today's session…some nurses only know of what happens in their own ward…yet we are one unit for maternal care .. nursing care is routine and no questioning is occurring…if a doctor comes and changes something some of us do not even know about it…we just end up doing the wrong thing or changing when we are told…"(Rural, Individual interview)

"you feel like giving up with nursing…sometimes one even thinks of starting a business just to escape this...because every day is one in the same thing…you are just drained emotionally we deal with sick, sick mothers, and you know how the babies will end up…so you just think this is not the nursing I wanted to do when I trained…one doesn't feel like a nurse anymore…I sometime feel like I am nursing the dead…because that is what happens…" (Rural- FGD, participant 3)

Because they felt isolated in their practice, the participants realized that a structured space for nurse practitioners to share their challenges and experiences of working in the field of midwifery which were compounded by HIV/Aids nursing care activities would provide them with the support they needed from peers and experts. More importantly, participants required a forum where they could keep abreast with some of the changing policies and guidelines. Critical reflection emerged as one of the tools to promote ongoing learning, as stated in the extracts below:

"…we sometimes are isolated…we all keep to our units, not knowing what is happening in other units…yet we are in the same department…I think sharing together…like this group we are having…it will give us that support we need..."(Urban FGD, participant 3)

"I think this is the first time we have had such a opportunity…to share all our problems about the PMTCT and about working all the time with this HIV…I will like to keep learning more…and be part of some group like this…we need something to help us to cope…"(Rural, FGD, participant 3)

"…this reflection will be good for us…so we can think about how we nurse…it will also help us to see where we need some help to improve our care…" (Urban,FGD, participant 2)

Analysis of the challenges described the nature of the activities in the process of conceiving and negotiating the idea of establishing the CoPs. This involved an action-orientated approach, and it was apparent that planning the envisioned CoP needed mutual co-operation of all stakeholders. In addition to this, given that the concept of CoPs, especially in the health discipline, is a novel one, the idea needed to be collaboratively embraced by all stakeholders so as to achieve full participation and ownership, and it also needed to be directed by a leader or facilitator who has

some knowledge on the concept so as to direct and guide the stakeholders into understanding the envisioned idea. The following extracts highlight this.

"during that first meeting…where we all shared our experiences and our issues with nursing and HIV…we also had the nursing services manager and our zonal matron there…it was good to hear from them that they also wanted us to be part of the group meetings..." (Rural,FGD, participant4)

"…it was exciting to hear of this CoP thing…like the first group meeting we had...I very much liked it…and was happy to be in the group…this the first time we heard of this…it was interesting to hear how it was going to help us work through our problems and find our own solutions…(Urban-individual interview)

While the idea of a CoP for HIV nurse practitioners was being discussed, participants highlighted the importance of having a facilitator who would give direction and clarify the process and expectations. This is evidenced in the following extracts;

*"…this idea was something new to us…so we relied on the facilitator (*i.e. researcher*) to give us some direction … to tell us more about the CoP and to lead us in the process…" (Urban - Individual interview)*

"… while we are still talking about and thinking about how this CoP will operate in our hospital..we will also need to know what is expected from us… what must we do for this CoP… from the hospital what will we be required for us to do… what kind of support will be needed for the nurses who will be joining the CoP…"(Rural Health service manager-Individual interview)

4.3.4.1.2 Negotiating with stakeholders and garnering support.

With the intention of promoting ownership and partnership, and soliciting support with regards to the conceived idea of establishing a CoP among the participants; the researcher approached the relevant stakeholders, who comprised of the nurse practitioners and the nursing management team from both hospitals. Emerging from the data sources, this activity in the process of planning and preparing for the envisioned CoP was collaborative in nature and ignited a lot of curiosity with respect to understanding what the concept of establishing a CoP meant. Some of

the participants viewed the establishment of a CoP as an intervention they needed to be part of. This is evidenced in the selected extracts:

"…this idea of a CoP sounds exciting and different…no we have never been part of something like this before…I am interested to learn more about what this CoP is all about…it is nice to be part of the process…where we can have a say in how we want to design this type of intervention…to suit our needs…" (Urban - FGD participant 3)

"…this is my first time to be part of something like this…it is new for me...but very interesting to hear…in the past we just had a one day talk…sometime just a short in service training…with this group…we will be coming all the time...we will belong to it.."(Rural-FGD participant 1)

Another attribute that was made apparent from the data, was the positive reaction of the stakeholders. Negotiating support and buy-in from the relevant stakeholders regarding the envisioned CoPs involved unpacking expectations and responsibilities that were required. This was an important stage in the process of establishing the CoPs, especially as the stakeholders needed to know more about the level of commitment required and the nature of support required from the institutional and nursing management perspective. This is evidenced from the selected extracts.

*"…I think this idea of community of practice…of making some kind of group is good …where we come together to discuss our problems and get information (laughing)…for me it reminds me of err… "community nursing" … yabona' (*means "you know" denoting or seeking affirmation from others*) we used to learn that micro-community in a system…it will be like our own community... where we work as a system… so I think it will be like that where we can work together to build one another up and not suffer with our problems on our own…" (Urban-FGD participant 1)*

"…from the management… we are happy to support this group…I can see it will be beneficial for our nurses…because they will learn…but we must talk about what is needed from our side…as the management team" (Urban- Health service manager)

The strategy of garnering support and facilitating the relevant stakeholders to take ownership in the planning process was for the researcher to provide a platform for open discussion which she

did in the initial data collection sessions in the form of individual interviews with the relevant hospital's management and FGDs with the nurse practitioners. During this stage, the facilitator guided the dialogue by sharing information about the nature of CoPs and what was required for a CoP to be effective and successful, such as the time required for meetings and the nature of venues that would be suitable for effective group discussion. Various ideas about the emerging CoP were brainstormed by the group under the guidance of the facilitator. This is evident in the following excerpt of an urban participant's reflection of how the process started.

"during that time when we were still discussing the idea of forming a CoP structure in our hospital, we were given information about what is a CoP …we also spoke about what we needed to know and do for this CoP, like how much time we will need for the meetings..this was nice to know at the beginning because then we could decide properly after hearing what is really needed…so that we do not get any surprises…" (Rural- Individual interview)

The data sources also reflected how participants from both sites brainstormed the idea of establishing the CoPs and discussed ideas with the guidance of the facilitator on how the elements of the CoP could be tailored to respond to their needs. Ownership and coalescing emerged as properties within this subcategory as participants unpacked the concept of establishing a CoP and agreed to move forward with the idea as they felt a CoP had the potential to address some of the challenges they had identified. This is evidenced in the following selected excerpts below.

"…we will need to think of how we can make this work here in our hospital…like I can already see that we will need to think about how the nurses will get time off for the meetings…and we can use our staff boardroom for the meetings...because we do not have a lot of meetings there..there are also plugs and chairs in that room...the day and time we can work out as well but Wednesdays are generally not so busy days…I am thinking of other meetings we have" (Urban nursing services manager)

"…this group is very important…because we are experiencing many problems…our biggest challenge is the nurse's knowledge with the PMTCT process…we should try and start with discussing these things in our group" (Rural FGD participant 4)

Participants discussed the requirements or expectations in terms of the meeting venue, time to attend the meetings, frequency of the meetings, and nature of the CoPs. As evident in the following excerpts, although the stakeholders brainstormed and tailored their expectations in terms of setting and resources, there was overall agreement and join in to the idea of establishing the CoP.

"as an operational manager, what I can say is that it will be good to support our nurses…so much of time is spent with patients and they need to be kept updated with this kind of information…" (Urban FGD participant8)

"…I support what this will do (referring to CoP idea)...I can speak to the unit manager for the maternity departments to let the nurses who want to join your group...to get that time out of the ward…" (Rural- individual interview)

4.3.4.1.3 Establishing a shared vision and goal.

The facilitator and the relevant stakeholders were collaboratively involved with the planning phase, and analysis of the data sources indicated that the dimensional properties which explained this process included: (a) mutual understanding and establishing common ground and; (b) determining the focus and knowledge needs of the CoP

Mutual understanding and establishing common ground: The participants of this study, who formed the "members" of the community, were nurse practitioners working in HIV care within the discipline of maternal and child health. They revealed that the social nature of the introductory FGD sessions created a sense of commonality and familiarity within the group. Participants shared that the initial group meetings created a platform for them to highlight the everyday problems and challenges they experienced. Through sharing, participants became aware that others in the group were experiencing the same challenges in their clinical care. The

excerpt of one of the rural participant's individual interviews describes her experience of this stage in the planning phase.

"…in that meeting when we shared what we experience in the wards…our experience of nursing and dealing with changes when it comes to HIV/Aids policies or the treatment…I could see that we were all the same...we had the same problems we were facing…" (Rural in-depth interview)

Through mutual understanding of the commonalities which occurred among the participants, the facilitator initiated the process of defining the focus and intention of the CoPs at each site. Emerging from these discussions it was evident in the data sources that the facilitator provided discipline specific guidance in terms of what core elements were needed within the framework of the CoPs and CR, and the participants mutually discussed, defined and agreed on the contents that would form this structure. As reflected in the following extracts, the meetings were interactive in nature as participants and hospital management took ownership of this process of determining the scope of the CoPs.

*"…you (**referring to facilitator**) gave guidance…about what makes up a CoP, so we learnt a lot from this different aspects…you (**referring to facilitator)** also broke this down for us… for this group the focus was to learn more on HIV and also how to be critically reflective nurses …to that helped us to see our main aim and our focus…ja' it gave us direction where we are going with this group…" (Rural-Individual interview)*

"the session was interactive, most participants shared except for two quieter members, who agreed on the ideas but did not give any ideas…"(Research Fieldnotes_Rural group meeting 3)

"We came together as a group…and we started brainstorming… sharing our ideas of what we was thinking the group will be like….even the hospital manager was at that meeting…to hear about what the plans are for the group and to also advise on where she thinks the needs for the hospital and nurses were…I think that is what helped us to structure our group…" (Urban-Individual interview)

4.3.4.1.4 Determining the focus and knowledge needs of the CoP.

The initial phase of planning the envisioned CoP was also characterized by establishing the knowledge needs of the participants. This was promoted through the act of bringing the participants together and allowing them to express their challenges and share their every day stories, which allowed them to see the potential value of being part of a community of nurses. The following excerpts illustrate the participant's experiences.

"I used to think I was the only one who was feeling not prepared…like with training and knowledge for dealing with HIV/Aids in our nursing…there is always new policies or workshops and we all do not attend…so you feel alone when you are faced with this problem in your clinic...and it is frustrating….you just feel hopeless but now I can see that this group might change that…if we are going to learn about different topics on HIV…we can start using it in our practice…" (Rural FGD participant 7)

"it was nice to come and share like this …we normally do not do this… we maybe meet only the nurses we know…yet we are all working in the same maternity department…I think it will be so nice to support one another through the group..I can see that I will learn a lot from this group…I am happy to be part of this…" (Urban FGD participant 3)

"…every nurse shared something similar to what I was going through in the ward…just that we did not have the opportunity to talk about like this before…" (Rural-Individual interview)

The process entailed asking the participants within the FGDs what their key learning needs were and what they expected to gain from participating in the CoP. Participants indicated that changes in the PMTCT policy, which were made in early 2010, and HIV/Aids knowledge of the different drugs and regime of antiretroviral therapy were key learning areas that they wanted addressed. The complex nature of the ART regimen and the difference between prophylaxis and ongoing treatment was unclear to them. From the data, it was also revealed that participants required information and training relating to the stigma attached to HIV. The participants recognized that this was an important aspect in their nursing practice and they wanted to address it so as to break

down barriers in terms of HIV related stigma and promote greater disclosure among the patients they see. The reflections of the participants demonstrate this in the selected extracts:

"…it would be nice for us to be learning more about HIV care… especially these different drugs that are given for the ARVs…you find that when the patients ask you about this treatment…one doesn't know much about it…even with the PMTCT that is given and also the HAART that the mother takes …so we are very lost with these…" (Rural FGD participant 4)

"…you know we also have to think of a way to make the nurses more in control...so I too like this idea of reflection to get them to take charge of how they nurse and to think about their actions…this issue of all the changes in PMTCT policies…like this year we got another revised one (i.e 2010*)…maybe you can come teach us about that…" (Urban FGD participant 5)*

"from this group I can say that I would like to learn more about nursing and HIV stigma…you find that patients are afraid of their family or boyfriends leaving them or beating them…so they don't disclose…so something on HIV stigma can help us in how we educate the patients…" (Urban FGD participant 6)

Further analysis of the data sources revealed that sustainability of the knowledge acquisition was an imperative among the nurse practitioners. In sharing challenges, nurses expressed a longing for a new way of nursing that would reignite in them that spirit of nursing which they had possessed prior to feeling lost and overwhelmed with the changes and challenges of HIV nursing. The following extract demonstrates these experiences and feelings:

"…some of my colleagues here have already said it…but I too can say for me that I no longer feel like I am truly being a nurse…we just get told what to do and we are not thinking and owning how we nurse we are relying too much on these interns or other doctors to come tell us how to nurse…they shout at us…even some direct us wrongly…because even they are learning…I can see that coming here is going to change how we nurse…"(Urban FGD participant 9)

Collaboratively delineating the scope of the knowledge required assisted in focusing the activities of the emerging CoP. It was evident from the data sources that the purpose of CoPs was two-fold; to allow nurse practitioners to share and learn more about HIV care and to develop the skills of nurse practitioners in continuing to keep up with changes in HIV care. The strategies

identified to achieve this included information sessions aligned to the key knowledge needs of the participants facilitated by the researcher and capacitating the participants towards being critically reflective nurse practitioners. It was agreed that facilitating the nurses to being critically reflective, supported by the structure of the CoP to learn from experience, would promote lifelong skills which would be sustainable. The selected extracts from the data illustrates this.

"…it will be interesting to know more about all these changes in HIV…there is so many new things and some of us have not had any training...so we will want to learn about such things here in the group…" (Urban FGD particpant 4)

"…we have been hearing about this reflection, I too think it will be good for us to learn how to be critical thinkers…so it can help us to be better nurses" (Urban FGD participant 3)

"…what I like to see here is that our nurses must grow and have some skills that they must be able to use even after the research is over…I think that teaching them about HIV and even this reflection thing will help them to grow (Rural nurse management –Individual interview)

…the discussion focused on what will be the focus of the CoPs…and the nurses and the management were happy with the idea of focusing on skills development in critical reflection among the nurses and also having a teaching and learning component of HIV/Aids clinical and nursing issue." (Research field notes- urban session 3)

4.3.4.1.5 Collaboratively tailoring the logistics After identifying the specific scope of what should be addressed within each CoP, participants shared ideas that later constituted the operational and logistical plan of how the CoP should function. Evident in the data, participants described their preferences in how they wanted the CoP to operate in terms of the structure and the logistics. Participants brainstormed and shared their ideas on shaping the structure of the CoP as they wanted it. This created an opportunity for each participant's preference to be to be voiced and it fostered ownership among them. The collaboratively established structure was thus shaped logistically in the following manner.

Venue: A suitable meeting place was negotiated among the participants. Elements such as proximity to their work units, the level of noise around the venue and, more importantly, the privacy the meeting place would afford the participants were considered in their negotiations of the venue. The participants agreed that the venue must be conducive to open sharing. At both settings, the participants agreed on the use of a venue that was close to their units of work as they were mindful of the dedicated time off they were receiving to participate. Despite the urban group not having a venue that was for the sole use of the CoP, the participants were able to negotiate with the nursing services manager to have a cupboard in which they could store their learning material and other items. Meeting in a specific venue gave participants the sense of belonging to the group structure of the CoP. The following excerpts are evidence of the negotiations that transpired in agreeing on the venue.

"Participant 2: I think the training venue will be a good place where we can meet…maybe we can use that place…Participant 1: okay but what about how far that training place is...yes I agree that it is quiet but it will be too far for us to get away from the ward…Participant 4: err…what about if we talk to Mrs X…maybe we can use that old visitors room that is in the postnatal ward…you know it is just vacant..we can make it suitable for us…put some of our chairs from the duty rooms…and we can even lock it…so that our things will be safe there…Participant 1: yes…that will be good…" (Rural FGD)

" I think we can ask matron to give us permission to make use of that steel cupboard that is in the meeting venue…we can keep whatever papers we need to store there…it will good to have this place… even the management will know that this is where our special group meets… (Urban FGD)

Meeting time and frequency of meeting: Preference on a meeting time was discussed among the participants. Selecting a day that was suitable for all members generated much debate, in light of the diversity in the group of nurse practitioners and in terms of nursing hierarchy and their varied responsibilities. After much negotiation, participants from both sites agreed on a day, that being a Wednesday afternoon for the urban group and a Thursday morning for the rural group.

Participants considered all their responsibilities before coming to an agreement and the opportunity for collaborative negotiations on the logistical structure of the CoP was valued, as all participants, from the most junior practitioner, had input in tailoring the elements of the structure in accordance to their work responsibilities.

"Participant 8…I will like to suggest a Tuesday morning…and how long do we think that we will need to be here…Participant 3:maybe I can just share…for me…it is not a good time for a Tuesday because you find that there are so many things happening on this day…we normally send our new bookings for their ultrasounds on this days…so the wards may be more busy…Participant 1:…err okay as a manager…I can suggest that a Wednesday afternoon might be good…because we do not have any management meetings on this day…and then we will also not have problems of the nurses who will be off at midday on a Friday…so if we are all in agreement then I can talk to all of your unit managers for that two hours out of the ward to come to these meetings…." (Urban FGD)

"…when we shared how we wanted the meeting...like talking about the times...and how we said that meeting every second week would be better…it made us feel like we were in control of the process that we were not just told okay you must come here for this on such day…" (Rural-individual interview)

Through the collaborative discourse which occurred among the participants, the roles and responsibilities of the facilitator and the participants were established. Participants recognized the importance of open sharing and active participation in the group in fostering learning and meeting their knowledge needs they aimed to achieve within the CoP. This is illustrated in the following selected excerpts.

"…yes it is true we have to be responsible for our own learning…because like it was said before…we have to learn to take this process forward…it must not just stop here...so once we learn we can also do this if this project ends…" (Urban-FGD, participant 3)

"…it is the responsibility of the nurses to come and share…err because without this experience how will the learning take place in the group…I think this is the main focus of our group…to learn this ama-reflection…so that whatever the problem is…today it can be HIV tomorrow it can be TB...so we know how to learn from our experience…" (Rural-FGD6 participant 6)

Following from this thread of discussion, it was evident from the FGD that the envisaged CoP required the establishment of norms or group rules to guide the activities, processes and behaviours of the group and to overcome potential challenges. Participants were mindful that the free nature of sharing within the CoP could be inhibited if complete trust and confidentiality were compromised. Therefore, the group rules that were developed included maintaining trust and confidentiality, and open and free sharing of information and experiences. The following selected excerpts from the FGDs illustrate this.

"…there must be some rule of sort for how to handle confidentiality especially because some of our nurses might be shy to talk if they know that it might get out…it must be like how we are in our own families…when one shares something with you…then you keep it like a secret...that is what must happen with us…it is very important so that we all can grow…" (Rural-FGD participant 3)

Participant 5…you see …trust we cannot just get it like that because some of us we don't know each other well...also some of us are senior and the others are junior so we must make it in some rule..Participant 1 it would be nice to make it like the nurses pledge we say…you see as we get to build trust we must be reminded of it…" (Urban-FGD)

The last step within this phase of planning culminated with participants committing to the establishment of a CoP and critical reflective process. The participants recognized the value of being part of the group, especially in view of the learning and growth that they expected would take place in the area of managing HIV. The extracts hereunder reflect the participants' commitment and buy in.

"…I am excited to start with our group…now that we have all our rules in place…and we know what we are going to be doing in the group…I can see that we will be learning a lot especially on how to become better nurses in this fight against HIV…." (Urban-FGD, participant 4)

"…I can see that this group is going to be very enriching for us…err we will learn from this reflection and that means that we too will be able to see the good things we do…I can see that I am going to grow…I will be learning from my other colleagues…and we will get all this information we are lacking in…like with this HIV policy for PMTCT… (Rural-FGD, participant 4)

4.3.4.1.6 Participation in the planning process.

Involvement in the planning process was noted as being very important among the participants. For many, it was the first time they felt in charge of their practice and being part of designing the envisioned CoP gave them a feeling of being in control. Amidst the challenges of working in a dynamic context of nursing with many changes in policies and institutional changes which were out of their control, the process of coming together and creating a space the participants could belong to was related as being important. The excerpts from the data indicate this.

"…it made me feel like I could take charge of something…when you are facing so much new things…like we have this new infant feeding information and how to administer NVP syrup differently for mothers who are breastfeeding and who are formula feeding….so you feel out of control with the information…here we can take charge and plan what we want…." (Urban-individual interview)

"for the first time I could share my voice to what we want…you are not just told you must be part of this group…we could add our own flavours of what we wanted…and how we wanted things…it was our group…." (Urban FGD, Participant 6)

4.3.4.2 Implementing (launching) the CoP.

Analyzing the interactional strategies and activities that were embedded within the implementation of the CoP, it was evident that the activities were processual and dynamic in nature. The phases which described the process of implementing the CoP included: (a) Formation: coalescing, learning and developing; (b) Transitioning: consciousness awakening and experiential learning; and (c) Transformation: becoming critical and transformed identity.

4.3.4.2.1 Formation Phase (coalescing, learning and developing).

The formation phase of the emergent CoP began with a brainstorming session with the purpose of establishing a baseline level of understanding on the concept critical reflection. The formation phase in the process of the emergent CoP extended over the first three to four data collection

sessions. Emerging from the data sources, it was evident that during the brainstorming sessions, participants explored elements that were needed to develop their critical reflective practice skills. Participants requested that the researcher gave them some exercises on how to begin with reflective practice so that they could start their journey of critical reflective practice. The following extracts from the data sources illustrate this.

"Researcher*: maybe at this meeting where we are going to get started with the CoP we should start off by getting a sense of where everyone is with the idea of reflection and critical reflection…* Participant 6*…for me this is new…what I think is needed is some teaching about reflection and how we must start doing it…(Rural-FGD)*

"..we are excited to learn about this reflection…like it was said this thing can help us to think more clearly about our practice…but we never did it before…so I can see that a lot of training is needed…" (Urban-FGD)

It became evident, however, that certain group dynamics needed to be established so as to start forming coherence among the participants. The mix of both senior and junior nurse practitioners within the groups created uneasiness among the participants, which resulted in a lack of cohesion among the participants. Some of the participants expressed anxiety in terms of having to work with each other for a prolonged period of time. This is evident in the selected extracts below.

"….the group members seem very shy among each other…not a lot of mixing…some of the junior members sitting away from the senior members…need to foster some group norms so that they can start synergizing…" (Researcher field-notes-Session 4 Rural group)

"…I think for some of us it is the first time we will be working with each other…we see each other maybe when just in the passage… but it will be a first time to work together like this in this group…so it is like somewhat worrying to see what is going to happen…." (Urban FGD, Participant 5)

Further analysis of the dimensional properties of the formation phase revealed interplay of reflective skills development and group formation. Two distinct dimensions emerged from the

data sources, these were characterized as: (a) learning to reflect and (b) group formation: learning to work together.

Learning to Reflect. The driving force behind the emerging CoP was developing critical reflective skills among the participants. The participants had to learn how to reflect critically on their practice. The data sources revealed a certain process in developing the participants as reflective practitioners. This process included a number of phases of development, namely (a) concept clarification; (b) application of the concept critical reflection to practice; (c) hesitation and resistance; (d) transitioning and familiarity with reflective practice; and (e) learning how to reflect deeply.

Concept Clarification. The first step in learning to reflect began with the facilitator assessing the participants' knowledge or familiarity with the concepts reflection and/or critical reflection. Emerging from the data sources, it was evident that none of the participants had any experience or knowledge of reflection. Two of the senior professional nurses had heard of the concept critical, and tried to relate it to reflection. Others perceived it to being a new concept and thus attributed their lack of knowledge or familiarity to their basic nursing training being outdated. The following selected extract reflects some of the conversations:

"…I used to remember one of our tutors saying… "Nurses you must be critical nurses and you must be critical thinkers!"…so is that what critical reflection is?" (Urban-FGD, participant1)

"Cha' (No in isiZulu) *we have not used this thing of reflection…you know most of us did our training a long time ago so these new things were not taught to us" (Rural-FGD, participant 4)*

An interactive lecture was held in which the facilitator introduced the group to the concept of reflective practice. Participants started to clarify in their own understanding what they understood reflection to be. This was an important task as it not only allowed the understanding

of the term reflection to begin to crystallize, but also allowed initial misconceptions to be rectified. During these activities of clarification, an element of **sense-making** emerged. This was charcterized by the participants brainstorming their understanding of the concept reflection, questioning, debating and clarifying so as to deconstruct and reconstruct their ideas of reflection and make it meaningful for their own understanding. The following selected extracts below highlights this process of sense-making.

"…so it can be said that reflection is like thinking back on something…." (Rural FGD, participant 4)

"…I think for me reflection can be like something we do all the time…like when we remember something that has happened to us…then that is also reflecting…." (Urban FGD participant 3)

"…is it right to say that to be a reflective nurse….we must think of our goals…or maybe to say what we want to do better in our practice…then we reflect and think on what we must do to get to that goal…" (Urban FGD, participant 10)

Some of the participants understood the terms reflection as a meaning **daydreaming and meditating.** These had to be unpacked further during the session in relation to the concept reflection. The selected extracts below illustrate this.

"Participant 6*: maybe it means to daydream about something…err like to sit somewhere….and think about your life or something like that….Researcher: that is a good start…maybe you want to elaborate a little more....*Participant 5*: err ja…okay so it can be like thinking back like what you do when you are just daydreaming…your mind is not blank is it? So I think just like that when we are alone…then we sit back and think…so we must think back on our nursing and what we have done…" (Urban-FGD)*

"Participant2*:is it like meditating or like praying?…when you are quiet and like for meditation...just channeling your thoughts somewhere else…like to surrender to something bigger" Researcher: can you explain a little deeper into how this aspect of meditating can be applied to reflection?...*Participant 9*: I think that maybe just like when you are quite and focusing on one thing in meditation…err then with this reflections…you also have to take some time for our busy schedule…and to just think about how we are nursing…(Rural FGD)*

It was evident that participants started developing an understanding of the term reflection in a professional manner. The participants started relating the term to their experiences and practice in the context of HIV/Aids nursing. This is evidenced in the following extracts:

"like it means to learn from someone…like if someone can do something…it can be a long time ago…but now when you are in that same position you think about it and learn from it" (Rural-FGD, participant 9)

"…maybe it can mean like to be more professional… I can say it will help us to think about our actions and maybe we can then do them more properly so as not to harm the patients..." (Urban-FGD, participant 8)

"…I think it is like to keep questioning yourself…to ask ourselves if it what we are doing is the right way and if not how I can make it better…" (Urban- FGD participant 1)

The data also revealed how participants further unpacked the concept, and related it to thinking of day to day practices. Other understanding of the concept was related to thinking of situations that may have not gone well with patients and how to handle such situations in the future. One participant was able to link the concept of reflection with the attribute of critical thinking, in that it was not just thinking of situations that nurse practitioners may have experienced, but thinking that required a change or alteration in themselves to improve their practice. This is explained in the following selected extracts.

"… reflection means we must be always thinking…it means that we will be asking ourselves what we did today and what was good and bad…and what I can learn from it…."(Rural-FGD, participant 4)

"…now I think that it can be daydreaming but you are not just thinking of nothing…you can use something that happened to you…like for example if I did not do something right with my patient…then I must sit and reflect on it and then I can see where I made mistakes and then I can change it…" (Urban FGD, participant 4)

"…nazo' (yes)…so that is what that old tutor meant by we must be critical thinkers…because reflection can mean that one must not just to think about something but it must be "critical"(high pitch voice)…ya'bona…we must not just think of what we did…but we must

think…okay how can I do it better, what will make me to be a better midwife...or what must I do differently in my ward to improve certain things" (Urban FGD, participant 1)

***Application of the concept critical reflection to practice*:** Following the clarifying the concept and construction of the term reflection into a meaningful and purposeful definition for the participants, it emerged that the participants needed to learn how to reflect at a fundamental level. They needed to learn how to make sense of their experiences, and how to recognize and be conscious of incidents or experiences that caused uneasiness in their practice, with an aim of bringing about change. Therefore, a series of more informative sessions were conducted in which the facilitator guided the participants through a deeper and more practical way of understanding the concept of reflection. This was done in the form of teaching sessions on the concept of reflection, unpacking the use of reflective discourses sessions, the use of paper based exercises and the introduction of reflective diaries as the medium in which reflection can be practiced. The aim was to activate and demonstrate to the participants the various dimensions of experiences, to create an awareness of what experiences are and how to reflect on experiences and past behaviours and create learning opportunities. The following selected excerpts illustrate the participant's engagement in the information sessions of critical reflection.

"Yes…this can be very interesting to do…err...like I am thinking of a incident in the ward...so I can see from this paper (referring to paper exercise) that I must ask myself what I was doing when it happened, and what I did to respond to it…so there is a lot that goes into this thing of reflection…(laughing) ja..it is not just sitting in a nice quite place and thinking…"(rural FGD, participant 5)

"okay so these questions we ask doing on this worksheet…so it means every time…err…like every time we come across something in our practice…yabona'…err…we must then be asking such questions like this one so that we can then say we are reflecting…." (Urban FGD, Participant 9)

Emerging from the data, it was evident that this process of learning to reflect was characterized with excitement and curiosity to learn more. Participants freely shared incidences that they could reflect on and the questions that they needed to ask themselves to begin the process of applying themselves in reflective practice. This is evidenced in the selected FGD extracts.

"this is the first time, I am thinking so much about small things that happen to us..normally I just move onto something else not asking myself such things like how it made me feel and if I can do something about what happened… we go through many things in the wards…so now for me to learn from what happened…err..does it mean I must ask myself all these things? and think about it and write down all these things?" (urban FGD participant 8)

"there are so many things one must ask just to think back on something….I never knew it will mean thinking about all these questions….but I am excited to learn this new thing…" (urban FGD participant 4)

"so many questions to ask just on something that has happened…and what if I can't remember all these things to answer the questions?" (urban-FGD participant 1)

Hesitation and Reluctance. Despite the curiosity and interest in the concept of reflection and its benefit in nursing practice, the data sources showed that for some participants, the fear of letting go of emotions related nursing in a context of HIV/Aids was a barrier. Some participants indicated that having to reflect back on certain experiences of their nursing practice was an overwhelming and fearful challenge, as many had chosen to bury some of the painful and emotionally exhausting feelings of being burdened with the challenges of HIV/Aids nursing care. In addition, the uncertainty on where to begin in the process of reflection created a time of reluctance and hesitation. The following extract reflects this fear.

"…you know it is scary to just start thinking of all the incidents about our practice…cha' me I try to normally block out the negative things because some of the the things we face in our nursing or what the patients tell us…it is so painful…so I am just wondering…like now with this reflection…we must start to think about all our experiences…err…so it means that even some of these painful things we must bring it back to see how we can learn from it…" (Rural FGD, participant 7)

"…we all are knowing of some things of our practice…it is better off staying in the past…because when you think of the things some people tell you in your practice…or what we do in our nursing…haibo' (utterance of resignation)*...it is too much to face….like I mean for your mental health…but I can see now that we must start to unpack all things from our practice…if we want to really learn to be different and critical…" (Urban, FGD, participant 1)*

It also emerged that another source of hesitation and reluctance on the process of learning to reflect stemmed from the uncertainty on how to proceed with the reflection process and the confusion that went with this was expressed by the participants.

"(laughing)…*It was so nice when we was just talking about what this idea of reflection is…hai! but it is something else when you are alone…and you have to think about ideas to reflect on…it is so confusing to me…" (Rural FGD, participant 5)*

*"….one doesn't know where to begin with this reflection…because everything just happens all at one when you are in the ward….it was not easy to do it now in real…when I was on my own…I was even asking the other nurse…and she too was just saying let us wait to hear from the others…how we can do this reflection in this books (*referring to journal*)…" (Urban FGD, participant 3)*

Most participants expressed that amidst their current challenges of keeping up with changes in terms of HIV/Aids care, they still felt grounded in their general knowledge of nursing and their specialist field of midwifery, and were thus accustomed to being the "knower" of information. The process of learning to reflect challenged the participants to learn and be open to a new way of thinking and learning, and caused a state of "not knowing" and loss of control in terms of what they were used to. This resulted in apprehension in terms of how to move forward with the practice of reflection. This is evident in the following selected extracts which illustrates the paradigm shift.

"…hai…this thing of reflecting…where you have force yourself to think about your practice…it is not easy….I really felt like I was not in control of what was to be done…you know…even with all this new things with ARVs …at least we still know how to do the deliveries…now with this…we have to think of something…and then to think on what we must change to do that task better…it was confusing…" (Rural-FGD, participant 4)

"…when I started to try and do this reflection thing….then I could see that I did not know everything…it was confusing me a lot…to think of how to reflect and what to reflect on….ya'bona (you see)…even with HIV when we don't know like the policies…but at least we still know our midwifery and we can still do the deliveries and such…but now…this thing makes you to feel like you are not in control…" (Urban-FGD, participant 5)

Emerging from the data sources, it was apparent that as the participants unpacked more fully the requirement in terms of engaging with critical reflective practice, they viewed the time involved for introspection of an experience and thinking through their actions and outcomes of the experience as a barrier, especially with regards to maintaining the reflective journals. At the initial level of reflective practice, participants felt uncertain of what to expect in terms of their own emotional investment in the reflective process. Moreover, factors of time and a greater level of investment in clinical practice that the reflective practice required in terms of thinking back on clinical experiences were sources of hesitation and reluctance. The following excerpts presented below are evidence of this.

"*…it is to make the time to remember to write in these books….sometimes you are alone in the wards and it is so demanding…so you have to think of where you can steal some time to reflect…it can be challenging…"(Rural FGD, participant 5)*

"…you have to have something to write…and I keep thinking of some many things I want to write…or I want to come here and talk about…but is hard to know how to write these things…also the time is a factor…you got to make time to do such things….(Urban FGD, participant 6)

Transitioning and familiarity with reflective practice. Channeling the difficult and emotionally charged experiences into a learning experience required participants to become familiar with the practice of sharing openly. It emerged that through sustained engagement and decreased fear of peer judgment more open reflective discourses were observed. As the participants became more familiar with each other and realized that they all shared similar challenges they became less

inhibited and more open to the process of learning how to reflect. The following evidence from the various data sources illustrates this.

"it is interesting to see how that the nurses are not feeling so restricted in their conversations…there is more openness and not feeling so conscious of what others are thinking of what is being said…" (Rural FGD6-Researcher observation)

"…we are here to learn...so even if I can come here and tell you things I did...maybe it is wrong…but I need to learn about this reflection and HIV to grow…I cannot just keep quite… no I just try and share something…for the discussion…" (Urban FGD, participant 7)

As they became more familiar with the techniques of self questioning on clinical incidents participants became more active in the process of engaging in reflective practice. The data sources revealed that participants began to appreciate the value of reflective practice which illuminated new information and helped them to learn. The data sources revealed that participants recognized the value in reflective practice, despite their perceptions that the process added work to an already challenging workload. The following extracts presented below reflect this.

"I can now start to see how we are learning from this reflection...yabona' (you see) like when I am thinking of something in my nursing....then I am starting to ask myself if what I am doing it right...and when I come to this group it make to find out more about my practice...." (Urban FGD, participant 6)

"...it does mean there is something extra now that we have to do...because on the back of your mind err...you are always having this thing that we must come here and discuss something...so you want to start reflecting and using this questions in how we are nursing...."(Rural, FGD, participant 2)

Learning how to reflect deeply. Even although the data sources revealed that participants were transitioning into being reflective practitioners, evidence of the reflective discourse illuminated that this was still at a very superficial level. It was evident that participants struggled to reflect in terms of their feelings, emotions, actions and consequences. The following excerpt from a

reflective discourse session with the urban group demonstrates how they missed the point of the exercise and did not evaluate the behavior and feelings they described when recounting an experience or problem. The participants managed well with the aspect of reflection that required sharing an experience or clinical incident, but struggled with cognitive thinking and reflection. The use of probing questions by the facilitation process enabled the participants to engage deeper in reflecting shared clinical incidents, as noted in the following extracts below.

*Participant 3: Let me tell you about this woman that came into the ward complaining of the formula we give, so you see when they are discharged they all tell us that they will formula feed, but now they can't afford it, so these are the challenges we are having, because we do not give the tins (*referring to formula feed*) so we now are faced with this women just crying and then you know she will just breastfeed…*

Researcher: can you tell me what you did when this happened?

Participant 3: "No, I just said that there is nothing I can do…(laughing)…I even asked her…where did she think she was going to get the money from when she said in the wards she will formula feed….I think they end up relying on the boyfriend to buy the milk formula…

Researcher: how does this incident make you feel and how did you respond?

Participant 3: no…it is just normal…like I am saying these are things that we are facing in the clinics everyday…so I am just sharing...err with the group.

Researcher: …but if you reflect on this incident…if something similar happens with another mother…what do you think you may do differently….

Participant 5: (initial silence)…if I can reflect on this…err then I can see that maybe there is a problem with how these women make choices…err…like to formula feed but not knowing where they will get the money…so now if it happens that I am discharging someone…then maybe I must tell them more about how expensive these tins are…so they are sure they can afford…really we cannot be issuing these tins now and again…. (Urban, FGD)

An analysis of the reflective journal entries revealed that the participants' initial reflections lacked depth, were non-descriptive in nature and were characteristic of reflective logs. The journals served as a record or "day planner "of the participants' daily activities or work related events, and were recorded in an ordered manner describing events as they transpired. The entries

were short, non-descriptive and impersonal and contained no thoughtful action or evaluation of the activities or events that were recorded. The following are a sample of selected extracts from the participant's reflective journals:

"Started day with ward rounds…went for operational managers meeting and told about the institutional audit that is happening...went back to ward…working in the labour ward so helped with admissions and all the labours...went with some cases to theater for caesarian deliveries"(Rural journal entry dated 9th April, 2010)

"Attended in-service on quality assurance by matron about our maternity unit…. Worked in my ward...worked in the nursery helped the student nurses with some procedures..." (Urban journal entry dated 30th March, 2010)

"Worked in the labour unit, had a busy day in the labour ward, doing lots of admissions and seeing to the mothers who are in labour…had done 4 deliveries…" (Urban journal entry dated 6th April, 2010)

Further analysis of the reflective entries revealed that there was an orientation towards describing daily tasks and activities and that routine and habitual practice dominated the nature of their practice and way of nursing. Other entries were characteristic of listing out challenges and problems experienced at work. This is evident in the selected extract from the reflective entries:

"I am working in the gateway clinic (VCT clinic), every day I see many patients…I just counsel them and tell them healthy living…many are very young teenage mothers…I am working in gateway clinic for almost 2 years now..every day I do the same things and once a month I do my numbers for the month…we are very busy in our clinic" (Rural journal entry dated 5th April, 2010)

"I am sometimes the only one in the ward, and the only ADM (adv. Midwife) and so I must do all the cases…sometimes I have to be on call over the weekends if the locum is new and will not know how to deal with complicated cases…it is hard working with so many responsibilities and no time…" (Rural journal entry dated April, 2010)

Deeper engagement in reflective discourse, facilitated by probing, allowed participants to think more wholly on their experiences and unlocked their ability to think reflectively, allowing them to move forward. This, for some, became a turning point in their practice, their "aha" moment, as

they started to see the benefit of learning from the past in their own practice. The following excerpt of a rural participants sharing illustrates this.

"we had a mother and she was tested and positive…so she was already booking in late…after 28 weeks…so I did not know now what I must do..so we never give her the AZT to start taking… when I am thinking of this…after we got some information about the policy…so I can see that I did something wrong….so next time I will just tell them they must get issued with the AZT to start taking every day…I was feeling so happy…because I can see now what it means to reflect…and to learn for future actions..." (Urban FGD, participant 4)

Group Formation: Learning to work together. In the beginning, the group was fragmented as participants were unsure of themselves and each other and had to learn how to work together. As reflected from the data sources, many of the nurse practitioners had not previously worked together, especially in an intimate nature as the sustained meetings of the CoP. There were two distinct concepts which described the process of group formation, namely (i) reservations and high dependence and (ii) establishing middle ground

Reservations and High Dependence. Emerging from the data sources it was evident that participants encountered challenges in terms of the group dynamics. Evident from the participants' discussions, despite working in the same maternal and child health department, they worked in isolation, which meant that participants had no experience of networking. Further to this, the data revealed that the professional hierarchyof rank and experience created a climate of hesitation and reluctance among the participants, as they did not have the confidence or the skills to work as a collective unit. The junior participants, in particular, expressed concerns of not feeling confident in terms of working in the same group as their senior colleagues. Moreover, the data sources revealed that the nature of the CoPs challenged the participants' habitual ways of interacting with each other, which is based on hierarchy. The following selected extracts from the data sources illustrates this.

" …this is my first time to work so closely with some of the nurses…we sometimes greet each other in the passages…but never worked on something like this where we have to share what we are going through….so you feel nervous…especially because some of our seniors are there in the group as well…" (Rural FGD, participant 6)

…I know for many of us...we are used to being told by the management or the unit manager what is needed of like when we had the institutional audit...we never came together like this before...no I know it is going to be good...but we need to learn how to work together"(Urban FGD, participant 3)

"it is not so easy for some of us to just start sharing…many of us are operational managers, so we had this culture of some sort of just staying together as managers and then the other categories that stick together…it is a new change to start saying we are all one and to work together" (Urban FGD, participant 1)

The data revealed that participants initially tended to group together in terms of their units, where they worked, or in terms of hierarchy. For example, nurses from the postnatal department sat together or unit managers sat together. This is evident from the following field note.

"…over the past three sessions, the same seating arrangements have been kept among the participants, they tend to sit in terms of the units they are working in, like all four nurses from the postnatal department sit next to each other….there is not a lot of diverse interaction among the participants in terms of sharing and discussing issues…" (Rural Session 4, Researcher field-notes)

The data sources also revealed that participants' initial reluctance to open themselves and share their experiences stemmed from the fear of peer judgment. Participants explained how their unfamiliarity with one another created a barrier in their sharing and interaction within the group, as they believed that the other participants would judge and ridicule them in terms of their knowledge gaps and the nature of their sharing. The following selected extract presented below highlights this:

"…it was hard for me to start sharing…yes we all met before when we were talking about the plan to have this group...but now that we were ready to actually do the reflection and we needed to talk about some of our experiences…I was just thinking…what would my seniors think of me if

I share this story…so I thought it will be better to listen to others than to talk about my challenges…" (Rural FGD, participant 2)

" ...i wanted to be part of the group...err because I could see that it was going to be helpful for all of to learn...but in the beginning it was scary....because you think of these nurses...some of them we never knew too well before..so it is not easy..." (Urban, individual interview, participant 7)

Emerging from the data sources, it was also evident that participants were initially very dependent on the facilitator (researcher) to offer guidance and direct the group process. This was noted in the lack of collective discussion of clinical problems in the initial group meetings. It was noted from the data that participants were individually focused on their own clinical problems, which they listed, expecting the facilitator to provide the relevant information. It also emerged from the data, that participants displayed a lack of autonomy in directing their own actions or learning. Because participants were accustomed to receiving instructions and working on their own, they found the initial phases of the group challenging as it was a paradigm shift for them to direct their own learning and take ownership of the process collectively with other nurse participants. The selected extracts presented below highlights this further.

"...we are so used to just being told what needs to be done next...so I can now see that in the beginning...this is how we were behaving in the group...we did not know what must be done...and we were not used to one another...so that also made it difficult for us...we used to just be like children...waiting for the next instruction...." (Urban-individual interview, participant 3)

"...for some of us...we are used to just getting the instruction, you see even in the ward we just wait for the next memo or something to get told to us by the unit managers...so I think this is where it comes from...to not know how to work in a group...but like we are doing it now...we can also see that we are growing together..." (Urban-FGD, participant 5)

Establishing middle ground. Congruent with the increased consciousness and familiarity that was experienced by the participants in terms of learning to reflect and understanding the dynamics of reflection, it was noted in the data analysis that participants were more open and

engaging in the group sessions. A new dynamic was added to the group, however, as stronger personalities asserted themselves and conflict among some of the group members began to emerge. It was noted from the data that as participants became more familiar with each other and the process of reflection and sharing, stronger members wanted to drive their own agenda in terms of what should be the focus of the group discussions. The selected excerpt from one of the urban FGD sessions among two stronger members of the group illustrates this.

"Participant 6*: next week we should have a lecture on this aspect of discordant couples…I think it is important for us to know how to advise them…* Participant 9*: no…but what is more urgent to talk about is how to deal with stigma among the nurses…you see we were all sharing how we too can have our own what you say…err…prejudice so maybe this is what is needed more urgently…plus how many times do we see this discordant couples…* Participant 6*: yes but in my clinic I see many and I think if we are sharing what we like then we should be able to say it…*Participant 9*: this thing of asking might not work…so we must just go with what we are commonly seeing so we can all benefit from the lecture…" (Urban FGD)*

Another aspect of establishing middle-ground in terms of group formation was the aspect of inter-professional barriers. As noted by the participants, the older more experienced members assumed leadership roles and shied away from sharing as they were functioning on a premise that they knew everything regarding clinical management of HIV/AIDS. This was also noted as a source of tension, especially among the younger more recently qualified nurse practitioners.

"you feel like some of the senior nurses are not really listening to you…because they are think what does she know she has only come now…but at times you will find we are having the latest information about this HIV/Aids…so what I don't like with some of our colleagues here is that they always want to be right…" (Urban-Individual interview)

"I sometime feel like….my information is not really valued…some of the senior managers…they feel like what can I say that is worth listening to….i think they feel like they know everything and we who are the juniors cannot come with information to learn…" (Rural-Individual interview)

It became evident that a strategy was needed to establish middle ground among the participants. This was achieved by the group establishing specific rules to overcome the barriers of working

within the the hierarchy of the profession. Led by the facilitator, the participants established ways of fostering ownership and promoting autonomy among each other. Establishing and rotating duties of time-keeper and scribe for the reflective discussions were some strategies that were used to encourage participation. Furthermore, as a strategy to overcome the barriers of hierarchy and promote inclusiveness, a group rule which allowed every participant a chance to speak was established. Moreover, participation in the group activities and the group being seen as a platform was also evident in the use of a resource file. This is reflected in the selected extracts below.

"Participant 1:to have a rule about having a turn to speak...in this way no one will feel left out of the discussion, and like we were saying about respect…we must say in this rule that it doesn't matter what the person say's we as a group must not break them down…Participant 4:we must also have something about respect…some of us are sharing very personal stories…so we must respect and not judge…otherwise we are not learning and we all are here to support one another…" (Urban-FGD, participant 2)

"Participant 4…we must have someone who will keep notes and minutes of what we share…it must not be of what we share in confidence…she can jot down some of the things maybe we want to discuss the next time or things we must remember to do for the next meeting…Participant 9...it must not be the same person doing it every time…we must take turns…then we all can learn.."(Urban FGD)

"Participant 3*:like we have been doing we must keep this rule of watching the time…so that we don't spend our session on doing the teaching part…but we also divide our time for reflection and sharing because we can see we are doing both the things…and it is good to divide our time.*…Participant 2*...i like that we have this system...so now we all know what are our duties as well....*Participant 7*: I think another rule must be about file for information...because we can take this out to copy but it must be a rule that you must return it...and maybe something like also having a system for everyone to put some information in the file...."(Rural FGD*

The group dynamics, therefore, were transitioning towards being more collaborative in nature, as opposed to the insular way in which the participants had been participating in the initial group discussions. By the third and fourth reflective discourse sessions, group coalescence became more pronounced and participants honestly and openly began sharing their initial fears of being

judged and the reservations they had had regarding working together in terms of the diversity of the group.

"Participant 8*...at first I used to be scared to come here and share....but now I feel comfortable with each of you...*Participant 5*: ja...even I can say the same...i used to only want to stay with who we knew...and not talk...but I can see now that we are all together with this...even if we are different in our wards...here we are all the same...with same problems..." (Urban FGD)*

"...now that we are closer...err...i mean like now we are getting to know each other...i can see that I was afraid for nothing..because when we first started coming here I was nervous...now I happy to even say that I am not shy to share my problems here..." (Rural FGD, participant8)

The diagram below is aligned to Strauss and Corbin (1990) technique of use of diagrams and figures to present the connection of categories and their subcategories. Figure 3 is a logical diagram which depicts a visual representation of analytical thinking that show the inter-relationship of categories and its subcategories in terms of the formation phase of establishing the CoPs.

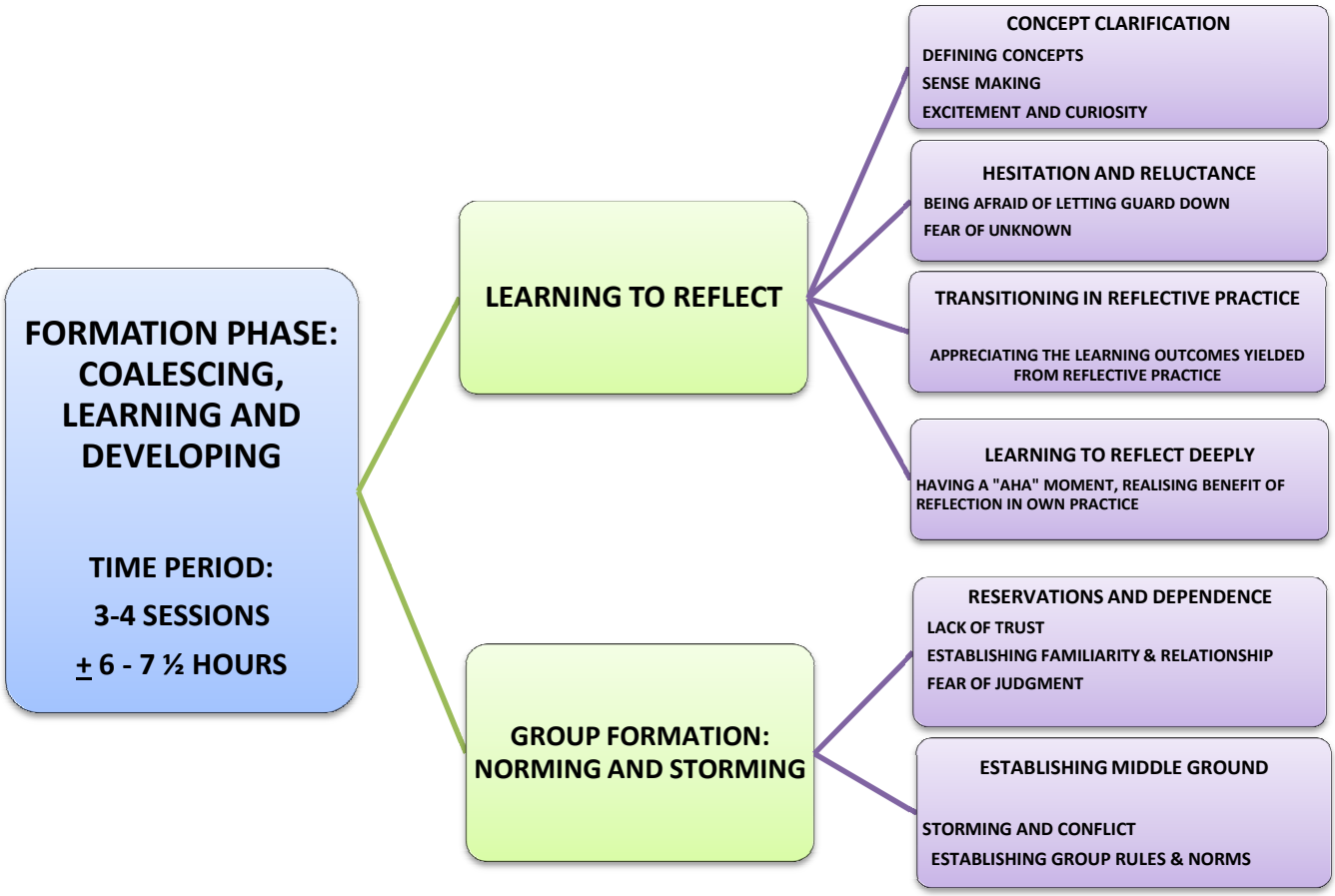


Figure 3: Categories and subcategories of the formation phase

4.3.4.2.2 Transitioning phase: An awakening of consciousness.

Moving from the phase of learning to reflect, interactional strategies and activities became apparent, which collectively described a transitioning phase. Within this phase, the data revealed that the participants transitioned from being non-reflective and learning how to reflect towards a new awakening and realization of mindful, deliberate and thoughtful clinical practice aided by critical reflective skills. During this transitioning phase, the participants progressed from a point of being dependent on the facilitator to guide the nature and content of the sharing sessions (i.e. through the HIV/Aids teaching sessions) towards creating autonomy within the group and the activities thereof and coalescing towards ownership of the group process. This phase extended

over four to six reflective sessions, each session taking an average of 120 minutes. During this period, the data revealed that participants had become more proficient in critical reflective skills and that the groups had begun functioning as CoPs. These occurrences can be characterized as two dimensions, namely: (i) conscious reflection and experiential learning; and (ii) becoming autonomous.

