LIST OF ACRONYMS

ANA American Nurses' Association

CHC Community Health Centre

CNP Clinical nurse practitioner

DOH Department of Health

DPSA Department of Public Service and Administration

EDL Essential drug lists

HWE Healthy Working Environment

ICN International Council of Nurses

MoH Ministry of Health

NDoH National Department of Health

NGO Non-Governmental Organization

NICE National Institute of Clinical Excellence

NPR Nurse-Patient Relationship

PHCFs Primary Health Care Facilities

PHC Primary Health Care

PHCNs Primary Health Care Nurses

PM Pain Management

RCN Royal College of Nursing

RNAO Registered Nurses' Association of Ontario's

RSA Republic of South Africa

STGs Standard Treatment Guidelines

TB Tuberculosis

TEF Therapeutic Environment Framework

UNAIDS United Nations Program on HIV and AIDS

UNICEF United Nations Children's Fund

UNISA University of South Africa

WHO World Health Organization

ORGANISATION AND STRUCTURE OF THE STUDY

Chapter 1: Introduction and background	Provides the overview of the study plan, which includes the introduction, and background of the study, research purpose and objectives.
Chapter 2: Literature Review	Covers the literature review of the study, sources of literature related to the three key concepts of the study, nurse patient relationship, chronic pain and primary health care. The chapter includes the identification of the knowledge gap in the literature relating to the key concepts of the study
Chapter 3: Conceptual/Theoretical framework	Explains the theoretical pinning of the study, the ten carative factors relating to the caring philosophy by Jean Watson, theories of pain and the four main concepts: Nursing, Environment, Person and health.
Chapter 4: Methodology	The methodological presentation of the study is outlined in this chapter. The methodology included both the quantitative and qualitative phases of the study.
Chapter 5: Quantitative phase: The survey results	The quantitative results are presented in this chapter, the data presentation is presented in the combination of graphics and themes
Chapter 6: Quantitative phase Data analysis	The quantitative data analysis is presented in Chi Square tables and the themes generated from the open ended section of the study
Chapter 7: Qualitative phase: Participative	Provides the qualitative phase data collection and data analysis of the study. The chapter is separated in the two sections on participative observation and the focus group

observations and Focus group discussions	discussions.
Chapter 8: Data interpretations, discussions and the model	The interpretation of the study results for both the quantitative and qualitative phases of the study were covered in this chapter. The chapter also includes the model developed from the research study results.

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CHAPTER ONE

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Chronic pain management is one of the reasons for the patients visit to the clinics (Louw, Morris & Grimmer 2007:105). According to the South African Department of Health (2009:1), thirty to forty five percent of patients with chronic pain are managed at the primary health care services. The Health Sciences Research Council (2000:350) indicates that chronic pain is a common and debilitating symptom that is gravely underestimated and under-treated. Several non-pharmacological therapies have been proven effective in the management of chronic pain (World Health Organization 2004:63). Chronic pain ranges from mild to severe and can persist for a lifetime. The cause of chronic pain is not always evident, although it is associated with chronic conditions. Every activity that the patient has to perform becomes an effort and thus performing activities of daily living is difficult. For a working patient, productivity at work is reduced. All the aspects of a person's health can play an important role in aggravating or relieving chronic pain. The complexity of pain requires that all the dimensions (psychological, spiritual aspects, physical) of the body be taken into consideration (Cathy**,** Russo**,** William & Brose 1998:443; Smith, Elliot, Hannaford, Chambers, Smith & Penny 2004:1032; Stannard & Johnson 2003:703). The impact of chronic pain in the community in terms of general health, employment and interference with daily activity has not been quantified (Cornally & Mc Carthy 2011:210).