Conscious Reflection and Experiential Learning. Unpacking the activities and strategies which transpired as the participants progressed in their reflective skills; it was evident that the participants became conscious and aware of their actions and behaviour in their daily practice and became open to seeing their experiences as a platform for learning. A conscious reflective way of practicing and the use of experiential learning to enhance clinical practice manifested through the following dimensional properties: (i) Deeper awareness of practice, consciously reflective through experience based practice; and (ii) Deliberate and action orientated way of nursing.

Deeper awareness of practice, consciously reflective through experience based practi*ce.* Gradual in its process, reflective practice and engaging in deeper, more conscious awareness of clinical practice was demonstrated by the participants. Through sustained contact over the initial three to reflective discourse sessions, trust and familiarity among the participants created a platform for open sharing of clinical experiences, as reflected in the selected extract below.

*"…now that we are getting closer and getting to know one another…it makes it better to come to the group and share…there is no more feeling afraid that the others will think differently about you…I find it easier to talk about what I am going through…you just feel free to talk here (*referring to CoP group session*)…" (Rural FGD, participant 5)*

This trust and openness enabled participants to reflect more fully on their clinical experiences, this time moving further and deeper in the process of reflection by also engaging in the affective, emotive side of the clinical experience related to HIV/Aids. The data sources also revealed that being open and sometimes vulnerable in their reflective discourses allowed for hidden emotions of nursing in the context of HIV/Aids to be addressed. This emerged as an important characteristic of the transitioning process, as it demonstrated that the nature of the participants' reflections were evolving and had progressed from being focused on the identification of problems towards being more thoughtful and introspective regarding clinical experiences. Furthermore, it became evident that the participants had begun to engage with reasons embedded in their nursing action and behaviours towards patients.The following excerpts illustrate the affective introspections of feelings and emotions within the participants' experiences:

*"if I can share what happened to me… there was this young women who came for HIV testing….so she opened up to me and said she suspects her other child died of HIV/Aids…the baby had chest conditions...i think it must have been TB…so this patient herself is knowing she is HIV positive...and not taking any treatment...yabona' (*you see*) she is afraid of the husband now...who is himself denying this disease...so such things when I hear it...yes it makes you sad to hear this...even angry at some of our men...because this women...she is just forced to stay with him...like for the financial support...but then...when I am now in this group...I can see in me...that for this lady to share with me...it means there is trust in me...so I too must try and help her" (Rural FGD, participant 6)*

"...I can say that now that we discuss what happens to us as nurses...it also helps me to cope...because sometimes you are so afraid of this HIV...that I can see that yes...I feel sad for these women...but me...I was becoming so distant from working nicely with them...because you start feeling like this disease is a monster...and yet some of these women they don't have a choice...they are just getting it from their husbands...so it makes me to also think of my role as a nurse to support her...and not to just keep them far because of me being afraid of them...." (Rural FGD, participant 3)

Furthermore it emerged that as participants progressed in the development of reflective skills, there was a heightened awareness in terms of holistic nursing in the context of HIV/Aids. Described as being *"switched on"*, participants shared how reflective practice illuminated a

greater sense of awareness and intuitiveness in their nursing practice. They reported that they had become more mindful of the patients reactions and non-verbal cues and acted on these to inform the patient wholly to foster better acceptance of the HIV diagnosis and promote adherence to the treatment, thus improving health outcomes. The selected extract illustrates a rural participant's experience.

*"...I am like more aware of the patients...in the past I used to just say oh...these patients they always take the NVP syrup when we discharge them....err...and then in the afternoon, you find that they left in the lockers in the wards...or they give it to the security at the gate...so it was just a normal thing...but now I am much more like awakened....err (*laughing*) I can say more switched on...because I even had this young mother...and I could see in how she was when I was explaining this medicine...err she was just going to leave it...and then I motivated her...I explained properly there is nothing to be scared of this treatment....because only when you ask you hear some are frightened of these drugs...so after a long time when she left....I see she did not leave it...even the guard never bring it back...so I am hoping it helped her...ja...I can see how me too I am more like awake for the patients needs..." (Urban FGD, participant 3)*

Another attribute that emerged from the data sources was the process of knowledge generation through experiential learning. It was evident from the reflective discourse as well as from the participants' self reflections that there was greater awareness of the routine and habitual behaviour of the current nursing practice. Iterations from the reflective discourses sessions demonstrated how the group discussions had became a platform where new and innovative ways of improving nursing practice were debated and shared. The following selected extract illustrates this.

"Participant 6: ...if I can share something...you know we had this talk some time ago here in this group...err...about all this different types of pills...so when I am in the ward...I can see that we just do our usual ward rounds...we don't even do the proper health education...so you see that the mothers are just defaulting with the medication and even to come for the follow-up checkups after the delivery... Participant 4:...Hai...even with us...we are seeing that after the mother delivers...they have just made up their mind...that they maybe won't keep taking the medication..they say it is like a poison for the baby... participant 6:...so me I was thinking it must a good idea for us to maybe make some sort of chart...then the patients can read for themselves...and if they see it time and time again when they come for their visit...it might help them to also accept...Participant1: no I think this is a good idea...because then we can also see that this can help with some problems of not adhering to medication because of wrong information..." (Rural FGD)

Higher order thinking, coupled with the autonomy in their group cohesion was evident in the innovative problem solving abilities to challenges and institutional restrictions regarding HIV/Aids care. Evident from the group dynamics; participants started to gain deeper trust and better working dispositions among each other. This, in turn, created a platform for creative thinking, use of critical thinking and pooling of ideas and resources to come up with unique ideas to address commonly experienced challenges. This is reflected in the following excerpt.

"Participant 5: for today's session I wanted to share about this new HCT program …I think it is important to have this talk ...it will help us to make the changes…because now the nurses will have to do the counseling which they are not doing at the moment…so we must start to think together how we will solve this problem...Participant 1...what about if we use the lay counselors which we already have...some of them have this extensive training in err...this counselling...so

*while we are waiting to get the training ourselves...like from the district...err then we can use this category to help us develop our skills....Participant 8...err...ja...I think it is good...see for me...I am just in the TOP clinic...so we only give this counselling on contraceptives.....so it will help me a lot to know really what is this other counselling with the comprehensive HIV testing about...ja I think we must start looking for these ways to help ourselves....Participant 1....see some of us....we look down on these people...(*referring to lay counselors, who are equivalent to community health workers*...but it is time we work together... all of us...to address this new things in dealing with this disease..." (Urban, FGD)*

Deeper engagement in reflective practice was also evident through the garnering of expert advice and peer assisted learning that took place in the reflective discourse sessions. Confidence in using reflective skills in clinical practice and recognizing the richness of their experiences as a catalyst for bringing about change in the nursing management of HIV/Aids, participants relied less on the facilitator for information about HIV/Aids and began to share their own ideas, experiences and expertise to create knowledge. Through peer supported knowledge participants began to apply what they had learnt within the CoP to their daily nursing practice. This is illustrated in the following excerpt:

"Participant 5*: If others here can help on a problem about this formula feeding…err... I never thought about this before…but with this reflection we are doing...I am starting to think about this... err... many mothers when you ask them about the feeding choice… they just say they want to do formula feeding…but after a moths or so...the same one....they come back crying for this formula from us.... because now they can't afford it. So in the past...even me...I used to just shout at them...and ask them if the government is here to support the,...because we are not here to give them this free milk...they should have thought of this before....*Participant 10*...no I know what my sister is saying...but you see...some of these women...they are relying on the boyfriend to buy these milk for them..then the boyfriend just leaves and they come back...Participant 6...so what I can share...because I went for the training some time ago for the infant feeding...you see these women they are afraid to breastfeed...because of this mixed messages they sometimes get...but we...we must also educate them properly...so for my colleague who is sharing of this problem...where they come back...yes it is true that the clinic cannot reissue the milk tins...so that is why when you are educating them...you must let them know how much this formula will cost...so they can know and be informed...and we too must also educate them properly about mixed feeding and even to breast feed exclusively is safe for the baby...so they don't end up mixing..*participant 5*...ja sisi...what you are saying is true...maybe that is what we must advising these women...to help them not to be in this situation..." (Urban FGD)*

It also became evident that participants' growth in the process of becoming a reflective practitioner was demonstrated in a renewed consciousness in practice, moving away from habitual routine practices towards a focused way of nursing aligned to evidence and knowledge generated through experiential and reflective practice. This is illuminated in the following extracts:

"I have grown in my nursing care from being part of the group… the last time when we heard from someone here about how the mother was given NVP syrup for the baby... how the mother came back having said the syrup was finished… I reflected on this and said in the past when this was happening I too used to just reissue more syrup…but when my colleague was sharing her story...she told us that the mothers should not be coming back with remainders or it being finished in two weeks...so it means she is not dosing correctly or she is sharing with someone….so such things helped me to change my practice." (Rural FGD, participant7)

"…I can see that every day I am using reflection to ask myself how did I do? Where can I do better? And I am learning from my own experiences…I have changed how I do the patients booking, because in the past I just ticked all the things I needed to just complete…but now I can see I try to engage with the mothers and ask them questions about what else is happening even at home and how she is taking any medications..now I learnt that other thing, like if she is comfortable to disclose and if she can share it with her partner…all these things can affect how she may take this PMTCT , so I must show her as her nurse I have to support her, so she does not default…" (Urban Reflective Journal Entry-Dated 3 June, 2010)

Findings showed that being consciously reflective resulted in participants experiencing a paradigm shift in terms of previously held world views or assumptions regarding people living with HIV/Aids and nursing in the context of HIV/Aids. Emerging from the reflective discourse, it was evident that participants were able to openly and honestly reflect on the sometimes stereotypical and prejudicial way of nursing that was practiced and consciously considered how these practices could be changed to improve nursing care. The excerpts presented below demonstrate this.

"..now that we have been learning so much about HIV/Aids and even about stigma...I can reflect now on some of my behaviour...and see how it is wrong...even to shout at them...or to ask them why they are keep getting pregnant...I am not proud of it...but even I used to ask them why they

are not using amaCondoms...so I am learning to be better...and to understand the women better so they too can trust us to maybe accept the HIV quicker …" (Urban FGD, participant 5)

"it has been good to be part of this group...and with this reflection..because sometime it forces you to see how you are nursing...err...to think about our behaviour...we get angry at the mothers and shout at them...and sometimes I say to myself...it is because they are not taking this HIV seriously...but some they don't have this choice...they are just getting it from husbands...so I can see that I am changing my thinking...." (Rural FGD, participant 2)

"....before...if I just see them with their thin bodies...hai... I used to just say...look at this think "tikki"...err...like a prostitute...you know to just think maybe she is just sleeping around....but I am learning...it is not for everyone....but I am seeing I am must change my attitude" (Urban FGD, 10)

Deliberate and action orientated way of nursing. Evident from the reflective discourse, it was apparent that participants were engaging in two forms of reflection, which were reflection on clinical practice and reflection on learning what had been gained from the information sharing sessions of the CoPs. Participants expressed that engaging with both these processes of reflection fostered a renewed approach to nursing practice. Embedded within the deeper engagement of reflective practice, inquiry based skills were also emerging. The following excerpts describe these two reflective processes.

"...when I am thinking of how I nurse....so I think about what we learn here in this group...and that information that we get from her...err...I can say like for example...when we discussed the dosage for giving the NVP syrup to the baby...err...so that helped me to start to reflect like on my own practice...because I could then see check if this information we are receiving here....if my practice is correct with it..." (Rural, FGD, participant 3)

"...err...ja I can say that I am reflecting more...so I can share something....so we had this case in our ward...it was a very unusual case where this mother she had come back for the second time of the PMTCT program...so now we started with the AZT like we supposed to...but now I was thinking in me...if for this women she is now maybe like resistant to the same drugs like the others...so because I can say because of this reflection....it made me to go and learn about this...and find out more...so I see that in my practice...i am reflecting...err...I am thinking deeper about what I do...so that I can learn from it...."(Urban, FGD, participant7)

Coinciding with deeper awareness in practice through reflective skills, the data revealed another dimension of the participants' actions which indicated progression in reflective practice. Participant started to be mindful of their knowledge gaps, and as opposed to just nursing within the status quo of their inadequate level of knowledge, they made a conscious effort to address their lack of knowledge. Embedded in this process of recognizing and addressing knowledge gaps, participants reflective skills were also emerging as becoming more proficient and deeper. There was evidence of participants recognizing their gap in knowledge while the incident or event was occurring (i.e. reflection in action), and taking appropriate action to remedy the situation. For example, recognizing a knowledge gap with a particular HAART drug, such as d4T, and referring the patient to another department as opposed to advising the patient incorrectly. Participants noted how they had previously only been able to recognize their learning and knowledge needs after the incident/event (i.e. reflection on action). This served as an important transition as it demonstrated the participants' engagement of being reflective "in and on action / practice" and also tied in with a heightened awareness and consciousness of their wish to improve on their practice. The selected excerpts reflect two participants' reflections regarding "in and on action/practice".

"…reflection makes you to be thinking all the time…even when I am with the mothers I am always thinking if what I am doing it correct…so when this happens I can see where I need to learn more...so the one day while I was working I could see in the patients file the doctor wrote something like tailoring drugs for this patient...even myself I did not know what this is..so I can see I need some education with these different drugs…(Rural FGD, participant 3)

" I was able to say to myself while this patient was with me…okay I don't know much about this drug d4t…so I just said to the patient you are also on HAART and that it where that drug comes from…so after you are done here (referring to antenatal clinic) you must go to the ARV clinic and the sister there will help you with this other problem…I could see that I did not know so if it was not for reflection then I was not going to see my gaps and was not going to guide this patient properly…" (Urban FGD participant 7)

The data sources revealed that the development of reflective skills among the participants was also evidenced in the action-orientated practices which stemmed from insight and learning generated from the participants own reflective practice or the sharing of reflective experiences fostered in the CoPs. The heightened awareness that reflective practice created within the nurse practitioners created an atmosphere of change among them in terms of how to nurse. It was noted from the data how increased confidence in reflective nursing promoted the nurse practitioners to want to go further or, as described in the excerpt below, "go the extra mile" with an aim of improving patient outcomes. The following excerpt illustrates the action orientated behaviour generated as an outcome as the participants evolved with reflective practice.

"…I can see in myself… I am now reflecting in everything… like in the ward I want to go the extra mile to help the patients..I had a patient who told me how her boyfriend was also sharing her tablets (ARVs)…but at the time I had no knowledge about this resistance…when I reflected on her story...I knew I must do something...even it was weeks ago when she saw me…I found her file from the clinic sister and called her and her boyfriend...I counseled them and now it makes me feel good to know I am making a change in their lives…" (Urban FGD participant 4)

Emerging from the data, a renewed action orientated way of nursing was evident in the participants' behaviours. Participants expressed how information learnt from the CoP meetings was disseminated to the wider nursing community in their respective work units. Participants noted that involving other colleagues who were non-members of the CoP enhanced the nursing practice related to HIV/AIDS. The following excerpts illustrate this further.

"I have gained a lot from the group...we share so much information...so when I meet others who are not in this group...i also tell them because that is how we can then change how we are nursing for these people with HIV/Aids..." (Urban FGD, participant 5)

"...i can see that with this err...reflection....even in my colleagues...they too see something different with me...and I too want to always be sharing what we ;earn...even to tell the other nurses they must think about they do something....so we all can grow like that....." (Rural, FGD, participant 6)

Critical thinking and becoming self directed in addressing learning needs. Evident in the reflective discourse and within the reflective stories shared in the CoP group sessions, participants were displaying evidence of becoming critical thinkers, and how this translated to a paradigm shift in their nursing practice.. A renewed confidence in nursing which was attributed to reflective practices was described by one rural participant as *"unlocking the mindset …. thinking"* This served as a catalyst for inquiry based nursing where the participants wanted to seek new information that would support a new action orientated way of nursing. The selected extracts illustrate this.

"…I feel so different in how I nurse… err… this reflection err the talks on different topics and our group…it is like it unlocked the way we think…like your mindset is changed…I don't only get stuck on what I don't know…or the negative I think of the change I must make" (Rural FGD, participant 7)

"…in myself is a change…I just want to always be asking questions… so that I can make sure I am on the right track… in the past when I used to do the doctors round… I used to not ask anything because one feels stupid to ask such things… but now I am asking all the time...even the professor when he comes for his weekly rounds… he even said to me….I can see you have changed…it is good…or he will even ask me if I have a question now…" (Urban FGD participant 2)

Another dimension of critical thinking which emerged was the information seeking behaviour that emanated in reflective practice and described the changed way of nursing that was expressed in the data sources. Noted from the data sources, an indicator of critical thinking was inquiry based practice. Participants shared that with increase of confidence in their HIV nursing practice, there was a move towards inquiry based practice. The excerpt of one of the urban nurse practitioners illustrates this.

"…I can see that we are no longer just doing things like by routine… I can say even in our postnatal ward...I am also thinking …I try and ask if I don't know…if I cannot the answer from someone where I am working then I just write it in my diary then I know I will come here and I can get the answer from one of us…" (Urban-FGD)

As a strategy of critical thinking, the attribute of self-directed learning towards solving learning needs was evident in the data sources. Participants demonstrated critical thinking wherein they were able to recognize their own learning needs and also demonstrated insight with regards to possible ways of addressing their needs. An increase in confidence was attributed to engaging in reflective practice which resulted in a drive and desire to be accountable for patient care and improve HIV/Aids nursing care. In response to this drive to inquire deeper into their nursing practice and solve problems, participants related incidents where information was sought from either the experts, such as the dermatologist or from the other resources such as the pharmaceutical information leaflet.

"…I said to myself…let me be sure that what I am saying to the patients about this drug is true...so I just called pharmacy and asked the man working there to give me the pamphlet that comes with this medication…so that I read it for myself…and indeed it helped me to give the patients more information…" (Rural-individual interview)

"…I had a patient she had this rash all over her body… so I missed the doctors rounds… I could not understand from her chart what was the problem… the patient looked as if she was burnt…so when specialist doctor came…I asked him to explain…so we can know for the future and it was my first time to see this…so I learnt that it was Steven Johnson syndrome…and it was said it is a common skin condition with HIV…so I could also advise this lady because you could see she was just down with this…" (Urban-FGD, participant 6)

Analysis of the reflective journal entries at this current transition phase revealed that the entries were more descriptive in nature and characteristic of diary entries as opposed to log entries of the previous phase. The reflective entries documented both clinical and personal experiences and showed a description of the experience in its entirety, wherein the participant was able to place self within the experience and document the emotive aspect of the experience as well as the actions or the outcomes of the experience. The analysis further noted entries that were focused on "reflecting on practice/action", where a gap in knowledge or a learning opportunity was recognized during critical periods in the participants practice. This learning opportunity was used

to reflect on the clinical situation and what information or skills were needed to enhance practice through application of knowledge learnt from the CoP reflective group sessions. The following selected reflective diary excerpts illustrate this further.

" …while I was with the patients, I just remembered the lecture we had about the formula and mixed feeding and how "Jane" shared her experience of the lady who came to her crying for these tins of formula…so when I was counseling my patient…I said to prevent this problem for her down the time…let me share with her what happens to some mothers who go for formula and then can't afford it…and what this mixed feeding will do for the baby…so it helped me to teach someone… (Reflective diary entry- July 4th, 2010)

Becoming an Autonomous Group. Embedded in the phase of transition, the characteristics of group cohesion and autonomy, which were characterized by increased trust; establishing a sense of belonging in the group; less reliance on the facilitator; and establishing group identity emerged from the data sources. As confidence and use of reflective practice progressed, there was greater sense of belonging and group cohesion was evident in the group dynamics. More responsibility with group tasks was willingly taken on by the participants, such as arranging the venue and establishing who will assume the group duties such as the role of the scribe and time-keeper for the CoP sessions. The following evidence from the data sources reflects this.

"we notice when we come late we start late… we decided to come early and set up the venue for the meeting, so we don't waste time when everyone arrives…we can just get started…" (Urban FGD, participant 8)

"…there is already a scribe chosen for the session…we did it before the meeting started…we arrived early so that we can just prepare the room…you know to arrange the tables and the chairs how we normally have it…" (Rural FGD participant 3)

Group cohesion was also evident in the collaborative discussions within the CoP sessions. Within the former phases participants had grouped themselves either in terms of nursing rank or designation or in terms of familiarity of working in the same unit/department. These dynamics

changed, however, as participants became more comfortable with each other. The observation of the researcher's field-notes illustrates this.

"… I can notice that the participants are not seating in their usual places. They are mixing now, Sr Y who normally sits with the other unit managers, is now sitting next to the nurse from the postnatal ward…no more juniors and seniors…they are learning to see beyond that…" (Researcher field observation- Urban,Session 6)

As familiarity and trust among the participants grew it was evident that there was an increased level of engagement among the participants during the CoP sessions. Shyer members became more communicative and joined in the communal reflections of shared clinical experiences. The following excerpts of the participant's reflections of their experience and evaluations of the CoP illustrate this further.

"…when I first joined it was difficult to open up…I was shy to just say anything…but now it is easier…I have even shared my own challenges and experiences and it has helped others…so those barriers of only listening to the seniors in the group talk is gone…" (Urban- individual interview)

"…I feel like we are a family here…I am so comfortable with everyone…at first I used to be shy to share anything…even if I had something I wanted to ask…I used to leave it…but now I wait to come with my questions…" (Rural FGD participant 5)

The more senior, more experienced participants began to trust the group dynamics and open themselves to the learning process. They had been afraid of sharing their experiences as they felt they should be perceived by the others as being knowledgeable and in control of themselves. The findings showed that through group cohesion, such participants were able to break away from these initial barriers and open themselves to all learning experiences. The selected excerpts below illustrate this further.

"…for me this has been a steep learning road...when I joined I had this thing...I can say it was a barrier because I was afraid that the others will look down at me…I am their matron yet I too

feel challenged…like to ask questions about my own gaps…but I was surprised to see how I learnt even from the juniors I learnt things I will use…it has helped to be here...we come very often...then we got so friendly with one another...that issues of senior and junior is no longer there...err...I can even say it has helped me in how I see the nurses in the wards even,,,," (Urban-individual interview)

"I feel happy to share anything…even when I am unsure on something…I don't hesitate to come and ask…at first I used to think that maybe the others will think that I was not a good nurse…maybe they will think I am incompetent…but we are all at the same level…so it is easy to share now…all my challenges…" (Rural, FGD, participant 7)

As trust among the participants developed there was more cohesion between them and the group sharing became more open and transparent. The CoPs functioned as a support space and a safe haven wherein personal experiences and challenges were shared. Participants used the CoPs as a space to unburden and de-stress and, at the same time, seek advice or solace from their peers with whom had formed deep bonds of friendship. The reflections of some of the participants illustrates this below.

*"... I want to tell all of you…because we are sisters in this thing…I am even having this disease (*referring to HIV/Aids*) at home…my son has it and it has been hard to keep it in me alone…but here I can just come and share and I feel lighter with my problems … I decided it was good for me to share it everyone…because we are all supporting one another here…" (Urban FGD, participant 5)*

"even in my family….we have this virus at home…it is such a strain…even when you go home…there is not break…I wait for this group…just to come and breathe and share all my problems…I feel lighter…" (Rural FGD participant 9)

Further to this, the support structure into which the CoPs had evolved promoted open and honest sharing as members began to trust each other more implicitly. There was no fear of judgment and stigmatization on any issue that was shared among the participants and this supportive environment fostered disclosure of their own fears and hidden truths as demonstrated in the following extract:

"…I had to get tested… it was such a fearful thing to go through... it was a private hospital I was not given any counseling I just had this doctor come and tell me this is the ARVs and this is how you must take it…so there is no preparation for something like this..I was just depressed when I heard this…" (Urban FGD, participant 4)

Another attribute of group cohesion was that the familiarity among the participants resulted in a move towards a unified agenda for the CoPs. Participants started creating a sense of belonging in the group and the focus of the group began to evolve and become tailored towards the members' level of proficiency in reflective practice. Participants took ownership of the group process and began to design their own objectives and goals for the CoP sessions. The following extract highlights how the agenda for a CoP session was negotiated and the nature of the discussion centered on a collaborative need for redress in quality standards within the midwifery department.

"Participant 6…I think we must discuss this institution problem we are having about all the negative incidents in the maternity ward…Participant 4: what can we think of to try and address some of these issues…we even had the minster coming and it always makes us nurses look bad…participant 2:okay so maybe for today's session we try and brainstorm some ideas on what we can do to solve some of these problems...or err...to address some of these issues in our department…participant 1...a good place to err...like to lead us...is to see some of the recommendations made in that institutional report...that way we can also see how we can imporove..." (Urban FGD)

"group focus is becoming very tailored...participants taking a leading role in discussing topics regarding HIV that they need further information on...very interactive..." (Researcher Field observations, Urban FGD 8)

Figure 4 highlights the connections between the categories, subcategories and dimensional properties related to the second phase of transitioning in the process of the emergent CoP of critically reflective HIV/Aids nurse practitioners. This is in accordance with Strauss and Corbin's (1990) method of data analysis, wherein the authors support the visual representation of

the interrelationships of concepts in terms of categories, subcategories, and dimensional properties.

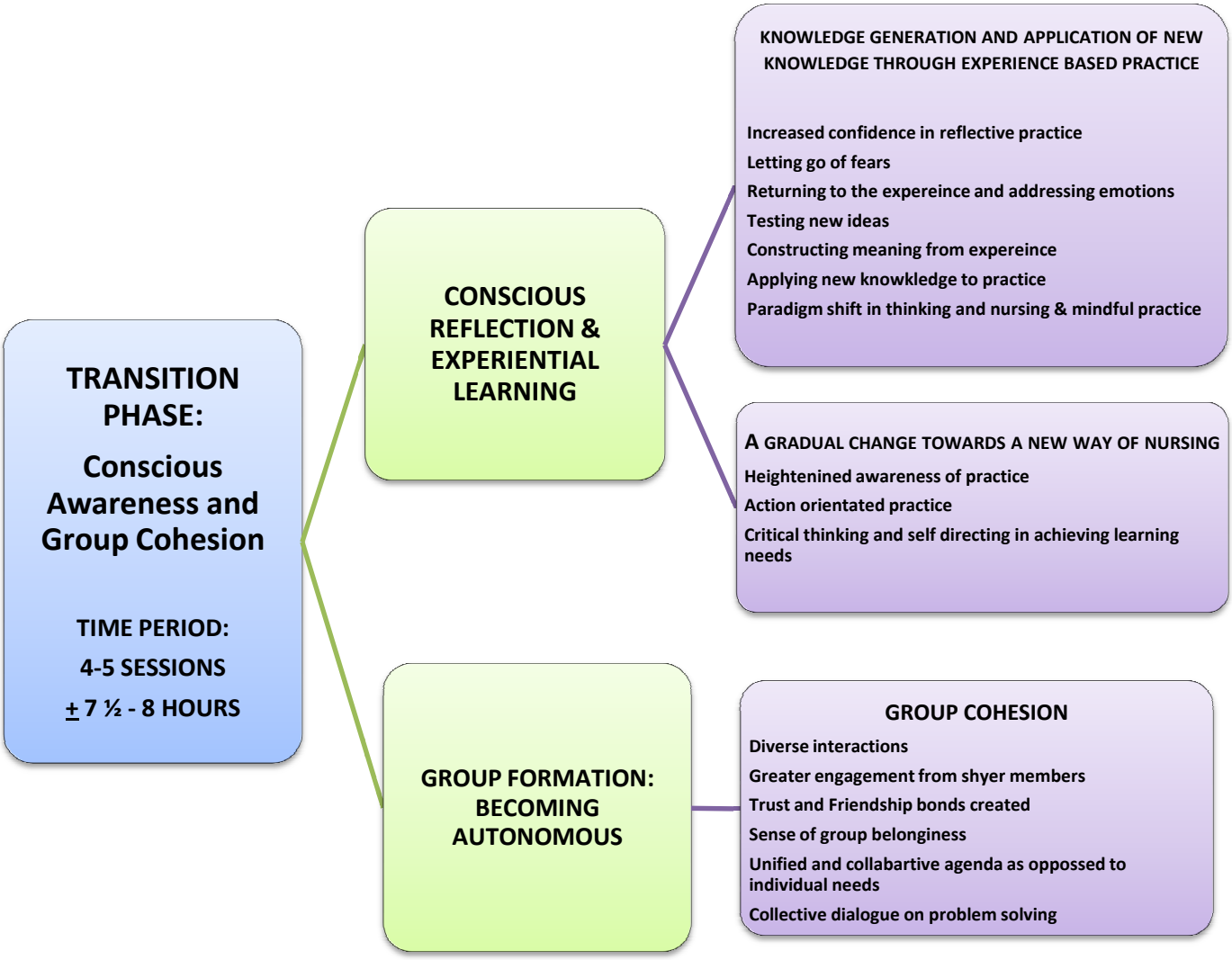


Figure 4: Categories and subcategories of the transition phase

4.3.4.2.3 The Transformation Phase: becoming critically reflective and a transformed space for learning.

Indicators of transformation in the participants' reflections, critical awareness of self and practice became evident during the last six data collection sessions.Further to this, after the CoPs were characterised as being fully functional and established, the researcher revisited the sites to assess the sustainability and the continuity of the CoPs.During this latter round of data collection, the sustainability and continuity of the CoPs were evident by virtue of the groups continuing six months after the initiation of the critical reflective discourses and the CoPs, especially within the urban site.Group dynamics such as synergy among the participants, coherence and collaborative practice also signified a transformed state from group formation towards CoPs of learning and inquiry. The dimensional properties which described this transformed phase in the CoPs included: (i) a transformed way of knowing in HIV/Aids nursing and (ii) renewed and refocused CoPs.

A transformed way of knowing in HIV/Aids nursing practice. Noted through the learning trajectories that characterized the process of learning and evolution in reflective practice among the participants was evidence of a transformed way of knowing and nursing. Participants' reflective discourse illuminated a change in cognitive thinking that embedded the reflected actions and experiences. Critical clinical reasoning and clinical judgment had become the cornerstones of the reflective discourse as participants moved away from the process of mere knowledge acquisition which predominately characterized the former formation and transition phases of reflective practice. During the transformation phase, clinical experiences were demonstrated, which required high order thinking and application of knowledge where the

knowledge was creatively used and coincided with reflection in practice. The following clinical incident displays the aspects of application of learnt information, self-directed learning and inquiry based practice of an urban participant.

"…I think deeper now in my practice…I reflect on my practice while I am doing something…like I ask myself if this is the only way to do something…err… and if what I am doing is the best for the patient…if I can share…a patient had very bad ulcers and thrush in her mouth… we were using bicarbonate of soda to gargle...we just used this because that is how it used to always be done in the ward…but I could see this was not working here…I just thought if the patient is bleeding with her gums and mouth…. it might even affect her CD4…so I started looking for this Glyco Thymol mouthwash… after the patient used it maybe two times…I could see that even the bleeding stopped and the sores were drying…so this reflection makes me think of how I must be critically thinking to help my patients…and not just to do things like how we normally do things…" (Urban FGD, participant 4)

Another indicator of the transformed way of knowing and nursing which was evident in the data was that the participants felt the injustice of non-members of the CoP being excluded from the empowering attainment of knowledge available to those within the group. Recognizing the benefit of diffusing the information to attain a unified way of nursing, participants started assuming a proactive role in disseminating information to effect change and align nursing care on evidence informed practice. It emerged from the data that participants made conscious and deliberate efforts to make explicit best practice benchmarks so that improved ways of providing HIV nursing care could be achieved in their own units and in the wider institutional community. The following selected evidence from the data sources illustrates this further.

"… I could see it was important for me to also teach the other nurses in the wards…because it will also change them...like how we got changed....so I try in my ward even after the lunch time ward routine to give some talk...even of what we learn here...so that together if we as nurses are all doing the same thing...then we can make a bigger difference..." (Rural FGD, Participant 6)

"when we learnt about the new PMTCT guideline…like how we should be giving this AZT for the mother from 14 weeks to take everyday…and not only when she is in labour…you feel so stupid now…because of the wrong things we do...so now even when we get the students to rotate with us

in the wards...err...then I share this with everyone...so we can be following the policy which is the correct thing..." (Urban FGD, participant 5)

Unique to the urban participants emerged a renewal towards maintaining core nursing values which was aligned to the transformed way of nursing. Evident in the reflective discourses, participants become more mindful of the consequences of poor practice decisions and expressed a desire to change the status quo of the normal habitual uninformed nursing practice that many in the context of HIV/Aids nursing were accustomed to. It emerged from the reflective discourses that participants assumed an active role in creating an awareness of better practice to support HIV/Aids nursing care. The advocacy role assumed by participants was reflected in a joint meeting steered by the CoP where a multi-disciplinary involvement with the institutional laboratory services was established. This is reflected in the following selected discourse. In addition, Appendix 10 reflects the minutes of the meeting that transpired among the urban participants.

"participant *4: …the turnaround time for the CD4 results was too long…participant 9: sometime it was more than two months before we got the results...so this affected our care…not only because sometimes the patients are angry with us as nurses…Participant 4:because they are also knowing they must get treatment…you know they hear this information… participant 2: yes it is true…but even for us as nurses it means we are not finishing our jobs if we don't get the results...so as a groups we made a meeting with Mr K…he is in-charge of the lab…it was good we shared our problems…Participant 1: it was nice our nurses were letting their voice be heard…so when we came we just used that computer in the matron's office and sent a copy of the notes…so we can also use it if we want to follow-up…*Participant *4…it made us feel so good…" (Urban-FGD)*

Analysis of the data sources also revealed that the participants' role expanded from their normal task-orientated way of nursing to that of advisor. Colleagues outside of the CoP began seeing a change in the way participants carried out their duties which illuminated the way they and their nursing practice had been transformed. This resulted in the members of the CoP being called

upon in an advisory role to support their peers, offer information or negotiate solutions to challenges experienced. Participants noted how changes in their renewed way of nursing in the context of HIV/Aids were evident to their colleagues, who approached them for advice and counsel on HIV related issues. Their transformed role also facilitated their own drive in being critically reflective and inquiry based practitioners as their role extended to advising others and guiding best practice benchmarks within the micro-contexts of their own departments and units with the potential of effecting change in the wider institutional community. The selected extracts from the data sources provide evidence of this.

"…others are noticing the change in us…in my ward…if there are matters that the others are unsure about…especially the new PMTCT policy because of the changes to it…you find that they just come to me for some advise….so this also pushes me to want to learn and read more…so when others come to me for help or advise I am using the correct information …." (Rural Individual interview)

"… I have become a change agent in my workplace…the unit manager she asked me to update the nurses who are not in the group on what I am learning… I have started a weekly feedback and like this training we had on all the HIV topics…I go and share it with them…this way I am spreading what we know and then the whole institution can have this new culture of thinking" (Rural FGD12)

The use of evidence informed practice and inquiry based nursing actions also emerged as a practice development indicator. Participants recognized the importance of information that is current and relevant to inform decision making in the management of HIV/Aids. Reflecting on their own learning trajectory from the commencement of the study, participants spoke of the empowering nature information creates in practice. The following excerpts highlight this.

"Participant 2...from where we used to be...you know you used to be scared all the time...in case we get into trouble...like a incident gets reported because for many of us...we were just doing this HIV/Aids nursing...not having the knowledge why we are doing something...Participant 6...i too can say the same...but now because we have learnt all of this it has made up to be more skilled and gives you back that power in your nursing..."(Rural, FGD)

"...I find that I am using information...like even to come to our file just to check on what is the right things if I am feeling unsure...it helps you know that what we are doing is based on information....and not because someone told us...or just guessing..." (Urban FGD, participant 9)

"....sometimes...you go looking for the information...if you don't know something...i even went to the pharmacy and asked for that leaflets that come with the tablets...so I can read more to get some information..." (Rural FGD, participant 6)

Further evidence of the transformation process that had taken place involved the urban participants creating a best practice pamphlet to diffuse information on the PMTCT policy of 2010, which they considered to be crucial for all nurse-midwives to use in their practice. Participants, reflecting on their own previous experiences and knowledge gaps in their HIV nursing practice, had come to the conclusion that much of their confusion stemmed from their difficulty in reading the large PMTCT policy document of approximately 60 pages. Following through with the transformed way of applying knowledge participants decided to assist their colleagues by condensing the most important information into a phamphlet. This served the dual purpose of creating an awareness of the group's activities within the wider institution and translating it into an awareness of evidence informed practice among their colleagues.. Using their renewed skills of critical thinking and a critical awareness of practice issues, with minimal guidance of the facilitator apart from assistance with the printing, the participants extracted information from the current 2010 PMTCT guidelines and generated a practice pamphlet to distribute to all nursing personnel so as to create an awareness of correct information. Appendix 11 provides a sample of the pamphlet and the selected excerpt below reflects the discourse.

"Participant 4...we was thinking what we could do to make our group known...and also for the nurses in our wards to also benefit from what we learnt in this group...Participant 8...cha' yabona...when we also started we did not know this PMTCT policy...it was a nightmare for us...because everything we was doing in the wards needed us to know what is in there...Participant 4...ja..so we was just discussing what if we make like a booklet that we can distribute to the nurses...Researcher...wow...that sounds like a very exciting thing to do...but how long must it be...you think...Participant.1..Ja...that is good point...because we must not make it

long because already that policy is very big...that is why nurses don't want to even look at it...Participant 4...you see how we got that worksheet on the drugs...it was maybe only three pages...so we must do something like that to just make it easy for nurses..." (Urban FGD)

Other dimensions of evidence informed practice among all participants was noted in their use of the resource file. This file was created by participants to store collected information that various members had brought to the group discussion and participants expressed how it served as a valuable resource which could be consulted when necessary. Further to this, critical reflective practice facilitated evidenced based practice as there was greater ease of deferring to evidence as opposed to guessing or resorting to routine ways of nursing. This is illustrated in the following excerpts.

"when I was working in the gateway clinic...one of the nurses asked me to explain this new PMTCT policy and about how we give the NVP syrup for mothers who are breastfeeding and who are formula feeding…so while I working there I could see that even I was not sure what the policy says…then I just remembered our file (referring to group resource file) and just came here to see what it says so that I may share with this nurse the right thing…you see in the past I will just say whatever even I did not know…" (Rural FGD, participant 7)

"…when I am doing something…and I don't know what is the right thing to do…I know I can come to our file here and just read up about it...it make you feel in control of your work now…because it is based on the right information…"(Urban FGD participant 10)

The lever arch resource file, became an invaluable resource for both groups. It became apparent that being aware of the limited resources available at the hospitals, participants took an active role in collecting and collating relevant information that could be used by the members of the CoPs in their nursing practice, Participants were innovative in some of the methods they used to get information. One participant spoke of using external meetings and networking with other health care professionals as a source of getting information material, while another shared how she got information from a staff member of a provincial research based company cum NGO that

was in charge of monitoring and evaluation of the PMTCT programme, This is illustrated in the text below.

"…even when you are these meetings…I am thinking of our group here and what I can take back so that we all can keep growing…. (laughs)…hai…now I can say that I am reflecting all the time on my practice…. (other laugh)….so when I go for our management meetings…I try and bring back some reading material for our file…" (Urban-FGD participant1)

"because we are sometime limited with reading material…even the new guidelines for PMTCT….we can get it from the intranet…but we have no printers…so you can't have a copy...the people from the 20 000 plus project…they are here to monitor us…how we are doing in the program…so I sometimes tell them to bring some reading material or to bring us the copy of the guidelines…" (Rural-FGD, Participant8)

Moreover, it was evident from the data that the participants' professional roles expanded as a result of the shared inquiry and critical reflective practice that transformed their way of nursing. Evident in the following reflections, participants noted a sharpened way of nursing, wherein most practice encounters were used as learning opportunities. Gradually, as participants had become accustomed to reflective practice and blended new information with previous experiences, they spoke of how they were able to analyze information and use it appropriately in practice situations to enhance the quality of HIV nursing practice. The following excerpts reflect this.

"...I feel more comfortable with reflection....err...I am like always reflecting...even after I move from one patient to the next then I think of what I did with that patient and how I can improve my nursing care with who I am dealing with...it keeps your mind alert..and you keep building on what you know with the new information...when I learnt from this group about the new infant feeding policy...and I was thinking of the resistance some of my colleagues was sharing about the NVP syrup...so I just build on that ...err...now in how I give choices to the mothers...I tell them the importance of sticking to the method they are choosing like bottle or breast...so you keep using the information in your practice..." (Urban, FGD participant 3)

A renewed and refocused CoP. Emerging from the data sources, the dynamics of the CoPs became more focused and driven as participants progressed in the learning process of critical

reflection. Two dimensional properties described the manner in which the nature of the CoPs transformed, these were: (i) refocused into a learning practice CoP and (ii) a renewed identity

Refocused into a learning practice CoP. Emerging from the activities during the latter stage of the research, which was roughly six to seven months after its conception, it became evident that the participants had matured in critical reflective practice and were functioning as a CoP. As participants had developed into reflective practitioners, the focus of the CoP had changed, moving away from its initial focus of knowledge acquisition in terms of HIV/Aids information and skills development in critical reflective practice. It emerged from the data that in this transformational phase the focus of the CoP was redefined. Participants noted that the learning trajectory they experienced in becoming critically reflective practitioners had developed their skills and expanded their professional roles to a point where they were able to refocus the core aims of the CoPs. The following selected excerpts reflect this.

"...as we are growing together...even in how we nursing...and how we are working together in this group to make a difference...we can see that our group is changing...we are no longer only coming here to learn the reflection..." (Urban, FGD, participant 6)

"Participant 1...for us...I can say that we can see a change in how we are nursing...and even sharing our information with others...Participant 3...I can see that what we needed when we came here we are now learning how to get the information on our own...and not to rely on others....so we have grown a lot..."(Rural FGD)

The wish to bring about wider changes within their institutions served as a catalyst for participants to refocus the aim of the CoPs. It emerged from the data that as a result of the critical reflective development which had occurred, both groups of participants were refocusing their aims and planning to sustain the lifespan of the CoPs beyond the period of research. Participants from the rural CoP reported that they intended the CoP to continue functioning in its current capacity, serving as a support in dealing with challenges of nursing in the context of HIV/Aids.

They also expressed their continued focus of being stewards for knowledge in terms of HIV/Aids and aimed to continue using experiential reflective learning to build on and improve HIV related nursing practice. The following excerpt displayed below reflects this.

"...for us...I can see that yes we have grown a lot with reflection...we also still need to have a place to support our nurses...some of our stories of the pain of nursing sometimes with this HIV...is what a lot of our nurses are going through...so to have to space to come and share is also important....." (Rural FGD, participant 4)

Participants from the urban group expressed similar aims. They saw the need to sustain the group and recognized that their main aim was their efforts of diffusing information to the wider institutional community. In addition to knowledge transfer, however, the urban CoP had placed new focus on learning practice innovations. In both settings, there was evidence that the learning experience of the participants translated in greater desire to transfer their new learnt skills and knowledge to their peers outside of the CoPs so as to effect change in their units. Thus, it emerged that the focus of the CoPs was shaped to the needs of its members and the institutions they served in. The data sources presented below highlight this.

"we have been seeing how others are err.... relying on us for information and to guide them...err...so we are responsible to help the other nurses in our ward to also learn these new things of HIV so we can all be better in our hospital…and I can see that even on our group we are focusing on how we can get the information to them...." (Rural FGD, participant 3)

"…some of us were talking about our future…because we know the research will end soon…but group will continue…we can see the need to spread what we learnt to our wards…we want to see a difference in how we are practicing because of what we learnt now know...so the work must not stop here…we now have the tools so we can teach the nurses…" (Urban FGD participant 10)

Another factor that emerged in the transformed phase of the CoPs was participants' awareness that certain members of the CoP were in possession of expert knowledge and skills which could be used to the benefit of the group. As the group developed, it became apparent that certain

members were more confident in their practice and their existing knowledge could be useful for group learning. Being thoughtful of the sustainability of the group, the strategy of identifying a stronger expert group from within the CoP was used to keep the group functioning, with the expert group being called on to steer the sessions. The following extracts illustrate this further.

"…we could see that Sr.T she was good at infant feeding…she has been doing a good job in her ward with this…even with the new talk of the province doing away with the formula….she has been guiding our talks in our group on such matters…so we are seeing that even some of us…we are experts…just that we were too afraid to use this information in the right way… (Rural FGD, participant 6)

"…with this critical thinking and reflection...we have started to see a lot of change among our own nurses in the group…some have good experience with some of the HIV issues…and we have now called upon them to be our mini-group to guide our discussion…we know we have to sustain this group on our own so we just identified such things for us to keep going…like Sr B. she is a good nurse with all this ARVs…yabona' (you see)she was working for a while in one of these NGOs that were rolling out the ARVs in the beginning…so we started to identify such people…we will all contribute…but some are stronger…(Urban FGD participant 1)

Another characteristic which demonstrated maturity and transformation in the group identity was increased autonomy and ownership of the group process. Mutual engagement among the participants translated into greater group cohesion which was evident in new roles emerging among the participants. Familiarity among the participants allowed the strengths of some of the participants to be acknowledged by their peers. Those who were regarded as "active participators" in terms of resource sharing or having expert knowledge on a specific area were nominated as the subgroup of experts. It was evident from the data sources that these expert groups steered the group sessions and activities and also provided leadership within the CoPs. The excerpts below illustrate the emergence of the core expert group.

"Participant 1…there are experts among us…like Sr. K…she has been helping us so much with this infant feeding…so we are always seeking her advise....Participant 5: u MamK she is also someone strong in our group…they both have been helpful …she sends us information even when we are out of the group…it is nice how she motivates us…" (Urban FGD)

"…some have always been leaders among us…like I can think of at least two here today...she has been so active...always sharing something even when we were first learning to reflect….even the information she brings for the files…they are so useful…so I think such people are useful to guide the group in how we can achieve our own goals for the hospital…" (Urban FGD, participant 4)

Greater group autonomy and decreased reliance on the facilitator emerged as a natural progression as the CoPs became independent. Participants assumed an active role within the CoPs and were able to initiate their own agendas. Ownership of the process was also evident as the group altered the frequency of the meetings to suit their needs. Independence and ownership were the key indicators of the sustainability of the CoPs as participants were able to continue with the CoP sessions without the supervision of the facilitator, as evidenced in the selected extract below.

" we were experiencing some complaints of this testing kit G-Ocean …it was giving false negatives and nurses from some clinics were still using it so a meeting was needed for us to discuss this and we didn't want to wait for the normal Wednesday…so we went ahead and had the meeting on our own…I led the meeting and it was nice to see that we can run it because we know that we have learnt the skills…even doing that scribing duties helped us to know how to run the meeting and what points to take out of the meeting and this helped when we met with the matron and called the lady for PMTCT from district office to inform them of our situation with the testing kit" (FGD Urban participant 8)

A renewed group identity. The transition from participants focusing on becoming critically reflective nurse practitioners at the beginning of the research to them assuming the responsibility of continuing the CoPs at the end, revealed a shift in focus. This came about as participants became proficient in the use of critical reflection in their practice and experienced the immediate benefits such as raised consciousness and inquiry based practice. Participants therefore refocused on increasing the scope of the CoPs to reach a wider distribution of nurses. The group evolved and increased on its own, as some nurses, seeing the benefits of the CoP in their colleagues, were interested in being part of the group. The older, more experienced members of the group used

their knowledge of what they had learnt in the CoP to mentor the newer participants. This emerged as the first step towards a renewed identify of teaching and allowing the CoP to grow.

"…we had invited one of our colleagues to join the group…although she is a new person…and still need to learn more about this reflection…we think that she can learn from us…she is an important person…because she works in our HCT program and we want her to know about our group so that we can share this way of nursing to as many of our nurses…" (Rural-FGD9)

"…our group started growing…you know it just happened on its own…so now we have this two new people…they were so interested because they could see …some change in us…and d we said it was fine to join.." (Urban-FGD 10)

"..it is so strange…because now we are teaching the new ones…things we learnt in this group…it make you see how much we have grown ourselves…" (Urban-FGD 11)

Having established their skills in critical reflection, the participants recognized that their role was to create some kind of intervention of bringing to light their learnt knowledge and being known as a support system for the other operational nurses in their wards. Participants, therefore, refocused their aims to becoming more visible in their work settings. They tried various initiatives to share what they had learnt through the process of critical reflection with their colleagues in their wards. The groups wanted it to be part of their identity that other nurses felt they should come to the CoP as a resource centre and a practice development hub. This is illustrated in the following selected extracts.

"Participant 6…some of us tried to do some kind of in-service in our wards…like when we did the poster on the different ARVs for our ward…so we can see how everyone enjoyed that…so we must be known for that in our ward…Participant 2…I like that…it will be good because we too will keep growing as we are finding new information and sharing new information to the rest of the department…." (Rural FGD)

"…our aim should be to try and let as many nurses and even the other departments aware of the policy…like we learnt it hear…once you know these things it is easy to base your work on it…so our drive should be to like to have like workshops..but it must be ongoing…or to make files like what we have in our group so we can share our information…" (Urban FGD, participant 8)

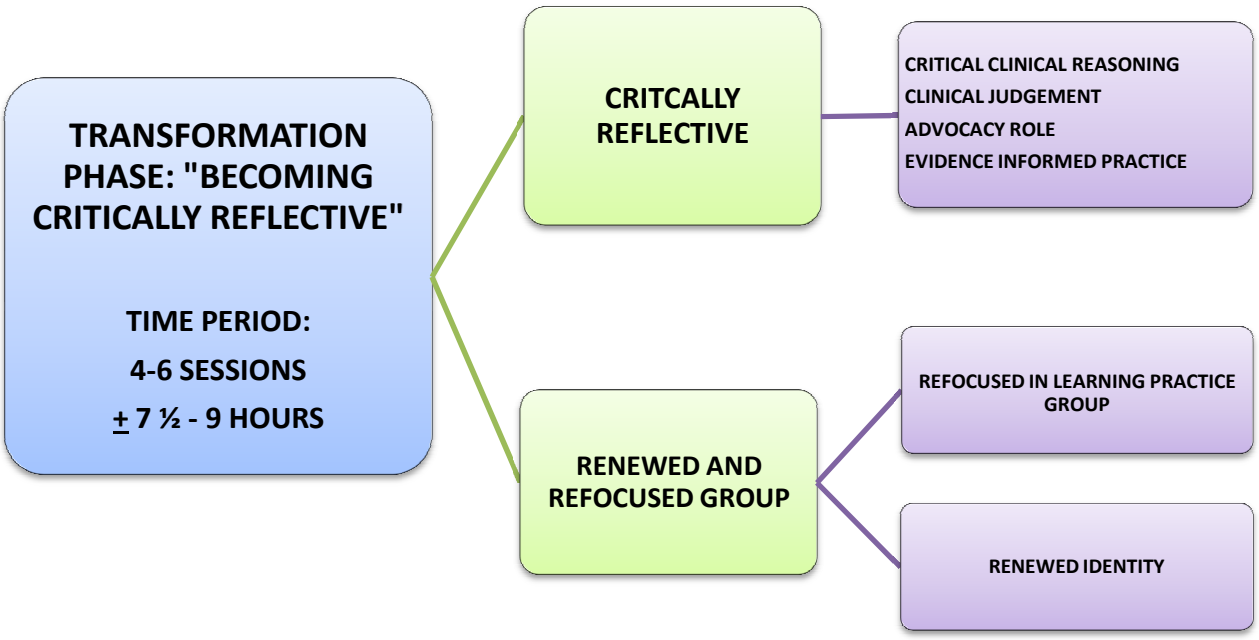


Figure 5: Categories and subcategories of the transformation phase

4.3.5. Intervening Conditions

Explained by Strauss and Corbin (1990), intervening conditions refer to a set of broad and general conditions which facilitate or constrain the action and interactional strategies. In this study several intervening conditions emerged from the data sources which both facilitated and inhibited the emergence of the CoPs of critically reflective HIV nurse practitioners.

4.3.5.1 Facilitative Conditions. The subcategories which emerged as facilitative conditions included (i) the desire to change one's practice; (ii) the nature of the facilitator; (iii) support from

the institutional management; (iv) flexibility in reflective practice; and (v) diversity of professional nurses

The desire to change one's practice. The participants desire to address the challenges they experienced in HIV/Aids nursing practice and learn new information or skills was the driving force that sustained the activities of the groups. Because the members of the groups shared the vision of changing their practices and ways of nursing, it promoted in them a greater level of commitment and engagement to make the CoPs flourish and grow. This is reflected below in extracts from individual interviews which occurred towards the latter part of the seven month data collection period.

"I can see now… we were so excited to learn anything about HIV to help us we were so excited to learn this reflection and join the group…we were coming with err like a hunger to learn something new… it kept us motivated to stay in the group…" (Rural-individual interview)

"we kept going in the group…even when it was difficult in the beginning…but we wanted to learn more about HIV…so that we could try and improve our nursing care…it was that….that is what kept us motivated to keep going with the group…" (Urban FGD participant 1)

The homogeneity of the group members in terms of coming from the maternal and child health units and specializing in midwifery care added to the like-mindedness and the common understanding of shared experiences regarding HIV/Aids within a discipline of maternal and child health. Although the process of learning reflective skills was a new experience for all the participants, the common challenges they shared in terms of HIV/Aids pertaining to maternal and child care enabled them to progress through the stages of being non-reflective towards being critically reflective in their practice. The following extracts indicate this.

"…because we are all from the same place…midwifery departments…we are all at some point facing the same challenges about HIV and the pregnant mother or her baby…so I enjoy sharing

such issues in this group…it helps to see how others are reflecting on similar experiences you are facing in the ward…" (Rural FGD participant 5)

"I think this common bond…that we are from the same department...it is helping with how we are learning to reflect on some of our challenges… (Urban FGD participant 7)

Role of the facilitator. It emerged from the data sources that the facilitator's (researcher) role in the initial grounding and later monitoring the process of the CoPs in terms of the core components of HIV/Aids teaching (which later became experiential learning), group dynamics and critical reflective practice of the envisioned CoPs, was a facilitating condition in the process of the emergence of the CoP. The data sources revealed that facilitator's role in unpacking the vision, and teaching and capacitating the participants in reflective skills was an integral aspect in motivating them in their transition of being reflective. Participants noted that the facilitator's role in orientating them to a new culture of doing things, such as being expressive in writing, and in steering the group process and facilitating group cohesion played an important part in sustaining membership among some participants who may have otherwise dropped out of the CoP due to challenges of writing or personality clashes in the forming phase of this study. The facilitator's role in this study was also to be the bearer of the vision of establishing the CoPs in response to the shared challenges of the participants in terms of HIV nursing care.

"it was important to have someone who was teaching us at every step…basic things like our role in a group was new for us…and we needed to be guided through all of this…" (Urban FGD participant 4)

"…we needed the facilitator... we depended on the facilitator especially in the beginning when we were lost with this reflection…that guidance helped me to stay focused on what it is that I am here for…even when I sometime felt confused" (urban-individual interview)

"..writing and keeping the diaries was a challenge…but the direction we received…it was made simple…so that you could feel like it was something you can maybe do…that was good…because this writing was a challenge and if we were left alone…this thing was going to be over in the first month maybe…" (Urban FGD participant6)

"…at first some strong people…like in their attitudes wanted to just take over the group…but the guidance we got…it helped us all feel part of the group…like we belonged here...if we never had that hands on support and teaching us how to do things in the group…like the reflection and the different roles of the group…only a few people may be left in this group…" (Urban-individual interview)

Support from institutional management. It emerged from the various data sources that relevant stakeholders such as the chief nursing managers and the unit managers of the maternal and child health departments were actively involved in the planning and implementation of the CoPs. The support of management motivated the participants and was a driver that encouraged sustainability of the life of the CoPs beyond the six month period of data collection for this study, as documented in the participants' reflections.

"…because we have the backing of the management…this also makes me feel motivated to keep learning and sharing...because you want to bring change for the hospital as well…" (Rural FGD participant 4)

"… the management are also supporting us to be part of this group ….I feel relieved knowing this…and it makes me eager to learn…because the management are allowing us to be here…so we need to show some deliverables of what we are learning from here…."(Urban FGD participant 4)

Moreover, it emerged that the management teams at both institutions supported the envisioned CoPs with regards to the logistical needs of the group such as making resources such as time and space available. This support was a facilitative condition as commitment from the management facilitated the smooth functioning of the CoP group sessions. The fact that management had granted them time off from the normal working day to attend the group sessions was also a motivating factor for the participants, as they were aware that in the midst of current challenges in the wards, such as shortage of staff, they had "their" time which was dedicated towards the CoP discussions and activities. The following extracts from both the participants and the hospital management teams illustrates this.

"…I support the nurses so they can have the time off from work to come for the meetings…I let their unit managers be made aware of this…so there is no problems…I can see that this CoP will help the nurses and our hospital too…" (Urban Hospital Manager)

"…there are many rooms like the old meeting venues…so you can make arrangements to use one ….in that way you will know it is for this group and you can keep your things there…" (Rural Hospital Manager)

"it makes me feel like it is our time…even in the ward the other nurses know that we have been given this time from the matron to be here…you feel like you belong somewhere…it also makes you want to do something for the hospital…because of the time we are getting to be part of this group…" (Urban FGD participant 8)

Flexibility in reflective practice. A new language of reflective practice was learnt throughout the process of the emergent CoP. It emerged from the data that participants felt more comfortable to reflect in conversation and dialogue during the reflective discourse sessions than to write their reflections in their journals. Coming from a culture of not writing and documenting participants found it easier to find validation in their discourse reflections as opposed to writing their reflective practices wherein no validation or affirmation from their peers was obtained.

"Participant 3*: it is easier to just come and talk about our practice, about how we are doing with the reflection and what changes we are making…but it is harder to sometimes think of a way to write what you are feeling…*Participant 7*….yes…even for me…I feel the same…at least when I start to share what I encountered I can see that the others understand what I am talking about…then in me at least I feel…err like okay I am doing this reflection in the right way…" (Urban FGD)*

"…it is easier for me to come and talk about my feelings and how I am thinking back on my practice…it is not so easy to write such things…it is challenging...you are on your own…and then you are not sure if you are practicing the right thing…it is easier to come and talk about what is in your mind about what happened…" (Rural FGD, Participant 3)

Another aspect of language that emerged as a characteristic of the reflective discourses was the use of both isiZulu and English in the same sentence to express and describe the reflective incident more wholly. In both groups, the majority of the participants were first language isiZulu (i.e 13 of the total 18 participants of this study). Alternating between both languages allowed for

greater control and expression among the participants in terms of familiar terms and adjectives to illustrate a point. Moreover, moving between the two languages allowed participants to create locally and contextually relevant meanings of the reflective experience and the shared way of learning fostered in the CoP. The selected two excerpts illustrate an example of a reflective dialogue wherein both languages of isiZulu and English was used within a shared experience and the latter excerpt reflects a participant's response in terms of conversing in both languages and what this means for her.

*"Haibo!...Cha'…yabona these people..they are jollying around…then when this thing comes to them (referring to HIV)…they are just in denial…they just say cha' uSister…ngiyahamba uyathwasa…(*referring to a spiritual process or training to become a traditional healer where the person undergoes several rituals and may even lose weight, thus trying to disguise the weight loss caused by HIV with the process of being a uSangoma/traditional healer*) so they just use that err..excuse…hai ngeke (*nuance for a sigh, surrender or resign*)…we are dealing with such patients and it is challenging for us…(Urban-FGD, Participant 3)*

"…ja…you know sometimes there are things we say in Zulu…so if you take it to English…then it sometimes does not have that same kind of meaning that we are trying to say…I don't know if I am explaining properly…ja and also it is sometime more natural …it just comes out naturally because we are all among our own where we understand one another…so it helps us to err relate better to one another…." (Urban-Individual interview)

Conversing in both languages was also part of the socialization as members within the CoPs. Moving away from the initial barriers of being among colleagues who were managers or subordinates to one another in their normal work environment, the use of familiar jargon and bilingual speech fostered the socialization of togetherness among the participants. Moreover, participants made use of isiZulu nuances to express themselves, such as sounds and words of affirmations such as *'yabona'*, a term of agreement and affirmation from the other participants, or the term *CHA!*, an isiZulu term for no, used in a stronger tone, to express anger, frustration and surrender to a situation, which not only allowed them to fully express themselves in the

reflective discourse, but also created ownership and meaning to the shared information and learning.

"…ja' we can sometimes talk about things that we all know about…because we all are knowing what is happening in our community…so I had this patient she was in the labour ward because of PIH…so just like that she took a pass out…she had izilonda (genital warts) and she just went do this things with the u Sangoma…CHA! …we are just failing with such things happening in our community…they don't listen about these pills…"(Urban-FGD participant 4)

Diversity of professional nurses. Although the CoP was formed among a group of professional nurses who function as registered nurses, in the South African context of, this category can vary according to different levels of education. It emerged from this study that the educational qualifications of the participants varied, ranging from a diploma in general nursing and midwifery to a master's degree in nursing. This diversity brought richness to the dynamics of the CoPs as participants who had been exposed to innovative teaching methodologies were able to traverse easily in terms of roles of self directed learning as opposed to other participants, who needed more guidance and direction in information seeking patterns. The participants diverse qualifications became an asset from which many skills could be drawn. The following extract of the urban group makes reference to this concept.

"Participant 4…I can remember when I did some of my studies in UNISA we used to also be given these types of papers to read (making reference to articles)…they used to make us do some searches…hai (laughing) but it was so difficult…but I think we can learn how to look for information…sometimes you can use people too, like for information and resources…Participant 1: (laughing) yes…some of us… we did it in our studies…but it was not all these internet things..so we must be guided on what to do...err...some kind of demonstration Participant 9: Ja, maybe those that have done these such things they must bring the information…we can learn from them…some of us never study more than our basic training...so this is our chance to also learn all these computer things too…(laughs) " (Urban-FGD)

It also emerged that the educational backgrounds offered diversity and innovation in how the CoPs progressed, especially in terms of the emergence of the core expert groups that surfaced

and formed towards the latter part of the process. The skills of the participants in terms of educational qualifications and clinical expertise were garnered in the establishment of core groups within the larger CoPs. This was an important step as it transitioned the CoPs in terms of their sustainability and self reliance. This concept is best illustrated by the following excerpt from one of the later reflective group discussions/FGDs.

"…what we can see is that some of us are more stronger…like...err to be bringing information for our resource files…some are better with the clinical, we are clinical experts…yet we too are learning this HIV information…even myself I am strong...if I can say for myself (laughing) with some of the clinical things…because I am a ADM (reference to advanced midwife)…so I even help with the district maternal death meeting…so we was thinking we will have a few people….like to just direct the group…after you (reference to facilitator) leave" (Urban FGD, Participant 12)

4.3.5.2. Hindering Conditions.

The hindering conditions that emerged as constraining conditions to the development of the CoPs were: (i) culture of hierarchy in nursing; and (ii) culture of not writing

Culture of professional hierarchy in nursing. The CoPs were made up of nurse practitioners with varied clinical experience and mixed levels of seniority. Initially, this was a major inhibiting factor in how the emergent CoP was established. During the initial group sessions, there was hostility among the senior members of the group, many of whom were the managers in the various units within the maternal and child health department. A barrier in terms of open sharing and reflection was created among the senior members who had the perception that they were supposed to know all the information related to HIV/Aids and felt junior members would see them as incompetent if they openly shared their gaps in knowledge and practice. As a result, senior participants were reluctant to participate in group exercises or discussions which were

centered on learning the new skill of reflection which became an obstacle in the group dynamics, The following individual interview excerpt is evident of this.

"it was not easy…we are the seniors…and our juniors expect us to be knowing of all this issues of HIV/Aids…so to just open up in front of them about our own gaps…that was not easy….you will find it was better in the first meetings we used to have to not participate because was afraid thinking what my juniors will think of me…" (Rural - Individual Interview)

The junior nurse practitioners also initially found it difficult to open up to in the presence of their more senior colleagues, in of fear that they would be judged, as expressed in the extracts below:

"….I used to be scared to open up with my ward manager being there…I did not want here to think I did not know something…because she might think what kind of a sister am I" (Rural-FGD participant 9)

"…I used to think it might be better to be quite because of fear of what my in charge will think…even to share…yet it is challenges everyone is going through…I was worried that she (referring to unit manager) might think that I might be complaining…so it was hard in the beginning…" (Urban FGD participant 10)

Culture of not writing. Participants expressed that writing was not part of their culture, either socially or professionally. During the reflective discourses, participants shared how unaccustomed they were to writing down their emotions, feelings and thoughts on either their experiences or their goals, as evident in the selected extract:

"for some of us we have not been brought up in this culture of writing…ya'bona (you see in isiZulu)*… as teenagers we never had these diaries to write down what we are feeling…"(Rural-FGD participant 4)*

"…this will be first time of keeping a real journal....we only know of these diaries…now when we started working…and we just use it for appointments…so to keep a real diary to write feeling and so on…we are not used to that…we never grew up with such things…writing your feelings and talking about is not what we generally do…" (Urban FGD participant 3)

It also emerged that participants felt they lacked the skill of writing and to them this was perceived as obstacle. They shared that writing, or even reading, for pleasure is something that they did not practice and this hindered them from embracing the use of the reflective journals. This was further compounded by language, as many participants were second language English speakers and found the process of writing daunting. The following excerpts display this:

"Hai…I last did this writing for essays and things in school…cha' so this is not easy… to start thinking...you have to think of the right words to use to say what I am thinking…" (Rural FGD participant 6)

" I was very much excited when we got those books (reflective journal)…but then when I sat down to write something…I was just blank…the words were not coming…and I was keep asking myself if this is how I must do it…so even now my book is just empty" (Rural FGD participant 4)

The data sources further revealed that the participants found the idea of having to keep a diary or journal intimidating, and many of the senior professional nurses, who were mostly unit or operational managers, noted that their only experience of using a diary was maintaining a daily planner, which served as a log of their daily schedules and activities. Further to this it emerged that the trend of not documenting or writing was attributed to their fear of legal action. Participants shared how they felt documenting too much of information could potentially implicate them and they therefore developed a culture of not writing and documenting. Following on this discussion thread, it also surfaced that participants' lack of confidence in their clinical practice due to their lack of certainty and inadequacy was another reason for poor documentation in fear of legal consequences. Therefore, against this backdrop of habitual practice and cultural constrains, to them, maintaining a reflective journal was intimidating. The following selected extracts display their reluctance:

*"I only keep this diary (*pointing to daily planner)*…I just record my meetings…so this will be something new for us… I think it is going to be a steep road of learning…you know we have bad*

habits of documenting as nurses…we just don't do it…it is a known fact about poor recoding keeping (Rural FGD participant 3)

"… we are bad with our documentation…I think it all comes from this thing of being afraid of writing…you know sometimes these cases can come back for you, so we just write in short or even not document "(urban FGD participant 7)

*"you know when you are unsure of what you are doing?…for me I can say that I do not write everything in the patients file because some of the things we do we ourselves are not sure about…so all this policies for AZT and then changes to AZT and NVP…today you find one thing and tomorrow there is something else…so one does not know when a patient can just take you to court…(*says to others, *you know how our hospital has been in the papers recently!)…so just like that tomorrow it can be you…so to be safe it is better to write little" (Urban FGD participant 9)*

The date revealed that another reason participants were reluctant to write in their journals was their confusion of not knowing where to start. Participants shared that even though they had previously learnt through the paper-based exercises, they felt overwhelmed with actually beginning the process and not knowing which experience was suitable to reflect on. The discomfort they experienced with writing, manifested in a constant need for affirmation from the facilitator as they sought to find the right experience and way to reflect on.

"Sometimes I feel like I don't know what I must say and write in this journal…(long sigh)...this thing about writing our feelings and what is happening to us…it is sometimes confusing…so if I write about...like in the wards something that I did for the patient… then can I reflect on that?…and must we do this everyday?"(Urban FGD participant 5)

For many of the participants, engaging in the reflective dialogues of sharing clinical and personal experiences was challenging enough, but reflective writing that was also part of the process of critical reflective practice compounded the problem Many participants stated that they found it challenging to maintain the reflective diaries on an ongoing basis as it was something that they were not familiar with.

"The writing was a big challenge…in the beginning I used to think this diary was a monster…to think of what to write in it and then how to express oneself was another challenge…because for

many of us…as nurses and even just as a person…we are not used to this…like keeping a diary and thinking of how feelings…it is not something we do all the time…"(Urban-FGD)

"…when we were talking and sharing it was fine…but to start writing and you are on your own…oh that was hard…to just don't where to start" (Rural-FGD)

Furthermore, related to the culture of not writing, participants were not accustomed to the nature of documenting. Participants expressed that they felt out of their depth in learning the skill of expressing self through writing as they were used to just writing briefly about what transpired in their clinical care. They explained that they were not used to attaching any feelings to their documentation and this deep rooted culture of not documenting fully was a barrier to the emergent CoPs that was noted. This is noted in the selected extracts.

"*hai…(sigh), I don't know if we will be able to do this, you know for us, this is not normal, because we are not used to writing down everything we do, I think it will mean we have to change our ways now…you know as nurses we are used to having all the information and being in charge…" (rural-FGD6)*

"…the only type of writing we do…is to record something on the nurses file…even when we do the patients progress notes…we keep it very short…this is going to be a challenge to write down feelings…." (Urbam-FGD4)

" …we are not used to writing…we do it in the wards because we are forced to just put something down…just to show that the patient was attended to…" (Rural-FGD10)

4.3.6 Outcomes of the CoP

Explained by Strauss and Corbin (1990), any action and interaction activities or strategies that occur in response to a phenomenon have intended and/ or unintended outcomes that occur as a result of the action/interaction strategies. The author further explains that such outcomes can be described as an event or a happening or may also be a responsive reaction to the action interaction strategy. In the context of this study, consequences, both intended and unintended, occurred as a result of the learning process of critical reflection and the development of the CoPs

4.3.6.1 Intended Outcomes.

Being mindful that the data collection of this study data took place over a period of seven months with eleven and thirteen sessions conducted in the urban and rural sites respectively, the outcomes reflected hereunder are the short-terms outcomes of the process establishing CoPs of critically reflective HIV nurse practitioners. Two subcategories of intended outcomes emerged from the data, these included: (a) Information seeking and utilization skills (b) professional development.

Information seeking and utilization skills. As participants progressed to a proficient level in critical reflective practice, the nature of information seeking patterns became a natural habit for them. The use of information and an inquiry focused practice was evident in the manner in which the participants were able to seek appropriate information from a variety of resources either to resolve their own gap or improve patient outcomes. The selected extracts of the participants reflections illustrates this.

"…it is like second nature for me now…I struggled in the beginning…but now if I am unsure about something…I try and look for the information…if I can't find it I try and locate a good resource person…like the training officer from the district for the PMTCT program…then I can be guided by the current information…and base my decisions on that…" (Urban-individual interview)

"we have always had the intranet in the computers… where we are connected to the internal system…we can review documents from the DoH and latest messages…before…I never knew it can be so useful to my practice…the information was always out there…but now when we are reflecting on how to make this better….and to use the correct information…you start looking in these places like the intranet…" (Urban-FGD)

The process of sharing and evaluating information in the CoPs fostered evidence based practice and renewed ways of thinking of patient outcomes. Participants possessed a greater awareness and insight on the importance of evidence based practice which fuelled patterns of information

seeking and utilization so that HIV nursing practice were aligned to and informed by policies and other guiding principles, such as that from current research. The selected extracts of the participants illustrates this.

"…discussions from the CoP…taught me to be always looking for evidence to base my decision on…and not just on "here-say" from others…this is an important skill I learnt…I feel so confident now in my nursing care…because if someone questions me on what I did…I can just say I got the information from that document..." (Rural FGD participant 2)

"….now that we have learnt this thing of policy interpretation…it has made such a difference in how I nurse…I use the information in the policy like the PMTCT policy to inform how and what I do…so this was learnt in our group…where we used to have discussion on the importance of using information and not just relying on our old information…and we used to even take one policy and go through it together…it has taught me…so even if another new policy changes…I will know how to read it and use it for my work…(Urban-FGD participant6)

It also emerged that parallel to the acquisition of critical reflective practice and aligning HIV/Aids nursing practice towards evidence informed practice, information related skills were acquired in terms of technical learning development. Learning to use a computer, drafting a letter and developing an informational brochure were listed as skills that the participants acquired over the course of the research. The following excerpts reflect the participants' iterations on this.

"…before we joined this research…I never knew how to really use the computer…some of us just go to the intranet, but we don't know things like doing a letter…so we used come here and learn these things…we learnt how to handle a group…like some of the roles of minute taking…and err…time-keeping...so there are lots of things we learnt"(Rural, participant 6)

"I can see that I have grown from just being in the group, for me it is a place where we learn lots of things...err because even to keep a diary it was new to some of us, so now I can say that there is a lot I have taken away from here, I have discovered a lot of myself and my practice from this group and the learning" (Reflective Journal Entry, Urban, 15 June, 2010)

Also related to information seeking and utilization skills, participants related a desire to access information from sources such as the institutional libraries. It emerged that both hospitals had libraries which subscribed to medical journals. Although many of these were old and outdated,

participants reflected their desire to make use of libraries and the departmental computers. It became evident that the CoP learning space had fostered information seeking skills in terms of learning how to use the computer and access the internet, a skill that was aligned to critical reflection and transforming HIV/Aids nursing practice. The following selected extracts presented below highlight this.

"…Some of us from the group....we wanted to see what information we could get from our library...err...it is close to the nursing college...but we was so shocked to see how old some of the books were....and we could not see much nursing journals....but we still spoke to the lady in charge of the library....so that in the future she can know of some of our needs for the PMTCT information...." (Rural FGD participant 7)

"…it has helped us a lot...being in this group has helped us to make use of some of the resources that we have always had...errr...like to use the computer and to use it to make how we nurse based on the right policies...we have even been able to see hoe to use the internet from the main computer....so even if the library is outdated...then we know how to get the right information from different sources...." (Urban-FGD, Participant 1)

Professional Development. As an outcome of being directly involved in the group planning and formation of the CoPs, skills such as leadership, working teams and group roles were fostered among the participants. Leadership emerged as a direct influence of greater autonomy and group cohesion in the CoPs. The emergence of leadership in the groups was two-pronged. Firstly, leaders emerged naturally as participants valued the insight and nature of facilitative skills exhumed by certain participants of the group. More importantly, however, a leadership trait was evident in all participants as they assumed leadership roles in their respective places of work. Participants noted that the grounding received in the CoPs, of fostering and building reflective skills which related to their increased confidence, was translated to their work settings. Here participants took an active role of activating change in their own places of work. The following excerpts illustrate this.

"…it is nice to see that others can appreciate us...I too have noticed that in the meetings...the other people there they ask me to lead the discussion...because now they can see that in the knowledge I have I always have a reason for why I say something....and that makes others to see that we must practice with some kind of information...." (Rural, individual interview)

"…it is good even for me just being a normal professional nurse and when the senior professional nurse says to me I must lead in the discussion with something…because she can see the value now in my learning....and the change in my nursing ...so you start seeing such changes...that others see the change in how we are practicing and also want to role model that change...." (Urban, FGD, participant 3)"

Another attribute of professional development that emerged from the data sources was the collaboration that developed between them. Participants expressed how greater confidence in HIV/Aids nursing practice allowed them to break down previous barriers of working together as a team. Another attribute of professional development evidenced by the nurse practitioners was the deliberate dissemination of generated knowledge to other nurses who were not part of the CoP. Participants expressed that having experienced the benefits of the learnt and generated knowledge to their own HIV/Aids nursing practice, they felt they had a responsibility to also try and change the practice of other nurses with evidence informed information. The following extracts depicted below illustrate this.

"....I can see that my role has even extended outside of my ward...err...like I try and make an effort to contact our primary health care clinics we are linked to...so that if new information is received here in the hospital...I make sure the clinics are aware of it as well....so that we can ensure that the quality of care...and the same care is received to the patients....." (Rural, FGD, participant 6)

"...I can say that it is our role to network with the other nurses...even if they are from other departments...so that the same type of care in this HIV/Aids treatment is given in the same way..." (Urban, individual interview)

"...seeing how we have changed so much by just learning how to read the different policies properly....so you can see that it is important to spread this information to others....it make the quality of our nursing care much better...."(Urban, FGD, participant 7)

4.3.6.2 Unintended Outcomes.

The unintended outcome that emerged from the data sources were (i) socially responsive and conscious HIV/Aids nurse practitioners

Socially responsive and conscious HIV/Aids nurse practitioner. It emerged from the findings that coinciding with the nursing values of advocacy, advisor and change agent which surfaced during the transformative phase of the action and interactional strategies, participants expressed a renewed consciousness in their nursing actions. Participants demonstrated a greater social awareness and aligned their nursing care to engage wholly with the patients' psychosocial aspects of living with HIV/Aids.

"I can say that being critically reflective helped me to be more conscious and responsible towards our patients...I am also thinking about where they stay...err if they have disclosed and such things when I educate them or give health education..." (Rural individual interview)

"...now when I see a patient...I see the whole family...and where she comes from so that we can advocate for her...sometime it might mean asking the boyfriend to also come in for testing or for counselling so that we can all be supportive for the mother and baby..." (Urban, FGD participant 8)

Furthermore, socially relevant practice was noted as being the hallmark of the participants' transformed practice. Participants began recognizing gaps in the flow of care from all units of care, from the first contact of health care that the patient receives at the community primary health care clinic and continuing to the various departments of maternal services of antenatal and postnatal care. It emerged from the data that participants transformed their advocacy actions to ensure that, as per their rights, patients received appropriate, relevant and essential care.

"...I can say that in our group we have see that for us to show that we are changing and keeping updated with the policies....it means we must make sure the mother get the right care that they deserve to get...so we try to keep all the departments updated as well...if there is new information or something new we are doing....like this pamphlet we made...then we try and let all the

departments know...so that patients can benefit from getting the right care....” (Urban, FGD, participant 1)

“in the past we was focused on our own problems...forgetting we are here for the patients...so it must be about their rights...like this blood samples taking so long and when we addressed it with the department...so it is something we should be doing all the time...” (Urban individual interview)

Lastly, it emerged that having evolved into socially conscious practitioners, participants took on the role of being a voice for the patients who are sometimes oppressed. It was noted in the reflective discourses that participants expressed how being conscious of the patients' psychosocial aspects in terms of HIV/Aids management also allowed them to be aware of unjust situations where patients endure stigma, abuse and neglect. Being mindful of the detrimental effects this has on the outcomes of HIV/Aids interventions, it emerged that participants actively reworked old ways of nursing care that often overlooked this aspect of the patient care and realigned care and strategies to address these oppressive and unjust characteristics. Noted in the following excerpts presented below are some of the participant's reflections on this aspect.

“...I am awakened... even seeing that our patients go through lots of traumas...for some they find out about this HIV very late...and then they are expected to just make these changes while they are dealing with their news...I have changed my mindset .... I feel more compassion for their cases...so get abused when they go and disclose this thing...so we have to empower the patient in how we nurse them...saying such things like they deserve it and such things...it adds to them being belittled...so they feel like not fighting....”(Urban-FGD participant 6)

“...we must take a stand for our patients...encourage them in our attitudes...so they can see we care for their case...even if they say they are afraid to take the NVP syrup home...so we must counsel them...even if it means they must hide and give the baby...we must support their choices so they can accept...because if we are not for them...they sometimes got no one else...and they will just end up throwing the medication away...so everyone suffers...” (Rural, Individual interview)

4.5 SUMMARY OF MAIN FINDINGS

This conclusion summarises the main categories and subcategories which emerged from this study findings, guided through the paradigm model of Strauss and Corbin (1990), the domains of which are presented earlier in this chapter. *Firstly*, the phenomenon of CoPs for HIV/Aids nurse practitioners was conceptualized as a (i) practice and learning space; (ii) a support network where advise on personal and emotional problems was shared and where new experimental learning was supported; (iii) it was characterised as a space which fostered togetherness through collaborative and purpose driven interaction, and (iv) it was a space which fostered self determinism and self reliance. *Secondly*, the conditions that led to the need for establishing a CoP of among the HIV/Aids nurse practitioners through the use of critical reflection included (i) a changing nature of nursing in the context of HIV/Aids nursing care and management ; (ii) a culture of nurse practitioners working in isolation; (iii) lack of support from the management at the institutions in terms of nurse practitioners meeting the demands of a changing and dynamic public health system; (iv) workplace distress and emotional exhaustion which stemmed from providing nurse care in a context of HIV/Aids and (v) a loss of professional identity experienced among the HIV/Aids nurse practitioners. *Thirdly*, the national health priorities and the national frameworks and policy documents related to HIV/Aids provided a context which the CoP of HIV/Aids nurse practitioners responded. These health priorities and policy frameworks included the United Nations Millennium Development goals, specifically the goals which related to HIV/Aids namely goals four, five and six; the South African HIV/Aids and STI national Strategic Plan 2007-2011(NSP); and the National Revised Guidelines on the Prevention of Mother-to-Child Transmission (PMTCT).

Fourthly, the process of the establishment of the CoPs of HIV/Aids nurse practitioners emerged through the processual nature of the action and interactional strategies. In this study the action and interaction strategies emerged as planning and implementation of the CoP for HIV/Aids nurse practitioners. The planning for the establishment of the CoPs included the following activities (i) conceiving the establishment of the CoP; (ii) negotiating with stakeholders and garnering support; (iii) establishing a shared vision, (iv)determining a focus and needs of the CoP; (v) tailoring logistics; and participation in the planning process. The implementation of the CoP included the following actions which occurred as three distinct phases depicting a process of change among the nurse practitioners. These included the (i) Formation phase, which was characterised by learning to reflect and a process of group formation; (ii) a transitioning phase which was characterised by conscious reflection and experiential learning and becoming autonomous in terms of group cohesion and lastly the (iii) Transformed phase which was characterised by a transformed way of knowing in nursing practice and establishment of a fully functioning CoP.

Fifthly, conditions which facilitated in the successful establishment of the CoPs of HIV/Aids nurses included (i) the nature of the facilitator, (ii) the desire of the practitioners to change their practice, (iii) the support received from the institutional management, (iv) flexibility in the reflective process and (v) the diversity in terms of the nurse practitioners educational background and learning styles and experiences. Conditions that hindered the process of establishing the CoP of HIV/Aids nurse practitioners and of the process of critical reflection included (i) a culture of hierarchy in nursing (ii) and culture of not writing. Lastly, the intended outcomes of establishing the CoPs of HIV/Aids critically reflective nurse practitioners included (i) information seeking

and utilization skills; (ii) professional development and the unexpected outcomes which emerged from this study included a socially responsive and conscious HIV/Aids nurse practitoner

In Chapter five a discussion of these findings will be discussed in relation to empirical and theoretical literature. The aim of which is to discuss how these concepts identified through the data analysis compares to that of previous research.

4.6. DESCRIPTION OF CoP ESTABLISHMENT

The nature of the CoP sessions was collectively a learning and knowledge-exchange sessions; underpinned by reflective discourse. Through the sustained interaction of the participants at both settings, open sharing of resources and learning to seek, analyse and apply information became the hallmark characteristic of the CoPs. This characteristic enhanced the sustainable componenet of the CoP outside of the facilitation by the external facilitator (i.e researcher), as life-long learning skills was developed. Given the nature of the establishment of the CoP emerging through the process of critical reflection among the HIV/Aids nurse practitioners, the table 4 summarises the key attributes of the CoPs in the urban and rural context.

Table 4: Summary Description of CoP Establishment

CoP CHARACTERISTICS	**RURAL**	**URBAN**
Total number of sessions	13	11
Total number of participants	8	10
Averge length of time per session	120 minutes	120 minutes
CoP session time	Alternate Thursdays	Alternate Wednesdays (afternoons)
Skills addressed	Information seeking Computer literacy	Information seeking Computer literacy

	Reading and using policies and evidence informed resources ARV treatment and management training Stigma management Minute taking and managing a meeting Reflective writing	Minute taking and managing a meeting Drafting an advocacy letter Resource development (i.e. pamphlet) ARV treatment management training Stigma management Reflective writing
Duration of Data Collection	7 months	7 months
Number of Session per phase of CoP Establishment • Formation Phase • Transition Phase • Transformation Phase	 4 sessions/ 7 ½ hours 5 sessions/8 hours 4 sessions/ 7 ½ hours	 3 sessions/ 6 hours 4 sessions/7 ½ hours 3 sessions/ 6 hours

4.7. CONCLUSION

This chapter presented the main findings of the study interms of the processes of establishing CoPs through the use of critical reflection among HIV/Aids nurse practitioners in a rural and urban setting. The paradigm model of Strauss and Corbin (1990) guided the analysis and the presentation of the main findings in terms of understanding the phenomenon in relation to how it is conceptualized; the antecedent or causal conditions; the action and interactional strategies; the context; intervening conditions and outcomes related to the establishment of the CoPs. This chapter also presented the findings in relation to three distinct phases which characterised the establishment of the CoPs; namely the formation, transition and transformational phases. This chapter also presents an overview of the CoP and the characteristics thereof in terms of nature of the CoP sessions at noth setting.

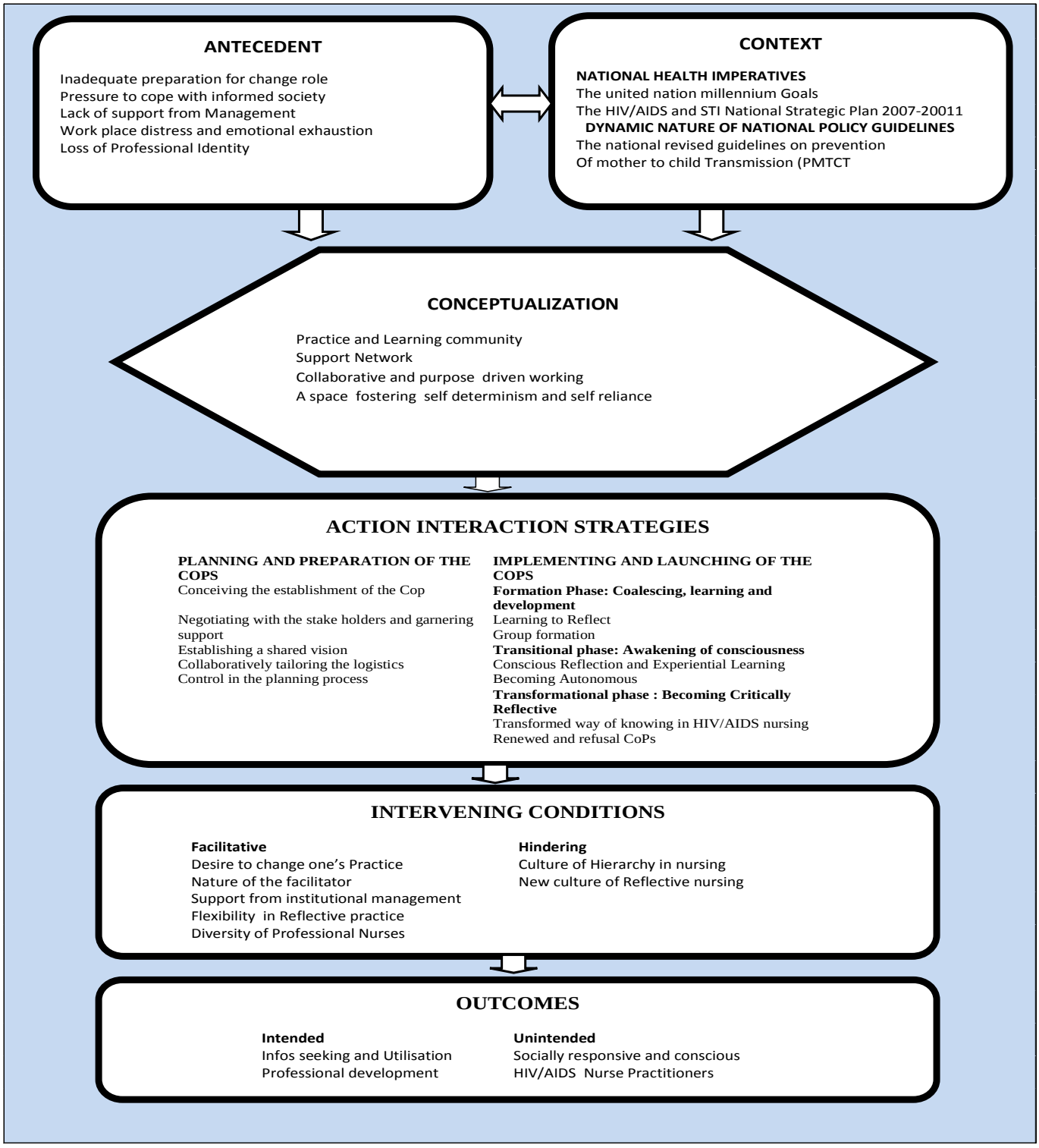


Figure 6: Representation of conditions for CoPs for HIV/AIDS Nurse Practitioners

Adapted from Strauss and Corbin (1990)

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1. INTRODUCTION

This chapter will present a discussion of the main findings which emerged from the study in relation to the existing body of evidence. The use of literature in grounded theory studies is very explicitly discussed. Strauss and Corbin (1990) comment that a secondary review of literature is used to discuss the finding of the emergent theory. Authors such as Heath (2006); Stern (1994) and Hickey (1997), to name a few, have also shared on the importance of engaging with the literature at an extensive level after the emergent theory has been discovered. It is further noted by these authors that the literature should be a thread that is integrated into the emergent theory so as to add deeper dimensions of meaning to the discovered findings.

Hickey (1997) points out that the literature review in grounded theory studies is delayed until after the data collection and analysis has transpired because, at this stage of the process, the literature allows the researcher to ground the emerged theoretical description of the phenomenon in relation to the existing body of evidence. Moreover, Strauss and Corbin (1990) noted that in a constructivist approach of inquiry, empirical evidence should be used to understand the study findings in relation to existing empirical evidence. In this case, the literature was used to describe the emergent theoretical concepts in terms of the phenomenon, which is the establishment of CoPs of critically reflective HIV practitioners.

The aim of this study was to analyze the process of establishing Communities of Practice by developing critical reflective skills in two groups of nurse practitioners working in the field of HIV/Aids. Furthermore, the study aimed to develop a middle range theory which explains the process of establishing Communities of Practice (CoPs) among HIV nurse practitioners grounded in critical reflection. This chapter will thus be discussed in terms of the dimensions of the study findings, aligned to the paradigm model of Strauss and Corbin (1990). The dimensions include: (i) a conceptualization of the phenomenon CoPs of critically reflective nurse practitioners; (ii) the antecedents or causal conditions which emerged as contributing to the need for establishing CoPs; (iii) the context of the CoPs; (iv) the action and interactional strategies that were undertaken in the process of establishing the CoPs; (v) the intervening conditions and (vi) the outcomes of the CoPs.These dimensions are aligned to the research objectives as they discuss the study findings in terms of the processes involved in developing critical reflection and establishing CoPs among the HIV/Aids nurse practitioners (related to research objectives 1 and 2).Moreover, inherent within the dimensions of the paradigm model is a discussion of the HIV/Aids nurse practitioners experiences to the exposure of critical reflection and their involvement in the CoPs (related to research objective 3).

5.2 CONCEPTUALISATION OF COMMUNITIES OF PRACTICE

It surfaced from the findings that the phenomenon of CoPs was characterized by various dimensions that related to the CoPs in terms of developing levels of critical reflection among the HIV/Aids nurse practitioners. The subcategories that emerged to conceptualize the phenomenon included: (i) a practice and learning community: *"better than being back at school"*; (ii) a support network:*"Feels like home…I'm with family here";* (iii) collaborative, unified working to

make a difference: *"Sisonke…together we can!"* and (iv) a space that fostered self-determination: *"staring to feel in control again…like a nurse again*

5.2.1 A practice and learning community*: "better than being back at school".*

The CoP was initially characterized as a space where a culture of learning was fostered. Compared to the formal structured learning environment of a school, the findings revealed that the organic, flexible manner in which information was shared and discovered through reflection and a focus on scaffolding new information to past experiences emerged as a unique characteristic to the study findings.

This characteristic of how the CoP was described in this current study can be linked to Döös and Wilhelmson's (2011) description of the organizational pedagogy of learning. Here the authors note that theoretically underpinned from Kolb's (1984b) branch of experiential learning, organizational learning is about the collective manner in which individuals construct knowledge and the development of competence in engaging and developing shared meaning of experiences in an active way, thereby making learning individual and applicable to practice. This confers with the attached meaning of the CoP as a space for practice learning, as reflective discourses, storytelling of HIV related practice experiences and shared ways of addressing common problems was shared in a communal medium of the CoPs. Also supporting this Estabrooks, Rutakumwa and O'Leary (2005) validate the significant contribution socially orientated learning activities such as that of workplace learning strategies and CoPs have in supporting nurses in their professional development.

The findings also revealed that the CoPs were conceptualized as an opportunity for professional growth and learning opportunity. Even though the CoPs were informal structures they provided a platform for engaging on critical issues related to HIV/Aids. Furthermore the findings indicated that the learning space created for the participants was for some the only opportunity of HIV/Aids related training, due to the lack of access and resources many of the nurse participants experience in terms of further and ongoing training and education.

Several studies on workplace learning have also stated the benefit of an informal learning structure in promoting ongoing learning opportunities (Fenwick, 2008; Eraut, 2007; Billett, 2000). In the context of nursing Skår (2009) and Duddle and Boughton (Duddle and Boughton, 2007) found that nurses face many challenges to maintain up to date professional knowledge. Skår (2009) and Jensen (2007) found that workplace learning structures, such as the CoPs, provide a scarce opportunity for many nurses to learn informally on practice based issues and to be continuously educated. The interaction between individuals in such structures gives access to important knowledge resources that may not be otherwise available during the nurses' routine practice outside of a working-learning community. Jansen (2003) and Skår's (2009) findings are aligned to the findings of this current study which noted that the CoPs created an invaluable opportunity for participants to catch-up with practice information.

Also evident from this study was the organic nature of learning that occurred within the CoPs. The use of authentic real-life problems, lived experiences of HIV/Aids related nursing dilemmas and practice problems, as well as the shared learning and discovery of solutions based on authentic problems and experiences, enhanced the utility and the relevance of the knowledge which was generated in the learning space of the CoP. Explained by Fetterman (2001), the

process of knowledge generation within situated learning context of CoPs or similar organizational formats is logically reasoned through a process of sense-making and is elevated from inductive to deductive reasoning by the unique characteristic of the use of lived life experiences of members. This is supported by Wenger (1998), who stated that meaningful learning occurs through social participation and using real life situations to unearth and make explicit the tacit knowledge. Weick (1995), who is considered a leader in the literature of sense-making and organizational learning, also notes that the process of sense-making in response to any new event, task, stimuli or information occurs by comprehending, constructing meaning and interacting toward the pursuit of mutual understanding of the new phenomenon and further notes that use of real life situations, stories and shared symbols facilitates in this process.

The culture of inquiry based learning and practice fostered in the activities of the CoPs also created a space for knowledge exchange and transfer and is described in the findings of this study as a resource hub or space. A primary and significant feature of accessing and utilizing appropriate, current and relevant HIV/Aids related information was noted as being meaningful in blending experiential information and evidence into new practices.

DeBourgh (2001) and Tolson, McAloon and Hotchkiss (2005) note that there is a long standing gap of theory and practice among nurses and a revitalization of nursing practice is considered an urgent strategy to ensure nurses keep updated with new information to provide meaningful, relevant care. In Schön's (1991) discussion of the reflective practice, this author makes the distinction between two types of practice spaces: the high hard ground, where problems are solved through engaging with evidence based practice or research theory; and the swampy lowlands where problems are solved using non-rigorous methods of inquiry. Thus, relating to

this study finding, the social and cognitive learning embedded within the CoPs is appropriately aligned to addressing the theory-practice deficit noted among nursing practice research and, in light of Schön's (1991) discussion of the disparity of the practice environments, the CoP learning space fostered a higher level of engagement of practice problems. Tolson, Booth and Lowndes (2008), exploring the impact of an evidence based practice model among nurses in a work-based network of CoPs, found that utilizing evidence based practice in a CoP created a sense of ownership and collective responsibility among the nurses. Furthermore Tolson et al., (2008) also facilitated members of the CoP to cascade learning of both practice and theory and champion for practice change. The blending of experiential learning episodes and evidence generated knowledge to fit the practice needs of the HIV/Aids nurse practitioners of this current study concurs with the above findings of Tolson et al., (2008). Furthermore, Motteram (2007) and Stacey and Gerbic (2008) explored blended learning in the context of CoPs and assert that in the social learning space of CoPs, blended methodologies, styles and techniques of learning adopt a constructivist underpinning and transform learners to engage in higher order thinking. Stacey and Gerbic (2008),in particular, discuss how the blended form of learning, allows learners to reconcile the practice with new knowledge.

In this study, nurses became more knowledgeable about current HIV/Aids nursing practices through the use of critical reflection, experiential learning and formal learning. It was noted in this study, that the participants through the process of learning through critical reflective practice and within the context of shared learning in the context of the CoP, were able to bring new information into the practice space which was either in the form of materials and resources or shared discourses of reflective experiences. The activities of the learning space that the CoP of this study was characterised by included interrogation of the shared resources and sharing and

debating ways in which the new information can be applied or adapted into the practitioners HIV/Aids related nursing practice. This coincides with knowledge construction activities as noted by Duffy and Jonassen (1992) who states that the activities of knowledge construction involve active activities and engagement in building knowledge structures. Furthermore, the activities of the participants in the learning practice space of the CoP, involved practitioners actively seeking out relevant information which they felt was necessary and important to discuss and share in the CoP space, this coincides with Merrill's (1983) *finding* level of learning process and Gagne's (1985) cognitive process in knowledge generation. The practitioners were also involved in actively debating, negotiating and refining the new information to assess applicability and how it will fit and enhance their existing nursing practice. This aspect coincides with the synthesis level of Bloom's (1956) learning taxonomy, as nurse practitioners were able to use the information meaningfully form the shared repository of information into practice, thus the CoP was likened to a learning and practice space.

5.2.2 A support network: *"Feels like home…I'm with family here".*

Fuelled by the emotional and moral distress, and burnout that many participants experience as a result of working in the context of HIV/Aids with little training and skills on current and relevant HIV/Aids related nursing issues, the platform for open sharing on such issues led to the CoPs being conceptualized as a "home", where trust, support, caring, friendship and bonds can be nurtured. Chirwa, Greeff, Kohi et al.,(2008) and Benevides-Pereira and Das Neves Alves (2007) have reported on the emotional exhaustion and fatigue that is common among nurses working in the context of HIV/Aids. Sundin-Huard and Fahy (1999), in theorising the relationship between advocacy, moral distress and burnout among nurses, found that even although they were

competent to deal with new and challenging treatment procedures, nurses sometimes experienced frustration, hopelessness and distress. These authors further noted that in such circumstances, the loss of control experienced by the nurse in her practice context sometimes left her unable to advocate, which resulted in moral distress. At the crux of Sundin-Huard and Fahy's theorizing it is noted that a sharing avenue for nurses to vent, come together and learn from one another will not only alleviate the practice related pressures of trying to cope, but will also decrease the resulting feelings of hopelessness and moral distress.

Various researchers have recognized that CoPs provide a relational dimension that fosters interpersonal interactions that facilitates in building trust and support among the members of CoP (Brown, Harte and Warnes, 2007; Kelly, Tolson, Schofield et al., 2005). Furthermore, Wenger (2000) asserts that the social dynamics of coming together over repeated and sustained interactions not only develops social familiarity among the members, but also develops empathy among the CoP members and enlightens members of the emotive constructs related to their shared phenomenon. These empirical findings tie in with this study's findings which saw the participants conceptualize the CoPs as a safe haven, where trust and open sharing of personal and professional problems could be shared and supported. It was also a space, however, where a new insight of nursing people living with HIV/Aids was groomed, as the emotive domains that may have previously hindered optimum nursing care were addressed in the safe and non-judgmental space of the CoPs.

The supportive characteristic of the CoPs also facilitated practice-learning. Being in a space that allowed for open and honest expression of challenges related to HIV/Aids nursing experiences, participants felt comfortable to use the supportive nature of the CoPs as a platform for

experimenting with new information without the fear of peer judgment. Cooner (2010) found that the intimate relationships fostered within a group of social work students in their classroom discussions enhanced their ability to move away from initial fears and self made boundaries of 'becoming' reflective. Furthermore, the support they received from their peers and teacher enabled them to transgress beyond their own limits of reflective practice and learning.

Similar to the supportive features of workplace networks, CoPs and organizational learning hubs foster active learning and participation. Akgün, Lynn and Byrne (2003) also discuss the reciprocal interactions of support and social cognition that translates into heightened learning processes and experiences. According to these authors, members of an organizational group start collectively from a premise of the 'unknown' and novice state in terms of group learning and, through intimate group dynamics, begin to become open to new experiences and move towards an emancipated learning state. This concurs with the findings of this study, which noted that the flexible and active participation of members was promoted by the supportive culture of learning which is characteristic of CoPs.

Lastly, the open communication and group cohesion which fostered the supported network of the CoP is aligned to Garrison's (2004) model of community of inquiry, which indentified three interdependent elements which are central to the way participants engage in inquiry based practice in a CoP. Here Garrison noted that social presence, teaching presence and a cognitive presence collectively contribute to the dynamics of inquiry. This author noted, furthermore, that through personal and purposeful relationships, the social presence, which is defined as the group cohesion and dynamics and open and honest communication, leads to security among the members to engage more effectively in deep and meaningful learning experiences.

5.2.3 Collaborative and purpose driven working to make a difference: *"Sisonke…together we can!"*

Evident in the findings of this study, the CoP was seen as a platform where collaborative efforts towards a unified goal were initiated and supported. Through practice of critical reflection, which was fostered by working together in the CoPs, the participants matured in their thinking and found a deeper purpose and a renewed way of nursing. Likened to the social values of *uBuntu* and described in isiZulu terminology as "*Sisonke"* ("togetherness"), the space of the CoPs translated as a field for socially relevant and action orientated HIV/Aids related learning. Discussed by Mbigi (1997), *uBuntu* is an African trait describing social values and can be defined as group solidarity. Poovan (2005) notes that the concept, *uBuntu*, was popularized after the democratic governmental dispensation in 1994 and that it has become synonymous with cultural norms and values of unity, togetherness and brotherhood. Furthermore, Broodryk (2002) comments that *uBuntu* encapsulates a symbiotic communal relationship which focuses on oneness, interconnectedness and inter-relationships. Mbigi and Maree (1995) likened the concept, *uBuntu*, to their *"Five Fingers Theory"* which is made up of five domains; (i) survival; (ii) compassion; (iii) solidarity; (iv) dignity; and (v) respect.