According to van der Westhuisen (2009:10) 1.5% of the general population in the United States of America are living with chronic neuropathic pain while in United Kingdom 1% of the population are living with such a pain. In Canada 37% of the adult population had experienced chronic musculoskeletal pain in their lifetime (Louw, Morris & Grimmer-Somers, 2007:3). In the Sub Saharan countries, amongst the patients who are suffering from chronic conditions such as AIDS, Arthritis, Diabetes Mellitus and musculoskeletal conditions, 29-61% of those patients suffer from chronic pain (WHO 2006:23). Patients suffer from different types of pain: 71% somatic pain, 46% neuropathic pain, 29%

visceral pain, 46% chronic headache, 17.5% chest pain and 66% lower limb pain (Merriman et al 2006:47). In studies conducted in South Africa, estimates vary: it was found that the prevalence of chronic pain in patients with musculoskeletal pain ranged from 67%-77% (Naidoo, Kromhout, London, Naidoo & Burdorf 2009:204). The prevalence of chronic pain among HIV and AIDS patients in South Africa is 98% (Norval et al., 2006:53). The variations in prevalence may be explained by the fact that the prevalence and pain intensity increase with disease progression.

Irrespective of the prevalence of the chronic pain, it is still undiagnosed and undertreated (Driessen, 2007:123). Schulman-Green, McCorkle, Cherlin, Johnson-Hurzeler and Bradley (2005:67) interpreted the under-treatment of chronic pain as the registered professional nurses' desire for maintaining hope among patients and their families (Caritas process 2: **Enabling faith-hope**). Fear of the development of side effects, fear of opioid addiction, lack of pain assessment and management knowledge, and lack of availability of relevant drugs act as barriers to the management of chronic pain. The incomplete nature of the pain management team at the primary health care (responsible for non-pharmacological management of pain) is also noted as a barrier (Department of Health, 2004a:5).

McElligott,Simmers, Thomas and Kohn *(*2009:100) and Weintraub, (2006:02) explained that the non-pharmacological approach to managing chronic pain such as nurse-patient relationship (NPR) have more benefits to the patient living with chronic pain. The benefits of NPR are closely related to the caritas process as explained in the Watson caring science (Watson 2008:14). Nurse-patient relationship enables the nurse to understand the patient as a whole (Caritas process 8 **Supportive, protective, and/or corrective mental, physical, societal, and spiritual environment**), patients is able to mobilise inner self-healing powers (Caritas process 3; **Cultivating the sensitivity to the self and others**), improves coping skills and emotional support (Caritas process 6: **Creative problem solving caring process**); promotes self-care, improving ability to comply with pain regimen and preventing side effects.

The nurse-patient relationship constitutes one of the fundamental tenets of nursing as a caring profession. The caring factor of the nursing profession is embedded in intimate, compassionate human interaction (Breier, Widschut & Mgqolozana 2009:112; Van Rensburg & Pelser 2004: 163). A properly established relationship between a nurse and

patient contribute towards mutual trust between the two parties (Mitchell, 2007:80). A trusting relationship may improve the healing and job satisfaction for the patient and the nurse respectively. Establishing a trusting relationship is a skill that needs to be taught and learned by nurses. In the context of this study, the relationship between the nurse and the patient with chronic pain happens in the primary health care clinics that are different from the hospital situation. According to Henning (2005:1-2) the nature of nurse patient relationship among others contributes to the under-utilisation of the primary health care service by the patients.

Primary health care is the first level of contact for the community to access the health care system in South Africa and it is a free service. Primary health care (PHC) provides a comprehensive health care package ranging from preventative to rehabilitative care for stable chronic patients. The primary health care package explains the services that should be available at any primary health care clinic in South Africa. Primary health care practitioners provide a one-stop service, where all services should be provided from the same room by the same professional nurse including chronic pain management (Department of Health, 2004b: 24).

Patients with chronic pain visit the PHC clinics on a monthly basis for the collection of their medication. According to Sun, Borneman, Piper, Koczywas & Ferrell (2008:67) there are several barriers that contribute to lack of effective management of chronic pain. The factors include patient's attitudes towards pain medication, lack of knowledge regarding the chronic pain condition, and lack of utilisation of non-pharmacological pain management therapies. If the relationship between the nurse and the patient is not conducive and does not allow the exchange of relevant information, the management of chronic pain will remain being a challenge.