Therefore, based on these descriptions, the findings revealed that the social values of *uBuntu* resonated in the participants of this study as evidenced in their involvement, growth and ownership in the process of creating a community among the HIV/Aids nurse practitioners. Following with this notion of togetherness, the CoPs were also characterized by more than just learning as the collaboration of the group members within this learning space led to an awareness and orientation towards socially relevant nursing practice. The social values of *uBuntu* became evident through the CoP activities as participants reviewed their previous assumptions and

stereotypes of nursing people living with HIV/Aids and demonstrated activities of advocacy and social learning. Aligned to the dynamic situated learning context of CoPs, Nicolini, Powell and Conville (2008) state that members of a community transform in using local situations and local knowledge to inform clinical practice through mutual engagement and a shared repertoire of common knowledge and practice symbols and resources, such as shared stories and experiences,. Furthermore Clarke and Wilcockson (2002), advocate that through mobilizing collaborative working relations among members of the CoP, a renewed, consciously reflective way of providing care is ignited, which is driven by the needs of practice. This was evident in the context of HIV/Aids in the current study as the renewal of nursing orientated values aligned to a social awareness of patients' needs.

The findings of this study also revealed that the dynamics of the CoP fostered collaborative relationships among different health care professionals from various departments. Noted by Henri and Pudelko (2003) and Andrew and Wilkie (2007), CoPs create the added advantage of fostering interdepartmental collaborative bonding and promote practice development through organized collaboration. A study conducted by Henri and Pudelko (2003) supports the collaborative characteristic of CoPs noting that the locus of CoPs is closely related to informal meetings which harness the expertise and talents of both members and non-members who have a a common and unified goal.

The findings of this study highlighted the CoPs as empowering spaces that moved the participants away from their previously isolated practice of nursing that had been fuelled by lack of confidence in HIV/Aids nursing practice and a loss of control in patient care. Gaining confidence through mutual engagement among the participants in the CoPs and through the

process of becoming critically reflective HIV/Aids nurse practitioners gave participants the space to explore collaborative relations to foster and create an emancipated socially relevant way of nursing in the context of HIV/Aids. Tagliaventi and Mattarelli (2006) assert that through the socially situated practice of learning created in the CoP, individuals reach a state of coherence through a sustained pursuit of shared expertise and joint enterprises and participation. The authors state that this creates an emancipated way of knowing as members gain control over the reflective learning process and a new way of using knowledge and networking to improve practice outcomes.

5.2.4 A space that fostered self-determination; *"staring to feel in control …feel like a nurse again".*

The study findings revealed that the CoPs were seen as a space which cultivated a new identity among the participants. The learning and supportive environment of the CoPs shaped a renewed identity in nursing which was evident in the emergence of core nursing values such as assuming advocacy and advisory roles in nursing. This is aligned to Collier (1999) and Davis (2006) whose explorations of identity development among nurses have found that the social co-participation of learning within CoPs refocuses the nurse practitioner into seeing a new way of nursing through the lenses of other members of the group. Their identities, thus, become shaped through the mutual engagement of shared repository of reflective dialogues, and shared artifacts and symbols that facilitate in a deeper understanding of the professional role aligned to articulation and co-construction of new knowledge. Lave and Wenger (1991b) have discussed the role of CoPs in the development of professional identity from a theoretical perspective and according to their theory of situated learning in terms of legitimate peripheral participation, they

observe that learning within the CoP is a social co-participation and that members identities get shaped from their novice sense of identity and influenced by the learning trajectory of moving from the periphery to the core of the CoP.

Similarly, this study's findings also revealed that the participants' identity of self was shaped and reinvented in terms of the activities of the CoP. Noted in the findings, competence in critical reflection created a paradigm shift in discovering and debating previously held worldviews about self and nursing in the context of HIV/Aids. An empowered identity was noted in the findings as being reclaimed. Self actualization in becoming equipped with various skills was supported through collaborative learning in the CoPs, which led to a renewed sense of being in control for the participants. According to Tajfel and Turner's (1986) social identity theory, increased self esteem is greatly influenced by the shared group values of group participation. Bartunek (2011), exploring intergroup relationships, noted that the identities of members become reinvented through the personal security, companionship, bonding and shared relationships enacted in a group which leads to a renewed insight on social values and related issues Lingard, Reznik and DeVito (2002) also support the findings of this study that personal and professional identities become shaped within the activities of the CoP. These authors state that a social participatory learning model such as a CoP leads to the process of identity development by making sense of tacit knowledge, which refers to knowledge that is often held in the subconscious and difficult to enact upon Leonard and Spencer (1998). Lingard, Reznik and DeVito (2002) also state that over time and through shared communal learning, an individual's identity of self is attuned to the responsibility the individual has in their profession to their communities. These empirical insights of how social participation in learning shapes one's identity through the cross-boundary friendships and bonds and way of learning is aligned to the findings of this current study which

also demonstrated greater self esteem and sense of knowing that was fostered and shaped in the CoP cultivated a renewed identity. Bogenrieder and Nooteboom (2002) confer with this finding stipulating that CoPs provide the context within which indentities are born, noting in particular that more intimate bonds are created in smaller groups as intensified interactions in smaller CoPs, blended with a local atmosphere of the situated context of the CoP, enhances greater coherence and authentic relationships.

5.3 ANTECEDENTS FOR ESTABLISHING A COP

In this study various sub-categories emerged which described the causal conditions in terms of the work environment and the emotive challenges the participants experienced in relation to the need for a CoP. These included: (i) the changing nature of nursing in a climate of HIV/Aids; (ii) a culture of working in isolation; (iii) lack of support from management; (iv) workplace distress; and (v) loss of professional identity.

5.3.1 The changing nature of nursing in a climate of HIV/Aids.

In this study, participants expressed a change in the nature of nursing, which was attributed to the changes in public health issues underpinned by the impact of HIV/Aids on nursing practice. Furthermore, this current study illuminated the challenge the participants experienced in terms of the outdated nature of their basic training which left them feeling frustrated and in a constant state of second guessing their actions. The findings from this current study resonate with the findings from Willard (2005) , wherein it is noted that due to the demands of HIV/Aids on the public health system, the role of the nurse has expanded to encompass greater responsibility and assume more complex functions of initiating care and treatment related to HIV/Aids clinical management. With reference to the effect of HIV/Aids in the South African context and the

implications it has for nurses, Shisana, Hall, Maluleke et al., (2003) also note the severe stress that already overburdened nurses are undergoing in light of the challenges related to HIV/Aids nursing care in terms of new roles and functions of diagnosing, monitoring and evaluating new treatment.

In this study, the dynamic nature of nursing in the context of HIV/Aids emerged with several challenges, which included: (i) inadequate preparation for the changing role of the nurse; and (ii) pressure to cope with an informed society.

5.3.1.1 Inadequate preparation for the changing role of the nurse.

The findings of this study revealed that a lack of adequate and relevant knowledge and training, compounded by the outdated training of the participants, contributed to increased feelings of uncertainty and incompetence experienced by the participants in the clinical management of HIV/Aids. This study's findings also illuminated the lack of knowledge nurses had regarding the current policies of the Prevention of Mother-to-Child Transmission of HIV/Aids (PMTCT) programme, which affected their ability to function comprehensively and make informed decisions on current practice guidelines. Aligned to these findings, several authors, namely Woods, Cope and Eley (2008); Hall (2004) and Smit (2005), in separate studies exploring the impact of HIV/Aids on the experiences of nurses and nurse-midwives, have demonstrated the lack of continual training for nurses in the district and tertiary hospitals in South Africa. Moreover, these studies found that in the few instances where HIV training was offered, the information was inappropriate and outdated in relation to the context of HIV/Aids.

The findings of this current study also showed that the lack of adequate training experienced by the participants created a climate of uncertainty, wherein participants felt incompetent and in a

state of second guessing their nursing actions. Moreover, participants reported that they did not have the knowledge to interpret certain HIV diagnostic results to meaningfully direct nursing care plans, and examples of taking a patient's CD4 blood test or the infant's PCR levels and not being able to interpret the results in terms of patient treatment plans were highlighted.

It was also noted that the inadequate preparation in terms of training resulted in poor or no clinical reasoning in the participants' actions as they felt overwhelmed and did not have theoretical grounding to the tasks they had to perform. This finding is echoed in the separate studies of Hall (2004), Smith (2005) and Tobi, George and Schmidt (2008), who, in the South African context of public hospitals, found that nurses experienced overwhelming feelings of incompetence and inability to meet the demand of the HIV clinical practice due to a lack of knowledge and skills in this area. Moreover, Guberski (2007), in an assessment of HIV/Aids nurse practitioners and the nature of nursing in resource limited settings, noted that with the increased responsibility of HIV/Aids treatment, nurse practitioners were lagging behind in adequate, intensive specific training on ARVs, side effects thereof and how to monitor indicators to stop medication and move to second line medication. Guberski notes that lack of such preparation for nurses was causing feelings of confusion, despair and inadequacy in how they were functioning.

In this current study it also emerged that the inadequate preparation for the changing role of the participants in terms of HIV nursing also stemmed from the changing nature of policies underpinning HIV/Aids management. Participants expressed that core policy guidelines, such as the PMTCT guidelines, were rapidly changing and this contributed to their confusion and uncertainty in their nursing practice. Moreover, it emerged that participants did not have the

skills to translate information from the policy guidelines into their clinical practice, thereby creating room for wrong or outdated HIV treatment care plans being implemented. This finding is supported by Tawfik and Kinoti's (2006) study, which reported that that an overwhelming amount of nurses from the Kenyan, Zambian, Mozambican and South African study samples expressed concern with the number of guidelines and policies underpinning HIV/Aids and nursing-midwifery care, and that the changes to these policies caused a challenge for them in terms of practice. Other studies have also alluded to the impact of health policies in HIV/Aids to the nursing perspective, arguing that along with the rapacious nature of HIV/Aids on the public health system, the increase in the number of health policies and treatment strategies attributed to the increased burden of the nurse in coping with HIV nursing care (Zelnick and O'Donnell, 2005; Locher and Didion, 2003).

In a study conducted by Dijkstra, Kangawaza and Martens (2007) to assess health care practitioners' knowledge of HIV/Aids and policy guidelines related to HIV/Aids in South African state hospitals, they found that less than one third of their sample of nurses, doctors, and pharmacists had an above average score of perceived level of knowledge regarding HIV/Aids policies and guidelines. Shisana and Simbayi (2002) also reported on the poor knowledge and awareness of HIV/Aids related policies and guidelines.

It also emerged from this study that participants experienced a challenge to cope with the ever changing information surrounding HIV/Aids care. Participants made reference to the Prevention of Mother to Child Transmission of HIV/Aids (PMTCT) guideline and the frequent changes thereof which caused diminished confidence in clinical HIV nursing care and a climate of uncertainty for the nurse participants. Moreover, the lack of experts who could be consulted

further exacerbated the uncertainty and increased challenge to work in a complex field of HIV nursing care. In a study in Swaziland, Kinghorn (2005) reported that health care professionals reported poor training on HIV and high stress levels as they felt challenged and ill-prepared to cope in an overburdened health care sector which was rapidly changing in terms of HIV/Aids information and caring interventions. Oliver and Dykeman's (2003) comparative study of nurses and social workers experiences of the challenges of HIV service provision found that HIV training and preparedness was a huge determinate to positive experiences evidenced in both professional groups. Furthermore, Oliver and Dykeman's (2003) study emphasizes the importance of continual educational programmes in HIV care being pivotal in the nurses' and social workers' efficacy in their practice. This draws parallels to the current study's findings, wherein participants spoke of the many challenges which arose as a result of lack of information and the stress attached to nursing in the dynamic context of HIV/Aids.

In this current study it became evident that participants resorted to a strategy of habitual routine nursing and task orientated practices to overcome their incapacity to function out of the norm. Participants reported that they followed these practices in the fear of making ill-informed decisions .Leshabari, Blystad, de Paoli and Moland (2007) echo these findings, noting that nurse counsellors resorted to engaging in uninformed routine and habitual ways of providing counselling on breastfeeding within the PMTCT programme. These authors further noted that the nurse counsellors' actions were based on lack of information on current HIV related policies guiding infant feeding choices.

The findings of this study illuminated the need for a supportive structure, such as a platform, where relevant information could be accessed. Several other studies have also established the

need for supportive mechanisms for nurses working in the context of HIV/Aids, these include ongoing HIV training (De Villiers and Ndou, 2008; Mkhabela, Mavundla and Sukati, 2008); mentorship programmes (Dhorn, Nzama and Murrman, 2009); and caring for the carer programmes (McCausland and Pakenham, 2003; UNAIDS, 2000).

The varied qualifications of the participants presented an interesting aspect to the current study. It was evident from the current study that the participants had varying qualifications in terms of their educational preparation. These ranged from a masters degree in nursing to a diploma in general nursing and midwifery, which is the minimum criterion for practice as a professional nurse in South Africa. Despite some participants having post-graduate degrees, findings showed that all participants experienced the same challenges in dealing with the complex nature of HIV nursing care. They all felt they were lacking in skill and were incapable of interpreting HIV diagnostic tests. Furthermore, all nurses were equally challenged in their lack of ability to translate innovative learning skills in their clinical practice to engage with their learning needs.

Nokes and Stein (1997), voiced caution during the very early period in the HIV epidemic, and suggested that nursing curriculums be aligned to preparing the graduate nurse with core competencies in HIV/Aids nursing care and management. Their forewarning was not misplaced. If educational institutions had introduced core HIV competencies to equip a graduate nurse for the HIV clinical practice, nurses would not have to struggle to interpret and utilize basic diagnostic information in their practice. Furthermore, Liljestrand (2004) also commented on the rapid treatment changes and the increasing complexity of the management of HIV/Aids that warrants continuing education for health care professionals. Exploring the concept of further education for nurses, doctors and pharmacists, this author found that HIV related topics such as

the latest in antiretroviral (ARV) treatments, adherence issues to maximize drug effectiveness and minimize drug resistance, and dealing with co-morbid illnesses of HIV/Aids and Tuberculosis were insufficiently addressed among the sampled professions training and created an obstacle in their management of HIV/Aids related care. Closer to South Africa, Banda (2000), found that the Zambian curriculum for general nurse practitioners did not meet the demand of chronic care of HIV/Aids, especially in areas of treatment and medication adherence. All of this evidence compares favorably with the current findings which illuminated the lack of preparedness of the nurse practitioners in terms of HIV/Aids nursing care and management, despite some of them having post graduate degrees. This highlights the deficiency in nursing curriculums in integrating HIV/Aids in the varied nursing programmes.

Another finding which surfaced from this study was the disempowered nature of the participants' way of nursing as they lacked the insight and information to provide holistic patient care. Furthermore, the findings revealed that feelings of loss of control and frustration surfaced as the participants were not able to keep up with the changes of the dynamic context of HIV and, therefore, were not able to make clinical decisions that would definitely result in positive outcomes for patients. This is congruent to studies of Harrowing (2009); Dohrn, Miller and Baken (2006); Tobi, George and Schmidt (2008); and Ross, Greenfield and Bennett (1999) which showed that the lack of current HIV related training on aspects such as antiretroviral treatment, comprehensive HIV testing and counseling, and psychological training on issues such as HIV related stigma affected the nurses' ability to cope in the increasingly stressful and demanding context of HIV nursing, leaving the nurse practitioner feeling helpless and disempowered in her role as a care provider. Exploring the challenges nurses experience in coping with HIV/Aids in Africa, Ehlers (2006) came to similar conclusions. According to this

author, the continually changing acquisition of knowledge in the field of HIV/Aids complicates the decision making processes of nurse practitioners in terms of health education for the patient which challenges the nurse in her role of caregiver and leaves her feeling lost and vulnerable in her practice.

5.3.1.2 Pressure to cope with an informed society.

The findings of this study illustrated the added challenge participants experienced in having to cope with patients who were well informed about HIV/Aids. This compounded the participants' deficit of adequate training and knowledge. It became clear that many patients had acquired information about the disease from resources such as the media or externally funded medical research projects. and, while this open access to information was liberating and empowering for the patient, it created an unfamiliar and discomfiting paradigm shift for the participants, as they were no longer considered the source of information. Moreover, it emerged in this study, that the patients were sometimes better informed about current HIV related practices or information and would therefore advise the health care professionals. This imbalance in power and role reversal is explored in Harrowing's (2009) Ugandan study, This author reported a shift of power as patients recognized the lack of expertise in nurses and nurse-midwives and their limited capacity to provide care. Ojwang, Ogutu and Matu (2010) also provide insight on the consequences of a power disparity that occurs among nurses and patients in the context of HIV/Aids. These authors found that patients attending selected Kenyan hospitals were conscious of the level of care and they should receive in terms of HIV treatment, medication and medical procedures and that nurses working in these hospitals experienced pressure to meet the demands of their patients. The above researchers reported that the nurses' inexperience in dealing with the demands of their more informed patients resulted in them withdrawing their involvement with their patients and

becoming verbally abusive. The underlying thread in the studies of Harrowing (2009) and Ojwang, Ogutu and Matu (2010) draws similarities to the findings of the current study, which showed that nurses needed to regain their role of being a source of health and information.

Another aspect that emerged from the findings of this study relating to the dynamic of power relations was the diminished nurse-patient relationship and level of mistrust which stemmed from the participants' lack of authority and ownership in HIV related nursing care as a result of their lack of training and grounding in current HIV information. This finding is supported by Forsberg's (2001) concept of consumer-demand on health care services. This author speaks of a demanding patient profile who are empowered and informed on the type of care they should receive as opposed to assuming the traditional role of being submissive to the health care providers as the only source of information. Forsberg (2001) speaks of a consumer driven society which is geared toward high demands on the health care system in light of incentives, financial gains in exchange for performance based care. In light of this study's finding one can substitute Forsberg's constructs with that of an information fuelled society who access care with an already established idea of what they should receive from the health care providers. Kalvemark,Hoglund, Hannson et al.,(2004) suggest that challenging work environments wherein fundamental changes in the health care system (such as the changing nature of HIV care evident in this study) cause stress related dilemmas and challenges and makes it difficult for nurses to keep abreast of the organizational policies guidelines and structures that underpin the work environment.

5.3.2 A culture of working in isolation.

It emerged from this study that the fragmented nature of the participants' working relationships with their colleagues was attributed to feelings of insecurity and fear of peer judgment on their

lack of knowledge regarding current HIV practices. Furthermore, the lack of collaborative nursing practices exacerbated the participants' perceptions of isolation, and left them feeling that they were the only ones experiencing the challenges of the overburdened health care system. Moreover, the lack of collaborative nursing practice reported in this study resulted in poor continuity of care among the various subdivisions of the maternal and child health department. Guberski (2007) discusses the potential of loss of continuity of care in low resource areas with regards to HIV/Aids provision and states that low resources not only refer to the lack of basic requirements such as food and shelter, equipment and access to treatment, but can also refer to "*lack of training and limited evidenced based data to inform clinical decisions*" (pg 696). Connections can be drawn between this and the current study, which, similar to Guberski's (2007) idea of lack of resources, also found that there was lack of adequate and relevant training which fuelled the participants nature of working on their own.

This current study notes the isolating nature of nursing that was evident as participants feared peer judgment in terms of their lack of competence and resorted to functioning in silos with no integrative approach to HIV nursing care in the discipline of maternal and child health. The findings showed that despite belonging to the same department, participants concentrated on their own role and were unaware of the continuity of care in terms of the patients' progression from antenatal care to post-delivery care, especially in the context of HIV/Aids. This finding relates to Mackintosh and Tibandebage's (2000) study which reported that the overwhelming stressful conditions confronting nurses working with HIV related nursing care leaves them feeling abandoned and isolated. Congruent to this, several studies have also noted that inadequate preparation, increased workload, issues of task shifting and fear of contagion of HIV, stigma related to HIV/Aids and inadequate and relevant training relating to current HIV/Aids

protocol have led to loneliness, abandonment and isolation experienced by the nurses working in the field of HIV/Aids care (Greeff, Phetlhu, Makoae et al., 2008; Ehlers, 2006; Tawfik and Kinoti, 2006; Gerein, Green and Pearson, 2006).

It also surfaced in this study that there was a fragmentation of practice and that nursing care was not being wholly addressed in terms of holistic nursing of the patient's psychosocial needs. A unique aspect of this study was the knowledge gap of HIV/Aids practices that caused nurse practitioners to check off duties that they realized were important so they would be documented as having been done. Moreover, it was found that the task orientated nature of nursing practice that prevailed, nervousness of not providing adequate nursing care and information overload caused the nurse practitioners to work in isolation and create a distance not only between themselves, but also between themselves and the patients. These findings are consistent with a study by Dieleman,Bwete, Bakker et al., (2007) who explored the impact of HIV/Aids on nurses working in four rural hospitals in Uganda and found that that the closeness between the nurse practitioner and patients was distorted by contextual factors which impact on the working conditions of nurses working in the field of HIV/Aids. The authors identified that factors such as poor supervision, lack of awareness on the availability of HIV/AIDS counselling, use of antiretrovirals, working overtime and the emotional demands on the nurse of working with HIV/Aids on a daily basis attributed to a distance in the nurses' rapport with patients. In another study by Mathole, Lindmark and Ahlberg (2009), nurses in rural Zimbabwe also experienced similar frustrations of providing maternity care in the context of HIV/Aids. This study illuminated that despite the nurses' competency in midwifery skills, they were challenged and experienced a sense of "not knowing" in the context of HIV/Aids, and that new caring strategies were needed to optimally manage HIV/Aids alongside the midwifery components of their

nursing practice. The findings of Mathole, Lindmark and Ahlberg (2009) is congruent with this current study which revealed that participants' lack of confidence in current HIV practices and policies caused a routine task orientated manner of nursing that was not wholly based on critical thinking of the patients needs.

5.3.3 Lack of support from management.

In this current study, it surfaced that participants experienced lack of support from the management of their institutions. It was evident that although nurses had not received adequate training and were overwhelmed with the influx of information regarding new policies and practices of HIV/Aids related nursing, there were increased demands and expectations from the management for the nurses to perform. Furthermore, it surfaced that a lack of human resources, such availability of equipment and personnel, further challenged the participants to provide continuity of care in the context of HIV/Aids. The findings of Suri, Gan and Carpenter (2007) and Hall (2004), in separate studies, identified that nurses experienced lack of support in terms of management supervision and training, and lack of clear instruction with new policies and treatment changes. These studies further reported nurses are often expected to provide optimum quality care in a resource constrained context and that they experienced difficulty in coping in such an environment with inadequate employer support. Turan, Bukusi and Choen (2008), who explored the effect of HIV/Aids on maternity services, reported that nurses were challenged with poor infrastructures of resources,in terms of training and supervision from their management. This is also supported by studies of Kinoti and Livesley (2004); Manongi, Marchant and Bygbjerg (2006); and Samb, Celletti and Holloway (2007) that explored the human resource issues related to service delivery. It was noted in these studies that the added challenge of multi-tasking, task shifting of higher priority services such as provision of treatment and interventions,

caused nurses to feel de-motivated and incapable of meeting the demands and pressures of a health system plagued by HIV/Aids challenges. Several studies have also commented that human resources, such as proper facilitation and supervision from managers, development and opportunities in HIV/Aids training and recruitment, and retention strategies for nursing personnel in the contexts of HIV/Aids needed to be scaled up, especially in resource constrained areas such as Malawi, Tanzania, South Africa and Kenya (Manongi et al., 2006; Hall, 2004; Gueritault-Chalvon, Kalichman, Demi et al., 2000).

5.3.4 Internal Domain: The Emotive Challenges.

Evident from this current study emotional challenges that surfaced from the findings included workplace distress and loss of professional identity.

5.3.4.1 Workplace distress.

This study findings revealed that the nature of HIV nursing, especially with regards to HIV counseling and assisting patients with accepting their HIV diagnosis, was emotionally draining for the participants. Furthermore, patients' complacent attitudes towards their illnesses, prolonged contact with ill patients, increased frequency of a younger profile of patients, mainly teenagers, and dealing with consistent poor health outcomes were sources of emotional stress for the participants. Findings revealed that lack of training and lack of a space or platform for support also contributed to the participants increased level of distress experienced with HIV/Aids related nursing. This is supported by various other studies Ijumba (2008) reported that primary health care nurses in South Africa were experiencing distress and work related stress as a result of inadequate training in HIV/Aids related care. Sundin-Huard and Fahy (1999); Schneider, Blaauw and.Gilson (2006) and Dageid, Sedumedi and Duckert (2007) comment on the

powerlessness and challenge of task shifting that more senior nurse practitioners experience in terms of dealing with inadequate staff and having to resort to using less skilled staff members for higher level tasks.

It also surfaced from this study that moral dilemmas were experienced as a result of institutional restrictions which challenged the participants in terms of restricting care and treatment. Another moral dilemma participants experienced; was having to delegate nursing tasks to inexperienced staff members as a result of staff shortages. Furthermore, participants expressed feelings of decreased motivation, emotional exhaustion and mental fatigue. Prolonged contact of dealing with HIV/Aids made it difficult for them to separate personal and professional challenges of also being infected or having a family member infected with HIV. These findings are similar to several studies which also document the emotional stress nurses experience. Mkhabela, Mavundla and Sukati (2008) report that nurses experience feelings of helplessness, depression and intrapersonal stress due to conflict of the professional and family roles of having to deal with large numbers of HIV positive patients and family members who were ill with HIV or Aids. Moreover, helplessness among nurses has been reported in light of a patient profile that has issues of disclosure, stigmatization, fear of abuse, and denial of HIV status that perpetuates poor health outcomes (Van Dyk and Van Dyk, 2003; Whiteside, Hickey, Ngcobo et al., 2003).

5.3.4.2 Loss of professional identity.

Findings revealed that participants experienced a loss of nursing identity and were in need of support. Having to deal with poor health outcomes and death on a frequent basis created frustration, emotional exhaustion and feelings of no longer being a nurse-midwife as opposed to being a “porter of death”. This study finding also revealed that there was a greater intent to leave

the nursing profession in light of the emotional strain of HIV/Aids related nursing care. This finding is aligned to several studies which documented high correlations of work related stress and burnout among nurses working in prolonged contact with people living with HIV/Aids (Ijumba et al., 2008; Demmer, 2004; Bellani, Furlani, Gnecchi et al., 1996). These studies also report that nurse practitioners experience loss of control as they attempt to keep up with shortage of staff, high levels of absenteeism and low resources in HIV related health care settings. This is aligned to the findings of this study which revealed the emotional fatigue the participants experienced in provide nursing care in an environment that lacks resources, but demands longer working hours due to staff shortages.

Relating to the findings from this study that revealed an increased intent on the part of participants to leave the nursing profession, which was attributed the emotional burden, low satisfaction in nursing and diminished meaning the participants found from nursing, was similar to other empirical evidence. Chirwa, Greeff and Kohi et al., (2008) in a multi-country African study, found high levels of job dissatisfaction that were correlated with experiences of working in HIV/Aids related health contexts and sustained contact with people living with HIV/Aids. These authors, furthermore, identified several factors which motivated nurses to migrate to other employment. These included nurses perceived and received HIV related stigma of working with people living with HIV/Aids, diminished job satisfaction and incidents of pressure to cope in an HIV related work context where stigmatizing behavior towards nurses and patients were witnessed. Contributing to the corpus of evidence regarding the emotional turmoil nurses experience in terms of HIV/Aids care, Miller and Gillies (1996) documented that nurses became de-personalized in their interaction with patients as a strategy to cope with the pressures and emotional exhaustion in their working context. In an exploratory study of occupational stress and

burnout among nurses working in AIDS care, Kalichman, Gueritault-Chalvin and Demi (2000) note that, nurses who work with patients with chronic illnesses and those who work with people living with HIV/Aids experience intense occupational stress and emotional exhaustion due to an array of factors, such as being constantly preoccupied with thoughts of death, lack of motivation to continue nursing amidst poor patient outcomes and dealing with challenging patients and treatment dilemmas.

Stigmatizing and prejudicial thoughts also surfaced from this study as manifestations of emotional and work-related distress the participants experienced, which was compounded by the lack of support mechanisms and forums to discuss such issues. It surfaced from the findings of this current study that participants felt frustrated with the challenges of nursing in a context of HIV/Aids, had fears of contagion and experienced fatigue and helplessness amidst patients who resorted to traditional and alternative medicine, thus delaying and complicating initiatives offered by the nurse. This is aligned to Sadoh et al.,(2006); Mulaudzi, Pengpid and Peltzer (2011) and Adebajo, Bamgbala and Oyediran (2003) whose studies report on the attitudes of nurses towards people living with HIV/Aids. Similarities can be drawn between the studies as they were all conducted in the African regions with similar socio-economic status , similar profile of patients in terms of level of acceptance, issues if secrecy of HIV status due to fear of stigmatization, and use of traditional and alternative medicines in terms of HIV/Aids. It was evident from these studies that negative, stigmatizing behaviour and attitudes were evident among nurses who work in HIV/Aids.

Factors such as fear of infection, over-involvement with terminally ill patients, attitudes of patients about their own illness, feelings of helplessness about being constrained to do more in

terms of HIV/Aids treatment and management, increased workload, nurses also being HIV infected and fear of stigma by association stemmed as reasons that perpetuated impolite interactions, stigmatizing behavior and negative attitudes that nurses had towards people living with HIV/Aids and towards the nursing profession. These findings support the findings of this study which also found that the participants' emotional exhaustion and prolonged contact with sometimes difficult patients in terms of adherence to medication and beliefs about HIV/Aids created opportunities for episodes of stigmatizing behaviour.

5.4 THE CONTEXT

It emerged from the findings that the ongoing changes to policies and guidelines such as *the United Nations Millennium Development Goals* and the *HIV/Aids and STI National Strategic Plan 2007-2011*; as well as changes to the national frameworks and policy documents such as *The National Revised Guidelines on the Preventions of Mother-to Child Transmission (PMTCT),* created an uncertain climate in HIV/Aids nursing practice wherein participants needed to respond to these changes. This formed the context for the establishment of CoPs, which served as a mechanism or a vehicle to enable the participants to respond effectively to these changes.

5.4.1 The United Nations Millennium Development Goals and the HIV/Aids and STI National Strategic Plan (2007-2011).

These were recognized by the participants as the two dominant national imperatives that drove many changes in the treatment and care strategies of HIV/Aids care. The Millennium Development Goals (MDGs), especially goals 4, 5 and 6, were revealed as pivotal in the context of HIV/Aids nursing care, as they focused on reducing child mortality; improving maternal health and combating HIV/Aids, malaria and other diseases (UNAIDS, 2000). Furthermore, the

HIV/Aids and STI National Strategic Plan (NSP), for the five year period of 2007-2011, was also noted as another major policy that underpinned a new dispensation of HIV/Aids nursing care. Noted from the study findings, various targets were aligned by the MDGs and mandated through the NSP. The goal of reducing the PMTCT rate of transmission to less that 7% by the year 2015, was recognized by most, if not all, participants as a target that their nursing practice needed to attain. However, although participants were aware of this particular target, they commented on their frustrations with the ever changing climate of HIV/Aids due to the mandated changes initiated through the MDGs and the NSP.

Discussed by Chopra, Lawn and Saunder (2009), the political changes since the end of apartheid created a new course of redress and equality in health and health services underpinned by the White Paper for Transformation of Health Services of 1997 (DoH, 1997). One of its seven restructuring objectives was to unify fragmented health services at all levels into a comprehensive system. Coovadia, Jewkes and Barronl et al.,(2009), describing the public health challenges in the context of South Africa's political systems, reported that the country is still facing many challenges in transforming the inequities of the previous apartheid system in terms of equity and development in the health care system. Moreover, these authors mention the concurrent epidemics which compound efforts to align transformation. They make particular note of poverty related illnesses, which include maternal death, malnutrition and a widespread burden of communicable diseases, the largest contributor being HIV/Aids among the South African population (Coovadia et al., 2009).

Chopra, Daviaud and Pattinson (2009) commented that in the South African context, the MDG served as a benchmark to align services towards a universal target. The MDGs thus formed a

foundation for all other related HIV/Aids related efforts, to be aligned and form a platform for health care providers to assess their efforts against the global benchmarks (Willan, 2004). Explained by Chopra, Lawn and Saunder (2009) and Tang (2010), the three MDG goals and their targets and indicators which have had the most impact and which motivated the development of the NSP were goals 4, 5 and 6. Goal 4 addresses reducing the under five child mortality rate; goal 5 addresses improving maternal health by decreasing the maternal mortality ratio, addressing contraceptive issues, adolescent birth rate, antenatal coverage and increasing the birth encounter with skilled practitioners; and goal 6 addresses HIV/Aids, Malaria and other illnesses prevalent through HIV, and increasing the use of HIV prevention interventions such as the PMTCT programme.

Tang (2010) and Dennil (2008) note that the NSP was developed as a result of the adoption of the MDGS by SA, together with 189 other countries. The commitment by SA to addressing social and health imperatives, especially in relation to MGD goals 4, 5 and 6, and the government's National Operational Plan for the Management of HIV and Aids care, management and treatment which was legislated by cabinet in 2003 led to the development of the NSP by the South African National AIDS Council (SANAC).Dennil (2008); Chopra, Lawn and Saunder (2009); and the Department of Health(2007) all concur that that the NSP originated from various strategic frameworks, some of which include the MDGs (UNAIDS (2000) and the Operational Plan for the Comprehensive Management of HIV and AIDS care, management and treatment. The NSP's four key priority areas that all health care professionals and HIV/Aids related prevention and intervention programmes need to be aligned to are: prevention; treatment, care and support; research, monitoring and surveillance: and access to human rights and justice in care and treatment (Dennill, 2008; DoH, 2007). Explained by

Saunders, Reynolds and Elay (2008), key priority area two of the NSP, is aligned to increasing coverage of voluntary counselling and testing; promoting regular HIV testing; addressing the special needs of pregnant women and children, such as initiatives to decrease HIV and Aids related maternal mortality; and increasing the accessibility of comprehensive ARTs. Wellness care is a priority for many nurses, especially those working in community health care centers, primary health care clinics and maternal and child health departments Dhorn, Miller and Bakken (2006) also comment from their findings that while nurse-midwives in South Africa were aware of these two imperatives, namely the MDGs and the NSP, they did not know how to realign their nursing practices to address and achieve these goals. Dhorn and colleagues findings are similar to this current study, which also found that despite participants being aware of the importance of these two national imperatives in aligning nursing practice towards achieving the targets, very little knowledge was evident from the participants in terms of the actual indicators.

5.4.2 The National Revised Guidelines on the Preventions of Mother-to Child Transmission (PMTCT).

In the context of the current study, this national guideline was a critical policy guideline underpinning the care provided by the participants. Moving from MDGs and NSP, participants recognized that all their tasks and efforts were aligned to the PMTCT intervention programme which was directed by the PMTCT policy. A common thread throughout this study finding was with regard to the dynamic nature of this particular policy. Participants expressed confusion, increased pressure and inadequate training in failing to meet up with the demands of the constantly changing PMTCT policy, which directly impacted on their day to day activities in HIV/Aids nursing and midwifery care. To address the challenges posed by changes to this policy, in particular, the idea of implementing a supportive learning structure, such as a CoP, was

born. Supported within the learning space of a CoP, nurses could be taught the use of critical reflection to foster lifelong learning skills that can be used in any changing dynamic context.

To highlight some of the main changes in the PMTCT policy over time,, Doherty, Chopra, Nsibande and Mngoma (2009) and Youngleson, Nkuruziza and Jennings (2010) explain that when the PMTCT programme, which was piloted in 2001, was rolled out nationally in 2002, it provided that a single dose of Nevirapine (sdNVP) prophylaxis be administered to pregnant women then, in 2004, the highly active antiretroviral therapy (HAART) was made available for pregnant women with a CD4 count of less than 200 cell/dl. Amidst these treatment strategies being initiated, the province of Western Cape in 2004 initiated a dual ARV prophylaxis of Azidothymidine (AZT) and Nevirapine (NVP). However, following various political factors such as a denialist factor by the then Mbeki cabinet (Dennill, 2008; Doherty, Chopra, Jackson et al., 2007), following a court ruling initiated by the Treatment Action Campaign (Heywood, 2003); the dual ARV prophylaxis was rolled out nationally in 2008. To complicate matters further, in April 2010, the DOH released an updated national PMTCT Policy and Guideline, which incorporates major changes to the earlier versions. Such changes are a testimony of the evolving nature of the disease.

During this period (2001-2010) several changes were introduced, which include: (i) a move away from monotherapy to dual therapy (i.e. from AZT only to AZT and single dose NVP); (ii) improving first line ART regimens in line with international standards (such as phasing out Stavudine and replacing with Tenofovir); (iii) a change in the ART initiation criteria (that is all pregnant women and PLWH and TB co-infection with a CD4 of 350 and below must start lifelong ART, this is a change from the previous CD4 of 250); and (iii) a revitalization of

interventions, such as the early HIV identification initiatives, thus the introduction of HIV counseling and testing (HCT). This comprehensive testing does not only apply to HIV, but also serves as a screening for TB, blood sugar, blood pressure and hemoglobin levels. Another fundamental change to the PMTCT guideline was the decentralization of HIV care and treatment. As part of the strategy of improving primary health care services, a strong focus has been placed on HIV management and, in an attempt to increase the equitability and access to HIV treatment, ART initiations have become nurse driven. It is within this context of cardinal changes in the policies, guidelines and framework guiding their practice that many health care professionals, especially midwives, experienced that their functions and roles were evolving in response to the transforming health care system (Murray, Laakso, Shibuya et al., 2007).

Youngleson, Nkurunziza and Jennings (2010) noted that the effectiveness of the PMTCT programme is due to the nurses and other health care givers training in terms of the core activities of the PMTCT program.. Rollins, Little and Mzolo (2007) and Horwood (2010) have also indicated that nurses who are expected initiate ARVs in resource constrained settings are placed under a great deal of pressure and that having to cope with the demands of a depleted health care system juxtaposed by changes in the PMTCT programme and other policies created enormous challenges for them. The findings of the current study noted that the core role of nurses in the current study is in providing care aligned to the current PMTCT policy and programme, and because policies and guidelines related to HIV/Aids are constantly changing, participants experienced pressure in trying to keep up with the changes and challenges involved.

5.5. THE ACTION AND INTERACTION STRATEGIES

The action and interaction strategies described those actions that facilitated the establishment of CoPs of critically reflective HIV practitioners. Some of the actions and strategies described the planning and preparation of the envisioned CoPs, while others focused on the implementation process of the CoPs and the process of critical reflective skills development among the HIV nurse practitioners.

5.5.1. Planning and preparing for the Communities of Practice (designing).

The findings of this study revealed four conceptual categories in the process of planning the envisioned CoPs. These included:(i) conceiving the idea of establishing the CoPs; (ii) negotiating with stakeholders and garnering support; (iii) establishing a shared vision and goal; and (iv) collaboratively establishing a shared structure.

5.5.1.1 Conceiving the idea of establishing the CoPs.

In this current study, the idea of establishing the CoPs was conceived when the shared experiences of the participants made the need for such a structure apparent. Through collaborative discussions, participants identified some of the challenges they faced which included inadequate training and preparation, fragmented practice and working in isolation, workplace distress and loss of identity. Moreover, when it became apparent that the participants had serious kowledge gaps in the field of HIV/Aids, it gave rise to the idea of creating a space for a structured form of peer and expert support; a platform where participants could keep up with changing information and the changing context of HIV could be fostered. With the thought of implementing such a platform, critical reflection emerged as a tool to promote the ongoing learning and information seeking needs of the participants.

To carry out this idea, an action orientated approach to initiate the establishment of the CoP took place. Through mutual co-operation among the participants and guidance of the facilitator (i.e. the researcher) the concept of the CoP was discussed, with the facilitator explaining the activities and processes that would be involved. Full participation and ownership were fostered through the involvement of all relevant stakeholders, namely the research participants and the hospital management. These activities that took place are congruent with several studies. Wenger, McDermott and Snyder's (2002) guide for knowledge management of Communities of Practice (CoP) explain that planning is involved. These authors explain that "*the potential"* of the group's formation is assessed in the early stages by assessing the group's interest in the idea of developing the CoP. They note, furthermore, that mutual participation of the relevant "*members*", the HIV practitioners in this study, is vital for sustained interest in the group. This idea of Wenger, McDermott and Snyder (2002) has been extrapolated to other studies (Barrett, Ballantyne, Harrison et al., 2009; Lori, Land and Mamede, 2007; Strand, Udas and Lee, 2004) where the possibility of implementing CoPs was explored. These authors concur that the planning activities and the conception of the main ideas of any group activity such as a CoP are key aspects. Wenger (2000) also draws specific attention to this, stating that collaborative engagement in the formation of the CoP allows for different levels of participation and combined open dialogue from both the perspectives of the members and that of other relevant stakeholders. These assertions are aligned to the activities of the current study which facilitated dialogue on the planning of the envisioned CoP between the HIV nurse practitioners (participants), the hospital management and the facilitator (researcher).

5.5.1.2 Negotiating with stakeholders and garnering support.

The activities that promoted ownership and partnership in the planning phase of this study were through soliciting and garnering support or "buy in" from the relevant stakeholders. The findings of this study describes how the collaborative planning sessions ignited curiosity and excitement as participants viewed the envisioned CoP as a supportive and learning platform and strategy to address the challenges they experienced in the dynamic context of HIV nursing care. Bourne and Walker (2005) explain that this aspect of garnering stakeholder support is an important step in establishing any joint activity involving members of a large organization as it maximizes positive input and minimizes potential detrimental effects. The authors further explain that garnering such support from the organization's management *"unearths hidden reservoirs of power"* which contributes positively in shaping the project's success (Bourne and Walker, 2005: 650). Contributing to this Mitchell (2002); Wenger et al., (2002); Iedema, Meyerkort and White (2005); and Nahapiet and Ghoshal (1998) speak of the importance of stakeholder involvement in a project such as establishing a CoP, comparing it to evoking support and commitment in the early life of any project. Wenger et al (2002) and Nahapiet and Ghoshal (1998) refer to this process as *"social capital"*, and state that it is crucial to tap into actual and potential resources that are embedded within the management structures as it lends to the success of the CoP in terms of ensuring the vision and the mission of the group can be achieved as well as ensuring the longevity of the group's activities in the organization.

This latter aspect of stakeholder involvement, being viewed as social capital, is what emerged from this current study's findings. The process of negotiating and garnering support involved negotiating the level of commitment and nature of support required from the relevant stakeholders (the nursing management of the two hospitals), such a time off for the nurse

practitioners to attend the group meetings for the CoP. The findings of this current study describe the interactive and dynamic nature the process of planning encompassed and further described the level of excitement and ownership that was undertaken in activities such as negotiating times and venues for the group meeting, as such activities demonstrated a "buy-in" from the both the stakeholders and the participants. This step of creating a space of ownership in the processes of the CoPs in the planning phase of the projects is congruent with Wenger (2000) who states that a *"mode of belonging"* is fostered early on in the life of a CoP through engagement, which means members participating in the planning of the CoP by working together and shaping the envisioned CoP in terms of how they (i.e. participants) view it (Wenger, 2000: 227). Wenger, McDermott and Snyder (2002); and Lesser and Storck (2001) discuss dimensions of social capital and involvement and the various steps that members take to ensure the success of the CoP. In particular, the authors speak of the structural dimension of social capital and the importance of members being able to make connections in terms of time, space and their level of commitment in the CoP and its activities, as well negotiating in terms of accessing such resources that will underpin the logistics and structure of the CoP.

In this current study, and aligned to this discussion on social capital, it was evident that the participants were eager to find a solution to their challenges and welcomed the idea of having a platform to discuss their problems and learn about new developments of HIV nursing. This need for support was a driving force in the participants' and the stakeholders' actions and involvement in the planning of the CoPs. This reiterates the findings of various researchers who maintain that the shared need that ties all key players to the CoP is vital in its success; as it will keep the group members sufficiently motivated towards a unified goal (Wenger et al., 2002; Wenger and Snyder, 2000; Wenger, 2000; Hildreth, Kimble and Wright, 2000).

Morris (2002) states that for a co-constructed meaning to be born there needs to be engagement of all voices. This current study is underpinned by the constructivist paradigm which supports the engagement of the multiple viewpoints of the stakeholders, participants and the researcher in collaboratively planning the envisioned CoP. Moreover, Brandon (1998) and Van der Plaat, Samson and Raven (2001) state that within a constructivist paradigm, the involvement of all stakeholders and participants allows for all " voices" to be recognized, based on the premise of constructivism which states that there is no single truth. The authors note that stakeholders become empowered through their involvement in the decision making process in the planning and implementation of a project, which increases the likelihood of the project being sustained and the results utilized in the institution. Lave and Wenger (1991b) and Wenger (1998) also purport that in order for shared learning on a common discipline to occur, there should be multiple viewpoints on a real life situation. This supports the idea of engaging with various voices to construct a holistic meaning on a situation as was evident through the collaborative interaction with all participants and relevant stakeholders in this current study

5.5.1.3 Establishing a shared vision and goal. The findings from this study showed that the collaborative decision making process of the stakeholders in approving the idea and planning the envisioned CoP extended to their creating a shared vision and goal for the CoP. This was achieved by means of: (a) mutual understanding and establishing common ground: and (b) determining the focus and knowledge needs of the CoP.

Mutual understanding and establishing common ground. It was evident from this current study's findings that the purposively sampled group of nurses practitioners, sharing the same discipline of maternal and child health, had a mutual understanding of the challenges they shared

in relation to HIV/Aids nursing. This notion of having a group of participants of similar experiences or similar backgrounds is a supported tenant in the literature of workplace learning and CoPs. Lave and Wenger (1991b), who initially stimulated the discourse of Communities of Practice, spoke of work-related learning as a situated activity in their social learning framework of "Legitimate Peripheral Participation". Here the authors speak of the likeness and similarity of participants (referred to as *participants*) in the group (which is referred to as the *community*); and how this supports workplace learning in the shared symbols and experiences when members come together with a commonality in their work profession background or their apprenticeship. Lave and Wenger (1991b) conducted a study of five apprentice groups consisting of tailors, butchers, 2 groups of midwives and an Alcoholics Anonymous group. These authors found that learning was facilitated in the social context of individuals drawn together by a central similarity, such as the apprentice groups of their study, who participated in shared learning with familiar learning symbols. This is in accord with the current study in which all the participants came from the same background of midwifery (or maternal and child health) and shared the same challenges of HIV/Aids. Shulman (2004) and Wenger (1998) also support the usefulness of creating Communities of Practice (CoPs) by connecting individuals with a common interest, so that knowledge can be created, sustained and transformed, and that common social practices that are unique to the group of individuals of similar interests will foster relationships and connections around the area of interest (which Wenger, 1998 refers to the domain).

Various other researchers have added to Lave and Wenger's (1991b) initial work of situated learning and maintain that communal work-related learning occurs through shared participation, noting, however, that four constructs encompass the learning, namely: community: identity: meaning: and practice (Wenger et al., 2002; Brown and Duguid, 2002; Wenger, 1998). These

authors all support the notion of participants or "members" that have a commonality. According to them, *meaning* refers to the creation of meaningful learning by talking about or exchanging individually and collectively, *practice* refers to the shared resources around a topic or phenomenon, the *community* refers to the collective communal participation of the members in their quest of a renewed *identity*, which denotes the learning changes that occur in the context of the community. Again, this is in accordance with this study which sampled nurse practitioners sharing a common discipline of midwifery (or maternal and child health), which created a space for mutual engagement of shared experiences, practice elements of symbols such as resources that were unique to the discipline and thus aimed to foster communal participation and a sharing of knowledge to benefit the group (community).

Determining the focus and knowledge needs of the CoP: In light of the overwhelming challenges participants experienced due to inadequate knowledge and training on HIV related issues, the current research focused on equipping participants with lifelong learning skills which they could use to assist them in keeping up with continued changes in HIV care, and was delineated collaboratively among the stakeholder (i.e. the hospital nursing management) and the participants. This aspect of learning, which was crystallized as critical reflective skills, was identified as a prerequisite to the successful functioning of the envisioned CoPs.

Moreover, specific knowledge needs had been identified by the participants which gave direction to the learning focus of the envisioned CoPs. Participants needed to learn more about HIV related topics such as management of ARVs and dealing with HIV related stigma, but, at a more cognitive level and necessary for the success of the CoPs, they also needed to learn critical thinking, critical reflective skills and the application of experiential learning to practice.

Establishing a learning focus as was identified in this study is supported by Wenger, McDermott and Snyder (2002) and Wenger (2000) who speak of the strategic intent of all CoPs, stating that the strategic intent is the reason for the CoP being formed. The authors cite four examples of strategic intents of CoPs, namely: *helping communities,* whose core intent is helping others to solve everyday problems and share ideas; *best practice communities,* whose core intent is developing, validating and disseminating specific practices. Wenger, McDermott and Snyder (2002) comment that unlike the helping communities, the best practice communities are reliant on sharing documented experiences due to its systematic process of validating best practices. The third example is *knowledge stewarding communities,* whose focus is on hosting forums for members to connect, develop and verify practices with the main intention of distributing the knowledge to a greater audience; and lastly the *innovation communities* who focus on creating unexpected innovations and ideas to develop and contribute to practice. Riberio, Kimble and Cairns (2010); Andrew, Tolson and Ferguson (2007); and Lawthom (2011) speak of the transient nature of the strategic intent of any CoP, arguing that as a CoP grows and matures the strategic intent may change aligned to the needs its members in its core group and that of members participating in the periphery.

Thus with regard to these empirical statements, the strategic intents of this study varied over time and in terms of the established focus and goal that was collectively established during the planning phase, it encompassed a hybrid of a *best practice and knowledge-stewarding.* Aligned to Wenger, McDermott and Snyder (2002) , the CoPs in this study were focused on learning how to manage and apply knowledge through critical reflective skills and, furthermore, in light of the HIV related knowledge needs that were indentified, the strategic intent was also that of a helping

CoPs as it aimed at sharing ideas and new information to assist the participants with their everyday challenges.

5.5.1.4 Collaboratively tailoring the logistics.

From the base of the focus group discussions, the researcher involved the participants in the collaborative planning of the more tangible structure that formed the operational structure from where the CoPs were launched. Ownership of the proposed CoPs was fostered as participants agreed upon the logistical operational plan for the CoPs. By actively participating in discussions and negotiating aspects, such as the venue and the time for the proposed reflective group meetings, allowed the participants' voices to be heard in planning and taking control of their own initiative to create a change in their own nursing practice. Aligned to empowerment pedagogy, such as that of Freire (1976) and Foucault (1980), the collaborative nature of letting each person's voice be heard and noting their contribution as meaningful had an empowering effect on the nurse practitioners of this study, who, as evident from the antecedent discussion, had been feeling isolated and de-motivated in their working environment of providing HIV/Aids nursing care.

There was active engagement on the part of participants in developing a logistical structure as they discussed strategies such as effective times for meeting and choice of venue. Elements such as privacy, comfort and access to resources such as white boards were factored into the planning of the structure of the envisioned CoPs. These findings are in keeping with Serrat (2009) who states that a process of building a learning organization requires key aspects, such as identifying a space for learning (which the authors defines as the physical space either virtual or actual;

decentralized or centralized in terms of geographical space) and the time and duration of meetings.

Furthermore, Serrat (2009) argues that embedded on the premise that any learning space that collectively brings people together (as was the aim of this current study) should aim to breakdown hierarchies, move away from working in silos and have a renewed paradigm of collaborative partnerships. Witt, McDermott, Peters and Stone (2007) and Allee (2000) argues that embedded on the premise that any learning space that collectively brings people together (as was the aim of this current study) should aim to breakdown hierarchies, move away from working in silos and have a renewed paradigm of collaborative partnerships. Witt, McDermott, Peters and Stone (2007) state that when all members are involved in designing the structure of the CoP, it creates ownership, increased likelihood of participation and less likelihood of resistance to group activities.

Another strategy that was used in this study to create a collaborative structure that would facilitate the implementation of the prospective CoP involved encouraging the participants in establishing group rules, norms and unpacking group roles of the participants. Participants were mindful of the open communal sharing of experiences that would be part of the activities of the critical reflective discourse sessions. Due to the professional hierarchy that existed among the participants it was imperative that such rules and roles were made explicit to prevent intimidation and lack of participation and promote open and uninhibited sharing of experiences and information without the fear of breach of confidentiality and to foster active participation in the reflective practice and other related activities. This is supported by various other authors who comment on group dynamics, group processes and learning in groups. Baron and Norbert (2003);

Forsyth (2006); and Brown (1999) state that group and social interdependence and group cohesion is underpinned by planning and establishing collective rules, norms and roles of the team players of the group. These authors further state that a joint vision, or what Baron and Norbet (2003) refer to as a *"co-operative goal structure"*, provides rules of conduct which indicate the behaviour and expectations in terms of participation and roles of the members of the group in terms of duties and responsibilities. The authors further comment that this structure aligns the activities of the collective group towards the attainment of the goals and visions of the group. Furthermore, Johnson and Johnson (2003) assert that without some commitment to the pursuit of common goals through a formalised structure in terms of rules, functions and roles of each member, the group will not survive or be effective.

5.5.2 Implementation of the CoP

Several concepts emerged as phases in describing the process in which the envisioned CoP was launched and subsequently evolved from being highly dependent on the facilitator into a transformed autonomous unit. These included (i) the formation phase; (ii) the transitioning phase; and (iii) the transformed phase.

5.5.2.1 The Formation Phase.

The first aspect that was considered when planning the establishment of CoPs was establishing the needs of the participants, which can be aligned to the focus and vision of the CoP. These were unpacked by participants in collaborative discussions during the planning phases. To address these needs and equip the participants for their roles in the proposed CoPs, it was necessary to stimulate a process of group formation and reflection among them. From the findings of this study, the process of learning to reflect was characterized by various facets,

which were: (i) concept clarification of what critical reflection meant for the participants, (ii) application of the concept reflection to practice; (iii) hesitation and reluctance with critical reflective practice; (iv) transitioning and familiarity with reflective practice and (v) learning how to reflect deeply.

Concept clarification: It soon became evident that critical reflection was not practiced by any of the participants and, exploring the baseline level of knowledge, it was clear that participants had no previous skills or experience in terms of reflective practice. This is congruent with Atkins and Murphy (1993) who commented on the promotion of critical reflective practice in nursing, stating that there was a lack of skills among nurses to be reflective which was an important omission in nursing training. However despite the lack of knowledge and skills that participants displayed in terms of reflective practice, Durgahee (1998; 1996) commented that reflective practice, which is associated with imaginative thinking drawing on experience and evaluating actions and behaviours, is inherent in all individuals and that through facilitation and teaching reflective skills, all nurses, regardless of being non-reflective, can be developed into critical thinking, reflective, confident nurses. The findings of this study showed that through a process of sense-making, participants deconstructed and reconstructed the idea of reflection and made it meaningful for their own understanding. Ranging from ideas of reflection being likened to daydreaming and meditation the concept critical reflection was also understood in a professional manner and likened to cognitive processes such as critical thinking.

This process of unpacking critical reflection to engage with the participants understanding and to further facilitate in constructing a shared meaning is aligned to social constructivist and critical theory worldviews which recognize that the process of learning and knowledge construction is

an active process in which individuals construct knowledge in a way that is meaningful for their everyday lives and makes personal sense (Peters, 2000; Knowles, 1990; Mezirow, 1981; Knowles, 1980; Lewin, 1951). Moreover, the process of sense-making (which this current study reports on in terms of participants deconstructing and reconstructing the concept of critical reflection in terms of simple literal understandings and then towards a more cognitive and professional interpretation) is described by Brookfield (1994), Boud, Keogh and Walker (1985) and Liimatainen, Poskiparta, Karhila and Sjogren (2001) as an interrelated process which begins by questioning, reframing and replacing ideas and meanings of a given concept so that it makes meaning to the world view and assumptions of the social context in which the knowledge is being used.

Application of the concept reflection to practice. For participants, the process of learning to be critically reflective nurses incorporated information/teaching sessions from the facilitator (i.e. researcher) on a practical way of applying reflection into their clinical practice. This was aligned to the participants' need of understanding how to make sense of experiences and be aware of circumstances where action learning through critical reflection can be applied to experiences or behaviours in clinical practice. The use of reflective discourse sessions, paper based exercises and reflective journals were introduced as mediums to facilitate reflective practice. This process of the facilitator in guiding the learning process of reflection is supported by research, which also reports on the value of guidance in making sense of experiences and the questions learners should ask in order to raise the consciousness of self into being open to learning experiences (Hickson, 2011). Furthermore, Holly and McLoughlin (1989) urge the use of multiple techniques in eliciting and facilitating reflective thinking. These authors argue that deconstructing reflective thinking is different for different individuals, thus the use of various mediums will elicit an array

of information at varying levels of depth that will foster movement towards an empowered way of practicing.

The findings of this study on the phase of learning to reflect also revealed that exploring the various forms of experiences and unpacking the steps of reflective practice in terms of the questions the participants needed to ask themselves when encountered with a reflective episode and how to use experiences to generate learning opportunities was congruent with educational learning theorists. Drawing from Schön's (1983) work of reflective practice, *"returning to the experience"* is regarded as being cardinal in the reflective process and in being a reflective practitioner. Moreover Jarvis (1992) posits that the learning process of reflective practice is hinged on the individual's ability to consciously explore experiences in order to arrive at new understandings and behaviours.

It was evident that the initial practical step of learning to reflect ignited curiosity and excitement as participants engaged with the exercises and the various mediums to reflect on practice. Questioning and clarifying were characteristic of the participants' experience of learning how to reflect and apply the concept of reflection into their practice. Several studies which explored the use of reflective practice among adult learners or, more specifically, in the nursing profession, similar to this current study, have documented the curiosity and eagerness to experiment with reflective practice and inquiry based questioning to clarify issues on the process of reflective practice that is evoked during the initial learning process(Davis, Barnes and Fox, 2002 ; Heath, 1998; Antrobus, 1997). Furthermore Glaze (2001) and Williams and Lowes (2001) assert that to maximize learning through reflective practice, especially among already qualified nurse practitioners or adult learners who may have rigid styles of learning, an open forum of

experimentation and discovery in learning through questioning and inquiry is helpful in breaking down previously held assumptions of ways of nursing and assists in transforming the practitioners' experience of reflective practice. Moreover, Hickson (2011) mentions that the phase of discovery through looking back on experiences and working towards achieving control in thoughts and reflective action orientated behaviour is an exciting and curious stage for learners. The findings of the above mentioned empirical evidence is aligned to the findings of the current study, which also revealed a curiosity and excitement among the nurse practitioners as they were engaging in the process of learning a new way of nursing and knowing.

Hesitation and Reluctance. It was evident from this study that despite the curiosity and excitement to learn the process of critical reflective skills and practice, fear of the unknown in terms of letting go and unearthing vulnerable emotions of nursing in the context of HIV/Aids was a source of hesitation and reluctance. There was also uncertainty and confusion in terms of knowing how to proceed with reflective process. According to Platzer, Snelling and Blake (1997), reflective practice is about journeying and linking subjective and emotional experiences with practice and renewed actions. Bound by Schön's (1983) processes of reflection and Kolb's (1984b) experiential learning cycle, Roberts (2009) explains that part of engaging with concrete experiences through experimentation and reflection is intricately related to emotions, both desired and undesired, that are related to that given experience

In light of these assertions it is understandable that the participants of this current study were hesitant in terms of engaging with the concrete emotions of HIV/Aids related nursing experience. Furthermore, as was evident in the discussions of the antecedents, the findings of this study revealed the emotional distress that participants had experienced in light of HIV/Aids nursing

care. Bishop and Scudder (1990) point out that although moving towards an awareness of unknowing is a necessary internal process of adult learners moving through their own internal or moral dilemmas so that meaningful learning outcomes can be achieved, it often leads to external pressures. This is similar to the findings in this study where it became evident that participants experienced feelings of hesitation and reluctance due to the uncertainty of what to expect in terms of the process of reflection and in terms of surfacing emotions of past HIV related experiences.

This study revealed that participants experienced a paradigm shift as a result of their engagement in critical reflection. Prior to the research, although the nurse practitioners were aware that their training had not equipped them sufficiently and there were gaps in their knowledge in terms of HIV/Aids care and treatment policies, they were always in a state of "knowing" wherein they still had grounding in their knowledge as a nurse-midwife. However, the process of learning a new way of thinking and drawing new knowledge from reflecting on experiences put participants in a state on "not knowing" where they lost confidence in themselves and their abilities. Other studies have reported similar findings of loss of control (Hickson, 2011; Brown and Duguid, 1991). The study by Hickson (2011), in particular, explores the critical reflective journey of practitioners and the concept of loss of control that is experienced in reflective practice. The author speaks of the diversity of learning experiences that all participants engage in, and that core in the development of reflective skills, especially that of critical reflective skills which calls the adult learner to debate previously held assumptions of previously held espoused theories of "world truths", is a sense of loss of control. This notion of Hickson (2011) can be correlated with this study where previously held assumptions of the participants were challenged as they constructed new ways of learning and knowing through reflective practice.

Transitioning and familiarity with reflective practice. The findings of this study revealed that the participants became more familiar with each other as they came to the realization that they all shared the same challenges and thus became less hesitant and reluctant in fear of peer judgment. It surfaced from the findings that openness in reflective discourses resulted as the value of reflective practice and the outcome of new knowledge was manifesting in the reflective discourse sessions. Familiarity as a consequence of shared experiences, therefore, served as the catalyst whereby their increased confidence made participants eager to engage in reflective practice. This finding is congruent with Glaze (2001) and Wilkinson (1999), who stated that in the process of facilitating reflective practice, participants' fear of embarrassment, especially among learners engaging group discussions, can create a source of tension in the reflective process.

Wilkinson (1999) further notes in a review of implementing reflective practice among nursing students that balancing learners to engage with assumptions of self and others in the group and allowing the useful contribution of reflective practice to the body of nursing knowledge, creates opportunity for greater commitment and flexibility by learners to be responsive to change through reflective practice. Drawing from Wilkinson's (1999) observation, the findings of this study demonstrated that as participants started seeing the outcomes of reflective practice in terms of shared experiences and the generation of new knowledge, it led to an enthusiasm to engage with reflective practice, despite the perception of it being additional work to an already challenging work load.

Rolfe (2005) and Solomon (1999) explain that hesitation and reluctance as a prelude to the transitioning into reflective practice may be attributed to the nurses' culture and knowledge and

the relationship of power. These authors noted that the transitioning into a mode of learning new ways of knowledge acquisition may be problematic, and this is attributed to long held power boundaries embedded within a biomedical model of nursing. They suggest that nurses assume a powerful stance in terms of the already held truths and "knowledge stores", thus to move from one state to another means stripping away existing assumptions and unlearn trusted practices, making the transition sometimes difficult (Rolfe, 2005; McDonald, 2002; Solomon, 1999).

Learning to reflect deeply: The finding of this study noted that part of progressing from a state of being non-reflective and learning to reflect involved learning how to engage deeper in reflective practice. It soon became clear that participants did not know how to attend to the underlying emotions attached to an incident as they had a tendency to simply list the problems they had encountered with no critical cognitive processing of the experience or clinical incident in terms of deeper questioning of actions to elicit a new way of action to create a different outcome for the same experience. The findings of this study also noted that during the process of learning to reflect, it necessitated the facilitator to be very involved in directing the reflective discourse sessions with probing questions so as to activate deeper inquiry in reflective thinking.

Schön and Argyris (1974) purport that reflection is achieved through construction and revision of the individual's action theories, which they define as the worldview and truth about beliefs, values and behaviours that emanate in how people behave. Schön (1987; 1983) further expounded on this idea by introducing reflection on action and reflection in action, two cognitive processes of allowing a person to think about their action during and after a behaviour so as to stimulate a new course of action in subsequent behaviour. Based on the above assumptions, other authors have also explored the patterns of reflective practice and critical reflection among

various cohorts. Durgahee (1998) advocates the role of a facilitator in the process of reflection, stating that the facilitator can be useful in guiding and encouraging deeper awareness of the implicit tacit knowledge and making it explicit for the learners of reflective practice. This is aligned to the findings of this study which saw the role of the facilitator in guiding the participants in deeper awareness of reflection through the use of probing questions.

Schön (1991) defines theories of actions as behaviours, truths of behaviour or theories which manifest in or can be inferred through action. Argyris and Schön (1974) also address this concept, stating that human action is always consistent with the theories in use, and reflection allows these theories of actions to become explicit. Greenwood (2001) adds to this discourse stating that in the process of reflection, learners undergo a phase of reflecting superficially, which is in line with the current study which saw participants only listing clinical problems and the facilitator having to ask probing questions to encourage deeper thinking. This finding is further supported by Mezirow (1991), who described content reflection as thinking about the actual experience, as opposed to process or premise reflection which encompasses thinking through the experiences and assessing long held assumptions on the experience and rethinking new socially constructed meanings to experiences.

It also came to light in this study that participants experienced difficulty in writing down their thoughts, as there was lack of depth in the nature of reflective writings in the reflective journal entries. Just as participants had verbally listed their challenges rather than reflecting on them, so the entries in the reflective journals were written as journal logs, as opposed to reflective writing. Because participants were still learning to reflect and were not accustomed to utilizing a diary or to a culture of writing, the journal entries were depicted as logs of daily activities as opposed to

reflective writing. This is finding is supported by Loo and Thorpe (2002) who conducted a study on the use of reflective learning journals and reported that it is common for users to start off writing their reflections in the form of logs, where the entries are sporadic and follow a trend of merely stating activities. Similarly, Kember, Jones, Loke et al., (1999) also noted that the initial journal entries of a group of students whom they studied were not process reflection aligned and had no evidence of critical thinking.

Group Formation: Learning to work together. The study findings revealed that group formation dynamics among the participants during the initial stage of development of the CoPs was characterized in terms of norming and storming. The two distinct processes which characterized the manner in which the group formed included: (i) reservations and dependability; and (ii) establishing middle ground.

Reservation and dependability: The findings of this study revealed that participants initially encountered challenges in the process of group formation and working together and that this difficulty stemmed from a culture of working in silos and isolation, despite belonging to the same maternal and child health department. Moreover fear of judgment and lack of confidence in terms of working across the nursing hierarchy of senior and junior nurses added to the reservations among the participants. In a descriptive study of situated learning models, Khan, Mitchell, Brown and Leitch (1998) indentified that the process of learning discovery is about the social interaction of self and other. These authors explain that within social learning models there always issues of power among professionals that can impact on the learning discovery and that it is common for professional communities to unpack the role of power between the members.

Barab, Barnett and Squire (2002) characterize the essential tensions in developing a community of practice and state that one of the core tensions that initially occurs among members of a CoP is related to the stability and change that sometime occur when groups are called upon to work together. Aligned to Khan et al., (1998) and Barab, Barnett and Squire (2002), the level of reservation that was evident in this study finding can be labeled as an essential tension common to the process of CoP development.

It also surfaced from the findings of this study that during the group formation phase participants were highly dependent on the facilitator to direct the group activities. Participants also initially had difficulties in group interaction in terms of mixing with other nurse practitioners despite all working in the shared discipline of maternal and child health. This finding can be attributed to the isolating nature in terms of the nurse practitioners having a culture of working in isolation which was noted as one the challenges experienced. This is supported by Van Dyk (2006) who reported on the occupational stress experienced by caregivers working in the context of HIV/Aids which leads isolation and lack of collaboration due to the demanding nature of the HIV/Aids nursing context in South Africa.

Establishing Middle Ground. The findings of this study revealed that certain strategies were used to foster autonomy and increased participation, such as group rules and identification of roles,. The tasks and functions, such as establishing how and where the resource files would be kept, and rotating the duties of time keeper and scribe provided structure to the group sessions and allowed participants to establish a way towards transitioning into a more collaborative unit. Discussed in the literature of innovative pedagogies of learning, especially that of problem based learning, it is noted that group cohesion is encouraged through negotiation of tasks which fosters

ownership (Mantzoukas, 2007; Guile and Young, 1998; Barrows, 1986). More recently, Deignan (2009) suggested that the collective activities of organizing a group and its activities is a social and reflexive process which creates room for new understanding among group members and greater coherence. With regard to organizational learning and communities of practice, Fowler and Mayes (1999) have established that the personal development of members of an organization is an integrated approach to learning, and can be achieved and facilitated in a number of ways, such as making the functions of the structure or framework of the learning organization explicit and attaching roles to the function. Moreover, in their discourse of CoP establishment, Lave and Wenger (1991b) stated that constructing identities occurs through the act of social participation. Barab and Duffy (1999) and Wenger (1998) have expanded on this assertion, stating that it is through shared learning experiences which occur from the early stages of the CoP development and in tasks such as establishing group norms and the CoP focus that social participation is conceived.

5.5.2.2 Transitioning phase: An awakening of consciousness.

The findings of this study illuminated that two categories characterized the process of participants transitioning from the state of being non-reflective to learning to reflect as they moved towards a new awakening and realization of thoughtful, mindful clinical practice aided by critical reflective skills. These categories were: (i) a conscious reflection and experiential learning; and (ii) becoming autonomous.

Conscious reflection and experiential learning. Evident in the findings of this study, participants transitioned towards a more conscious and deliberate reflective practice as they began to recognize experiences as a medium of learning. This characteristic is aligned to what

Moon (2004) describes as a *reactive behaviour* or consequence to reflective practice. This author elaborates further, saying that within the complex process of evolving into a reflective practitioner, an individual's process of thinking and interpretation of experiences become heightened, moving towards a greater consciousness of actions, thoughts and behaviours.

The findings of this study further classified the conscious reflective practice and experiential learning as manifesting into: (i) a deeper awareness of practice, consciously reflective through experience based practice; and (ii) a deliberate and action orientated way of nursing.

A deeper awareness of practice, consciously reflective through experience based practice: The findings revealed that as the participants developed into reflective practitioners during the transitioning phase, they engaged more consciously in their nursing practice. This resulted in greater trust and open sharing of reflective experiences, which created a platform for the participants for thoughtful practice and introspection of feeling and emotions in terms of their behaviours and ways of nursing. This attribute of introspective and thoughtful reflective practice is noted by Burrows (1995); Maich, Brown and Royle (2000) and Andrews (1996) as a pre-requisite in the quest of changing professional practice and developing a meaningful and conscious way of practicing. Moreover, Antrobus (1997) claims that the essence of reflexivity should be based on personal engagement and involvement of the nurses lived experiences of their clinical practice which allows the reflective practitioner to rethink situations so that it can be responded to in the future with a changed perspective.

A conscious awareness and deliberate engagement in clinical practice was evident from the findings of this study as participants consciously moved away from habitual and routine ways of nursing. Greater confidence in the mechanics of reflective practice allowed the participants to

think deeper about their practice and to actively negotiate and discuss renewed ways of nursing practice in the context of HIV/Aids. The findings also noted that participants were actively involved in generating new knowledge through experiential reflective learning and began to use the CoPs as platforms where new ways of nursing and practice could be negotiated and discussed. In the current study, this renewed consciousness in clinical practice was attributed to both the individual reflective skills advancement among the participants and to the collective reflective discourse sessions, which played a role in raising the consciousness of the participants.

This is accounted for in Glowacki-Dudka and Barnett's (2007) study of critical reflection among adult learners through online learning. Here the authors found that the focused involvement of adult learners on critical reflective online discussions created a "conscious community" among their sample. Blackwell, Bowes and Harvey (2001) maintain that reflective practice is aligned to Asubel and Robinson's (1969) cognitive learning process in that new knowledge is meaningfully embedded or accommodated into existing practice through the interaction of new information and debating and negotiating of this information. Roberts (2009), supportive of Blackwell et al., (2001),), also states reflective practice is closely bound to experiential learning and can be noted in the individual's ability to assimilate and accommodate new information into meaningful units. Based on these assertions, the findings of this study of the participants' raised consciousness in the clinical management of HIV/Aids and moving away from habitual ways can be suggestive of a process of assimilation and accommodation of new information learnt through the reflective discourses and application to nursing practice.

Moreover, the findings of this study also demonstrated that coupled with the conscious and reflective way of nursing, participants also demonstrated greater understanding of their clients'

experiences of living within the complexity of HIV/Aids. This aspect of the process of becoming reflective is noted as achieving the epitome of the caring synchrony of nursing (Wallace and Appleton, 1995; Herberts and Eriksson, 1995). Moreover, according to Parse (1981), the nursing profession is about being in a relationship with the true presence of the patient. This is thus congruent with this study's findings which demonstrated that the participants had become more conscious of the patients' experiences of living with HIV/Aids, and wished to realign their role as nurse practitioners and offer more support to the patients in their quest towards better health outcomes.

The findings of this study also revealed that as participants became more proficient with reflective skills and began to recognize expert knowledge among the members of the CoP, there was less dependence on the facilitator as the source of HIV related information during the reflective discourses. The findings also demonstrated aggregation and pooling of resources to influence a renewed reflective perspective. Another aspect that emerged within the transitioning phase was that having become consciously aware of their nursing practice, participants experienced a paradigm shift in previously held assumptions and world views. This was demonstrated by participants addressing their stereotypical and stigmatizing behaviour towards people living with HIV/Aids, which was aligned to being mindful and deliberately conscious of their nursing practice and embedded beliefs and values.

This finding is related to the process of '*conscientization*' and critical consciousness derived from the work of Freire (2004; 1970), whereby individuals become conscious of the ways in which they think and behave; transforming their ways of thinking so as to create conditions of equity and social justice and rethink their previously held assumptions and worldviews which

may have been oppressive in nature. While assessing critical consciousness as an educational strategy among health care leaders, Getzlaf and Osborne (2010) noted that in what they termed the "second leg" of the reflective process, learners of reflective practice engage on critical perspective of culture and practice by questioning assumptions and exploring a deeper understanding of self in relation to their practice. Aligned to this study, it is evident that engagement in reflective practice allowed participants to question their own oppressive assumptions towards people living with HIV/Aids and the nature of HIV nursing by rethinking and recognizing their stereotypical and prejudicial stigmatizing attitudes towards their patients and moving towards a more conscious driven approach to nursing.

Deliberate and action orientated way of nursing. The study findings noted that participants reflected on their clinical practice and experience to generate learning opportunities. Evident from the study findings, two processes of reflection emerged, namely reflection on learning and reflection on practice. It also surfaced that learning and information sharing within the CoPs was also a catalyst for reflection, as participants used the new knowledge learnt and generated within the CoPs as a standard against which to measure their clinical practice.

This is supported by a corpus of information regarding reflective learning models. Schön (1987; 1983), who pioneered reflective practice, spoke of a similar construct in reflective thinking by stating that practitioners through reflection should be able to identify and critically analyze their existing understanding so as to reframe practice and self. Black and Plowright (2010) extended the discussion of reflective practice in a description of a multi-dimensional model of reflective learning. These authors stated that reflective learning activities are centered on Schön's (1983) assertions of reflection "in action" and "on action", two processes which describe how deep level

of thinking and experiential learning fuel a person to think of their behaviour and outcomes during an activity or behavior after the action, event or behaviour. They further note that within reflective practice, individuals can also think and reflect on their practice in terms of developing learning through their reflective practice, or that through reflection on a previous behavior or practice, the individual creates opportunities for a learning experience (Black and Plowritght, 2010). Furthermore, Hutchinson and Allen (1997), who developed the Reflection Integration Model to enhance reflection among education students, also support the findings of this study in stating that within the levels of reflection, the reflective-learning process allows students to become aware of the dynamics of both the current practice and the new information assimilated through learning, and how, through critical consciousness, they both interplay in the meaningful learning experience and transformed behaviour..

It also surfaced from the findings of this study that another indicator of action orientated nursing was demonstrated in participants diffusing information to the wider community of nurses who were not part of the CoPs. This was done as a mechanism of promoting a more informed way of nursing and improving HIV/Aids nursing care. Further to this, the findings revealed that reflective practice created a deeper consciousness of the participants' keenness to nurse, which was demonstrated in their willingness to go beyond their required duties.

It became apparent that participants interacting in new learning generated through the critical reflective discourse within the CoPs, learnt new information related to HIV/Aids nursing in an informal manner. This can be related to concept of scaffolding in learning, wherein learning occurs within a social context, Scaffolding of new information occurs as participants integrate

their existing practice theories with new information gained through peer assisted and shared learning (Vygotsky, 1978).

Lastly, abstract logical reasoning was evident as the findings of this study indicated that participants were able to identify their knowledge gaps in the practice of HIV/Aids nursing. Congruent to Arons' (1985) explanation, indicators of abstract logical reasoning are evident in processes such as consciously raising questions, being clearly and explicitly able and aware of knowledge gaps for practice and using observations to make inferences for practice.

Thus, this study demonstrated that the skills of critical reflection and the social learning space of the CoPs fostered higher order thinking among the participants, which raised an increased awareness and consciousness of their practice of HIV/Aids nursing.

Critical thinking and becoming self directed in addressing learning needs. It surfaced from the data that in the trajectory of becoming critically reflective HIV/Aids nurse practitioners, the attributes of critical thinking became pronounced among the participants in their paradigm shift from habitual ways to inquiry based practice. Fostered by reflective practice and the social and learning support of the CoPs, participants displayed more confidence in HIV/Aids nursing care in terms of taking greater ownership of their nursing practice. Their learning became self-directed as participants actively sought information to support practice decisions and assist in problem solving abilities.

Critical thinking as an outcome of progressive education techniques has been extensively discussed in the discipline of education (Foley, 2001). Underpinned in Rogers' (1994) work of adult education, which influenced the development of experience-based learning and self-

directed learning, critical thinking has been discussed as a skills development and seen as emancipatory, as it empowers learners with lifelong learning skills of seeking information through self-directed learning and creating meaning of experience based information (Erikson, 2007; Liimatainen et al., 2001). This is thus suggestive of the change that were evident among the nurse practitioners in their ability to not only make meaning of their reflective practice, but also in their development of lifelong learning skills of critical thinking and self directed learning.

This study is unique, however, in that the element of critical reflection combined with the social learning dynamic of communities of practice was used among a sample of nurses who worked specifically in the field of HIV/Aids. Using the diversity of their experiences, this study revealed evidence of learning and development towards the development of expertise in the practice of HIV/Aids nursing. This is supported by Schön (1987), who stated that practice is contextually located, and Jarvis (1983) who further asserted that embracing the reality of practice, exploring ways of using experience as a source of knowledge empowers nurses as adult learners to make sense of experiences and create knowledge base for practice enhancement.

Becoming an Autonomous Group. Several indicators of group cohesion and operational autonomy were evident from the findings of this study that paralleled the transitioning from a non-reflective state to conscious reflection and experiential learning. Firstly, the group dynamics changed as less aggregation among familiar members and more interaction from previously shyer participants were observed. Secondly, trust and closer bonds were evident in sharing of personal experiences related to HIV/Aids, such as one participant's disclosure of her HIV status to the rest of the CoP members. This is supported by Tuckman (1965), who maintains that there

is a sequencing of group development and that trust and intimate and personal dynamics become evident among the group members in the norming phase.

Furthermore, the increased interaction and facilitative group dynamics resulted in participants moving away from the entrenched hierarchy of professional ranking which had previously hindered group cohesion. This underlying power element was evidently diffused through the engagement of reflective skills, which built confidence among the participants in taking ownership of the nursing practice related to HIV/Aids. Foucault (1980) and Rooney and Hearn (1999) comment on the interplay of knowledge, power and discourse; stating that the complex networks of groups, especially occupational groups, helps a synergy among its members, enabling participants of the group to resolve tensions. Furthermore, Roan and Rooney (2006) mention that within knowledge group interactions, interdependence grows among members of the groups, allowing for greater accountability of the participants in their actions towards cohesiveness of the group. This thread of knowledge, power and discourse occurred collectively in this study. Fostered within the learning network of the CoPs, the barriers and issues regarding power among the nursing ranks was resolved as greater learning and a paradigm shift and renewed consciousness towards becoming transformed in a new way of nursing and greater awareness in best practice ways which was collaboratively learnt from all participants in the CoP was occurring among the participants.

Other indicators of the increased autonomy of the group that became evident were a tailored learning focus aligned to the needs of the group, innovative strategies in problem solving and potential interventions related to improving HIV/Aids nursing care and practice, and increased responsibilities in the group activities. In their book regarding CoP, Wenger, McDermott and

Snyder (2002) speak of this dynamic, stating that the life of a CoP is not static, but that migration from the initial focus will become realigned to the needs of the members as they mature in their learning and knowledge of one another.

The extensiveness of the participants' nursing experience, especially in terms of maternal and child health and of exposure of HIV/Aids nursing care, was activated in the discursive space of the CoPs. This allowed them to start taking ownership of the group process and the activities of the CoPs in line with their own needs, demonstrating greater independence. This can be related to Black and Plowright's (2010) work on a multidimensional reflective learning model which supports professional development, arguing that reflective practice makes a significant contribution towards professional development as transferable skills are acquired in the reflective process which become translated and transferred to practice areas. This is also in accordance with Shield (2001), who states that engaging in the social learning context of a CoP fosters inquiry based practice and confidence in the members, which is evident through questioning and stimulating reasoning through reflection on new ways of doing.

Findings showed that innovative strategies to problem solve surfaced as a new way of learning and problem solving, which was ascertained through the networked and supported group dynamics of the CoPs. This finding is not only an indicator of group cohesion, but also of greater advancement in professional development. The networked learning space of the CoPs not only facilitated the development of trust and bonds, but also became a platform for collaborative and innovative working. As evidenced by the findings, these had been lacking in the initial stages of the CoPs,where the isolating nature of nursing in the context of HIV/Aids was highlighted. In Hegarty, Kelly and Walsh's (2011) work on reflection in the workplace, these authors state that

there is often a palpable benefit for the organization when reflective practitioners become innovative in their work environments and initiate organizational change. This mirrors the current study finding which revealed the professional development of the participants with respect to their higher order thinking indicated by critical thinking and greater problem solving abilities,and the use of innovative techniques to find creative solutions to commonly experienced HIV related challenges.

Lastly, evident in the findings of this study, it was revealed that the autonomy in the group and group dynamics emerged into a personal intimate level. As the social familiarity in the group extended, participants openly shared hidden fears and emotional or personal challenges of nursing in the context of HIV/Aids. Noted in the findings, participants also became more conscious of previously held assumptions that may have negatively affected the way they nursed or interacted in the discipline of HIV/Aids or among people living with HIV/Aids. Noted by Fontana (2003) and Bennett, Fontana and Kehoe (2005), a critical awareness of practice underpinning a reflective practitioner is evident in an internal critique of a consciousness whereby individuals examine their own perceptions of reality in such a way that they begin to question their status quo and aim towards a more enlightened practice. Moreover, Olsen and Harder (2010) report that within network-focused nursing, which is a social network of nurses similar to a CoP, the growth in social support reciprocated among members facilitates a redefining of self as barriers and assumptions of nursing is reassessed in the social context of learning and sharing.

5.5.2.3 The Transformation Phase: becoming critically reflective and a transformed space for learning.

Evident from the increased synergy and group coherence among the participants and in the indicators of practice development that became pronounced as participants evolved from being reflective to critically reflective, two distinct transformational attributes occurred in the development of the CoPs. These included :(i) a transformed way of knowing in HIV/Aids nursing practice; and (ii) renewed and refocused CoPs.

A transformed way of knowing in HIV/Aids nursing practice. It surfaced from the findings that a transformed way of knowing and nursing was evident in the cognitive abilities of the participants of critical clinical reasoning and clinical judgment. Aligned to transformational learning literature, authors such as Mezirow (1981); Boyd (1988) and Taylor (1998) make reference to the meaning structure among adults which change and become transformed. Further noted in the discourse of transformational learning literature a key to changing individual's meaning schemas, which allows for higher order and complex cognitive translation of meaning into a new perspective of being, is attributed to critical reflection (Mezirow, 1991). Furthermore, Clarke and Oswald's (2010) work on collective reflection and its ability to bring about change, also support the notion that critical perspectives occur within the individual as reflective skills progress, stating that evidence of this is through clinical reasoning and rationalization of knowledge and experience to debate assumption and critique its relevance to current practice. Kuiper and Pesut (2004) also attest to the meta-cognitive reasoning skills that emerge as an outcome of reflective nursing practice. These authors draw attention to the cognition of critical thinking and reflective clinical reasoning which occur as outcome strategies, depending on the

degree of critical reflection and critical reasoning. They further note that deeper and more developed reflective thinking is manifest in critical thinking and clinical reasoning that nurse practitioners display in their practice environments. Vinson (2000) posits that gaining greater cognitive abilities, as was evident in this study's findings through the demonstration of critical thinking and critical clinical reasoning, can be related to Carpers' (1978) 'ways of knowing', which is illustrated in the nurse practitioner's ability to critically examine and analyze information and practice critical appraisal demonstrated in clinical reasoning.

Coupled with the crucial clinical reasoning and judgment, another interesting aspect which was noted in the findings of this study was the "doing aspect" which also characterized a transformative way of nursing. Study findings revealed that diffusion of information and promotion of evidence informed practice was fostered through the learning trajectory of becoming critically reflective. Merriam and Ntseane (2008) note that diffusing or translating new practice methods, is a common attribute of a transformational learning which suggests a state of self empowerment. They further comment that the process of self empowerment gives learners a sense of self control. Another "doing" aspect that emerged from the finding was demonstrated in the active participation among the nurse practitioners of this study creating an awareness of evidence informed practice. Findings revealed that the participants passed their new-found knowledge and skills to their colleagues in the wards. This is supported by Fook and Askeland (2006), who, discussing critical reflection through the lens of critical theory, state that evidence of critical reflection occurs in the recognition of self and the role an individual has in changing the status quo and influencing practice.

This finding is significant in the context of the HIV/Aids nurse practitioners, especially in light of their previous practices of working in isolation and following routine, habitual ways of nursing based on a traditional pedagogy of accepting information without reasoning. It symbolizes the positive professional change that occurred through the empowerment of learning and knowledge construction through reflection (Mackey, 2007; Le Cornu and Peters, 2005).

A renewed perception of core nursing values was observed, particularly among the urban participants. Being mindful of the habitual practices which usually dominate the nature of HIV/Aids nursing, the findings revealed that having been enlightened on current policy guidelines and other forms of resources, participants advocated for better nursing practices to achieve improved health outcomes. Participants actively implemented strategies to improve patient care, such as collaborating with interdisciplinary team members of the institutional laboratory services to speed up the turnaround time of CD4 blood results. Mallik (1997), who explored advocacy among practicing nurses, found that the nurses advocating for either patients' rights or better working conditions occurred in instances where nurses had sound clinical knowledge to rationalize clinical judgments and decisions making. Findings of Jordi (2001) also support the emergence of the advocacy role among the participants of this study Jordi (2001) found in an exploratory study of reflection and consciousness raising that reflective learning practice among adults encourages engagement of complex assumptions of societal and cultural prejudices and allows individuals through experiential learning and engagement to reverse some of these biases. Ward and McCormack (2000), along similar lines, discuss that apart from raising the consciousness of participants engaged in situated learning of CoPs, group learning positively influences practice development through deeper inquiry based practice and action learning evident in roles of advocacy and championing for best practice.

These finding indicate the effectiveness of the reflective practice on transforming and raising the consciousness of nurse practitioners who were previously disempowered to deal with a society and patient profile that is sometimes better informed about HIV/Aids than the nurse practitioners themselves. It is clear that nurse practitioners became transformed from that oppressed state, as expressed and discussed in the antecedents section of the findings of this study, towards an empowered state which was fostered through reflective learning practice and working and learning collectively in the context of the CoPs. Manley, Titchen and Hardy's (2009) findings of work-based learning in the context of contemporary health also support the findings of this study. The authors found that work-based learning creates a transformed pedagogy of learning among participants, as professional identities are reconstructed by skills transfer and utilization that occurs within the situated learning context of work-based learning. Work based learning is similar to organizational or networked learning and communities of practice, as they are all underpinned by the socio-cultural learning theories of Vygotsky (1978); Mezirow (1981); Dewey (1933) and, more recently, Lave and Wenger (1991b).

It also became evident from the findings that the participants had consciously expanded their nursing practice and embraced new roles of advisor and resource person. Other nurses who were non-members of the CoP were able to see the transformed nature of the participants in their evidence informed way of nursing. The findings revealed that participants started being called on as a resource person and advisor to the micro-community in their units and departments. Shedding insight to this finding in the context of professional development and transformative collaborative learning, Harrington and Garrison (1992) and Fullan (2001) state how engaging in social discourse and situated learning in the practice setting (as was the case of this study) leads to a changed identity which infiltrates to the wider work community. Fullan (2001), in particular,

notes that the transformed action of practitioners engaged in reflective and inquiry based practice often instigates a culture of inquiry in their own practice setting.

These empirical discussions, therefore, supports the advisory and resource person roles that the participants of this current study assumed as their transformed way of nursing in the context of HIV/Aids instigated a curiosity and desire in other nurses, who were not members of the CoPs, to also learn. Cope, Cuthbertson and Stoddart (2000) found that nurses who had participated in a situated learning project evolved into cognitive apprenticeship mentors who supported other professionals in practice decisions. Discussing Benner's (1984) development from novice to expert, Daley (1999) states that in the developmental stages of transitioning to an expert level, individuals usually initially engage in formal learning opportunities, but as they move towards the competent to expert level, they demonstrate their learning to others, using opportunities to show their competent-expert "way of doing" and being action orientated in sharing experiences in active dialogues or teaching sessions. These assertions are aligned to the action orientated strategies of the participants of this study, which translated into an advisory role, or as noted by Cope et al (2000), into a cognitive apprenticeship mentor to advise and serve as a resource person for HIV/Aids best practice nursing.

Promoting best practice HIV/Aids nursing care was evident in this study's finding and was demonstrated in the active engagement of participants in developing best practice guides to better inform and assist other nurse-midwives of current and relevant information, especially with respect to the polices that underpin care. Here again, this interactional strategy of information sharing demonstrated by the participants of this study signaled a transformed way of nursing.

In this study example is made of the information pamphlet of a quick guide to the latest Prevention to Mother to Child Transmission to HIV/Aids (PMTCT) policy guidelines that was developed by the urban CoP. Participants, drawing from their previous experience of not only finding it challenging to understand HIV/Aids related practice policy guidelines, but also having difficulty in applying them to their nursing practice, took it upon themselves to create an abridged, simplified version of the policy guidelines for the benefit of their colleagues who had not been part of the group. This blending of previous experiences with new information, as illustrated in the participants' action orientated way of nursing, speaks of two processes. Firstly, similarities can be drawn between the finding of this study and the findings of Jacobs, Fontana and Kehoe (2005) who found that nurses who had progressed from a fragmented, disempowered and frustrated place in terms of how they were devalued as nurses and overextended in their roles and duties, showed their emancipation in nursing practice by wishing to expand the vision of the nursing unit by putting in place strategies that were used to emancipate the other nurses. Similar to Jacobs and collegues (2005) observation, the current study shows the nurse practitioners emancipating themselves from their previously disempowered position of inadequate training and expanding their visibility by producing a practice pamphlet to transfer their knowledge and skills and thereby empower other nurse-midwives in their institution. The second process is aligned to Amin and Roberts (2008), who state that group based learning or situated learning in workplaces play a significant role in the process of learning and knowledge generation. Moreover, Amin and Roberts (2008) and Bates (2000) both speak of the social engagement and social familiarity fostered in CoPs, which give rise to a mode of innovation or knowledge formation.

It is noted in various other literature regarding CoPs that a CoP is more than a group of people sharing a common interest, but is a group that is situated in a learning identity through the translation of tacit knowledge into explicit knowledge (Davis, 2006; Boud and Middleton, 2003; Gherardi, Nicolini and Odella, 1998). Wenger (1998) highlights that not all groups working together can be classified as CoPs, stating a CoP has 14 key characteristics, one of which includes the flow of information and the propagation of innovation in knowledge transfer and creation. Mindful of the findings of this current study, it is evident that the transformation phase not only signified a transformed way of knowing and nursing, but, based on the professional development and cognitive indicators highlighted in the findings, it also signaled that the group was functioning as a CoP. Based on Wenger's (1998) characteristics of a *knowledge stewarding CoP*, which the author defines as a group of people contributing towards learning about the shared domain through knowledge exchange and learning. In this study, the activities of the established CoPs included knowledge generation and disseminating knowledge and practice information to their wider institutional community, thus, based on Wenger's definition, the CoPs can be classified as a learning group, stewards of best practice knowledge.

Fully functioning CoPs. Aligned to the transformed way of nursing evident in the latter phase of the research, it became evident that both groups had developed into fully functioning CoPs and that the original aim and focus of the groups had been transformed. This is congruent with Wenger, McDermott and Snyder (2002); Wenger (1998); and Coakes and Clarke (2006) who state that the throughout the lifespan of a CoP, the learning focus will evolve according to the needs and the growth of its members.

Both the urban and rural CoPs had realigned their aims and focus areas in terms of continuing to steward practice knowledge. The urban group went a step further by innovatively diffusing practice related information to the wider institution as the members saw this as their renewed focus, coupled with the aim of continuing to promote and support collaborative learning in the context of HIV/Aids. Similar to the changes noted in this current study, Wenger (1996) and Drath and Palus (1994) noted that professional work and a professional identity is reshaped continuously in light of the growth undertaken by its members of the CoP. Andrew and Ferguson (2007), and Meyer and Land (2005) describes this change, stating that a CoP provides a portal for a deeper understanding of practice learning in any discipline, and as deeper engagement in the community occurs among its members, a new status in the community is formed. This leads to a new desire for renewed efforts in terms of the communities' aim, focus and learning vision.

More importantly, the refocusing of aims is aligned to the three cardinal aspects of CoPs, as noted by Wenger (1998), those being *mutual engagement, joint enterprise and shared repertoire.* According to the author, *mutual engagement* draws on the premise that practice which deals with the discourse and sharing of resources around a common area (as was in this study around critical reflective development and HIV/Aids) can only be done through mutual interconnected engagement. The second aspect of *joint enterprise* is aligned to the community's core function and that this aspect is constantly re-negotiated by the individual members and creates mutual accountability of the process of learning among its members. Lastly, the third aspect of *shared repertoire* refers to the routines, symbols and actions taken in the quest of finding information and learning around the practice of the CoP.

Thus, aligned to Wenger's discussion of these three integral aspects, it is evident from this study finding that the *joint enterprise* of the CoPs of critically reflective HIV nurse practitioners was re-negotiated in terms of being a space or practice of learning inquiry aligned to HIV/Aids nursing, wherein *mutual engagement* of the members were collaboratively refocused to create a platform that could provide support to other members of the nursing community and help them grow; and a *shared repertoire* was formed among the participants through the open sharing of practice information; the shared repository of reflective clinical experiences which were translated into generated knowledge and the exchange of resources which contributed to the shared practice repertoire of HIV/Aids related information.

Another interesting finding which gave evidence that the groups had transformed into CoPs was the emergence of a core group of experts. Findings showed that sub-groups of experts were elected by the members of both CoPs, functioning to serve as the steering group for continued group activities and to support sustainability of the CoPs after the disengagement of the researcher, who had served as a facilitator in the process of the establishment of the CoPs of critically reflective nurse practitioners. In their book, *Situated Learning: Legitimate Peripheral Participation* Lave and Wenger (1991b) speak of members having different roles and different levels of memberships in a CoP. To explain their concept of situated learning, Lave and Wenger (1991b) state that members of a CoP share a common practice or, as they describe it, a repository of resources, which includes practice experiences, stories and ways of addressing problems. They further explain that learning that occurs within the CoP is termed situated learning and that this occurs through the gradual integration of individual members into the CoP. Thus, there is always a core group of a few experts in the CoP and new members start out in the peripheral and gradually move towards the centre as their skills and learning evolve. Lave and Wenger further

note that new members have very little personal commitment to the CoP and their participation in group activities may be minimal. In this current study, the group engaged with situated learning as described by Lave and Wenger (1991b).

Contrary to the above premise of core and peripheral groups, all members of both groups in the current study started at the same level of learning and participation. Taking into account their novice level of learning and sharing, one can state that in this study all participants started at the same non-reflective point. However, as the learning trajectory progressed, it became evident that the reflective practice and mutual engagement of the participants developed, thus creating a progressively more autonomous group until, eventually, all members progressed to a point of being critically reflective and transformed. It is in this phase of being transformed that a significant finding of this study surfaces, as it is at this stage that the core expert groups emerge from the CoPs. The core group in this study is formed as a mechanism to support sustainability. and was established through recognition of their strong leadership style and ability to direct the group activities and their strong knowledge base with certain aspects of HIV/Aids nursing.

A renewed group identity. Aligned to the transformation of the CoPs which had become evident at both sites, the study findings showed that other nurses wished to become involved in the learning process. New participants joined the CoP where they able to discuss and share the challenges of HIV/Aids related nursing practice. It was at this stage that Lave and Wenger's (1991b) description of situated learning and peripheral participation came into being, with not only the core expert group, but also the distinction between "old timers" and "new comers".

Discussed by Karalis (2010), this distinction of the two levels in the CoP can be equated with Mezirow's (1978) discussion of evaluation of experiences and the transformation of perceptions

that occurs within critical reflective practitioners. Karalis (2010) notes that aligned to Mezirow's *instrumental* and *communicative* learning which occurs as a result of transformative learning,, Lave and Wenger's (1991b) distinction of "old timers" and the "new comers" is relevant as it describes the level of learning and skills that will be transferred from the expert to the novice. It is this attribute that Lave and Wenger (1991b) encapsulated the longevity and sustainability of CoPs as continuous entry and exit and movement from the peripheral group to the core group continues.

Therefore, in light of this discussion and the findings which illuminated the transformation of the original group of participants, a sub-group of experts was elected and new members joined the group, thus not only ensuring the sustainability of the CoP, but also ensuring that through the process learning, members will progress from being novice and non-reflective to becoming proficient critical reflective HIV/Aids nursing practitioners (Wenger, 1998; Lave and Wenger, 1991b). 1998)

5.6. INTERVENING CONDITIONS

The findings of this study revealed that several facilitative and inhibitory intervening conditions emerged in the process of developing CoPs of critically reflective HIV/Aids nurse practitioners. The facilitative intervening conditions included (i) the desire to change one's practice; (ii) the nature of the facilitator; (iii) support from the institutional management; (iv) flexibility in reflective practice; (v) diversity of professional nurses. The hindering intervening conditions included (i) culture of hierarchy in nursing, (ii) new culture of writing and reading.

5.6.1 Facilitative Conditions

Desire to change one's practice. Evident from the findings, participants were eager to find a strategy to deal with the overwhelming challenges they experienced in terms of coping with the rapid nature of changes in the context of HIV/Aids and to have a sharing platform in terms of dealing with the complexities of HIV/Aids, which led to the idea of establishing the CoPs. This desire to learn new practice methods and ways of nursing sustained the interest and participation of participants in the formation of the CoPs as well as in the learning trajectory of critical reflective practice.

Noted by Bouner (2003); Esterhuizen and Freshwater (2008) and Rolfe (2006), the use of critical reflective learning and practice to improve practice is considered useful in the rapidly changing contexts of practice (such as the context of HIV/Aids). Adding to this Vaast and Walsham (2009) and Little (2002) assert that in a context of change, individuals need to locate appropriate practice learning and a new ontology of knowing, and that fostering a new way of practice through experiential and reflective learning in a supported or networked practice environment is evidenced as being most effective in addressing the authentic needs. These indicators for the use of both reflective learning practice and supported learning within a CoP affirms the facilitative condition emerging from this current study. Furthermore, Wenger (2000; 1998) indicates that a strong attributor to the success of a CoP is the profile of its members and lists characteristics such as a commonality or shared problems and experiences, a drive and desire to learn in a social context of situated learning and like mindedness in terms of practice experiences as are some of the characteristics noted as contributing to the longevity of a CoP. This relates to this study which revealed the eagerness of the participants in terms of wanting to work together to find a strategy that would help them to address their practice problems relating to HIV/Aids nursing.

Role of the facilitator. As all participants started from a novice and non-reflective state and needed guidance on how to interpret experiences and apply reflective cognitive thinking to practice situation, it was evident that the process initially needed to be supported by a facilitator. Furthermore, as the idea of using the structured situated learning space of a CoP to foster new skills of critical reflection was novel, the researcher assumed the role of facilitator in the initial stages of the research not only to teach the skills of critical reflection, but also to foster group cohesiveness in the formation of the CoP, The facilitator, having done a progressive nursing education postgraduate module, was qualified in the skills of guiding the process.

Evident from the findings, the supportive role of the facilitator in guiding the process was noted as positively contributing to the success in establishing the CoPs. Owens and Stupans (2009) support this finding noting that in experiential and scaffolding of reflective learning and practice, the role of a supervising mentor is important, especially in aligning and directing the students' experiences and creating meaningful learning opportunities for co-constructing knowledge. Van Manen's (1977) support this finding noting that in experiential and scaffolding of reflective learning and practice, the role of a supervising mentor is important, especially in aligning and directing the students' experiences and creating meaningful learning opportunities for co-constructing knowledge.

Furthermore, the study findings revealed that the supportive role of the facilitator also diffused power imbalances that were experienced in the initial stages of CoPs' processes of development. Due to the professional hierarchy of the nurse practitioners and the fact that group work was a new experience for the participants, the initial stages of development were characterized by what Tuckman (1965) refers to a 'storming' phase. Power imbalances were diffused by the facilitator

and this facilitated in creating a phase of norming, where group norms and relationships were fostered by working through the barriers.

Verburg and Andriessen (2006) refers to a ‘storming’ phase. Power imbalances were diffused by the facilitator and this facilitated in creating a phase of norming, where group norms and relationships were fostered by working through the barriers, Verburg and Andriessen (2006) and Wenger and Snyder (2000) contribute to this discourse, stating that even although CoPs progress to be self-reliant spaces, sometimes support and supervision are needed to develop and integrate the CoP into the large institution. Wenger and Snyder (2000) also acknowledge the difficulties that may transpire, especially among groups that have never had the familiarity of previous groups or collaborative networks. They note that battles of power and personality clashes often occur, which can affect the group dynamics and, thus, support the use of a facilitator or someone to guide the process of bringing the likeminded individuals into the CoP space.

Furthermore, this study findings revealed that the role and the presence of the facilitator guided participants in the social elements of group formations, such as how to establish group rules and norms, the structure of meetings and how to encourage collaborative and equal participation from all members of the team to foster ownership and coherent group functioning which underpinned the social dynamic of situated learning and critical reflective practice.

This is congruent with Billett (2000), who states that guided learning in organizational learning fosters the development of tactit knowledge and cognitive processes of shared learning. This author also mentions techniques of mentoring as ways of promoting cognitive apprenticeship among novice practitioners. Billett (2000) and Cope, Cuthbertson and Stoddart (2000) state that cognitive apprenticeship, which describes a process of learning new knowledge and cognitive

skills, is fostered through a relationship of the learner being guided and directed in the process of situated learning. This was evident in the current study, as the facilitator guided the participants in their process of becoming critically reflective practitioners and also had a hand in promoting the group dynamics of the CoPs.