1.2 BACKGROUND TO THE PROBLEM

Irrespective of high prevalence of chronic pain as indicated earlier in the report, 68% of patients living with chronic pain reported that chronic pain is not well managed in the PHC services (Boulanger, Clark, Square, Cui & Horbay 2007:40). In countries such as South Africa with high prevalence of AIDS, musculoskeletal pain such as chronic back

pain (Louw et al, 2007:8), the unavailability of chronic pain clinics contribute to the under treatment and under diagnosis of chronic pain. Lin, Chiang, Chiang and Chen (2008:2039) highlights that the high prevalence of chronic pain in the PHC setting resulting as the complication of unrelieved acute pain while the patients are still at the hospital. Cornally and McCarthy (2011:206) further agrees that poor management of acute pain at the hospital results in the increased morbidity and compromised quality of life of the patients which are later suffering from chronic pain. Sometimes the guidelines (standard treatment guidelines) that are available in the health facilities (SA) are not fully compliant with the WHO recommendation of the 3-step ladder approach to the management of chronic pain (South Africa, 2008:320), which makes the chronic pain management problem even more complicated. Management of chronic pain is complex and require a comprehensive approach to restore the functionality of the affected individual (Sullivan & Ferrell 2005:2). Upshur, Bacigalupe and Luckman (2001:1792) reiterate that under treatment of chronic pain with pharmacological interventions and the absence of cognitive therapy result in the poor treatment outcome for the patient.

Health professionals in the PHC setting fear that the regular prescription of opioids in the management of patients with chronic pain may result in drug dependency or abuse or side effects thus further reducing the quality of life of the patient (Boulanger et al, 2007:40). Cornally and McCarthy (2011:206) attributed the patients fear to the disbelief by health professionals because the current health system utilises the biophysical model of chronic pain management where there should be objective evidence of chronic pain to allow health professionals to prescribe opioids. Courtenay and Carey (2008:2010) warns that the highly specialized pain clinics are very effective in managing patients with chronic pain but due to the economic burden they have on patients, it is almost impossible for the patients to sustain the services of specialized pain clinics in underdeveloped countries. Brennan, Carr and Cousins (2007:209) further indicate that the biophysical model of pain management does not take into consideration the cultural, educational, spiritual and social aspects of chronic pain management. Such complex aspects of pain management are responsible for poor quality of life that the patients are experiencing. The bio psychosocial model of chronic pain management was recommended from literature (Monsivalis & McNeill, 2007: 66; Lindberg & Engström, 2011: 164; Adams, Poole & Richardson, 2006:292 and Harding et al, 2010:2)) as an additional model to the biophysical that will assist in managing the complex

phenomenon of chronic pain. The basic principle that underpins the bio-psychosocial model is the development of the therapeutic relationship.

Nurse-patient interaction as manifested by the caring practices is the potential source of therapeutic relationship increases the success rate of managing chronic pain (Dunn, 2004:77). Last and Hulbert (2010:186) indicated that the complicated manipulation techniques such as tractions, nerve stimulations and laser therapy even though they are identified as complementary therapies for the pharmacological management of the patient do not improve the treatment outcome of chronic pain. They further indicate that the effect of pain on the patients relates to the feeling of hopelessness, helplessness, thinking of the worst case and fear of loss of family status (requires a supportive environment).

Dziedsik et al, (2009:1373) emphasised that access to information; advice giving and education are the core non-pharmacological interventions in the management of patients with chronic pain. According to the American Nurses Association (2002:5), mutual respectful communication, active listening, assertive speech, avoidance of passive aggression and proper conflict management of nurses contribute are identified as some of the caring behaviours that needs to be observed by both the nurse and the patient. Selby (2011:14) adds that the use of communication skills effectively and assisting the patient to set realistic goal for self are proven to be the most effective methods that leads to the improved treatment outcomes. Dysvik et al, 2011:305), however warn that this can be effective if utilized in combination with pharmacological interventions even though Stenner and Courtenay (2008:280) disagree because the prescribing role of the nurses has overarched the core non pharmacological role of nurses in chronic pain management.