Cox and Ledgerwood (2003) states that modeling, coaching, reflection, articulation and exploration work interdependently with each other to promote an effective strategy that supports situated learning practices. Collins defines modeling and coaching as demonstrating a thinking or new learning process, and assisting and supporting cognitive activities respectively. This is aligned to the current study where both *modeling* and *coaching* were evident. The facilitator applied these strategies in the various exercises and tasks she used to stimulate the participants' acquisition of reflective practice skills, especially in the formation phase of the CoPs. This aspect of modeling and coaching facilitated the learning and interest in the new learning activities of the CoPs.

Lastly, noted in this study findings, facilitation by the researcher gave participants the opportunity to acquire new skills which they had not had prior to the research, such as critical reflection and improved writing skills, in terms of reflective writing in the journals. The facilitator's knowledge of HIV/Aids and experience of the critical incident technique of data collection that she had acquired working in similar FGDs in two previous studies, provided grounding to elicit greater discourse. Furthermore the facilitator's postgraduate studies of progressive nursing education had given her the skills to facilitate participants in scaffolding in learning new tasks. This increased self esteem as participants grew more familiar and competent in the cognitive tasks related to critical reflection and thus nurtured greater interest.

There is a range of empirical evidence that supports facilitator's role in guiding the learning of the participants. Kolb (1984b) states that the experiential learning loop is largely focused on informal learning that learners may not be familiar or competent in and, thus, supports the role of a supervisor/facilitator in supplementing and accelerating informal learning from a structured well planned aspect. Dennen (2008) also asserts the importance of structured facilitation in supporting the co-constructed nature of knowledge generation and application in a situated learning context of CoPs. Owen and Stupans (2009) argue that scaffolding guides learners in performing tasks which are normally beyond their ability.

Support from management. Expressed by Contu and Willmott (2003), there is uncertainty regarding the role of organizations in actively encouraging the growth of learning communities of practice. However, bringing in a new perspective to this observation, the findings of this study noted that the support which had been garnered from the institutional management in terms of providing participants time off from their work schedules to attend the CoP/critical reflective meetings and providing some of the resources in terms of venues, was noted as facilitative in cultivating and maintaining the participants' interest and participation in the CoPs. Furthermore, the findings of this study noted that participants expressed a commitment to actively participate in the CoPs as they were appreciative of the initial support that had been provided by the institutional management. They felt that the dedicated space they had been granted to function in the activities of the CoPs had given them a sense of ownership of the CoP and learning process.

Argued by Thompson (2005), providing the structural components such as the time and space for the logistical operations of the CoP is often the easy part, while the organization's ability to persuade individuals to work and interact within these structures is often more difficult. The

findings of this study shed new insight into both Contu and Willmott's (2003) and Thompson's (2005) observations. Findings revealed that as participants had the desire to network and find a working solution to the challenges of working in the dynamic context of HIV/Aids, having the support of the management in the creation of a platform to foster learning and a new way of nursing contributed to their commitment to activities of the CoPs. Thus, it was noted in this study that ensuring the success of a CoP in terms of active commitment and willingness in the process of shared learning towards the organization's needs, the focus of the CoP should be closely aligned to the needs of the organization and supported by the institution's management. This study also noted that support provided to the participants by the institutions in terms of time and space, was regarded by participants as a privilege in light of resource constraints and staff shortages. This fed the participants' responsibility and desire to participate in the CoPs to bring about institutional change. This is aligned to the component of reciprocity, where participants, being driven by an organizational obligation of knowledge enhancement, see this aspect as an honour and are, therefore, driven to succeed in their responsibility not only for their own individual growth, but also for the benefit of the organization (Soo, 2006; Alavi and Leidner, 2001).

Flexibility in reflective practice. Evident from this study finding, flexibility in the nature and mode of reflection, facilitated the development of the CoP of critically reflective HIV/Aids nurse practitioners. It emerged that participants felt more comfortable and familiar with reflective talk or discourse episodes. The flexibility of either verbal or written reflections during critical reflections activities in the CoPs fostered greater comfort which resulted in active participation in the learning encounters.

This flexibility in learning and reflection is aligned to Wenger's (2000) three modes of belonging to a social learning system. This author maintains that engagement, imagination and alignment foster the dynamics of a CoP through talking and producing shared artifacts, constructing new images of self, reflecting on a situation to explore new possibilities and making use of local activities that are aligned to the needs of CoP members. Wenger (2000) further asserts that through a dynamic and flexible engagement of these three components, deeper social learning is nurtured in the CoP. Furthermore, Hew and Hara (2006) assert that conversation as opposed to blogging, or in this case reflective writing, is noted as an important conduit for knowledge sharing among members of communities of practice.

Flexibility in the learning process was also evident in the use of both English and isiZulu in the reflective discussions. Given that most of participants in this study were Zulu, flexibility in the use of language allowed greater alignment of local nuances and deeper more applicable meaning to the reflective and experiential learning in the CoP. Noted in the discipline of socio-cultural linguistics, Nilep (2006) defines this use of first and second language in cognitive learning practices as '*code switching'*, stating that language and learning is interrelated and that every time learners interact in the second or first language, they are engaged in identity construction and negotiation of learning. Tara Fenwick (2001) also assert that the embodiment of experiential reflective learning is about the construction of symbolic meaning attached to language and the individual's identity.

It also became apparent that the use of familiar nuances and language/linguistic expressions by the participants facilitated the group socialization. Initial reservations due to rank and dominance

that restricted open interaction among the participants were mediated through the familiarity of language that was a common thread and fostered a togetherness in the CoPs.

This is supported by Gendlin (2004), who states that language is implicit in human processes of living. In Barker's (1947) analysis of social networks and the choice of language, this author established that language code switching occurs naturally among a group of similar individuals who possess two or more separate linguistic varieties, as was the case in this study of isiZulu and English. Furthermore, according to Bucholtz and Kira (2008); Montes- Alcalá (2007) and Nilep (2006) code switching fosters identity and group interaction. This is achieved through the familiarity of language with embedded nuances and meaning that lends to the group dynamics. Bucholtz and Kira (2008) states that language and culture is inter-related and through the process of language code-switching the hidden meanings of the discussed phenomenon is better understood. In this study, the flexibility of code-switching created a more interactive climate in the shared reflective discourses and this also created a space for power issues related to the hierarchy of nursing to be expelled as the togetherness of the group was created through the sharing and learning from similar challenges and experiences.

Diversity of professional qualifications. The findings revealed that even although the participants were all professional nurses, they differed with respect to the training they had received. Some participants had the minimum qualification of national diploma in nursing and midwifery, while others had graduate and postgraduate qualifications. This added diversity and richness to the learning experiences within the CoPs.

Knight (2002), who conducted research on professional development among teachers, noted that professional development within the learning practice group was enhanced by the diversity of the

participants' basic educational backgrounds. Knight noted that the diversity enhanced the learning activities as members of the group could support one another in terms of pre-existing skill transfer. This is similar to the findings of this current study which noted that some of the participants were able to engage in self-directed learning due to their previous educational training and were thus able to help and support others. This is also supported by Kayler and Weller (2007) who state that creating an effective supportive learning community is driven by authentic situations and experiences and the opportunity for the learners in the learning community with specialized skills and training to bring diversity in the knowledge and shared understandings.

5.6.2 Hindering Conditions

Culture of professional hierarchy in nursing. Due to the mix of both senior and junior professional nurses in the groups, issues of power imbalances hindered the initial dynamics of the group interaction of the CoPs. Senior nurse practitioners, who served in a management positions, found it difficult to openly share in reflective discourse among their peers who were junior professional nurses and, in the context of the work environment, served under them. Noted in the findings, senior members felt uneasy about sharing their ignorance on some of the HIV/Aids issues believing that that should be perceived as being knowledgeable. Because they felt vulnerable, senior nurses became assertive and dominant in the groups which inhibited the process of reflective practice and experiential learning. Junior participants also responded to this power imbalance by shying away from reflective sharing in fear of peer judgment.

Mørk, Hoholm and Ellingsen (2010) explored levels of professional expertise and the relationship of power within communities of practice and concluded that although issues of

power within CoPs are often not reported among the discourse of organizational learning and CoPs, it is a real dynamic that affects all group processes that bring albeit similar like-minded people together. Both Antonacopoulou (2006) and Swan and Scarbrough (2005) assert that domination over the resources and learning process in organizational learning creates unequal relations of power that disempowers both groups of participants, those that dominate and those that are submissive, as collaborative learning processes can only be achieved on an equilibrium in open and honest sharing experiences of learning episodes. Griffiths, Winstanley and Gabriel (2005) speaks of a learning shock in terms of returning to learning, and note that learning in a reflexive medium entails undoing earlier learning and generates very powerful emotions as more experienced professionals experience feelings of being bombarded with unexpected and conflicting expectations.

A culture of not writing. The findings of this study revealed that expressive writing was not the norm or something many of the participants were familiar with, thus the new culture of reflective writing initially restricted the learning dynamic within the CoPs. Furthermore it was noted that there was an embedded culture or norm of not documenting wholly in nursing records, due to fear of legal implications fuelled by lack of confidence in HIV nursing practices.

Otienoh (2009) noted that journal writing as an approach to reflective practice is often challenged by the individual's level of comfort with expressing self in the tangible medium of writing. Farrell (2008), Davidson (2005) and Thorpe (2004) noted that due to the elusive nature of reflection, the interactive and emotive writing that needs to be employed in reflective journal writing often serves as a barrier to sustaining this form of reflective practice among many individuals, even in the secondary school teachers they cited in their research. Thorpe (2004), in

particular, suggests that reflective writing requires a trusting relationship if individual thoughts, feelings and experiences are to be honestly reflected.

It was noted in the current study that nurses displayed reluctance to writing, which was fuelled by the poor documentation practices of nurses. This finding is supported by Ehlers (2006), who comments that in the context of HIV/Aids, many health care professionals experience insecurity in their nursing practice due to limited knowledge, causing uneasiness and doubt in their nursing care actions. Ngidi (2010), assessing the effects of nurses' insecurities on their documentation practices, reported that from a random sample of PMTCT records in a district hospital in KwaZulu-Natal, none of the sampled records had a complete recording of all PMTCT activities. This author further noted that nurses' reluctance in documenting the core activities of PMTCT, such as administering ARVs or assessing the clients CD4 levels, was attributed to confusion among health care workers regarding correct PMTCT practices to follow.

5.7. CONSEQUENCES OF THE ESTABLSIHED CoPs

5.7.1 Intended Outcomes

In this study, the intended outcomes were: (i) information seeking and utilization skills; and (b) professional development.

Information seeking and utilization skills. This study revealed that participants developed an almost innate culture of inquiry, drawing from the principles of being critically reflective and engaging on evidence informed practice. Information retrieval and application skills allowed for a more informed practice in HIV/Aids related care and enhanced the participants' self confidence to generate workable solutions to practice related challenges.

Matthew-Maich, Ploeg, Jack and Dobbins (2010) state that evidence and information utilization is characteristic of a transformed way of learning and practice and further note that a practitioner's ability to inform clinical judgments based of self directed ways of gathering relevant and appropriate information and applying it effectively to the clinical problem is a hallmark of transformative learning strategies of critical reflection and experiential learning.

This study also revealed that despite the resource constrained context of the study settings in terms of access to current and updated libraries, the transformed way of nursing brought about by the learning trajectory of being critically reflective, allowed participants to use new information seeking skills in sourcing information from alternative places such as the internet. Fetterman (2001), in an evaluation of CoPs, notes that the empowered and transformed nature of the participant within such learning spaces is indicated in a drive to find solutions to situations that would otherwise not have been addressed. This aptly describes the action strategies evident

among the participants of this study in terms of finding an alternative to the outdated institutional libraries.

Professional development. Various outcomes became evident in the findings with respect to the professional development of the participants. As a result of the learning activities within the CoPs, it became apparent that the nursing practitioners had developed leadership qualities, expanded and transformed their professional nursing roles and effected change in terms of their HIV/Aids nursing practice. They also became involved in driving initiatives of diffusing information they had learnt from the learning space of the CoPs. Tolson, McAloon, Hotchkiss and Schofield (2005) and McCormack, Kitson, Harvey, et al. (2002), exploring the practice of CoPs among nurses, noted that practice development is achieved through the development of a common desire to share skills and knowledge in an effort to transform care and influence practice change.

Influencing change through inter-collaborative relations was another indicator of professional development that emerged from the study findings. It was noted in the findings that being transformed in a new way of nursing underpinned by critical reflection and evidence informed practice, the participants felt it was their responsibility to disseminate practice information in an attempt to improve the quality of HIV/Aids nursing care and thus, deliberately, embarked on a process of interdepartmental networking.

According to Tonuma and Winbolt (2000) and DeBourgh (2001), a learning culture of nursing brought about by the creation of evidence based learning organizations impacts on the organization in terms of efforts to change old practice to newer evidence based practices. DeBourgh (2001), exploring how nurses champion evidence based practice, state that role

modeling and active stewarding for improved nursing practice outcomes are indicators of change and professional advancement among nurses. Furthermore, Lamont, Walker and Brunero (2009) note that leadership attributes as noted in this current study, or participants being transformed and creating an awareness of better or improved working practices, can be defined as "shared governance", whereby a leadership role of a few workers translate into integration and collaboration of the larger organization in terms of decision making and awareness of improvement activities that can be aligned to job satisfaction or improving organizational outcomes, as was the case in this current study.

5.7.2 Unintended Outcomes

Socially conscious and responsive nurse practitioners. The transformed way of nursing brought on by critical reflective practice and the supportive learning space of the CoPs created a sense of social awareness within the participants of their role in terms of providing holistic care to patients by being more sensitive to their needs. Noted by Kuokkanen and Leino-Kilpi (2000), developing a positive professional identity which liberates self in being culturally and socially aware of injustices is empowered through positive group esteem in CoPs. This is supported by Akella (2008), who found that empowerment in organizational learning leads to greater governance in the organization as workers (in this case the nurse-practitioners) are greatly aware and sensitized to social issues affecting professional outcomes, thus aligning practice towards the socially relevant needs of its users or, in this case, the patients.

Another dynamic which emerged in terms social awareness was that participants became more conscious of patients' needs and rights, and thus aligned their patient care towards policies and directives so that equitable, fair and relevant treatment and care related to HIV/Aids nursing care

could be achieved. Participants became involved in inter-collaborative partnerships that would improve the quality of care that was provided to the patients. This aspect of examining and changing the status quo of the institution such that it is aligned to revenant and current care is noted in discourse relating to social justice and nursing. Wade (2001) maintains that addressing social justice in nursing allows practitioners to engage with prevailing social problems, all the time seeking appropriate solutions aligned to empowering the user of care. Taylor (2008) addressing transformational learning and the dynamics of critical reflection on evoking a conscious individual that is transformed in self practice as well as a consciousness to social justice, draws on the work of Roberts (2009) and notes that once nurses recognize the dynamics of oppression that underpin patient care, liberating actions such as engaging with other nurses to develop consensus on priorities in nursing practice is a hallmark of transformed socially aware nursing practice.

5.8. CONCLUSION

In this chapter the key findings relating to the process of how the CoP among HIV/Aids nurse practitioners was established. Evident from this discussion was that the process is collaborative and garners the active participation of all the nurse practitioners in the group. Furthermore the findings of the established CoP from this study can be labeled as a best practice and knowledge stewarding learning group in relation to Wenger's (1998) classification of the various types of CoPs. The process of critical reflection was a mechanism which supported experiential reflective learning and inquiry among the nurse practitioners and this led to a transformed way of nursing. This was characterised by the utilization of evidence to inform practice, active engagement in

knowledge generation and application and the higher order cognitive skills such as critical clinical reasoning which was applied meaningfully in nursing practice.

CHAPTER 6

A MIDDLE RANGE THEORY OF COMMUNITIES OF PRACTICE FOR HIV/AIDS NURSE PRACTITIONERS

6.1. INTRODUCTION

The purpose of this study was to analyze the process of establishing Communities of Practice (CoPs) and the process of critical reflective practice among HIV/Aids nurse practitioners in KwaZulu-Natal. Aligned to Chinn and Jacobs (1978) who asserted that nursing theories aim to predict, describe and explain the studied phenomenon in nursing, this study also aimed to generate a middle range theory. Explained by Alligood (2010), theories are theoretical works in the structure of nursing knowledge, and are less abstract than models, are more prescriptive and are usually named for the outcome they propose.

Strauss and Corbin (1990) affirm that through the axial and selective coding process of data analysis theoretically relevant concepts form the basis of the theory that emerges from the grounded theory study. Further explained by Strauss and Corbin (1990) and Babchuk (1997) the process of abstraction of the identified concepts and categories into meaningful relationships refines the phenomenon of interest, thus generating a more concrete theory (i.e. a middle range theory), rather than a loosely abstract theory generated from the corpus of data for that particular study. Fawcett (1999) also supports this, arguing that the product of every nursing study represents a middle-range theory. Thus, congruent with the chosen research methodology of this study, that being grounded theory, a middle range theory describing the establishment of Communities of Practice of critically reflective HIV/Aids nurse practitioners will be presented in this chapter. The theoretically relevant concepts which were identified in chapter four and

discussed in terms of the literature presented in chapter five have been integrated and inter-related to form the basis of the grounded theory discussed in this current chapter. The core category or the storyline around which the results of the study centered was Communities of Practice for HIV/Aids nurse practitioners. The story line or core category, as described by Corbin (1990) is congruent with Chinn and Kramer's (2008) description of the six components that are necessary for developing a nursing theory. These include: (i) the goal(s) of the theory, which specifies the context and situation within which the theory applies; (ii) the concepts, which are described as terms, words or symbolic representations of reality. These concepts serve as the building blocks for the emergent theory; (iii) a definition of the concepts to clarify the meaning of concepts within the theory; (iv) the relationships, which describe how concepts are linked to structure the theory; (v) the structure of the theory, which gives the overall form of the conceptual and theoretical relationships; and (vi) assumptions of the theoretical concepts.

Fawcett (2005), states that each middle range theory has its foundation in one paradigmatic perspective, and that the function of the paradigm is to communicate what the researcher believes to be true in relation to the phenomena of interest and the discipline of nursing. In the context of this study, constructivism education was deemed to be the central truth in understanding the multiple realities and perspectives of HIV/Aids related nursing experiences and practices that were fostered through critical reflective practice within the shared space of the CoPs. A constructivist education paradigm also underpinned the nature in which meaning was constructed from the CoP into functional knowledge that could be meaningfully applied to HIV/Aids related nursing practice. Discussed in Fawcett (2005), a middle range theory classification can be described as a taxonomy, which can be descriptive, predictive, or explanatory. Fawcett (2005) explains that descriptive middle range theories are generated from

descriptive research, which may be qualitative or quantitative in nature. Explanatory middle range theories go beyond merely describing a phenomenon by showing interrelationships between concepts and providing reasons why concepts relate to one another and predictive middle range theories move beyond the descriptive and explanatory theories by explaining the precise relations between concepts and addressing how changes in a phenomenon occur. Based on the Straussian version of grounded theory which uses open, axial and selective coding, and embedded within the paradigm model of Strauss and Corbin (1990), this study findings, is congruent with an explanatory middle range theory. Also aligned to Strauss and Corbin (1990), state that the theory generated from grounded theory may be a grand theory or a substantive theory. A grand theory evolves through exploring the phenomenon in multiple and varied contexts, while a substantive theory evolves from a particular situational context. This middle range theory was thus a substantive theory as it evolved from a situational context of HIV/Aids nursing within the discipline of maternal and child health. Despite being conducted in two study settings, urban and rural, the nature of data collection and analysis of the constant comparative method ensured that the emergent concepts were compared across both sites. This middle range explanatory theory is an action oriented model as changes were depicted in the processes of the developing CoPs and critical reflective practices of the study participants during the six to seven months of data collection. The middle range theory of this study will also be illustrated as a conceptual model. This is supported by Risjord (2010) who states that theories and conceptual models are related, and further noted by Riehl and Roy (1974: 26) who asserts that *a model is a schematic depiction of a theory"*.

6.2. GOALS OF THE COP THEORY

This CoP theory aims to provide a framework to guide and explain the process of establishing CoPs within nursing and midwifery disciplines in resource constrained settings. This theory has multiple goals, which include:

(i) To provide a framework that can be used to foster professional development and guide practitioners with an interest in evidence informed practice;

(ii) To provide guidelines that can be used in the establishment of a supported network learning space through critical reflective skills. The use of critical reflective skills can be used as a mechanisim to support nursing challenges in a fluid and dynamically changing practice context

(iii) To explain a process that can be used by different disciplines in developing their specific CoPs, and

(iv) To provide a tool that cab be useful in assisting nurse practitioners to generate context-driven and practice specific knowledge to achieve practice goals and functions in a dynamic and knowledge driven context such as HIV/Aids.

6.3. THE CONCEPTS AND DEFINITIONS OF THE COP THEORY

Chinn and Kramer (2008) explain that identifying and defining theoretically relevant concepts of the theory form the basic fabric and structure of a theory; and that identifying the relevant concepts provides dimension and structure to the theory. These authors note that the words or concepts in a theory can be utilized in a relatively associative definition or in a relatively specific definition. A relatively specific way of defining terms means that the concrete or specific

meaning of the term is used. The authors note that in generating micro-theories the relatively specific way of defining concepts are appropriate. A relatively associative way of defining terms allows for the abstract meaning of the concept to be used, and explained by Chinn and Kramer (2008), is a most useful way of defining concepts for a middle range theory. In this theory, the concepts were defined in a relatively associative manner, so as to bring an understanding of how CoPs of HIV/Aids nurse practitioners are conceptualized in this study.

The core concept in this middle range theory is Communities of Practice (CoP) for HIV/Aids nurse practitioners. Directly linked to the core concept are major concepts which included; (i) Context; (ii) Group Formation; (iii) CoP Establishment Process; (iv) Fully Functional CoP; (v)Outcomes; (vi) Sustainability and Continuity. Linked to these major concepts are subconcepts which will be discussed indepth under each concept. See Figure 7.

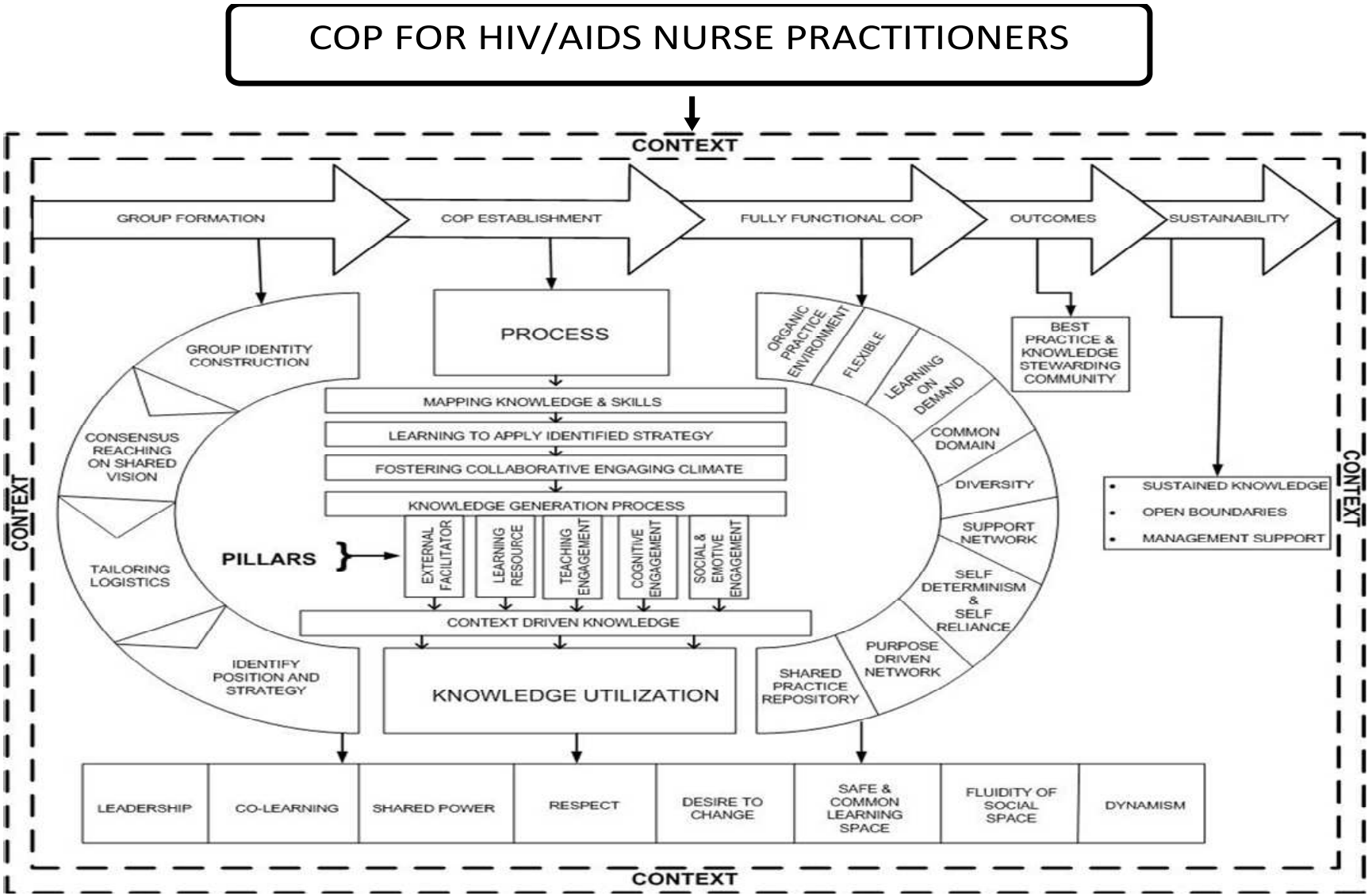


Figure 7: A Conceptual Model for Communities of Practice for HIV/AIDS Nurse Practioners

6.3.1 Conceptualization of the core concept

In this study, the core concept, Communities of Practice (CoP) for HIV/Aids nurse practitioners, is viewed as taking place within a set context and is process and product driven. The process depicting both the formation of a CoP and depiciting the development of HIV/Aids nurse practitioners in decoming critical reflective practitioners. The product aspect refers to the end result of the social interaction and process of constructing and reconstructing HIV/Aids related nursing practice. The CoPs for HIV/Aids nurse practitioners in the context of this model, is defined in terms of what is viewed as a fully functional CoP, and is made formed of the following subconcepts; (i) organic practice environments; (ii) space that promotes flexibility; (iii) providing learning on demand; (iv) a common domain; (v) incorporating diversity; (vi) a support network; (vii) promoting self determinism and self reliance; (viii) a purpose driven network; and (ix) a shared practice repository. These are subconcepts under the major concept fully functional CoP, as reflected in Figure 7.

The CoP is an organic practice environment. In this theory, the CoP is defined as an organic practice network that occurs naturally with the guidance of the facilitator and is directed by the goals and common area of interest(s) of the group members. The face to face contact and regular meetings of the group create a climate where members get to know each other and, through sustained interaction, participants share ideas and the direction of the group's activities occurs naturally.. The conversational mode of reflective discourse, which characterizes the group discussions, also creates a conducive climate for issues or topics related to the common area of interest to occur or be identified spontaneously. This allows for the practice and learning activities of the CoP to stay current and relevant to the group members' needs. In the context of this study, the common area of interest was nursing management of HIV/Aids in the discipline of

maternal and child health, and the open dialogues of critical reflective discourses allowed key learning issues related to the common area of interest to occur naturally. Activities to resolve practice learning issues related to the management of HIV/Aids organically shaped the groups' focus, such as interdepartmental collaboration, which emerged as a need to address delays in HIV/Aids clinical practice related to the turnaround time for CD4 cell count specimens from the institutional laboratory. CoPs stay current and evolve naturally in response to the practice and learning needs of the group.

CoP as a space that promotes flexibility in learning. Flexibility in this theory indicates that there is no one rigid way of learning and doing things, but variations have to be accommodated for a functional and productive group.This is critical for the success or effectiveness of a group that is formed of people from diverse backgrounds and with diverse preferences. The groups in this study displayed flexibility in terms of their use of language during group interaction and critical reflective discourse, their preferences in reflecting either verbally or in writing, as some members were not familiar with documenting their reflections on paper. In this study, flexibility of language was characterized by code switching, which was characterised by the use of both English or isiZulu, which fosters a deeper and more open form of sharing and engagement through familiarity among the members of the CoP in terms of the shared nuances and hidden meaning of shared experiences embedded within language. Flexibility with regards to the language and mode of reflection also fosters ownership of the learning process and activities within the CoP.

A CoP is a space for learning on demand: In this theory, learning on demand is seen as an extension of the continual process of learning. Learning on demand occurs when the individual

members identify learning gaps in knowledge and skills related to the common interest area of the CoP; which is identified through self assessment triggered by reflection in and on action. Learning on demand is about addressing specific learning needs at a specific time in practice, thus it is a mechanism that equips the individual members with relevant and appropriate knowledge and skills related to authentic real life learning needs related to the common interest of the CoP.

In the context of this study, the common interest area was HIV/Aids nursing management in the discipline of maternal and child health. The CoP is a space that fosters learning on demand through the exchange of authentic real life practice specific knowledge and skills and, engaging with the shared practice repository of evidence informed tools, reflective experiences and clinical stories, individual members are able to co-construct meaning that is relevant to their learning and practice needs. Thus, learning on demand in this theory is about tailored learning and the shared repository of practice based information which is used on a needs basis to suit the learning needs of the individual members. In the context of this study, learning on demand was facilitated through the shared reflective discourse in the CoPs, where learning needs were resolved and tailored to the practice of HIV/Aids nursing management. Shared learning material such as information booklets on ARVs or related HIV/Aids topics and shared reflective experiences were applied to the specific needs of the individual members. The CoP communal learning space is thus used as a knowledge base and a point of reference to assist the specific learning needs of individual members at any given point in their process of professional and personal development in terms of HIV/Aids nursing management.

A CoP is tied by a common domain: A CoP is conceptualized as a common domain, which is characterized by the commonly shared issue(s) among all group members that tie and unify the group as one. In this theory, the common domain is related to the practice issues which identify the group and in the context of this study, the shared challenges of HIV/Aids nursing care in a dynamic public health context was viewed as the common domain. This common domain is related to the shared purpose and vision of the group, which is discussed in sections below.

A Cop as a space that incorporates diversity: Although a CoP is commonly characterized by a homogenous group, there is room for diversity within the group. This was evident in this study where a CoP was formed of a homogenous group of professional nurses which were hetrogenous in terms of their training and qualifications. In South Africa,there are three categories of registered nurses. One category is a two year qualification after completing a bridging programme, but there is no midwifery qualification and nurses have to take an additional year in midwifery. The second category are those that qualify as registered nurses and midwives after completing four years of training, and the third category are nurses who have additional qualifications at post graduate level, such as advanced midwifery. The professional nurses serving in the maternal and child health units who were members of the CoPs in this study were drawn from all three categories. This diversity in the educational background and training enhanced the learning process as some nurse practitioners were more skilled with progressive education methodologies, such as self directed learning or computer literacy, and this supported other members of the CoPs in terms of discovery learning and self-directed learning aligned to the experiential nature of critical reflection.

A CoP as a support network: In this theory, the CoP is seen as a non-judgmental network where honest uninhibited interaction occurs among the nurse practitioners. This environment allows for group members to discuss practice issues that may have been incorrectly performed or may have yielded poor clinical outcomes. The supportive structure of the CoP is a space where some members, guided by the shared practice repository and reflective practice for future management, may advise others on how certain clinical issues could be handled better,. In the context of this study, the supportive space of the CoP fostered new experimental learning of new ways of nursing practice in the context of HIV/Aids. New learning and techniques of nursing practice were encouraged and the supportive space of the CoP also created a safe space where previous stereotypes of emotionally charged issues related to HIV/Aids nursing could be freely expressed. Members openly shared their own experiences of being HIV positive or having family members living with HIV/Aids and openly discussed stigmatizing behaviour which is directed at people living with HIV/Aids, using the learning resources of the CoP to better inform future practice.

CoP is a space that promotes self determinism and self reliance: The CoP in this theory is seen as a tool which promotes self-determinism and self-reliance to individual members of the group. The shared discourses and active social engagement of learning from all members networking collaboratively contribute to self-determinism and self-reliance and empower the members of the group with skills to seek, acquire and use information. In the context of this study, the nurse practitioners who participated in the CoPs became more skilled in using practice based information, such as the latest and current HIV/Aids related policies on maternal and child health, and became more capable in informing patients on treatment and care strategies. The

CoPs, thus, equipped the nurse practitioners with confidence to take ownership of their role as care providers in the sometimes fragmented context of HIV/Aids nursing.

The CoP is a purpose driven network: In this theory, the CoP is viewed as a purpose driven network because group members come together with a common goal and vision to achieve a new way of nursing in the context of HIV/Aids. This serves as a binding agreement among the group members. This common purpose sets boundaries and serves as a mechanism and a strategy to direct the group activities which is aligned to the common purpose of the group. In the context of this study, the common purpose was to develop HIV/Aids nurse practitioners as critical reflective practitioners to improve HIV/Aids nursing practice outcomes. The common purpose of the CoP, which drives the purpose of the group, is embedded within active participation and engagement in activities to achieve the vision and common goal.

A shared practice repository: A fully functional CoP is characterised by a shared practice repository. In this theory, a shared practice repository refers to material which is shared in the form of reflective experiences, shared clinical stories and practice related information, which may include practice related literature such as information brochures, research related readings and policy guidelines of nursing practice protocols. Information and good practice outcomes that may be yielded through trial and error and through experiential learning also form part of the shared practice repository. Practice related information is brought into the CoP through shared reflective discourse and active engagement in knowledge generation and is co-created through the process of learning in the shared learning space of the CoP. In the context of this study, the shared practice repository was in the form of a resource file. This was a collection of relevant and mutually agreed on HIV/Aids related information, which included informational pamphlets

on the various ARV treatments, a collection of relevant policy documents and nursing practice protocols, and HIV/Aids related literature and readings. The shared practice repository was also the inherent information stored in the members of the group. This was accessed through peer engagement and reflective dialogues which characterized the learning process in the CoP. Engaging with the shared practice repository fosters ongoing evidence informed practice and also sustains the engagement of the group members in terms of knowledge generation activities. This form of shared practice repository, especially in terms of the hard copies of learning material and resources is critical in under-resourced settings where people have limited access to resources including electronic resources.

In summary, a shared common domain and striving towards a common purpose, which in this study was improving HIV/Aids nursing management in the discipline of maternal and child health, focused the groups' activities and learning, and the strategy of critical reflection was used as a mechanism to achieve the purpose of the CoP. A CoP for HIV/Aids nurse practitioners, therefore, is characterized as a space and a mechanism that promotes the process and product orientation of shared learning. The CoP is conceptualized as a flexible and organic practice environment which promotes learning on demand through mutual engagement in a support network. Diversity in the qualifications of the nurse practitioners enhances the learning experiences through mutual support and the sharing of various skills related to the common purpose of the CoP. Learning in the shared communal space of the CoP leads to the creation of a shared practice repository and fosters ongoing learning and evidence informed practice among the nurse practitioners. The CoP is also a space which promotes self determinism and self reliance among the nurse practitioners to utilize the generated knowledge meaningfully into the

nursing practice and better equips and empowers the nurses to take ownership of HIV/Aids nursing management.

6.3.2 Conceptualization of the major concepts related to CoPs for HIV/Aids nurse practitioners

In this section the major concepts and their related subconcepts will be discussed.

6.3.2.1 Context: According to this theory and the depicted model illustrated in Figure 7, establishing a CoP is influenced by what is taking place within the practitioner's context. For example, this study included a complex profile of patients suffering from HIV/Aids who were consumer driven in the sense that they came to the nurse practitioners with preconceived ideas of the nature of treatment they required because their health seeking behaviour had been influenced by the media. Furthermore, the changing nature of the nursing practice in the context of HIV/Aids as a result of the numerous changes to policy frameworks and guidelines used to manage HIV/Aids placed an added pressure on the nurse practitioners. In this study, nurse practitioners faced challenges such as being inadequately prepared for the changing role due to outdated and inadequate training; lack of support from the institutional management to cope with the demands of working in the dynamic context of HIV/Aids; feeling disempowered to cope with a more informed society in terms of the patient profile; and experiencing a loss of professional identity in light of the emotional and workplace distress associated with nursing in the context of HIV/Aids.

6.3.2.2 Group Formation: Group formation emerged as one of the major concepts, with four sub-concepts. According to this CoP theory, the first phase in establishing a CoP is group formation and this is characterized by: (i) construction of a group identity; (ii) reaching

consensus on a shared vision; (iii) tailoring the logistics; and (iv) identifying a position and a strategy.

Construction of a group identity*:* According to this theory, a common group identity is formed at the beginning of the process of establishing a CoP. This is an important step as it may be the first time when the collective group comes together. Establishing a group identity is what unifies the group and becomes the central thread of the CoP. It can also be regarded as the step which identifies the commonality or the like-mindedness among the group members and it assists in delineating the scope or the boundaries of the group. The steps in establishing a group identity involve:

a) Constructing a group identity begins by bringing the group together. This can be done by having an informal meeting where all members with a similar interest can come together. It can also occur naturally, where members who are familiar with each other recognize the similar challenges or practice issues that are common among them and thus decide to form a group on their own. In the context of this study, the group was deliberately brought together in the form of a focus group discussion.The use of an external facilitator,;in this case the researcher; steered the initial group activities such that the nurse practitioners realized their shared interests and common challenges which fed into the group identity.

b) After the group is brought together, the aim is to elicit the main purpose that unifies the group. In this study, through shared discussions of experiences, challenges and nursing practices related to HIV/Aids, a number of ideas emerged as important issues, such as having more HIV/Aids information or training sessions, finding mechanisms to support the nurses in terms of the

emotional burden of working in the context of HIV/Aids and dealing with the complex and dynamic nature of the policy documents and nursing policies.

c) After establishing the common interest areas, the group works through delineating their scope and establishing a boundary in terms of the group and its activities. This may entail looking at the issues which were identified through the shared discussion around the common purpose of the group and assessing which are the most meaningful and important for all members, which are most aligned to the institution's vision or which can best benefit the institution. This step can also be regarded as establishing the focus of the group. In this study, the group members identified that it was important to address the nurse practitioners' outdated knowledge and inadequate training as it was noted that this fuelled some of the other challenges experienced by the nurses, such as feeling disempowered to deal with the complex patient profile.

Reaching consensus on a shared vision: For the sustainability of the CoP, consensus on the vision of the group is vital. In this theory, reaching consensus is an interplay of mutual collaboration and power of all members. It is important that every member's voice is factored into the vision of the CoP and that each member is involved in the decision making process towards the shared vision so that issues of power and dominance are not nurtured in the sustained interaction of the group. Further to this, it is important that each member is involved in determining the vision so that it appeals to everyone and continues to attract them to the group so that they can grow and develop. In this study, the researcher, who served as the facilitator of the process, created a space where each member of the group had an opportunity to voice an opinion or comment on how they believed the common purpose could be refined into the vision of the group.

Embedded in the process of establishing the shared vision, the facilitator has to steer the group in visualizing the long term effectiveness of their shared vision and to factor in various strategies that may be used to achieve the vision of the group. In this study, it was mutually agreed that the vision of the CoP would be aligned to the changing nature of policy documents and nursing practice protocols which challenged the nurse practitioners and their outdated and inadequate training. It was thus agreed that the vision of the group was to work towards developing a new way of nursing that would improve nursing practice related to HIV/Aids management in the discipline of maternal and child health and which would also assist in solving every day clinical challenges in terms of HIV/Aids nursing. Thus, the vision of this CoP was to generate and steward knowledge related to HIV/Aids nursing in the discipline of maternal and child health.

Tailoring the logistics: Following the collaborative thread in terms of establishing a shared vision, tailoring the logistics of the CoP should also be a joint initiative among key stakeholders. Involving the institutional management as well as the group members in this early phase of group formation is important as it creates a climate of "join-in" into the idea and vision of the group, and encourages institutional support, which contributes towards the sustainability of the group. All the group members become involved in structuring the CoP in terms of the venue, time and frequency of the group meetings. This logistical or operational plan also creates a space for other core issues to be interrogated, such as establishing group norms, group rules and possible roles and responsibilities of the group members. This is an important aspect as it creates an opportunity for every member to be involved in planning the structure for the CoP and to take ownership and responsibility of group activities.

In this study, the logistical plan was jointly negotiated with the nursing service managers and the group members. This created a sense of ownership and belonging to a space that was no longer simply an idea, but was becoming more tangible in terms of a dedicated space that could be labeled as the HIV/Aids nurse practitioners' space. Further to this, each member of the group contributed to the establishment of group norms and rules and a confidentiality pledge was one of the mechanisms used to create a trustworthy space which fostered confidentiality and open participation. Rules were also agreed upon in terms of group facilitation, scribing and time-keeping during the operational planning of the group's activities.

Identifying a position and a strategy. In this theory, identifying a position and strategy is the process of focusing the group's activities towards achieving their unified goal. After establishing the shared vision of the group, a clear position and strategy aligned to this vision is identified. In this study, the shared vision of the group was knowledge stewarding of HIV/Aids related information and the position was to create a new way of nursing to improve nursing care and management in terms of HIV/Aids. Critical reflective practice was identified as the strategy or the mechanism that would drive the common position and ultimately lend in achieving the common goal of the group. In this study, it was recognized that the process of facilitating critical reflection among the nurse practitioners required a facilitator or outsider to guide the nurse practitioners in capacity building in the process of facilitating their transition from novices to critically reflective practitioners. The researcher assumed the role of facilitator and guided the nurses in moving from a novice state to a transformed state in critical reflective practice. The use of critical reflective practice as a strategy coincided with the envisioned focus of the CoP of stewarding HIV/Aids knowledge, and the rationale for choosing critical reflective practice as the main strategy in this CoP was related to its ability to empower the nurse practitioners in

discovering a transformed way of nursing and also address the nature of nursing in a resource constrained setting such as South Africa, where access to information and training is not always readily available, health care facilities are understaffed and nurse practitioners have to cope with the diverse and dynamic changes of HIV/Aids nursing care.

6.3.2.3. CoP establishment process: According to this theory, the process of establishing a CoP for HIV/Aids nurse practitioners commences after the group of nurses have come together and identified a unified and common vision and established a focused strategy during the phase of group formation. The process of establishing a CoP is made up of four steps, namely (i) mapping knowledge and skills; (ii) learning to apply the identified strategy; (iii) fostering a collaborative engaging climate; and (iv) knowledge generation. In this theory knowledge generation was hinged on four pillars namely (a) learning resources; (b) teaching engagement; (c) cognitive engagement; (d) social and emotive engagement. These emerged as sub-concepts under the major concept of CoP establishment process. All of these steps lead to the development of context driven and specific knowledge which is utilized to achieve the focus of the group, namely achieving a new way of nursing and knowledge stewarding in the area of HIV/Aids nursing in maternal and child health.

Mapping knowledge and skills. In this theory, knowledge and skills are mapped to assess the knowledge base of all members in terms of the shared purpose. Once the group has been formed and mutually identified their purpose, the facilitator guides the members of the group to assess the knowledge and skills they possess in terms of the identified strategy of critical reflective practice. This is a way of establishing the strengths of expertise among the members in terms of critical reflective practice and HIV/Aids nursing knowledge as well as identifying their

knowledge gaps. It is also a way of fostering knowledge transfer and open sharing by establishing the baseline of all members. Further to this, mapping knowledge needs also creates an opportunity for expertise on certain knowledge and practice areas to be acknowledged, which adds to the sustained morale of the group in terms of using existing skills and strengths of the group to build on and develop into critical reflective practice. It is also a means of acknowledging the diversity among the group members in terms of their varied qualifications and clinical experience, which contributes to the learning environment. Lastly, it assists in creating a shared practice repository where existing skills, knowledge and learnt lessons from the knowledge base. In this study, mapping the knowledge needs and skills allowed the members to identify what they would need to progress in the process of critical reflection. It was established that none of the members of the group had previous knowledge or experience with critical reflective practice and so the starting point for all of them was to learn how to reflect from an elementary level as all the members were novices with this concept.

Learning to apply the identified strategy. In this theory, applying the strategy of critical reflection involves mentoring, where the facilitator guides the process of reflective practice among the members of the group. Building on the existing knowledge base of the members, the concept of reflective practice is unpacked and the carried meanings from the members are deconstructed and reconstructed to create a succinct and mutually acceptable idea of the concept of reflective practice. In this study, the nurse practitioners initially related the concept reflection with activities such as “day-dreaming” and “meditating”. By means of facilitated discussions, the concept reflection was then rediscovered to mean “looking back on experiences”. Further to this, learning to apply the strategy of critical reflection in the context of this theory involves learning to express self through the medium of reflective discourse and reflective writing. This is an

essential component in the process of developing a culture of critical reflective practice and fostering reflection on action in terms of the sustained critical reflective practice among the practitioners. In this study, guided by the facilitator, participants were introduced to the art of reflection, the use of role play in the group meetings and paper based reflective exercises. The practitioners were shown how to deliberately draw from a clinical experience, reflect on it, recognize what the experience might encompass and learn from it for future action.

During this step of learning to apply identified strategy to practice, other learning needs or knowledge gaps of the members might also be unearthed. In this study, this period of learning to be reflective practitioners illuminated the knowledge gap of reflective writing and it became apparent that members were not accustomed to a culture of documenting experiences, especially the affective aspects of such experiences. As they found writing a barrier, the practitioners were encouraged to use the reflective discourse sessions and verbally relate to an experience as the core aim in the strategy was to elicit the experiences from the participants to encourage reflective and inquiry based thinking on these experiences to foster a new way of learning and nursing. It is important that the role of the facilitator is only to guide the learning process of using critical reflective skills in practice. The facilitator should link the members' experiences with clinical practice to cultivate an inquiry driven way of thinking that links the information learnt from the shared space of the CoP to the clinical context of HIV/Aids nursing. In this study, the facilitator guided this process by using probing questions and applying progressive education principles. The facilitator allowed participants to seek the answers to some of the questions relating to learning gaps they had identified during their reflective practices, which fostered ownership and the development of self-directed and discovery learning.

Fostering a collaborative engaging climate: In this model, fostering a collaborative and engaging climate is seen as a source of group coherence and refers to activities which elicit open and transparent sharing of ideas. Facilitating collaborative engagement is a necessary attribute which creates the climate for knowledge exchange, and also feeds into the sustainability of the group. This is achieved as members create a cohesive working relationship wherein issues of power, dominance and dealing with conflicting issues are dealt with in a constructive manner. In this theory, various activities can enhance the group dynamics and foster collaborative engagement, such as members creating their own agenda for the group meetings, identifying learning issues or HIV/Aids related topics for discussion and rotating certain roles, such scribe, time-keeper, and person(s) responsible for responding to learning issues. In this study, the use of open reflective dialogue sessions created a conducive climate for the process of learning to be critically reflective practitioners and becoming more proficient in HIV/Aids nursing practice. Collaborative engagement was also achieved by virtue of the diverse characteristics of the group members as there was not only a variety of professional qualifications, but also a mix of senior and junior nurses. Although this created difficulties in the beginning in terms of fear of peer judgment and the power dominance which is related to the hierarchy of nursing positions, this was overcome by deliberately engaging the opinions and learning material of both junior and senior nurse practitioners, which increased their confidence and allowed every member to see the value of shared learning through mutual collaboration.

Knowledge generation: In this theory, knowledge generation was identified as one of the concepts that are central to the process of establishing a CoP. In this theory, knowledge generation occurs through situated learning, which means that the knowledge that is acquired is specific to the particular discipline. In this study, the situated learning occurred within a common

space of the maternal and child health department and shared learning was applied in the same context. In this theory, knowledge generation is characterized through (i) deconstructing and reconstructing text; (ii) mutual sense making; and (iii) open sharing of knowledge

Deconstructing and reconstructing text: The process of knowledge generation involves engaging with various forms of information which may be in the form of reflective experiences or text, such as literature related to HIV/Aids. Before this information is utilized it is unpacked to establish its relevance and to understand it better in relation the context where it will be applied, that is, the information is engaged with to make it more meaningful for the practitioners. Through a process of shared discussion among all members of the group, the information is broken down (deconstructed) into meaningful parts. Further to this, deconstructing and reconstructing the text also applies to the language of the information documents. Practice related information can sometimes be technically written, and the jargon of the text is also deconstructed collectively so that relevant information can be extrapolated from the text and used meaningfully in practice. In the context of this study, the PMTCT guideline for 2010 was considered a core document which underpinned the HIV/Aids nursing management and due to the various changes made to the policy was a source of confusion and uncertainty for the practitioners in terms of practice. The information that was presented in a technical way in the policy document was deconstructed and broken down into manageable parts so that members could reconstruct it in a way that was meaningful to them. It also gave participants more confidence in addressing such documents which are crucial in their nursing practice.

Mutual sense-making: Embedded within the process of deconstructing and reconstructing text is collaborative engagement, as all members come together in peer supported learning to make

sense and meaning of the shared information and assess how it can be applied to practice. In this theory, mutual sense making not only fosters a collaborative environment, but is also a mechanism for knowledge generation. The “engaging” element of mutual sense making in the process of knowledge generation is also a facilitative factor in demystifying the trust and power dynamics among the group members. Mutual sense making is a process whereby members of the group collectively factor new information into their existing store of nursing knowledge to discover a more effective, evidence informed way of nursing practice. In the context of this study, though the shared learning practices of reflective discourse, personal reflection and experiential learning new information was yielded which was used to reconstruct a new meaning to practice. The CoP space became a place where information sources were debated through active discussion and their relevance weighed into the nursing practice, which led to sense making and the creation of new practices for future action.

Open sharing of knowledge: In this theory, open sharing of knowledge is an element which contributes to knowledge generation and to creating a culture of ongoing learning among the nurse practitioners. Open sharing of knowledge is also a mechanism to boost the confidence of the practitioners in terms of stepping out of their previous culture of working in isolation and feeling disempowered in terms of practice related knowledge and skills. The CoP creates a communal learning space which encourages the active participation of all members. Having an opportunity to present new information, experiences and skills to other members fosters sustained interest in continually participating in the learning activities of the group as the value of each members contribution is recognized as contributing towards the common goal of the CoP. In the context of this study, group norms and rules of allowing each member to share an experience, information or reflective story contributed towards the open sharing of information.

Further to this, the role of the facilitator in creating a climate where learning needs are self-directed and explored by the individual members also contributes in terms of open sharing of learnt information and increases the confidence of the practitioner in taking ownership of her nursing practice. In this theory, open sharing of knowledge also lends to the exchange of methods that can be used to generate knowledge. The diverse characteristics of the members of the group means that different ways of seeking and using information are shared in conjunction with the sharing of the actual information in terms of learning resources brought to the group meeting. This interaction is useful as it promotes an exchange of learning skills among the group members, whereby members who are familiar with innovative learning skills or methods openly shares them in the learning environment of the CoP. In this study, skills such as information retrieval from the internet or from local resources such as the institutional library were openly shared when members presented their discipline specific information for group discussion or in response to learning issues from previous group meetings. This led to an awareness of such methods of knowledge acquisition among all members and thus facilitated the process of creating a culture of learning within the CoP of HIV/Aids nurses.

Pillars of knowledge generation: In this theory, the process of knowledge generation is embedded upon five pillars which hold the process together and contribute towards facilitating effective and meaningful knowledge generation of context and discipline specific knowledge. These pillars include: (i) the external facilitator; (ii) the learning resources; (iii) teaching engagement; (iv) cognitive engagement; and (v) social and emotive engagement.

*The external facilitator:*In this theory, the external facilitator is a critical component in facilitating knowledge generation.This person, who is often external to the members of the CoP,

in terms of work, profession and membership; serves as a resource-person and a guide. The external facilitator is critical in garnering the member's abilities to seek and utilize appropriate learning resources; appropriate to their knowledge needs and gaps. Furthermore; the role of the external facilitator is invaluable in terms of assisting members of the CoP to learn the skill of using reflective information and translating reflective discourse into meaningful learning episodes. The external facilitator is also responsible for assisting members of the CoP to seek and store information and such contribute towards the sustaibility of a knowledge generation and sharing network of the CoP.

In this study, the external facilitator who was the researcher; facilitated knowledge generation by steering the HIV/Aids nurse practitioners in utilizing appropriate learning resources such as HIV/Aids policies and protocols; into into information that informes practice. Furthermore, the external facilitator was instrumental in coaching the HIV/Aids nurse practitioners into moving from surface to deep learning by using reflective and experiential episodes of clinical practice into knowledge that can be used to inform and improve practice.

Learning resources: In this theory, knowledge generation is hinged on access to teaching and learning resources. This is regarded as an important tenant since effective and diverse knowledge generation is linked with the use of blended methods of learning and the use of various resources which may be accessed from different sources. This is regarded necessary as the challenge of working in a changing health care context requires practitioners to be relevant with their knowledge, which may include cognitive knowledge, skills and attitudes of the practitioners. The use of varied learning resources equips the practitioner with making sense of a phenomenon from multiple perspectives. Facilitating the use of varied learning resources creates an opportunity for

members of the group to access new ways of learning which they may not have been previously accustomed to.

In this study, the nurse practitioners adopted a new culture of using learning resources such as computers and libraries. Although they had always had access to these resources they had never used them due to lack of confidence in using them, interpreting the information and being unaccustomed to an inquiry focused way of nursing. Through the process of sharing expertise, nurse practitioners developed a new culture of blending reflective experiential learning with the use of knowledge accessed from various resources such as policy documents and research articles. Knowledge was also accessed by consulting experts in the clinical field, such as consulting a pharmacist on the side effects of certain ARVs. All of this contributed towards ongoing knowledge generation which is current, relevant and promotes evidence informed practice.

Teaching engagement: In this theory, teaching engagement is characterized by the facilitator's role in allowing the members of the group to regulate and to take ownership of their own learning. The facilitator, through problem posing and directing the members towards learning issues, guides them to learn skills and ways of mobilizing resources. This teaching presence assists members of the group to access their own inherent knowledge stores or transform tacit knowledge into knowledge that can be used in practice; or discover new knowledge which may be generated from experiences, reflections and from peer assisted learning in order to solve context specific problems. Teaching engagement in this theory also refers to teaching episodes that may be necessary to jumpstart the learning process of a certain skill or new learning methodology. In this study, teaching episodes were used to create uniformity in understanding

the concept of reflection, which was necessary so that the skill of critical reflection could be demonstrated through reflecting in and on their nursing practice so that meaningful learning experiences could be generated through reflective practice.

Cognitive engagement: In this theory, cognitive engagement refers to the process in which the members of the group perceive or encode new information that may come from various forms (e.g. experiences, physical resources, such as documents, or new skills that are being demonstrated or observed in the clinical space). This information is then processed through the activity of sense-making, which can be done individually through critical reflective practice or in the supported learning space of the CoP, and is then applied to appropriate nursing action that may change or transform HIV/Aids related nursing care. Activities related to cognitive engagement can include members' investments to the learning process and the effort they put into the preparation for the group meetings in terms of bringing in new resources to contribute to peer supported learning and to the shared practice repository. It can also be characterized by members' levels of engagement with the learning tasks related to the common purpose and strategy of the CoP. In this study, cognitive engagement was characterized by the nurse practitioners' desire to learn and discover more about HIV/Aids nursing topics and was demonstrated by their enthusiasm in seeking out relevant information to contribute to the shared learning resources, such as the resource file. It was also characterized by the nurse practitioners' level of engagement with critical reflection as a strategy to transform nursing practice. It was noted in this study that participants made use of high order cognitive thinking, such as the use of clinical reasoning and critical thinking, to improve the health outcomes of patients by changing the course of their treatment. Cognitive engagement in this study was also demonstrated by the nurse practitioners transferring their new found knowledge to other nurses through the use of

mentorship, where those participating in the CoPs were able to mentor other nurses in their clinical settings (i.e. their clinical wards or units).

Social and emotive engagement: In this theory, social and emotive engagements are interrelated and contribute to the "know how to be" aspect of knowledge generation. This is defined as the attitudes participants have in relation to learning, the phenomenon and the social interaction of open learning that are necessary to support constructive and meaningful knowledge generation. Social and emotive engagement, therefore, refers to each member's intrinsic drive and motivation towards the CoP and its shared purpose. It also refers to the level of trust and commitment that exists among the members to drive the agenda of the CoP.

In this study, trust and commitment were demonstrated by the nature of experiences that participants shared and their confidence in trying something that was new to them. Participating openly in the reflective process, they exposed their "true selves" by being honest about their feelings regarding the stigma and prejudice attached to HIV/Aids or their personal experiences of being affected by HIV/Aids, all of which contributed towards the sense of belonging in the group. Thus, knowledge generation was nurtured through open channels of communication without the fear of judgment. It was also demonstrated by the attitude changes that occurred through the process of critical reflection, wherein a new paradigm or world view related to HIV/Aids care was constructed through the interaction and social engagement in the CoP. This also contributed towards knowledge generation as a renewed perspective contributed in creating new ways of patient care and nursing practice in terms of HIV/Aids nursing.

Context specific knowledge: Through the process of knowledge generation, context and discipline specific knowledge is created. In this theory, the context specific knowledge is created

through the shared and open climate of learning promoted through the process of knowledge generation. It is within this context that learning in the CoP is said to be "situated" learning in a shared network. In the context of this theory, engaging with reflective practice fosters inquiry based practice, which motivates the nurse practitioners to adopt a new approach to nursing. In this study, the situated context was HIV/Aids nursing management in the discipline of maternal and child health. Information that can be meaningfully applied to practice to improve nursing outcomes and to further the agenda and vision of the CoP is created. In this study, various forms of context specific knowledge were created, such as inter-collaborative engagement, best practice guides and information sheets, that were used to increase an awareness of better evidence informed ways of nursing.

Knowledge utilization. In this theory, knowledge utilization refers to the process of how knowledge generated through the process of shared learning in the CoP facilitated by critical reflective practice is used in the nursing context of HIV/Aids and the discipline of maternal and child health. It can refer to individual members utilizing the generated knowledge in their own practice, as was demonstrated in this study wherein individual nurses, who had developed a deeper awareness of informed practices, made use of different approaches to nursing care to yield different outcomes, such as including aspects of the PMTCT policy in the health education given to patients so as to encourage a more informed infant feeding choice. Knowledge utilization can also be demonstrated in the changed attitudes of the nurse practitioners which resulted in changes in their nursing practice. In this study, changes in the nurse practitioners' attitudes towards people living with HIV/Aids led to new ways of nursing that were refocused to provide holistic care to the patients. In this theory, knowledge utilization can also refer to the way in which institutional changes are initiated through the renewed way of nursing cultivated

among the nurse practitioners. In this study, this was demonstrated through the inter-collaborative engagement which led to changes in practice, such as addressing delays in turnaround time for blood specimens.

Foundational attributes of establishing a CoP. Lastly, in this theory, the process of establishing a CoP for HIV/Aids nurse practitioners is underpinned by eight facilitative elements. These include: (i) leadership; (ii) co-learning; (iii) shared power; (iv) respect; (v) desire to change; (vi) safe and common learning space; (vii) fluidity of social space; and (viii) dynamism

Leadership: In this theory, leadership refers to the role of the facilitator. It is assumed that the creation of a CoP among nurse practitioners requires the deliberate socialization of like-minded nurses who share a common interest. This may require the facilitation of an outsider who is able to direct the group in taking ownership of the learning process and help them recognize that everyday problems can be solved and new ways of practice can be generated through the formation of a CoP. The facilitator's role also extends to maintaining group dynamics that foster a collaborative engaging climate. This is especially important in the group formation stage where power issues might interfere with group participation by all members. The facilitator is thus responsible for creating an encompassing environment where the views, ideas and experiences of all members are voiced so that commitment and group cohesion are fostered. The facilitator is also seen as a steward of leadership and should promote a core group of experts from the group of practitioners to form organically which will ensure the growth and sustainability of the CoP. The facilitator is thus responsible for encouraging self-development so that group members will not depend on the facilitator to lead and direct the group sessions. In this study, the researcher, who initially assumed the role of facilitator, played a role in directing and guiding the nurse

practitioners in the process of critical reflection. The researcher challenged the nurse practitioners cognitive engagement to foster the culture of reflective practice by problem posing in order for them to seek out solutions to some of the gaps in knowledge or learning needs they had identified. The facilitator also encouraged a more autonomous relationship among all members of the group by allowing the group members to decide on who would take the rotating roles of time keeper and scribe. This not only fostered the members' development in managing group dynamics, which was necessary for the sustainability of the CoP, but created a climate where natural leaders would emerge from the group of nurses.

Co-learning: In this theory, co-learning refers to learning by all and is an important attribute which links collaborative engagement and the creation of a shared culture of learning. Co-learning is fostered through the active participation of all members and occurs through deliberate socialization and involvement of members of the group in activities that may take them out of their comfort zone. This is an important strategy to use in a context where members have differing qualifications and professional ranks. In this theory, co-learning promotes a deeper and more committed level of engagement whereby members of the group regulate the climate of the learning experience through bringing innovative and varied learning experiences into the mutual space of the CoP. This engagement is a self regulating mechanism which keeps the group interested and motivated to learn within the CoP and among peers in the group. Although co-learning in the social space and among peers also has some negative aspects, these can be avoided through shared responsibilities and paired activities. In this study, members of the group who worked in the same unit or who were of the same professional rank tended to aggregate together during the formation period of the CoP. This had a negative impact on co-learning and knowledge generation as the mixing and sharing traits which are cardinal to the success of a CoP

were not occurring. This was overcome through peer and paired learning process engagement in which pairs from different wards or positions worked together on learning tasks, which promoted co-learning and teamwork.

Shared Power: Inter-related to the issue of co-learning, shared power refers to fostering a state of equilibrium within the group dynamics where strong personalities are contained from dominating the activities of the group, but where free spirited action is welcomed so that the opinions, ideas and expressions of all members are represented in the group. In this study, the use of group norms and rules that were established during the formation of the group were reiterated at each meeting. Furthermore, certain group customs or rituals which nurture inclusiveness became part of the routine and group sessions were not closed until every person's voice was heard through a shared piece, which could be a thought, expression, experience, reflective iteration or knowledge exchange. Power sharing is also promoted through shared tasks, such as every member having a chance to chair the CoP meeting or to take on any responsibility of the group. Such strategies encourage shared power, especially among a group of practitioners who may not have previously worked with each other.

Respect: In this theory of a CoP for HIV nurse practitioners, respect is regarded as an essential attribute in creating an open and nurturing medium to cultivate new ways of being and nursing through critical reflective practice. Respect is the subtle undertone which relates to co-learning and is a driver for promoting a collaborative engaging climate that is marked by active participation in knowledge generation and utilization through the shared strategy (which in the case of this study was critical reflection). A trusting climate, hinged on respect by all members of the CoP, is the cornerstone for knowledge generation and knowledge utilization. In such an

environment, participants feel comfortable in openly sharing of all types of experiences, especially those that may have not gone well and it is thus important for such sharing so that mistakes, incorrect practices or more effective ways of nursing can be established. Respect creates a climate where support and advice can be drawn from the peer support network of the practitioners and also enables experimental learning as there is no fear of peer judgment.

Desire to change: The common purpose/goal of the group is fuelled by the group's motivation attain the desired goal. In this study, the main goal was to transform the way of nursing and to create a space where new knowledge could be generated and used to solve problems and challenges related to HIV/Aids nursing. Steering the success of this vision is the members' desire, either personally or collectively, to bring some aspect of change to the phenomenon and the context within which it occurs. Establishing and sustaining the drive and desire to change motivates participants in terms of achieving this common goal and thus keep the members engaged in the process of knowledge generation towards the agreed goals. In this study, the driver or the reason related to the reason for change varied and this was due to the organic nature of the CoPs. It is thus also important that through facilitation and group sharing that the reasons which keep individuals driven at different stages in the life-cycle of the group are noted or made explicit. This is important so that individual driving forces or reasons are built into the group purpose or focus so that motivation is sustained and the individual is still considered part of the group in terms of her evolving needs and drivers. This was demonstrated in this study during the transformed state of critical reflection in the CoP life-cycle. As participants transformed in consciousness and behaviour in critical reflective practice, the focus of the CoP shifted from initially being focused on knowledge acquisition regarding HIV/Aids knowledge and skills, and development in critical reflective practice; to being focused on creating change through

knowledge stewarding and promoting best practice initiatives This need naturally evolved into a need and desire for diffusing evidence informed practice to the wider institutional community so as to effect change. It is thus important to recognize these changes as the driver of the "desire to change" so that it can be nurtured and refined into a focused goal that is achievable and that activities can be aligned towards attaining the goal.

Safe and common learning space: Intertwined with the aspects of respect and co-learning, the communal learning space should be a safe and common space. In this theory, safe refers to the undertones of trust, respect, confidentially, responsibility and honesty which should be promoted in the nature of sharing and in the group dynamics. This is considered important as it allows new learning to occur at personal and professional levels without any inhibitions. This is necessary for greater alignment towards learning new skills and competencies which can be experimented with and demonstrated among peers in the safe environment of the CoP. Further to this, a common space in this theory refers to the familiarity which is promoted through sharing of experiences, problems, insight and information that is tied by a common thread that is the discipline of HIV/Aids in terms of maternal and child health issues, as was the case in this study. By virtue of the fact that nurse practitioners come together with a common agenda or focus, there is an element of familiarity and while other characteristics of the individual members may lend to the diversity of the group, the underlying focus of the group ties the members together. Over time, through shared experiences and working towards a unified goal, diversity and differences in perspectives, education, experiences, to name a few, blend into the innovative tapestry of ideas and sharing which can optimally occur and lend to the organic and innovative flavour of the group. It is thus important to nurture diversity, as it builds onto the common drive of the group

and to maintain it, as it acts as a mechanism of preventing the group and its learning activities from stagnating, especially after the initial common purpose has been achieved.

Fluidity of social space: In this theory, fluidity of social space is aligned to the organic trait of a CoP, and is inter-related to the characteristic of a CoP promoting learning on demand. Fluidity refers to the migration of some members of the group in terms of engagement in the learning process and the individual needs. Some members migrate towards being part of the core expert group, as was demonstrated in this study, where a sub-group from within the urban group of HIV/Aids nurse practitioners naturally evolved into the leaders of the group in terms of arranging and steering the facilitation of the group meetings and activities and in terms of being identified as experts from peers and serving as the core group. While some members transitioned into leaders and began steering the CoP to ensure its sustainability and longevity, others remained at the periphery as their aim was to acquire knowledge. This is the natural progression of CoPs, and this space must nurture the fluid boundaries of the group where new comers may join and others leave, and others leave and come back when there is a need for learning on demand. To maintain an effective and sustainable foundation of a CoP, there must be fluid boundaries which allow the group to grow and be tailored to the needs of the CoP. In this study, a fluid context was noted as new members joined the group and the older members started to assume the role of facilitator in mentoring the newcomers to the inquiry focused way of nursing through critical reflection. In this study, a core expert group formed in one of the two CoPs. This core group promoted sustainability in terms of continuing with the lifecycle of the CoP, while newer members and some older members remained at the periphery or opted in and out to suit their learning needs. Even although the rural CoP did not form a core group, their group was sustained in terms of the group focus evolving and, through the skills and the support of the existing group, the CoP is still

fluid through the re-establishment of new ideas and new purpose that keeps the group motivated to continue.

Dynamism: In this theory, dynamism is related to the changing context. This context may refer to the boundaries of the group, it may refer to the changes in the membership of the group and it may refer to the changes in the drivers of the CoP. In this theory, dynamism recognizes that the needs and aims of the institution may feed into the purpose of the CoP, especially in cases where the focus of the CoP is to generate new ideas regrading the institutional knowledge system. In such a CoP, dynamism and diversity among the members of the group, in terms of ideas, perspective, backgrounds lends to the varied context and drivers of the CoP. This is an important attribute to have in a CoP, as elements of dynamism and diversity create a climate where new assumptions will always evolve and new skills and learning take place through the blend of diverse ideas, worldviews, experience and practice coming together towards a common goal. This sustains the group and keeps it evolving and growing as opposed to remaining at the same level and becoming stagnant. It is also important to bear in mind issues of power and conflict when fostering dynamism. In this study, issues of power stemmed from the hierarchy of nurse practitioners who formed the group. Not being accustomed to working across the hierarchy of the nursing ranks of senior and junior professional nurses,

6.3.2.4. Outcomes of the CoP:

In this theory, the outcomes are related to the process of establishing a CoP of HIV/Aids nurse practitioners and the products which manifest as a result of the established or fully functional CoP. The outcomes in this theory can refer to a behavior, a learnt skill or to a change in perception or attitude demonstrated or noted by the individual members of the CoP or the CoP as

a collective. In this study, the outcomes which emerged for the CoP as a collective included the group being actively involved in knowledge stewardship, which was defined in this theory as the role of the CoP being responsible for the management of current and relevant HIV/Aids related nursing knowledge. This was demonstrated by the active role the CoP took as a collective unit to effect institutional change. This was demonstrated in the transformed perspectives, renewed accountability and renewed value for knowledge displayed by participants. It was also demonstrated in the form of in-service workshops co-ordinated by members of the CoP to pass on current and relevant information to transform the practice of other nurses who were not part of the CoP. Another outcome evident in this study was the CoP becoming a best practice community. In relation to knowledge acquisition, the transformation of the CoP was evident in a new focus and position of being a best practice community. The CoP was recognized as a practice repository of current information and a place where members could coalesce to generate practice information that would be best applicable to the nursing context and assist in improving nursing outcomes. An example of this is demonstrated by the urban group creating a quick resource guide with the relevant information extrapolated from the latest PMTCT guideline to assist nurses to improve practice through current and evidence informed knowledge.

Apart from the collective outcomes noted in the transformed attributes of the CoP, the process of engaging in a CoP from the formation of the group and moving through the stages of development in critical reflective skills also fosters individual outcomes. In this study outcomes of an established CoP were made up of the following sub-concepts: (i) individual performance; (ii) an integrated approach to client management; and (iii) renewed professional values.

Improved performance: In this theory, improved performance refers to an improvement in skills and competencies in nursing practice related to the discipline of HIV/Aids that are demonstrated by the nurse practitioners. Improved performance can be related to the activities of learning and engagement that create improvement in the cognitive, emotive and behavioral aspects of learning. This improved performance in these areas is related to the engagement in knowledge generation which occurs in the communal learning space of the CoP. In the context of this study, improved performance was demonstrated through the application of reflective practice and experiential learning into practice. Examples of this included the use of clinical and logical reasoning in making nursing practice decisions, and the nurse practitioners ability to reflect in and on practice, thus having insight to change future outcomes based on previous experience, observation and peer learning in the CoP.

Integrated approach to client management: In this theory an integrated approach to client management refers to the nurse practitioner's ability to blend diverse practice related knowledge gained from the shared and peer supported learning in the CoP. Through the diverse backgrounds of the members in terms of working in the different units of maternal and child health department diverse practice information leads to an integrated approach to nursing, wherein individual members can factor in a more holistic approach to nursing care, thus ensuring continuity of care. An integrated approach to nursing is also characterized by the nurse practitioners' engagement on the psycho-social aspects of nursing, thus promoting a more therapeutic and collaborative relationship with the patient, which promotes better health outcomes. In this study, this was demonstrated in the holistic aspects that fed into health education, such as nurses making an

effort to counsel mothers to disclose their HIV status in response to them leaving the NVP syrup at the hospital in fear of stigma and discrimination.

Renewed professional values: Renewed professional values, in the context of this theory, refers to the personal value system of nursing which was revitalized among the nurses in terms of a transformed way of nursing which was evoked by the knowledge generation in the CoP and the development of critical reflective practice skills. In this study, evidence of this was demonstrated by the advocacy role which nurses assumed. This was demonstrated by advocating for better service delivery in cases where patient treatment was delayed due to logistical problems in the institution, and advocating for improved ways of nursing care by actively creating an awareness of the learnt information in the micro-communities of their individual units or wards. A renewal of professional values can refer to the mentoring and advisory role that members of the CoP assumed in their respective workplace units. Being conscious of creating a culture of best practice, individual members mentored and advised other nurse practitioners on how to improve nursing practice by diffusing and sharing information learnt in the CoP.

6.3.2.5. Continuity and sustainability of the CoP

Ensuring the lifespan of a CoP among HIV/Aids nurse practitioners requires (i) strategically sustained knowledge; (ii) open boundaries and (iii) support from management. These emerged as sub-concepts under the major concept of continuity and sustainability.

Strategically sustained knowledge: In this theory, strategically sustaining knowledge supports the continuity of the CoP. Mechanisms such as pooling resources to create a best practice and learning hub is a strategy that encourages the continual involvement and engagement of

members of the CoP of being involved in the learning process related to the core focus of that CoP (i.e. the domain that binds them together). Constantly updating the shared repository of learning and practice related information promotes ongoing learning among the members of the group and contributes towards the members' engagement in activities of the CoP, thus promoting continuity and sustainability. In this study, the resource file was a strategic tool, which was a driver for continual engagement in the activities of the CoP. Members of the group were responsible to update the file with relevant and context specific information related to the learning needs of the group. Moreover, in this study, the mentorship and advisory role that members transitioned into in the micro-context of their wards or units also fuelled their engagement in sustaining the pool of resources that could be accessed within the CoP. Another strategy to sustain knowledge is through involvement of members in the group activities. The practice of engaging members of the group to take on the role of facilitator for the group meeting is also a strategy which promotes the members to prepare for their turn and to take the responsibility of coming with information that can be used to enhance group discussion. Also, the principle of promoting members to regulate their own learning in terms of self directing learning and seeking out information related to learning issues is another mechanism which sustained knowledge generation and the continuity of active participation by the members.

Open boundaries: In this theory, open boundaries are likened to a "revolving door", which allows members of the community to come into the learning space and get what is required in terms of learning needs and then use this in their practice space. This fluid nature of learning, makes the learning episodes authentic and relevant to the practice needs at the given time. This sustains the interest of the members of the CoP, since the knowledge which is generated is

tailored to the specific needs, thus information is not just acquired and stored, it becomes real and relevant as it is used in a current contextual space. Another factor relating to the "revolving door" analogy is that similar to a revolving door being continuously in motion, the social learning in the CoP is also continuous.

Support from management: In this theory, management support refers to the management giving nurses the time and space to participate in the CoP and showing an interest in the CoP's activities. The support of the management sustains interest ín the CoP by motivating members to continue with the group's activities, especially in light of management valuing the outcomes in terms of improving institutional outcomes. Further to this, for nurses to have the dedicated time and space to participate in a CoP is regarded as a privilege, especially in a resource constrained setting where shortage of staff is rife. In this regard, the members are motivated by the trust and value placed in them by the management to use the CoP as a vehicle to transform practice. In this study, the management recognizing and valuing the initiatives of the groups, publically endorsed some of their endeavors such as the educational seminars held among the staff at the maternal and child health units and the informational pamphlet, which fueled the commitment and continuity of the members.

6.4. RELATIONSHIPS AND STRUCTURAL REPRESENTATION OF THE MODEL

Described by Strauss and Corbin (1990) and Chinn and Kramer (2008), theories and conceptual models are a set of relational rules which contain various concepts that are related to the core category to describe or explain the phenomenon of interest and show inter-relationships among the concepts. Chinn and Kramer (2008), also note that relational statements can be referred to

propositional statements since they suggest a specific relationship between two or more concepts. In this study, the core concept of establishing a CoP of HIV/Aids nurse practitioners is process and outcomes driven and was characterized by four major concepts with their related concepts. Inherent in the definitions of these concepts were the inter-relatedness and relationships among the concepts.

Chinn and Kramer (2008) and Risjord (2010) encourage researchers to provide a structural form of the middle-range theory so that the concepts and interaction thereof can be presented diagrammatically and thus clarify the relationships of the concepts through a symbolic representation. Due to the relatedness of the concepts and sub-concepts which emerged from this study, and owing to the processual and outcomes-focused nature of the core-category, the structure of this model and all the central and related conceptual relationships are included within a single structure and presented simultaneously (See Figure 7).

This model which illustrates the theory shows that establishing a CoP for HIV/Aids nurse is process and outcomes focused, and occurs within a context. In this model, the context is represented by two lines. The two broken lines which represents the context may refer to a particular discipline, in this study, the context referred to the nursing discipline of maternal and child health. Further to this, the lines are broken to that the elements within the context are influenced by factors from within the actual context and outside of the context, such as within the context of this study, factors such as the patient profile, the nurse practitioners training and education related to HIV/Aids influenced the need for establishing the CoP. While factors outside the context such as the changing nature of national health policies and national health imperatives that occurs outside the context of the nursing discipline, also contributes to the need for a CoP and the process of establishing a CoP. The broken lines representing the context thus

denotes that the CoP is organic and evolves and responds to changes within it's context. Within the context, the five linear arrows, starting from group formation and ending with sustainability and continuity, denote that the process is linear and has a starting point and is inter-related with subsequent steps. The first arrow (group formation) is not closed ended, representing that the groups of practitioners have a starting point; a commonality or likeness that unites them in their given context and creates the platform for them to come together and begin the process of forming a group. The first arm of the continuous process reflected below the first arrow denotes the elements involved in group formation and here, the steps are followed by arrows showing the flow of activities. The second step is reflected as the process involved in establishing a CoP, and is represented in this model as the activities that are embedded between the two arms of "group formation" and characteristics of the fully formed or functional CoP. The process is represented as four progressive steps of (i) mapping knowledge; (ii) learning to apply identified strategy; (iii) fostering collaborative engaging climate; and (iv) knowledge generation. The progressive steps mean that one activity leads to the next. The model also reflects that knowledge generation is underpinned by four pillars, namely the (i) learning resources; (ii) teaching engagement; (iii) cognitive engagement; and (iv) social and emotive engagement. The process of CoP establishment also reflects that knowledge generation leads to context specific knowledge which is utilized. The third arm (a fully functional CoP) occurs as a product of the first two steps, and is represented by nine segments, each of which represents the characteristics and conceptualization of a fully functional CoP. These three steps are represented in a circular image, showing the inter-relatedness of the process. The last two arrows indicate the outcomes which occur as a result of the process of establishing a CoP and the issues of sustainability and continuity of the CoP. The arrows are moving, reflecting that the fully functional CoP will continue in its own

context, that it is organic and can possibly evolve into mini CoP's being established in the micro-context of the institution. Lastly, the model has eight components on which the CoP process is hinged, these represent the eight qualities or attributes that enable an effective CoP process.

6.5. BASIC ASSUMPTIONS OF THE THEORY

Chinn and Kramer (2008) note that a theory is based on a number of assumptions, and defines these as statements or basic truths that underlie the theoretic reasoning of the theory. In this theory the assumptions were derived from the process of establishing the CoP through the process of critical reflection among for HIV/Aids nurse practitioners.

Socially responsive practitioners: It is assumed from this theory that an established CoP promotes health care practitioners to be socially relevant. The CoP is a space where socially relevant information is exchanged through the process of peer supported learning and through reflective discourse. Communal learning on socially relevant and current issues allows nurse practitioners to socially responsive to the psychosocial needs of the community that are served. It is also assumed from this theory that learning is a social instrument which addresses the needs of its society. Within the context of situated learning and critical reflection, nurse practitioners are conscientized to the needs of patients living with HIV/Aids. Deliberate socialization of nurse practitioners in a communal space which fosters a culture of being socially responsible such as advocating informing of infant feeding choices that takes into account the patients social environment that can maintain the choice and not create a threat in terms of mixed feeding choices. Diverse perspectives on HIV/Aids related issues also fosters a paradigm shift in terms of being socially responsive to issues such as stigmatization towards people living with

HIV/Aids, advocating for improved quality of care and treatment in terms of HIV/Aids management. The CoP for HIV/Aids nurse practitioners also fosters critical thinking and collectively constructing innovative solutions to address social issues in the context of HIV/Aids management, such as addressing ways of disclosure that affects the adherence to ARVs.

Knowledge generation in a CoP is continuous, process and outcomes focused: It is assumed in this theory that knowledge generation within a CoP is continuous and is process and outcomes focused. Positioned within critical reflection, knowledge generation is processual. Nurse practitioners move from a novice state of learning to reflect and use of critical reflective inquiry and are transformed into deeper engagement with learning, using cognitive reasoning and higher order thinking, such as problem solving, problem posing, critical thinking, self-directed learning and use of evidence informed practice as an outcome of the learning process within critical reflection. Collaborative learning within the CoP develops a culture of inquiry where critical reflective skills and experience based learning are used to meet the changing learning needs of the nursing environment. Furthermore, the skills development inherent in critical reflective practice enables the nursing practitioners to remain current in the discipline of HIV/Aids, as opposed to having training on a particular topic related to HIV/Aids nursing which can become outdated and obsolete critical reflective practice and shared learning of current nursing related problems in the social context of CoP allows for dynamism in learning tailored to practice needs.

CoPs produce politically relevant learning and practice: From this CoP theory it is assumed that social learning in the shared learning network of the CoP promotes the attainment of politically relevant health imperatives. Guided by the national policy documents and the

management of HIV/Aids and the National guidelines for the management of HIV/Aids among adults in South Africa, underpin nursing practice in the context of HIV/Aids. Shared learning, deconstructing and reconstructing of meta-narratives as these policy documents facilitates in learning and shared practices exchanged in the CoP environment to be politically relevant and aligned to the national health care systems health and treatment priorities. Thus practice learning knowledge generated within the CoPs produces nurse practitioners who are relevant to the priorities of the health care system and social and health needs of the South African community.

6.6. USABILITY OF THE MODEL

Chenitz and Swanson (1986) explain that a grounded theory should provide new insight into the phenomenon and suggest new directions for future inquiry. This theory explaining the process of establishing a CoP for HIV/Aids nurses is important as it maps out the process of how other nurse practitioners and researchers interested in using creating communities of learners and communities of inquiry focused nurse practitioners can utilize this theory. Furthermore, this theory also illuminates the use of critical reflection in terms of professional development as a new way of thinking as nursing was conscientized and transformed through experiential learning through critical reflective practice. This is an important trait of this theory, especially for other potential users of this theory in a resource constrained setting similar to South Africa, where access to ongoing relevant training on a specific discipline is not always feasible and available (as was the case of HIV/Aids in this study). The use of critical reflective practice as a strategy in a CoP of practitioners who may be challenged in a dynamic context is a useful tool as it creates inquiry focused and self-directed practitioners who are able to regulate their own learning and thus improve professional development in that given discipline.

6.7. QUALITY AND EVALUATION OF THE GROUNDED THEORY

Explained by Elliot and Lazenbatt (2005), evaluating the quality of a grounded theory study is a key issue in light of best practice decisions and ensuring the credibility of the research findings, namely the emergent theory yielded through grounded theory methodology. Chentiz and Swanson (1986) support this, stating that evaluating the emergent theory is the most important step in the evaluation and critique of grounded theory research. Strauss and Corbin (1990), suggest four criteria to assess the quality and the applicability of the theory to the study's phenomenon which include: (i) fittingness; (ii) understandability; (iii) generality; and (iv) control. Guided by the aspects of trustworthiness as noted in chapter 3 and the guidelines of Chiovitti and Piran (2003), these four criteria were assessed in the following manner.

6.7.1. Fittingness: Explained by Strauss and Corbin (1990) and Chiovitti and Piran (2003), fittingness refers the transferability of the theory and its generalisabilty to a similar context. Strauss and Corbin (1990) assert that if the theory was carefully induced from diverse data then it should fit that substantive area related to the study phenomenon. Fittingness in this study was met in the following manner:

Delineating the parameters of the research in terms of the sample, setting and level of theory generated: In this study, the demographic characteristics of the sampled participants are provided in chapter four by means of table 4.1. Further to this, providing a thick description of the study setting in terms of the discipline of it being maternal and child health focused met the criteria of fittingness, as essential information was provided regarding the context from which the theory was developed. The level of theory generated from this study was an explanatory substantive theory. Strauss and Corbin (1990) state that two types of theories can be developed.

Substantive theory evolves from data generated from a specific context as opposed grand theory which evolves from data being generated from a variety of settings. In this study, the researcher made the nature and reason of the theory explicit at the beginning of chapter six. Reporting on the scope of the theory, as noted by Chiovitti and Piran (2003), contributes towards ensuring the criteria of fittingness.

Describing the literature pertaining to each category of the emerged theory: By highlighting similarities and differences of the emergent categories and subcategories of the theory to other empirical evidence presented in chapter five, the findings of this study and the theory can be compared to other settings through engaging with literature. It must be noted, however, that drawing similarities and differences from previous studies does not guarantee the transferability of findings, thus the judgment of transferability always rests with the reader in light of their potential context (Chiovitti and Piran, 2003).

6.7.2. Understandability: Noted by Strauss and Corbin (1990), in light of the data representing reality, the theory and the data findings should be understandable and comprehensible to the persons who were studied and those working in the field. Understandability is related to the credibility of the findings (Chiovitti and Piran, 2003). Understandability was met in the following manner:

Participants guided the inquiry process and use of the participant's actual words: In vivo codes, which reflected the participant's actual words, were used during the open coding stage of data analysis, and this led to the labeling of certain sub-categories, such as "feeling disempowered to nurse" or "a learning culture", which formed the paradigm model of axial coding. Further to this, participants guided the inquiry process in terms of directing the nature of

the focus group discussions in terms of their learning needs and reflective experiences. This promoted the researcher to guide the inquiry process based on the participants' inclinations of the CoP and critical reflective practice process, thus ensuring the inquiry process was guided by the participants.

Theoretical constructions revealed the participants' meaning of the phenomenon: During the theoretical construction of the data, the data was checked against the participants' meanings. This was done consistently with data collection in two forms. Firstly, through the constant comparative method and secondly, the meaning units generated from the focus group discussions, which were validated at the subsequent focus group discussions. Further to this, a consultative meeting was held about six month after the fully functional CoPs were established. Here the initial theoretical constructions were discussed with the participants to assess its credibility in relation to the participants meaning. The meeting also served to assess the sustainability of the CoPs.

Articulating the personal views of the participants regarding the phenomenon: The participants' personal views and experiences regarding their sustained and collective participation in this research study were assessed through individual in depth interviews done during the initial data collection session and again towards the end of the fully functioning CoP (about six month after the start of data collection). This allowed participants to openly share views and experiences of the study and influenced the study in terms of assessing indicators of sustainability and personal outcomes, which influenced these theoretical constructions in the theory.

6.7.3. Generality: Generality is related to the auditability of the study, which expresses the ability of the theory to be used in another related context (Chiovitti and Piran, 2003). This is supported by Strauss and Corbin (1990: 23) who state that "*if the data upon which the theory was based is comprehensible and the interpretations were conceptual and broad, then the theory should be abstract and allow for variations that make it applicable to use in a variety of contexts related to the phenomenon"*. In this study, generality was achieved in the following manner.

Delineating and specifying the criteria built into the data analysis. In this study the paradigm model of axial coding served as the central feature upon which the open codes were built and from where the selective coding and the explicated storyline was generated. This paradigm model of Strauss and Corbin (1990) allowed the different level of codes to be engaged with in terms of relationships and dimensions. The paradigm model also guided the researcher's thinking in terms of asking questions about the data aligned to the elements of the paradigm model and this guided the construction of the model depicting this theory of the CoPs for HIV/Aids nurse practitioners.

Specify the sampling: As indicated in chapter three, the rationale and method of using theoretical sampling in this study was noted. In that chapter, it was discussed that the number of sessions held with CoPs at the urban and rural settings served as the unit of theoretical sampling as opposed to the number of participants. The reason for this was related to the phenomenon of interest, which was to assess the participants' development in establishing a CoP, thus saturation of the concepts regarding the activities embedded in each stage of this process in establishing the CoP served as the unit of theoretical sampling. In this regard and in conjunction with the researcher checking with the research supervisor, who is an expert in terms of grounded theory and progressive education principles, the auditability of the theoretical constructs were ensured

and indicators of the stages of development of critical reflection and establishment of the CoP were delineated.

6.7.4. Control. Noted by Strauss and Corbin (1990), a theory should provide control in terms of the actions towards the phenomenon. Strauss and Corbin further note that this is necessary as proposed relationships among concepts can be later used to guide hypotheses and action related to actual data. In grounded theory the use of the "conditional matrix" allows researchers to specify the conditions which control the relationships of certain concepts in the theory (Strauss and Corbin, 1990). In this study, the use of the "conditional matrix" allowed the researcher to examine the interactive nature of the concepts related to the process of establishing a CoP for HIV/Aids nurse practitioners. The use of the conditional matrix allowed the researcher to establish that a concept which may be abstractly represented as the core concept of CoP for HIV/Aids nurse practitioners is embedded in a set of conditions, in this study these included activities such as planning, and implementation for the CoP, consequences represented as outcomes conditions. The conditional matrix also assisted in establishing conditions, such as how the learning process of critical reflection and shared practice learning is related to the group or to the individual and the how the outcomes of the CoPs is related to the larger institutional level. In this way, this theory adheres to the criteria of control, in that it shows inter-related conditions and relationships at an individual, group and institutional level, aligned to what Strauss and Corbin (1990) refer to as three matrix levels.

6.8 SUMMARY OF THEORY

This theory focused on the process of learning within a CoP of HIV/Aids nurse practitioners and to understand the process involved in establishing a CoP. It has highlighted the various

mechanics and attributes required at the various stages of establishing the CoP, namely the group formation, the process of establishing a CoP, which is hinged largely to the knowledge construction processes which occurs within the group. Further to this, it has also illuminated the characteristics of an established CoP, what factors are essential in supporting a CoP and the process of formation and establishment. This theory also explained the elements necessary to sustain and promote the continuity of the CoP and discussed its outcomes. In summary, this theory provides insight into the process of establishing a CoP, which demonstrated that flexibility in language and in the medium of reflection enhances the level of engagement among the participants and supports development of critical reflective skills. The study also demonstrated that diversity in terms of a homogenous yet heterogeneous group, which in this study included diversity in the educational background of the participants and of the level of nursing position or hierarchy of ranking; lends to the diversity of experiences and resources that is exchanged in the CoP. Evoking a renewed culture of learning was presented in this theory which aims to support future practitioners in terms of establishing a CoP among a diverse and flexible group of practitioners in a given discipline.

6.9. RECOMMENDATIONS

6.9.1. Practice:

This study revealed that the use of CoPs in the discipline of nursing has positive outcomes on the professional practice development. It is thus recommended that practice learning communities be used as part of workplace learning models to enhance the learning experience of professional nurses in terms of on the job learning.

The results of this study also showed that the role of critical reflection in terms of transforming nursing practice was evident; it is thus recommended that the use of critical reflection be encouraged among nurses from different disciplines of nursing to foster critical thinking and evidence informed practice.

Critical reflection can also be used as a stand-alone strategy to foster critical engagement among nurse practitioners in wholly addressing the needs and gaps of their practice and mechansisms to self-direct learning needs. Moreover, critical reflection, especially the use of reflective journals can be used as a mechanism to support nurse practitioners working in a highly stressed unit such as that of HIV/AIDS, where emotional and moral fatigue is often experienced as a result of the nature of nursing care provided. The use of critical reflection, more especially reflective journaling can serve as support mechanism for nurses practitioners to delineate emotions from the practice environment. Lastly, the use of CoPs and critical reflection can be used as supportive mechanism, which through further development and research can be refined into a guiding framework or policy that can be used to establish and maintain quality assurance and performance in terms of the profieciency of practicing nurse practitioners continued and sustained training and development.

6.9.2. Education:

This study demonstrated the effectiveness of CoPs in cultivating ongoing learning, especially in a resource constrained settings where access to ongoing training in a specific discipline may not always be possible. It is thus recommended that nursing curriculums, especially at an undergraduate level or a basic level of training have a module or a short-course that deals with the mechanics of how to establish a CoP. This is strongly recommended in light of the health care context of South Africa relying heavily on the category of professional nurses to initiate and

monitor HIV/Aids related care and treatment. Nursing students equipped with the skills to establish CoPs in their practice setting will serve to enhance practice, especially when graduates are placed in low resource settings such as rural primary health care clinics. Having the skills to cultivate their own CoPs is necessary so that it can be done without the assistance of an external facilitator, who may not be available in all resource settings.

Implementing a curriculum underpinned by critical reflection and CoPs at a postgraduate level can be useful in facilitating graduate nurses in practicing in an advanced practice nurse role, as critical thinking; self-directed learning and shared, collaborative learning is promoted. This can influence a sustained nature of continuing practice learning, especially in low-resource areas where access to formal post-basic training may be inaccessible, in light of resources, time or staff shortages.

6.9.3. Research

This study was novel in South Africa in terms of demonstrating the process of establishing CoPs among HIV/Aids nurse practitioners, and in its use of critical reflection as a strategy that was used to foster the mechanics of coalescing and establishing the CoPs. The results of the study also presented various interrelationships and outcomes related to the fully functioning CoP. It is recommended that these inter-relationships and the use of critical reflective practice be researched through the quantitative approach of research to ascertain the significance of these inter-relationships among CoPs and measure the effectiveness of CoPs on practice development.

In response to the purpose of this study, a new theory was developed which has been represented as a tentative model. It thus needs to be tested to assess its validity. The use of CoPs in the nursing discipline can guide all disciplines in dealing with changes in the context of that specific nursing discipline. Testing this theory and model will be able to translate this theory into being

recognized in various settings and disciplines of nursing.Furthermore, future research is recommended in evaluating the effectiveness of the use of CoPs in improving health care putcomes. It is encouraged that an assessment of patient experiences from nurses engaged in critical reflection and CoPs are evaluated to fully understand the holistic outcome of the use of CoPs and critical reflection in enhancing clinical practice and patient care.

6.10 LIMITATIONS

Explained by Burns and Grove (2010), limitations of any study refer to the restrictions that might decrease the generalizability of the study findings. The authors comment that these limitations might be theoretical of methodological. In this study, the limitations will be discussed in light of (i) the data collection and (ii) the language

Limitations related to the data collection: The nature of the study required sustained interaction with the study participants, which required permission and support from the institutional management. It was necessary to negotiate with the management to allow a longer period of time for the research as management at both research settings were accustomed to research being a “once off occurrence”. A fair amount of time was spent in negotiations with the management to allow the nurse practitioners time off from their working duties so that all nurses could be available at the same time for the CoP meetings. This was overcome by extending the data collection time period with the researcher’s institution so that time could be spent to garner the management support as this would affect the effectiveness of the study. This needs to be factored in for other potential researchers wanting to establish a CoP.

Language: As most members of the group spoke isiZulu as a first language, flexibility in the group was promoted through the use of code-switching in the reflective discourse in the CoPs.

This was a facilitative element in the process of establishing the CoPs and facilitative in terms of the group dynamics. It also proved to be a limitation, however, as the researcher was not able to understand the nuances of the group when the reflective dialogues switched to isiZulu as the researcher does not understand isiZulu. This was overcome by asking the participants to translate the information into English. Although this was useful in establishing the content of the reflective dialogue, it limited the researcher in fully understanding the meaning of the information.

6.11. CONCLUSION

In summary, this chapter presented a middle range theory which explained the process of establishing a CoP among nurse practitioners in a given discipline of HIV/Aids. Guided through the mechanisim of critical reflection, the constructs, concepts, relationships of the theory explains the dynamic nature of an established CoP. Furthermore it describes the inter-relationship of the participants in creating meaning, understanding and transforming practice; evident in the outcomes of the CoP. Lastly, the theory presented an understanding of how a CoP is sustained and impacts on promoting evidence based practice.

This chapter highlighted the limitations of the study in terms of the methodology and language, moreover, key recommendations in terms of nursing practice and future research have been illuminated. The theory was also evualted in terms of the methodlogy of grounded theory guided by Strauss and Corbin’s evaluation of a middle range theory. This facilitates in increasing the credibility of the theory and increasing its transferability to other settings.

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APPENDICES

Appendix 1: Sample of focus group discussion

Date: 31st March 2010
Time: 14H00
Venue: Hospital A
Duration of Session: 1hours, 35 minutes
Group Members: 10 nurses

Setting the scene: Greetings and welcome to the session. Started with a debriefing and engaging on all members well being. Moral was low the hospital had an institutional visit from the provincial MEC for health.

Session began with a discussion on the different classifications of the ARVs, information given as handouts and generated a lot of discussion on the participants experiences especially in terms of the identifying them when laboring mothers come with their medication in different packets or containers other than the original container, due to fear of being identified as taking ARVs in their home.

R: Welcome once again, and thank you for making the time to join us in our discussion about our practice. Is there anything from the previous discussion, anyone wants to talk about.

P: Okay… so now with this journal. We must only write down things that happen while we are in the ward/s. Okay let me tell you what I mean… let me give you an example. You know that lady in labour ward. She came in from home and she was only 2cm dilated. When I asked her where her tablets are. You know how we ask the NVPs. I was asking for her AZT (you know how we ask them to show it us), (*rest of the group agrees)* she then told me that she started taking it 3 hourly *(everyone murmurs in disbelieve and shock)* I then asked her who told her to do that, she then told me No, I heard them at the clinic (*rest of the group disagreeing saying "CHA"*).I then told her tell me the truth, she then started saying that when she used to go to the clinic she used to hear the nurses talking and saying when the pains come you must start taking the tablet three hourly. I then had to say to her that what you heard is only when you are close to having the baby and when the pain is strong *("Ya bona" she was referring to active labour)* now you are still early she was only 2cm dilated. So can we write that down?

R: Yes, you are right, you can start by writing on such experiences, and for you to also try and go deeper remember how we had that exercises we did on paper where we were going through those questions about how to reflect?

P: oh!ja….yes I remember that…oh, yabona' I am maybe asking if such things are also experiences? (laughing)….you know just to be sure.

P: (Laughs) if I can say…that is a experience that one can writie down…because truly it is what make our work difficult, so maybe when we write it down we can come here and share…

P: we can even get some answers from others…

R: Yes, everything we all shared is correct, the journal can be used to write such experiences down, but remember that we want to see how we can learn from it, so ask yourself questions, like what does that experience or that incident make you feel and how did you learn from it.

P: If I can share something…..

R: Yes, please do.

P: okay it is something we saw in the wards so I am just sharing it with everyone. There was a lady, gravida 5, previous ceaser times three. Who was on PMTCT. She came into our labour ward, I believe the ward was very busy, so the staff who was attending to her. You know when you become very busy, you become very stressed. So there was that verbal abuse from the medical staff who was attending to that lady. The nurse asked her why she got pregnant for the fifth time. Was she looking for marriage? Is the boyfriend aware that you are positive? and on treatment, ant then look at you how thin you are, and then the nurse called the lady who was sweeping the floor and then discussed this with the cleaning lady. And this made the patient very angry. But I think this only happened after some time, because she delivered last year in December and when she came now in March she said that she was advised from her attorney. And that she wants an apology from the doctor. And even for me when I was listening to this, because the patient even said that the nurse even held up her upper limb to show the cleaning lady and it just fell, because of her being so thin. You know when you look at her, you can see that she was sick, and she said that the abuse was from labour ward until she delivered, so this made her very much angry. She even went to some support group for positive people and she said that she does not want money she just wants an apology from the medical staff who was attending to her.

Rest of the group (*many voices speaking at the same time*): Cha, Mmh,

P3: Hai, you know these people like doing these things to get attention

P1: You know this patient, she just went straight to the PRO, so we were the last to find out about it, I think she just wanted the PRO to know about the treatment that she was getting and she was not happy about it and in the end they did give her and apology, though the nurses were not called in for the apology.

R: How did that incident make you feel?

Silence.

P: You know I was a little angry when I heard about it, because we just came out of the institutional meeting and now to hear this, it was really disturbing…..like for me I was just thinking about this women and the other patients around her, and to be called all these names, you see it was very bad for her to hear all these things.

Pause

P: You know, like we have been hearing in the meeting last week as well by the managers, we also need to change our attitude and how we treat people, you know this disease it is affecting all of us, even me, I have this in my home, my son, he has this disease…. (*silence).* You know some of you are my sisters and you know about what I have been going through at home. (*Pause*). And then we come to work and we have to face it everyday at work as well. So you see we must try not to judge these women and why they keep coming to the clinic pregnant, some of them they don't have a choice or they may be in denial.

Agreement.

P: You know we all sometimes get angry with these patients, because some of them are so sick and then they just keep coming to us pregnant, yet you can see even the previous baby died with this HIV, but when you try to make them understand, they just say no, they know they are not sick with HIV. So… you see many of them are really in denial, even when you show them their signs, they just say it is because someone bewitched them, or the boyfriend put a spell on them because he does not want babies, that is why the previous baby has died.

Agreement

P: But you know sometimes these women, they just want to keep the boyfriend so they know they are (HIV) positive, but they don't tell the boyfriend, that is why they keep coming back pregnant. I think it is very must have been very difficult for this nurse who has to apologize, because this women (the patient) may want to trap this other person, because you will find that as

soon as the nurse or doctor apologizes, she will then say aha you see they are admitting to something and this women might be adding some of her own spices… you see she came after a long time to complain and we don't know what really happened in the ward when she was there. Because in most cases you find that they make up a whole of stories so that they can get our sympathy, you see when they come to hospital they think they will get treated differently. Coz they feel that they are sick and they think they will get a special treatment and to their surprise there is no room for that, because we don't do that where we work, because things are very busy and we got no time for that or to worry about who is sick with what….

Silence…..

R: So if we take this experience now, what do you think we can learn from it.

P: No, I can say that sometimes when we tell the mother how to do certain things, and then we find that they have not done it, or they don't take their medication. It is very difficult for us to now say to them, that their baby is now positive because they never follow what you told them, because they just say to us that we did not tell them that and we can't prove it so you just end up saying nothing.

(*pause*)

P:Like for me, I know that when I counsel the mother on how to take her medication and the next visit I find that she has not taken them because you find that they don't take them but they lie to you and then you still find that the CD4 count is below 50 yet she is supposed to be in HAART for 3 months and yet you should see an improvement in her CD4, so I just ask her if she has disclosed to a family member, then she will say yes, and you find that she may have told a friend but no one at home knows so she does not take her pills because she is afraid.

Agreement.

So for me, I just say to her that it is important to keep taking her pills, yet I know that she will not do it and yet she and the baby needs it.

P: Okay…yes I too can see that we must see how we can maybe change our attitude because at the end of the day we all have to try and help the babies who are just suffering.

P: You know this denial is very bad, because really we can't change their thinking and we can't change their minds and really it is a barrier to their treatment.

P: Hai!, but you know really we too as nurses we too sometimes get very angry with our patients, we too must give them time…because you know this is not a small thing, even for them it is very

big to hear this news, so we must be sensitive and listen to them. (*long sigh*!) I think we need to have some group meetings so that we can share this experiences with the other staff, so that we can learn how we need to treat our patients and how we can change our attitudes, because really we all in this group can become positive tomorrow or might even have our own family who is positive, so really we need to learn how not to be judgmental, and even with our stress we need to learn ways of how we can handle our job stress so that we don't let it affect the way we talk to our patients and that we don't place our attitudes in the wrong way or our anger to the patients….you know even these patients they did not ask to be positive, we know that many of us women we can't talk about condoms in the house, so even these women they are finding it difficult to talk about what is happening to them. Even with us as nurses, we are going through many things, some of us we have this thing in our house, so we leave it at home and when we come to work we find it here at work, so there is just no escape from it. *(agreement from other group members*)….And what is even worse is that some of us still have our own judgments about HIV and we also let our stress from work and what we are going through at home to affect how we treat these patients, so we all need to start to change our attitudes. We need to remember that these patients are relying on us for their treatment so we need to think about what we say to them. Sometimes it may even happen because I know for me when I first started in the labour ward and then I was told I must work in this PMTCT program, I did not know what to do or what the drugs names are, and we could not ask, so when the patients come I used to just shout at them, why, because I did not want them to know that even me I am not aware about these things for the PMTCT. So you see we all just need to start asking questions where we don't know and then for us to take responsibility. You see this new policy for PMTCT we are all just following what we supposed to do.