In countries where nurses have authority to prescribe medications as the added role, combining the biophysical and bio psychosocial models in chronic pain management are effective (Stenner & Courtenay, 2008:278). In South Africa, nurses working in the PHC setting are authorized to exercise such dual responsibility. The caring practices as embedded in the bio-psychosocial model of chronic pain management is widely advocated but minimally implemented. The caring behaviours that needs to be practiced in order to realise the therapeutic relationship are often understood or poorly implemented

The caring behaviour in the relationship if implemented effectively should benefit both the nurse and the patient. The carative processes are sometimes poorly understood as activities that will only benefit the patient who is suffering from the chronic pain. Trueman and Parker (2006:199) believe that counselling (Caritas process 7) could potentially cause harm to practitioners engaged in listening to the patients' feeling of hopelessness due to chronic pain experience. The potential harm is related to the emotional involvement of the practitioner due to the expectation of keeping all the information confidential. Craig (2009:29) also indicates that counselling and communication skills can only be effective if provided in the specialist clinics while Taylor (2007:44) pointed out that nurse's belief that the spiritual caring of the patient is the responsibility of the patient's family.

In the study conducted by Martensson, Carlsson and Lampic (2010:574), nurses perceived caring as the burden to the health of the nurses and constitute 37% of emotional exhaustion to the nurses. The study further indicated that the nurses do overestimate the emotional stress experienced by the patients but under estimate their ability to cope with the emotional stress. According to Koleva et al (2005:475) and Stannard and Johnson (2003:703), health personnel in primary health care settings are faced with the challenges of managing chronic pain and that more education and support of the health care personnel can lead to a change in the lives of people living with chronic pain. Nurses did not identify the establishment of the patient directed treatment goals as essential in minimising the work stress but belief that it is the workload that needs to be managed in order to reduce work stress.

In acknowledgement of the other external factors that may compromise the effective utilisation of the nurse patient relationship, the system issues were identifies.The challenge of PHC nurses in implementing the NPR skill is the time factor where they have less than an hour of consultation time to establish a trusting relationship. Miner-Williams (2007:1230), deduces that the skill need to be practiced for at least 100 hours for it to be mastered.

As the nurses shift the priority from the patient centred goals, the consequences of such shift in priority result in report on nurses' misconduct towards patients (SANC 2009:12) ANA (2009:1) further indicates that due to lack of trusting relationship between the nurse and the patient quality of care is compromised. In America, 40% of nurses are

disciplined due to misconduct at the workplace annually (American Nurses Association 2009:3). In South Africa, 394 cases of poor nursing care has been reported to the South African Nursing Council in 2009 (SANC, 2009:14). Khalil (2009:440) indicates that nurses discriminate against patients through their attitudes and behaviour. Almost fifty-seven per cent of nurses regard patients as good when they are not complaining or asking questions during patient management. The challenges in the health systems are often reported as neglect, misconduct and violation of patients' rights (La Duke 2004:226). Arnetz and Arnetz (2001:418) assert that wherever there is some form of violence, the quality of care is compromised.

The Royal College of Nurses (2002:39), contend that the nature of the relationship between nurses and patients has been severely compromised where 60% of poor relations pertain to verbal abuse between nurses and patients. Ferns (2006:44), explains compromised relationships as anything that affects the personal safety of the people interacting in the relationship. The International Council of Nurses (ICN) recommends that one of the responsibilities of the nursing associations should be to advocate the blame free working environment between nurses and patients (ICN 2004:13). The Registered nurses' Association of Antario (RNAO) acknowledges the need for the development of intervention strategies in order to maximise a healthy working environment in the health facilities due to poor nurse-patient relationships (RNAO 2006:17). This study will therefore explore the caring practices in the management of patients with chronic pain within the PHC setting.

1.3 STATEMENT OF THE RESEARCH PROBLEM

World Health Organization (WHO) has developed the guidelines for the management of chronic pain over the past decades (3-step analgesic ladder approach) in acknowledgement of the burden of chronic pain within the society. Drugs such as Tramadol are applauded for their effective management of chronic pain if prescribed accordingly (Manchikanti et al, 2011:E142). It is also acknowledged that the opioids therapy in general result in about 50% efficiency in management of chronic pain on initial use but not guaranteed for long-term use (Malson et al, 2011:E89). In countries like South Africa where the PHC services are nurses driven, there are situation adapted

guidelines to assist nurses in the management of chronic pain essential drug list (EDL) however chronic pain still account for more than 60% of patients who visit the clinic monthly. Despite that high utilisation, there are patients who are missed because they are not utilising the PHC services.