Agreement.

P: Maybe I can come in here, even though I came in late and only got the gist of things, we must remember that these patients undergo the same process as the person who is dying, you know those stages we used to learn about, about eh…. Anger, denial, you undergo bargaining and acceptance….. As nurses we need to support one another, you know support is very important. So we need to continually brief one another, so we need to know how we can support our patients and how we can change our attitude, you know our attitudes are very important because our patients can sense our attitudes. You know you can be talking and be frustrated by all these

work stress, and your patient will be coming with all her stress because of her status. So you see we need to learn to show them support, because we don't know if they just found out about their status or they are angry because of their status. So we need to compromise in a way….

R: *Agreement (response)*

P: You know what I can see from what we are now sharing that this reflection will help us to think more about our patients feelings and think about what they are going through emotionally as well and not only to worry about their medication….you know this introspection is very important. If I can share something that has happened to me.

You know last week I was working in the TOP clinic and this lady came and she asked for a TOP, and she was not young, I mean she was a married women, so I thought to myself why she is coming for the abortion. So when I checked in her file, then I saw that this was not the first time she had the TOP, so I asked her and then she said to me she already has three children and the last born was very sick and died, so now the husband he refuses to get tested and even she is now denying that she is positive so she just came for a TOP, so in me I was also very angry. You know to be keep coming here when she must use ama Condom. So then she started to tell me how her husband says he got tested you know in these private clinics and he is negative so if she is positive then where did she get it…now you know this window period some people they don't understand about it so when he got tested he thinks that is the true result…now this lady she is afraid. You see now it becomes very difficult to advise them, because even herself she believes that he is negative, but to me she is coming for the TOP because she knows that she has the disease.

Silence.

R: So you mentioned that you reflected on this, is there something that you think you should have done differently …or something you think you learnt from it for future situations that are similar.

P: Hai, no for me…it was very difficult to educate this women, you know something like this is not the first time we are experiencing this. (*Pause*). You know many of these women they know their status but you find that because the husband or the boyfriend is not ready to test then they also start believing they are not positive, so they end up denying, now with this women she is now even coming for ama TOP because she does not want to face the truth…Hai…it just becomes very difficult to handle.

R: So what do you think we can do…in a similar situation

P: No like for this situation, I just advised her to come with her partner for counseling and testing and I said to her that she is only causing more harm for herself if she keeps coming for this TOP, you know it is not the answer…and you know these situations becomes very difficult to handle because of the confidentiality. You know you cannot force them, you know these people they just tell you they have their rights and it makes it very difficult to advise them to get tested and make better choices for themselves, and then you find them after a few months the same person comes to the clinic maybe her CD4 is under 50 by then and then there is so little you can do and then she just dies soon after she delivers…you see it is very complicated to handle.

R: Agreement… I can see how challenging it can become to handle such cases when the patient is not ready to accept her status and treatment, yet she has the baby to think about.

Agreement.

P: If I can just also add how I think that dealing with HIV is very complicated to handle, and this becomes very stressful for us as nurses, because you know sometimes you have so many patients to see in one day and then you find If you don't ask them these questions, then they too won't tell you what is happening at home, so you end up spending a lot of time talking with them, but even after that, when they go home, they don't want to believe you about the disease and what makes it worse is that the partners end up blaming them and refuse to accept their own status. So you see, we now have to spend a lot of time with them and yet we have so many patients and sometimes you are on your own, so you end up don't asking them too much because for me I know that even if I tell them today about it, they will still come back to the clinic pregnant again and you find that the previous baby died or is sick.

Agreement

P: I too agree with what my other colleague was saying, because sometimes we know what is happening with them at home, but you know that there is long line waiting for you outside, so you don't end up talking to them; you just have to try and finish all the patients.

R: How do you think we can change this?

Silence

P: For me, I don't know really what can be done, because sometimes we get new staff, but then you find that those nurses they just can't cope or they just request to be moved because they are tired of seeing the same thing, so it is you who ends up staying there and you have to make sure

that everything runs well, because even if there are nurses working with you, you don't know if they will be there tomorrow when you come on duty. Hai, it can be so frustrating at times.

Agreement

R: That is a good suggestion, how do the others feel about this, is it something we can all try in the areas where we work.

P: I work in the labour ward, and I know that we just see the patients for a short while, but I think for us the nurses we need to have something, because sometimes you find you did not even chart the HAART and you find that even the AZT is not being recorded properly, so we too need to see how we can change this. You know how busy it is in that labour ward, you find that the women only come onto the bed when they are ready to deliver that is how busy we are, so we need to still see to all these other things and yet you find that there is another women ready to deliver. Sometimes you feel that it is too much.

P: I would like to share my experience of what happened to us where I am working. We had a patient who is Ca Cervix from 2006 and she is also HIV positive and I think now she became paralyzed as well. So she got worked up for her treatment and I think she only went there once, and then the husband took her to the traditional healers. The he brought her back this year, in January so she needed to be reworked up with bloods for her treatment. The husband went for classes on that side for the initiation of HAART, so when he got back he expected the wife to have started with the treatment, so when he came to me he was furious, you see he was shouting because he came to me and he was shouting saying that his wife is so sick and they need to get some transport to bring her here and since January she did not start the treatment. So I spoke to the DR about that and the doctor said that before she can start with the ARVs they can see that the wife is pre-renal failure so they have to correct that, but what we discovered when the doctor phoned the doctor on that side, we discovered that side the doctors have no records for the wife, on that side they are using another name, I think it is Jilo and he did not tell anyone about that…and after we discovered that she is Jilo, we asked the husband about that then he admitted that he is using Regina here and on that side they are using Jilo, but now the wife is not doing well so he had no choice but to come back here. So you see we have these cases where such things make it difficult to initiate HAART and the patients don't understand and they go everywhere, and then we get told that we are taking so long to start them on treatment. You know HIV is a very complicated thing, and because of the stigma and treatment, people are

getting very desperate and you see we too sometimes we don't know everything about this so when the patients ask us and we tell them you will get ama side effects and not telling them what to really expect the patient looses hope in us so they go here and there looking for help and now you can see like for this man, it is too late for his wife.

Agreement.

So for me as well learning about how to advise our patients about accepting and disclosing, it is something I can hear from everyone in the group is important….

R: is there anything else anyone wants to share for today? Or maybe find out more?

P: No, I am happy if we can learn more about this thing of counseling, because really that is where we sometimes need some kind of training.

R: Yes, I can prepare something, but someone else from among us must also come with something, so that everyone has some kind of homework for our next meeting?

(*Laughing*)

P: Yes, I like that it will makes us go to find something to read….

Agreement from the group members.

Group Meeting ended and refreshments served

Appendix 2: Sample of in-depth individual interview

Setting the Scene: Individual interview with participant four. She came in from her day off and was very eager to get started and share some of her experiences of being in the group.
27th June 2010, 14H00-14H42
Venue: Hospital B, Hospital Training Facility
Beginning of Interview.
Researcher: Thank You for taking time especially since you came in on your day off to share your experiences with me. I really am thankful for that and appreciate your commitment.
Participant 4: Ahh, (laughs) it's a pleasure.
Researcher: Okay, so as you can see today's meeting is slightly different. I thought that today I can meet with everyone individually to discuss their own feelings and experiences of being part of the group and of reflection in their practice.
Participant 4: Oh I see….no it is a pleasure….
Researcher: Yes, so please feel free to share anything you want to, remember as always I am not going to use this information individually but rather sue them collectively to see if our efforts in the group are meaningful for everyone in their practice and their experiences of it. So please be free and comfortable. I have a few questions that I will use to guide our conversation, but you can ask me questions along the way and you can share anything in your own way.
Participant 4: Oh…Okay.
Researcher: Do you have any questions for me at this stage.
Participant 4: No.
Researcher: Okay, well let's begin. So I wanted to get a sense from you, and please feel free to share anything you may have or questions you want to ask…err….what has been you experience of being in this group, for the past four to five months…
Participant 4: okay for me, I can say that being here, and learning about this reflection…ja it makes me think at the end of the day about what I have done, and if there has been anything that I have done in my day and at my work that is not right, then reflection helps me to think about these things and to make them right the next time. So the following day when I get to work, I must make sure that I rectify the mistake that I have made the previous day or the previous time or if it is not rectifiable, then I must make sure that I make an improvement the next time.
Researcher: Mmm, is there an example of this that you changed your practice because of your own reflection of because of something that you learnt from the group?
Participant 4: Okay, yes it was because of reflection, there was one person that was admitted in my ward, who had reacted to ARV treatment, so she had these sores in her mouth, it was very septic, so the doctors ordered mouth wash for the patient but we er' could not do it like properly….like….err' because the pharmacy did not give us the mouth wash solution, so with that patient I used to always use the soda bic (means bicarbonate of soda) and to gargle with normal saline. And er'' each time I cleaned the patients mouth it bled, so I used to become very concerned about it, because now in our group you remember we were talking about how the CD4 can drop, so I just thought hey if this patient is bleeding like this every time she gargles then it means that her cd4 is going down. So that thing kept worrying me, so I thought I must start calling the medical wards and I asked them if they have any solutions like the Glyco-Thymoline solution. So then eventually I got it from one ward, and then it was like a miracle what happened after that, because the patient used it for about two days and then the sores were gone. Mmh, so you see it is because of this reflection, because each time I used to give the soda bic and saline to

gargle, this thing used to keep coming back to me in my mind and I used to think what would I do differently so that this patient does not bleed after she gargles. (pause.) so you see it is only because of reflection that I thought no, if the pharmacy does not have this solution that the doctors have ordered then let me try and see what they are using in the medical ward, because they must be also seeing these side effects of ARV, it is not because I am in the ANC ward that I must only worry about the baby and not the mother…so if it was not for ama-reflection then I was just going to leave it and then the doctors can give her another treatment but maybe by then the sores would have been worse…..
Researcher: mmh, wow, that is a great example.
Participant 4: ja…so for me that is how this reflection is helping me, because it helps me to keep thinking about what I am doing, even while I am doing something with this patient then I find that I am thinking about what I did the last time with a similar patient. Ja….I can say that I have learnt a lot… so really it has helped me to think about how I doing things with the patients.
Researcher: how about our reflective group, what has been your experience of being part of the groups?
Participant 4: For me it has been very helpful, see for me I work in the antenatal ward, so for me before I never used to know exactly what happens to the patient after she delivers like in the postnatal ward, maybe like some of the problems the staff at the postnatal ward may encounter and maybe the patient was seen by me before getting there, so you see since we had this reflection groups, it has helped to see what I can do to change maybe my mistakes or to make sure certain things are done to this patient before leaving my department so that there is no problems after she delivers. Like for instance I discovered when the patients go to the postnatal ward they are not willing to take the medication appropriately and they do not tell the sisters in the postnatal ward if they are on ARVs and this is causing problems for the nurses to monitor their medication, as we have been listening to one of the ladies share about that in our reflective groups, so that thing helped me, so that now I make sure that in the antenatal ward I emphasize in the health education sessions that we have about taking their medication even if they are on ARVs to tell the sisters about it and to make sure they know about this resistance to medication if they just stop taking these medication, so that we don't have these problems post delivery. So this group that we are part of…it is very helpful to come here….it has helped me to see that I must make sure that the treatment for this HIV…it is something we must be monitoring in the wards…and to not just leave it to the patient…because…like the care it continues post delivery. And really it has helped me to see how I must make sure that I don't just do things here in the antenatal period and not worry about what happens after that…
Researcher: Yes, so you are thinking about what will happen outside your care for that patient…Yes, can you perhaps describe how it has helped you to change your practice?
Participant 4: well for me I can see that….uh (pause), you see the way we work, we are sometimes very short staffed in the ward and you cannot do everything for the patient and we need to work hand in hand with this HIV and with these pregnant women, so now that I have started coming to the group I can see that there are things that are crucial for me to do when the mother is with me and then I must do these things….silence, like when I came to this group I did not know much about this ARVs and how we need to also monitor how it is given to them, so when I first came here, there was this one lady from our group who spoke about how one patient was taking the AZT 3 hourly even after she delivered, now when I heard that I thought that maybe it is my responsibility when the women are in the antenatal ward to discuss with them that they should only be taking this ARV 3 hourly while they are in labour and they should stop after

they have delivered, so there is no misunderstanding with the patients. So this group has helped me to see that it is very important that while the patient is with me, that I should be giving her education about this ARVs and how they should be used. Mmmh, so in this group I have noticed that everybody comes and shares her ideas and what she has gone through in the ward for that week and it has really helped me to learn from that and to see things that we have done wrong or we have missed and to change it so that it does not keep happening in the wrong way. You know sometimes I might be the one who sees the patient in the ANC and you find that maybe she defaults and she does not come back or maybe the others will not see her for some reasons, but now that I have come to this group and I have learned what happens in the different areas like post delivery or in the labour ward, then it has helped me to identify different problems, or to advise this patient so that she does not default or to do the wrong thing with this PMTCT.
Researcher: Thank you, so I can say that you can notice within yourself that you are beginning to change because of the reflection, how about the challenges that we spoke about in the group…err…like about dealing with HI/Aids care …..how is being in the group effected this….
Participant 4: (long sigh)… Hey, you know the policies are so frustrating. I am very stressed because,, like there was this policy about the intro of truvada, and according to the policy it says that we should administer it post delivery and then we got the information from word of mouth that we should be giving it during labour. Okay so some of us we were giving it during delivery, and then we had this person come here from I don't know I think from the district and they were saying to us, no we must follow the guidelines and give it post delivery, so you see this is just frustrating us. Then you remember you gave us a talk and we were sharing in our group about this truvada and one of the lady's also showed us the memo that came from the DOH that says we must be giving the truvada during labour, so all this different information is so confusing, so in that case, it was very nice, because we all spoke about it and we all followed the memo, so if we were not in this group, then some of would be doing things differently and we will not be covered should anything happened, because it means that we are doing things as we please. Mmmh and for me this reflection has really helped to me I should say it has helped me to inquire a lot, because like this issue of truvada…I even worried myself I was able to get the leaflet of the truvada and I found out that this truvada is not good for nursing mothers because it can be carried to the baby…and I was able to come to the group and share what I learnt about this truvada and from your presentation you did with us on truvada I was able to see okay it is fine when it is only given once off dose during laboour, and it is only through this reflection group that I learnt about this research that people do with these drugs and I mean when you gave us some information about ARVs and those journals (referring to articles)…yes so I can say that it is only because of this reflection that I was able to say to myself, okay let me learn more about this truvada or let me learn more about something, so that I can be with this information when one of my patients need it then I will not do the wrong thing…eh…so this reflection it has also helped to get more information and to be more engaged with my patients in order to render quality care, so this has helped me a lot because I don't leave things hanging anymore waiting for someone to rectify the mistake, but I take initiative.
Researcher: Yes…I remember we were discussing about how many changes there are in the HIV/Aids treatment and policies….
Participant 4: Yes….but now I can say that because we are together like….errr…how I can put it…it like it makes the problems lighter…
Researcher: Maybe you want to tell me a little more, maybe an example from how you have changed your practice….

Participant 4: now I understand that for everything I do, I must think about it, if I did it intentionally, if I did it right, and if I did not do it right, what led to that, you now I reflect on it, and think about it and now I find that I reflect on everything even in my everyday life not only on what I do at work. I think it has even improved my relationship with other people, because everything I do and say now I am very cautious, I need to know if I am doing things right, and I am more aware of the things that I do and say so that maybe when I come back from that thing I just think and say to myself oh, did I say that the right way, did it upset that person and then if I find that maybe what I did was wrong, then I remember it for the next time so that I can rectify my mistake. So i-reflection has also thought me that I need not do things in the ward just for the sake of doing them but I must think about why I am doing it and whether it is right for this patient. I have to think back at the end of the day, how my day was, what I did, what happened and by just recalling these things, it has helped me to be thankful and say oh I have done these things today and I have worked (laughs) you know I have done 1,2,3 and I have achieved something, and if I find that I have not done or achieved something then I find I ask myself what can do differently the next day so that I can achieve it…sometimes I find that because of working alone or by being so busy I find that I have rushed things and not done things properly maybe I did not complete things and then I remind myself that while I am with this patient I must try and complete everything because if I say to myself oh..I will complete the chart when I am finished then I don't do it and then that is incomplete information….so it will affect her treatment when she goes to the other wards because the other sisters don't have that information. *Silence.*

Researcher: is there anything else you want to share, perhaps about the negatives or positive of the group.

Participant 4: Err, Ja, I can say that another positive thing has been the support that we get in this group. You know sometimes when we come to this group we might be having a bad day or a bad week and when we come here we can just get support from each other, you know sometimes it gets too much in the ward…there is so many of our patients having HIV or are affected and even us as nurses there are things that are beyond our control that challenge us and it is nice that we can come to this reflective group and get support from one another.

Researcher: mmh, so you also see this group serving as a support group for the nurses?

Participant 4: Yes very much so, because we all need to have a space where we can come together and just talk about our feeling and for me I found that I started feeling lighter after I cam to the reflective groups beciase I could see that I am not the only one feeling alone when we can't handle all the situations of our patients. Siome of our patients they have so mabny social problems or they don't want to accept their status so even when you see this patient you can see her cd4 is very low just from her signs and u say to her that maybe she can start attending the classes for ART then she refuses it is very distressing for me because we as nurses want to try and save them, yet they don't want to be saved.

(Silence)

Participant 4: you know after I joined this group, I started in my new ward in April, and you know when you are new and meet new people with their own way of doing things….(laughs), so now that I am part of this group I can see that my style of work has changed…I can say that because now I think more about why I am doing something I don't just do it because the other nurses say to me that that is how they do it in this ward…hey you know when you are new somewhere, like when I was in my old place when I first went there I found that I was just following the other nurses style of doing things because that is what you are expected to do, so

now with reflection I think about why I am doing something and I try and change things that I know will be better for the patient if I do it differently…..and I find that some of my colleagues they ask me, hey what keeps u going/ where do you get the strength from? Because now everytime I want to go the extra mile with whatever I am doing and I want to do things right ….and then I do share with them what we are leaning in this reflective groups and how I now go the extra mile because I conscious of what I am doing for the patients and I want to see them getting the right things no just doing it to finish my work and not thinking if it was the right way or not…so ya for me reflection is really part of me know and I don't stop doing it, because it even helps your conscious to be clear knowing that I am doing the best I can do and that I am learning from my mistakes so that I don't repeat them. You know it is not only about the work but about each individual and how they can change themselves….

Researcher: Mmh….thank you it is very interesting to see how you are experiencing and using reflection, is there anything you want to say or add?

Participant 4: Eh…No, it think I said everything, but just to also add that I am really enjoying the group at first we did not know what we will be doing on the Wednesdays and I used to think about all the work we have in the ward but now I look forward to the group meetings and I get disappointment if we have to cancel…because for me this is like a stress relieving technique and I look forward to sharing my experiences, because you know if you have to bottle everything up, it is not good and I also find that I have learnt so much and have grown and when you hear someone else's problem that you can say oh when I encounter that same problem whether it is in you life or work situation you can learn from what someone shared, especially HIV is here for stay and we are all going to have to deal with and most of the time I have found that it is because of emotions. So for me I would like for us to continue with this group.

Researcher: And now…

Participant 4: Laughs…hai I don't know…

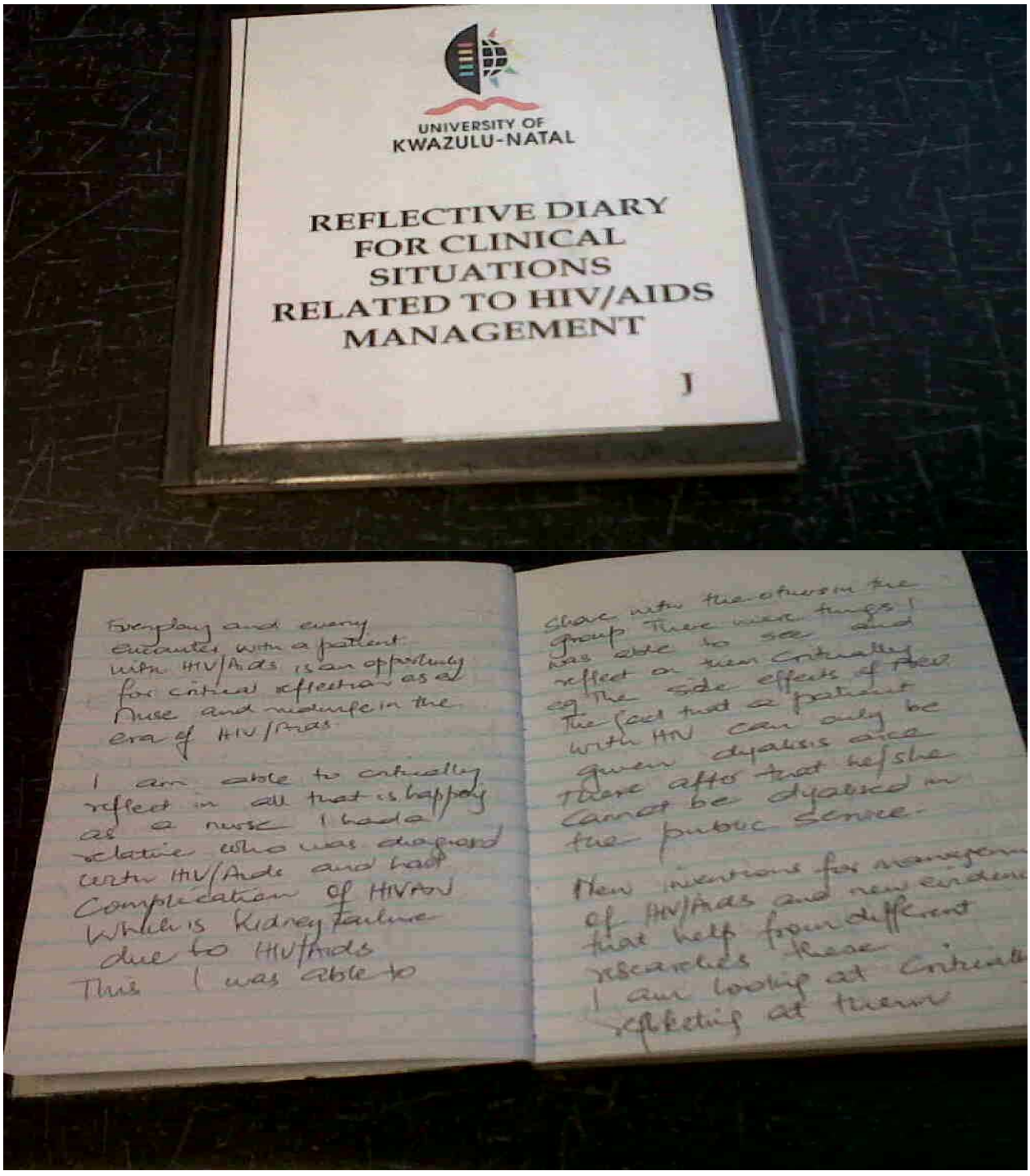
Participant 4: Hai…. I think that I am growing, you know now I can say that I am asking more questions, I even ask the doctors sometimes why they are changing their treatment, so I can see that I am inquiring more…even with the truvada example if it was not for reflection it was not going to bother me….I was just going to do things as I please, so because of reflection I was able to say to myself let me ask the pharmacist for the leaflet for truvada and I was able to learn more about it. And it has also thought me a lot about the other members in our group.

Researcher: mmh, in what way?

Participant 4: I never knew everyone from our group before joining, so when I used to see them, I used to just walk past them, you know when you are working in different wards you don't know everybody, so you just have this impression of them when you just meet them in the passage, but now with us coming together and meeting in this reflection group, I can see what we can get some support from each other, even for myself I find that now I know the others and now I can understand why certain people behave in such a way, it is because of the stress that they are going in their wards or maybe even in their families. So with this reflection group, we are health c care professionals are getting support we are the ones that are faced daily with these patients who are HIV positive and we too become affected by this, so I think really the group is helping us to get support. and to keep us going and to give us more strength to get going for the next day, because sometimes I feel like I have failed, but when we come to the group and discuss our issues you feel like okay I can do it and the support keeps me going. And it has shown me that it does not matter where we are we are all in the same page and we need to support each other

Researcher: mmh, is there anything else that stands out for you about our group and what is has meant for you that you want to share before we end?
Participant 4: Er yes, you know like with this HIV drugs, before I came to this group I want not very familiar with this HIV drugs and I did not know anything about this side effects of this d4t, so I was able to learn about that in this group, so if the patient came to me before I could join this group I was going to be blank, so now it is was easy for me when one of my patients said to me you know sister I don't want to take this drugs (referring to ART) because of this d4t and what I am hearing from the others (other patients) about this drug, so now because of what I have learnt from this group about the drugs I was able to counsel the patient and tell the patient why it is that only some people are experiencing this side effects and how the doctors will change her medication but that she must stay with what the doctors have prescribed because not all patients develop side effects and that she must not worry about what others are going through because we are all different. So for me if it was not for this group I should have not said all of the to the patient, in fact I was not going to worry about what is happening to her ART because before I should say to myself that we need to only concentrate on the baby and her pregnancy and she must go after to the Nkosi clinic but now I am confident to help my patients….
Researcher: Wow… thank you very much for sharing your experiences, because for me I can see the change and it is so nice to hear your experience and how you can see the change in your practice and life because of reflection. Thank you very much…
Participant 4: Hai….it was nothing really to come and share…I really must say that I enjoy coming to our group….it is so nice how we learn here.
Researcher: Thank you…is there anything you want to add before we end.
Participant 4: No….
Researcher: once again thank you and I have something very small (refreshment) just to say thank you for your time and I really appreciate you sharing your experiences and thoughts with me.
The session ended.

Appendix 3: Reflective Journal



Appendix 4: Sample of researcher field-notes

Date: 17th March, 2010
Hospital A
Today's session was made up of only six of the eight members of the group; two were not able to come due to being put on night duty and the other nurse being on leave. Today, we used the paper exercises to try and understand the process of reflection. Two of the members were very closed, I could see that there was not much interest coming from them to engage with the exercise. Sitting with hands folded and after the exercises were done and each member had a chance to share, the two nurses asked to take the exercise home so they could do there and then bring it to the next session.
My feeling is that it must be a little difficult for them to be working with nurses from other departments, also one of the two who were not very interactive at the session, is a unit manager. So there must be some issues there.
Apart from that the rest of the group gave me the feeling like they enjoyed it, one even used her personal experience of having a big fallout with her sister and using reflection to think back on why something so small could have triggered such a big rift between them. Others especially the nurse from the VCT clinic were open to share experiences that is happening in their practice. She spoke openly about how having a daughter who is a teenager makes her job more heavy, as she always thinks of her when she has to counsel younger patients about their HIV positive result.

Group still learning to work with one another, and there is still a long delay like today I had to wait for at least 40 minutes from our scheduled time of 13H00 to get started, not sure if it is the work environment that is busy, but when I inquire they tell me they were ready and the managers of the wards knew they would be excused from the wards for the group meeting. Once they get started like today, then the sharing is generally open.
Next week's meeting I must try use the unit manager as the facilitator so that she becomes involved in the group, and use the nurse from the antenatal ward, who is a junior nurse as the scribe.

Appendix 5: NVivo output of initial coding

Coding Summary Report

Project: CR and CoPs among Nurses
Generated: 12/20/2011 1:06 PM

Coding By

Name	**Initials**
NAIDOO	JR

Total Users 1

Internals\FGD Session 1_PMMH **Document**

Node Coding	**References**	**Coverage**
Free Nodes\affirmation	**1**	**100%**

Reference 1 Coverage 100.00% *Character Range* 0 - 9713

Meeting One
Setting the Scene:
An overview of the project was presented to the participants. The proposal was presented in the form of a PPT,
Venue: PMMH, Nurses tea lounge in the matrons suite
Date and Time: 3rd March at 14H00

Meeting Participants:
The group was made up of eight registered midwives, all of whom where clinical unit managers at the Maternity Services Units of the hospital.

The group meeting took place at the nurse's tea lounge which is away from the clinical units where the participants work. This was deliberately arranged to allow the nurses the freedom to express themselves without any inhibition of being seen by other members of their unit or patients and to maintain confidentiality.

The study was introduced to the group via a brief PPT. The emphasis of the presentation was to present the study aim, objectives, specific goals and significance of the study. The presentation also explored the participant's expectations and what is expected from their involvement in the study. The presentation also had an exercise and information on reflection, critical reflection and practical examples of how to keep a reflective journal.

Beginning of taped session:

Participants: Okay… so now with this journal. We must only write down things that happen while we are in the ward/s. Okay let me tell you what I mean… let me give you an example. You know that lady in labour ward. She came in from home and she was only 2cm dilated. When I asked her where her tablets are. You know how we ask the NVPs. I was asking for her AZT (you know how we ask them to show it us), (rest of the group agrees) she then told me that she started taking it 3 hourly (everyone murmurs in disbelieve and shock) I then asked her who told her to do that, she then told me No, I heard them at the clinic (rest of the group disagreeing saying "CHA").I then told her tell me the truth, she then started saying that when she used to go to the clinic she used to hear the nurses talking and saying when the pains come you must start taking the tablet three hourly. I then had to say to her that what you heard is only when you are close to having the baby and when the pain is strong ("Ya bona" she was referring to active labour) now you are still early she was only 2cm dilated. So can we write that down?

Interviewer: what does the rest of the group think about that example?

Participants: yes we all see the same thing. You know even me at first I used to tell them as soon as they start getting pain they must start taking the tablet, and only when that doctor came to us I learnt how to tell them.

Another Participant: But we all just tell them what to do but we all don't know why we tell them to take it 3 hourly. (Other's affirm this by vocalizing sound of agreement)

Interviewer: Okay this has been a great start and once again thanks for freely sharing your experience. Yes to

Appendix 6: Theoretical Memo

Memo Name: *Metamorphosing*

As I go deeper in reading and re-reading the transcripts, I can now start to see the picture of what Strauss and Corbin are talking about in their description of the paradigm model and also about how in axial coding, the fractured data is put back together and meaning (from the researcher and the fragmented parts "open codes") is attached to give the data more depth…I am starting to see this.

Overall with my data analysis thus far, what is evident is that in my study…the following occurred: Through the engagement and the togetherness that the CoP created, the shared experiences and the clinical incidents shared by the nurses, there was an obvious move from just doing and engaging at a deeper level. And the process of CR which at the beginning was a very real challenge for both myself as facilitator/researcher and the nurses…especially since the idea of writing and keeping a record of their actions, practice thoughts etc was so foreign and strange. Initially the nurses were only aware of their own truths that were given to them through tradition, or that they acquired through trial and error…they regarded this knowledge as their only truth and based their everyday encounter or activities on this information, they did not attach any meaning to their actions. However with the use of CR and being part of the CoP, there was a deliberate consciousness about how they use everyday information, one example that stands out for me was the individual transcript of Thandi. She described how CR and the communal sharing of experiences enabled her to re-evaluate how she was assessing compliance of the NVP syrup that she administered to the mothers for their new born infants as part of the PMTCT programme. She notes how previously she knew that once the correct dosage of NVP was issued there should not be any remainder at the next visit, but after engaging with reflection and think back on her actions and the thought and reasoning behind her actions. She was able to go deeper and think more comprehensively about the clinical incident that she was faced with everyday in her practice as a postnatal nurse. She was able to even go further in her reflection and move it towards being critical in the sense that she was able to engage with her clients at their next visit and had knowledge that the dose was dependent on the infants weight therefore each child would receive a different dosage, she was then using this knowledge that she attained from the peer supported learning and through logical reasoning of using the information and applying it to her clinical practice was able with "transformed eyes" to construct meaning to this information and thus change her practice in terms of health education she was giving her patient

Appendix 7A: Initial Ethics Approval

UNIVERSITY OF
KWAZULU-NATAL

RESEARCH OFFICE (GOVAN MBEKI CENTRE)
WESTVILLE CAMPUS
LEPHONE NO.: 031 – 2603587
EMAIL: ximbap@ukzn.ac.za

30 OCTOBER 2009

MRS. JR NAIDOO (9711384)
NURSING

Dear Mrs. Naidoo

PROVISIONAL APPROVAL
ETHICAL CLEARANCE: "A GROUNDED THEORY ANALYSIS OF THE USE OF CRITICAL REFLECTION WITHIN COMMUNITIES OF PRACTICE AMONG HIV/AIDS NURSE PRACTITIONERS IN KWAZULU-NATAL"

I wish to confirm that ethical clearance has been granted for the above project, subject to Gatekeeper permission being obtained:

This approval is granted provisionally and the final clearance for this project will be given once the above condition has been met. Your Ethical Clearance Number is HSS/0719/09

Kindly submit your response as soon as possible

Yours faithfully

PROF. S COLLINGS (CHAIR)
HUMANITIES & SOCIAL SCIENCES ETHICS COMMITTEE

cc. Supervisor (Prof. NG Mtshali)
cc. Ms. C Dhanraj

Appendix 7B: Ethics Approval- Amendment to Title

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

Research Office, Govan Mbeki Centre
Westville Campus
Private Bag x54001
DURBAN, 4000
Tel No: +27 31 260 3587
Fax No: +27 31 260 4609
Ximbap@ukzn.ac.za

24 August 2011

Mrs. JR Naidoo (971138457)
School of Nursing

Dear Mrs. Naidoo

PROTOCOL REFERENCE NUMBER: HSS/0719/09D
NEW PROJECT TITLE: "A grounded theory inquiry: Establishing Communities of Practice among HIV/Aids nurse practitioners through the use of Critical reflection at selected hospitals in KwaZulu-Natal".

APPROVAL AND CHANGE OF DISSERTATION TITLE

I wish to confirm that ethical clearance has been granted full approval for the above mentioned project:

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach/Methods must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years

Best wishes for the successful completion of your research protocol.

Yours faithfully

PROFESSOR STEVEN COLLINGS (CHAIR)
HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE

cc. Supervisor – Prof. N.G. Mtshali
cc. Mr. S Reddy

Appendix 8 :Gate Keepers Permission

KwaZulu-Natal Department of Health Approval

HEALTH
KwaZulu-Natal

Health Research & Knowledge Management sub-component
10 – 103 Natalia Building, 330 Langalibalele Street
Private Bag x9051
Pietermaritzburg
3200
Tel.: 033 – 3953189
Fax.: 033 – 394 3782
Email.. hrkm@kznhealth.gov.za
www.kznhealth.gov.za

Reference : HRKM128/09
Enquiries : Mrs G Khumalo
Telephone : 033 – 3953189

14 January 2010

Dear Mrs J Naidoo

Subject: Approval of a Research Proposal

1. The research proposal titled '**A grounded theory analysis of the use of critical reflection within communities of practice among HIV/AIDS nurse practitioners in KwaZulu-Natal**' was reviewed by the KwaZulu-Natal Department of Health.

   The proposal is hereby **approved** for research to be undertaken at **GJ Crookes and Prince Mshiyeni Memorial hospitals.**

2. You are requested to take note of the following:
   a. Make the necessary arrangement with the identified facility before commencing with your research project.
   b. Provide an interim progress report and final report (electronic and hard copies) when your research is complete.

3. Your final report must be posted to **HEALTH RESEARCH AND KNOWLEDGE MANAGEMENT, 10-103, PRIVATE BAG X9051, PIETERMARITZBURG, 3200** and e-mail an electronic copy to hrkm@kznhealth.gov.za

For any additional information please contact Mrs G Khumalo on 033-3953189.

Yours Sincerely

Dr S.S.S. Buthelezi
Date: 21/01/2010
Chairperson, Health Research Committee
KwaZulu-Natal Department of Health

Gatekeeper permission: Hospital A (Rural)

HEALTH
KwaZulu-Natal

GJ Crookes Hospital, 1 Hospital Road, Scottburgh, 4180
Private Bag X 5501, Scottburgh, 4180
Tel.: 039 978 7000, Fax: 039 978 1295
Email :sibongile.nyawo@kznhealth.gov.za
www.kznhealth.gov.za

Reference: GJC 9/2/3
Enquiries: Mrs. SP Nyawo
Telephone: (039) 978 7081

04 December 2009

Attention: Joanne R Naidoo
C/o School of Nursing
UNIVERSITY OF KZN
Durban

PER FAX: 031 260 1543

RE: PERMISSION TO CONDUCT RESEARCH – A GROUNDED RESEARCH THEORY OF THE USE OF CRITICAL REFLECTION WITHIN COMMUNITIES OF PRACTICE AMONG HIV/AIDS NURSE PRACTITIONERS IN KZN

I have pleasure in informing you that permission has been granted to you by GJ Crookes Hospital to conduct research on the above mentioned research.

Please note the following:

1. Please ensure that you adhere to all the policies, procedures, protocols and guidelines of the Department of Health with regards to this research.
2. This research will only commence once this office has received confirmation from the Provincial Health Research Committee in the KZN Department of Health.
3. Please ensure this office is informed before you commence your research.
4. GJ Crookes Hospital will not provide any resources for this research.
5. You will be expected to provide feedback on your findings to GJ Crookes Hospital.

Thanking you.

Yours Sincerely

HOSPITAL MANAGER: MRS SP NYAWO
GJ CROOKES HOSPITAL

Gatekeeper permission: Hospital-B (Urban)

HEALTH
KwaZulu-Natal

PRINCE MSHIYENI MEMORIAL HOSPITAL
Private Bag X07, MOBENI 4060
Mangosuthu Highway
OFFICE OF THE MEDICAL MANAGER
DR ISMAIL JAJBHAY
Tel: 031-9078304/17, Fax: 0866060372
E mail: ismail.jajbhay@kznhealth.gov.za
www.kznhealth.gov.za

Reference: EC 31.2009
Enquiries: Dr. IMS Jajbhay
Telephone: 031 907 8304
Date: 2009.12.21

TO: MS J R NAIDOO 031 2602213

RE: LETTER OF SUPPORT TO CONDUCT RESEARCH AT PMMH

I have pleasure in informing you that PMMH has considered your application to conduct research on **A GROUNDED THEORY ANALYSIS OF THE USE OF CRITICAL REFLECTION WITHIN COMMUNITIES OF PRACTICE AMONG HIV/AIDS NURSE PRACTITIONERS IN KZN** in our Institution. We hereby support your research subject to DOH KZN guidelines.

Please note the following.

1. Please ensure that you adhere to all the policies, procedures, protocols and guidelines of the Department of Health with regards to this research.
2. This research will only commence once this office has received confirmation from the Provincial Health Research Committee in the KZN Department of Health.
3. Please ensure this office is informed before you commence your research.
4. The institution will not provide any resources for this research.
5. You will be expected to provide feedback on your findings to the institution.

Should the following requirements be fulfilled, a Permission/ Approval letter will follow.

- Full research protocol, including questionnaires and consent forms if applicable.
- Ethical approval from a recognized Ethics Committee in South Africa.

Thanking you.

Sincerely

MR. NBL GWALA
HOSPITAL MANAGER

Appendix 9: Information Sheet and Informed Consent

Information Sheet

February, 2010

Title: A Grounded Theory analysis of the use of critical reflection within communities of practice among HIV/AIDS nurse practitioners in KwaZulu-Natal

Dear Participant,

Thank You for the opportunity to share my research ideas with you. I am Joanne, a student at the University of KwaZulu-Natal (PhD) and am interested in exploring the experiences of nurses in managing and treating HIV/AIDS. Through my exploration of your experiences, I would like to know more about your current practices, areas that you would like to know more about in your management of HIV/AIDS and to share with you ways on how you can reflect on your practice and ways that can assist in enhancing your current knowledge so as to assist in improving your confidence in your practice and quality of care. To assist in our learning process all participants who agree to be part of this study will come together to form a group, in which we will have discussions about our practice and learn new ways to change or improve current practices. You will also be required to keep a diary. If you agree to participate, you will be part of this group, when all the members of the group has been formed we will meet to establish how frequently we will meet (it may be weekly). The meeting will take place in the hospital premises but not directly near your work environment. All information shared in the group discussion will be kept confidential (i.e. only in the group). All information will be recorded and used only for the purposes of the study. You will not be required to use you actual names, you can choose another name for the purposes of this study that will be your pseudonym.

Your participation or lack of participation will not jeopardize your current work activities in any. You may ask for further clarification during any time of the process of this research, and can withdraw from the study at any point without any penalty.

Please note that due to the nature of the study, that is most of our interaction together will be in the form of group discussion, there is a threat to confidentiality. To safeguard from any of us violating other participants trust and discussing information outside of the group discussion, the following rules have been established:

1. We appeal to you not to talk or discuss any of your won or other private experience that you feel is too personal or revealing.
2. As a member of the group, you have an obligation to your fellow group members to respect the privacy of the other members of the group by not disclosing or discussing any personal information they share in the discussion.
3. As a member of the group, you have an obligation to your fellow group members to keep their identify confidential, this means not discussing the identity of any member of the group.

Should you wish further information please feel free to contact me.

Joanne R Naidoo
Researcher
Tel: 031 260 22 13 or 083 670 42 62
kistenjr@ukzn.ac.za

Prof N Mtshali
Supervisors Details
Tel: 031 260 24 99/ 2498
mtshalin3@ukzn.ac.za

UNIVERSITY OF KWAZULU-NATAL

Informed Consent Form

Title of research: A Grounded Theory analysis of the use of critical reflection within communities of practice among HIV/AIDS nurse practitioners in KwaZulu-Natal

Purpose of the study: The purpose of this study is to explore the process that is involved in establishing communities of practice among nurse practitioners working in the context of HIV/Aids, through the use of critical reflection. Communities of practice are another term that can be used to describe our group of nurses who are working in the discipline of maternal and child health. And through our engagement within the CoPs I would like to explore what are the stages of development in terms of critical reflection and establishing the CoP.

Please circle the appropriate answer based on our introductory session and the information you received on the study, and if you are satisfied with the information you have and are willing to participate in the study, please complete the consent slip.

1.You have read the information letter and understand the contents therein YES/NO

2. Have you had the opportunity to ask questions regarding this study YES/NO

3. Have you received the answers you required for better clarification YES/NO

4. Do you understand what your involvement in this study YES/NO

5. Do you understand that you may withdraw from the study at any given time without any reason YES/NO

6. Do you voluntarily consent to participate in this study YES/NO

Informed Consent Slip

I---------- (name of participant) hereby confirm that I understand the contents of the information sheet and the nature of the research study, and I consent to participating in the research project.

I understand that I am free to withdraw from the project at any time, should I so desire.

---------- ----------

Signature of Participant: **Date:**

Details of Researcher:

Joanne R Naidoo
0836704262 or 0312602213
kistenjr@ukzn.ac.za

Appendix 10: Advocacy Letter from CoP of Nurses

25th March, 2010

Meeting Minutes with the nursing staff (i.e. CoP members): RE Laboratory facilities support staff.

Present: HIV Nursing Core Team Members, all members present and Mr K... the head of the laboratory services department

The meeting commenced with a discussion of the crucial steps in the PMTCT program and the challenges that nursing staff are experiencing.

- One challenge that was identified from the group meeting was that there is a delay in receiving the CD4 results from the laboratory services department.
- The services are sometimes outsourced to other laboratory companies, so the delay might be coming from this issue.
- There might also be a problem with the time of delivery with the porter's from the lab to the wards.
- Ideas for follow-up like the nurses have a book or a register where the data and time and signature of the porter is recorded so that follow-ups can be made if the CD4 results or other blood specimens are not returned in an adequate time back to the ward.
- After some discussion it was agreed that after one week of taking the blood specimen the results should be sent back to the ward and for nursing staff to use in their patient care, like assessing if the pregnant women in eligible for initiation of ARVs
- Nurses are welcome to continue working with Mr Khumalo from the laboratory services department to assess for delays and ways of resolving the issue.
- Meeting concluded. Refreshments served.

Appendix 11: Information Pamphlets

YOUR ROLE IN THE PMTCT PROGRAM

Our role in the PMTCT program is to not also offer comprehensive counseling and health education. This will benefit the patient in adhering to her own ARTs and also for the baby thereby reducing the number of new infections of HIV among babies, and help the mother live a healthy and positive life.

One aspect of counseling is safe infant feeding choices. This includes advising mothers who are HIV positive and on lifelong ART or not and choose to breastfeed, should be supported and advised to do this exclusively for 6 months and gradually introduce appropriate complementary foods after 6 months and to continue breastfeeding up to 1 year. Mothers who are HIV positive and not er lifelong ART and choose to stop breastfeeding at anytime, should be advised to do so gradually and continue to give the baby the NVP syrup daily and continue for one week after breastfeeding has stopped.

Mixed feeding during the 1st six month should be strongly discouraged , because of the higher risk of childhood infections. Mothers who choose to use formula feeding as an option need support at each clinic visit, and supported in terms of advice for cost implication and dealing with stigma and disclosure about formula feeding. . The mother should be educated and demonstrated on how to prepare the formula and how to care for the bottles in terms of sterilization to avoid child illnesses. Mothers should be counseled on the cost implications for formula and how to deal with possible stigma or questions received from families or friends to whom the patient has not disclosed to. breast or mixed feeding.

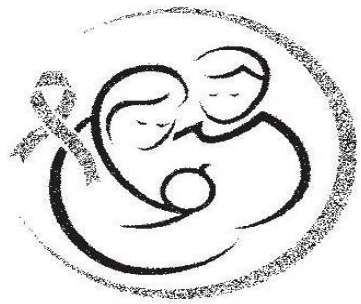
The PMTCT program is an important aspect in our nursing care and in our goal of reducing the rate of HIV/Aids.

We hope this information sheet has been useful for you, if you need any additional information, please feel free to contact any of our group members. We can be found from the Matron's office.

"SISONKE"

"WORKING TOGETHER WE CAN MAKE A DIFFERENCE "

A Quick guide to PMTCT care for nurses



THIS INFORMATION IS BASED ON THE NATIONAL DEPARTMENT OF HEALTH, SOUTH AFRICA GUIDELINES FOR PMTCT, 2010

DEVELOPED BY THE PMMH MIDWIFERY NURSING CORE TEAM, JULY 2010

PROVIDING PMTCT CARE

Dear Nurse/Midwife,

This quick guide information booklet is made to help you understand the PMTCT program and your role as a nurse/midwife in the program.

PMTCT is the abbreviation of the program called Prevention of Mother to Child Transmission of HIV/Aids. It was first introduced in KZN in 2002 . Guidelines on the clinical management of PMTCT come from our National Department of Health, SA . Changes to the guidelines are made based on new information that researchers are finding about more effective ways of preventing HIV transmission. This information is based on the latest guidelines, that is the **PMTCT guideline of 2010.**

The PMTCT program is made up of activities that we as nurses are responsible to implement. The PMTCT program starts from the pregnant women (our patient) first visit to the antenatal clinic, continues to labour and delivery wards and ends with the mother and baby's last check-up at the postnatal department.

What are the steps in the PMTCT program?

The PMTCT process or program is a step by step guide on the PMTCT process.

The first step in the PMTCT process is group and individual counseling.

1.All pregnant mothers presenting to the antenatal clinic, must be tested for HIV, for those patients who are HIV positive a CD4 blood specimen must be taken. From 14 weeks of pregnancy, one prophylaxis antiretroviral drug, which is called AZT must be commenced at the antenatal clinic. Advise the mother that this AZT will be repeated monthly at her antenatal visit. The dose of AZT is 300mg taken twice a day. **AZT should be avoided in patients with severe anaemia (Hb less than 8g/dl).** Clinical screening and WHO staging Tb screening should also be done on all patients.

PROVIDING PMTCT CARE

2. If the patients CD4 result is less than 350 cells/mm, refer the patient for lifelong antiretroviral therapy. In our hospital Vusithemba Clinic offers this service.

3.When the patient is in active labour, administer a single dose (sd) of NVP (Nevirapine), that is a 200mg tablet given once. During labour 300mg of AZT (also called Zidovudine) must be given every three hours till delivery of the baby.

4.Immediately after delivery give one dose of Tenovir and one dose of FTC. Women who are on lifelong ARTs do not require additional treatment, they must continue as normal.

What happens after delivery?

During postnatal care, the baby is issued ARV prophylaxis NVP (Nevirapine) syrup must start within 72 hours of delivery. if the mother is **formula feeding**, issue NVP syrup from birth up to six weeks as follows: If the birthweight is **less than2.5 kg** administer 1ml(10mg) once daily, if the birthweight is **more than 2.5kg**, administer 1.5ml(15mg) once daily for six weeks. At the baby's six week postnatal visit, administer immunization as per the EPI (Expanded Program of Immunization) and check the PCR level, if it is negative, stop Bactrim and do a rapid HIV test at 18 months. If the PCR is positive, refer the baby for ARTs and continue with Bactrim. To conduct a viral load test to confirm the HIV status.

If the mother is **breastfeeding**, issue NVP (syrup as follows:
From birth to six weeks: issue NVP syrup from birth up to six weeks as follows: If the birthweight is **less than2.5 kg** administer 1ml(10mg) once daily, if the birthweight is **more than 2.5kg**, administer 1.5ml(15mg) once daily for six weeks. **From 6 weeks to 6 months:** issue 2ml (20mg) to be taken once daily
From 6 months to 9 months: issue 3ml (30mg) to be taken once daily

PROVIDING PMTCT CARE

At the baby's six weeks visit, do the PCR level, if negative, continue with Bactrim until breastfeeding stops. Repeat HIV test 6 weeks after breastfeeding stops and repeat a rapid HIV test at 18 months. If the PCR level is positive, refer for ARTs and do a viral load test to confirm HIV status.

As a nurse working in the postnatal wards and clinics, you should always offer safe feeding choices and counseling.

What about the mother ?

At the six weeks postnatal visit, if the mother is on lifelong ART's, support and monitor adherence and make sure she is referred to a PHC for ongoing ARTs, discuss family planning options and encourage safe infant feeding.

If the mother is not on lifelong ARTs, assess her CD4 level, if it is more than 350 cells/mm and WHO staging is not at stage 3 or 4, and TB screening is clear, refer to the wellness clinic and family planning service, if the CD4 level if less than 350 cells/mm and the WHO HIV staging is at stage 3 or 4, refer urgently for lifelong ARTs.

What happens to abandoned babies ?

If the abandoned baby is judged to be within the first 72 hours of life, administer 1ml (10mg) of NVP immediately and then for six weeks. And to follow the routine as described above for the six week postnatal visit. PCR level checked at 6 weeks.

What happens to un-booked mothers ?

If a mother present in labour and was not booked previously from the antenatal clinic, offer all patients whose HIV status is unknown HIV testing and counseling immediately and preferably before delivery or discharge, so the baby gets NVP syrup if the test is positive.

Appendix 12: Editors Letter

Editing Declaration

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2011-12-16

TO WHOM IT MAY CONCERN

Thesis Title: A GROUNDED THEORY INQUIRY: ESTABLISHING COMMUNITIES OF PRACTICE AMONG HIV/AIDS NURSE PRACTICTIONERS THROUGH THE USE OF CRITICAL REFLECTION AT SELECTED HOSPITALS IN KWAZULU-NATAL

Author: Joanne Naidoo

This is to certify that I have edited the above thesis from an English language perspective only, and have made recommendations to the author regarding spelling, grammar, punctuation, structure and general presentation.

A marked-up version of the thesis has been sent to the author and is available as proof of editing.

I have had no input with regard to the technical content of the document and have no control over the final version of the thesis as it is the prerogative of the student to either accept or reject any recommendations I have made.

Therefore, I accept no responsibility for the final assessment of the document

Yours faithfully

Margaret Addis

Appendix: 13 Pictures of the CoP meeting venue