Nteta, Mokgatle-Nthabu & Oguntibeju (2010:1) in their study of PHC utilisation in Tshwane district revealed that the patients are moving from one facility to the other with the purpose to gathering more analgesics as the supply from one facility is not sufficient to relieve the chronic pain they are experiencing. This was further confirmed by Becker, Dell, Jenkins and Sayed (2012:800) who indicated that 27.5% of patients bypass the PHC services to the hospital because they feel that the medication at the PHC level is not effective while additional 23.7% of patients stated that there is lack of comprehensive plan for pain management at the PHC facilities.

Lack of sufficient pain management from the pharmacological approach is not only limited to the PHC services but combining the overall pain management challenges with the given situation in the PHC setting leads to more burden to the nurses who are faced with pain management at the PHC clinics. Challenges of pharmacological approach include: lack of proven efficacy of drugs (et al, 2007:238); increasing side effects (Zhang et al, 2010:480; British pain society, 2010:41); need for complex surgical procedures to administer some medications (Manchikanti et al, 2010:1536); stigma related to certain drugs (methadone) (Shah & Diwan, 2010:209); unavailability and strict access control of medication (Portenoy, 2011:2238); slow development of new efficient drugs (Woolf, 2010:1243); needs for extensive knowledge of the pathophysiology of pain mechanisms (Barron, Binder & Wasner, 2010:810) and the cost (Turk, Wilson & Cahana, 2011:2230).

While the efficacies of drugs in the management of chronic pain are unstable and to some extent declining (e.g. glucosamine sulphate) the importance of non-pharmacological interventions are strongly advocated as their impact on chronic pain management is increasing (Zhang et al, 2010:480). Several patient satisfaction surveys that were conducted relating to effective pain management therapy, patients' emphasis was on pain communication (Fakhr-Movahedi, Salsali, Negharandeh & Rahnavard 2011:187). On the other hand, nurses also indicated that the fulfilment in working with

patients who are receiving palliative care is based on the intimate relationship that is developed between them and their patients (Gamez, 2009:126).

The caring practices are identified as having a positive impact on pain for patients visiting the PHC services. Caring allows the development of the family oriented care (based on respect and trust), which are not optimal practices currently (Afzal & Salmela, 2012:30). NPR has also accounted for 72% of successful patient enablement in the PHC setting (Birhanu et al, 2011:7). The activities that were identified by patients as being effective during the interaction was empathy, information sharing, knowing who your health provider is, involvement of patient in their treatment plan, a good listener (Caritas processes). Wysong and Driver (2009:29) also realised that patients made the relationship between quality of care and the good interpersonal skills of the nurse.

Dewing, Matthews, Cloete, Schaay, Louw and Simbay (2013:200) highlighted that even though it is not disputed that caring is critical in providing quality patient care but the teaching skills (Caritas process 7) of nurses is so lacking that is becomes the instruction giving. Jensink et al, (2010:5) agrees that nurses were observed to be struggling with counselling skills (Caritas process 5) when dealing with patients who are receiving palliative care. The others aspects of NPR that were identified as areas that need to be explored further within the NPR are establishing the trusting relationship (Caritas process 4) and providing support to the patients (Caritas process 8) and instilling faith and hope to the patients receiving palliative care (Caritas process 2) (Watson, 2008: 30).

1.4 RESEARCH PURPOSE

The study has to separate but related aims:

Firstly, to explore the role caring practices within the nurse patient relationship play in facilitating effective chronic pain management in the primary health care context.

Secondly, to develop a model for strengthening the caring practices in managing patients with chronic pain in the primary health care setting

1.5 RESEARCH OBJECTIVES

The objectives of the study were to:

- ✓ analyse the current caring practices during the management of patients with chronic pain within primary health care services;
- ✓ explore the challenges experienced by nurses in primary health care services when managing patients with chronic pain
- ✓ observe the caring practices by nurses when caring for the patients suffering from chronic pain within primary health care setting
- ✓ explain the nurses' caring practices when managing their chronic pain in the primary health care setting;
- ✓ develop a model for strengthening the the caring practices related to the management of patients with chronic pain within the primary health care setting.

1.6 RESEARCH QUESTIONS

- ✓ What are the current caring practices within the caring practices during the management of chronic pain patients in the primary health care services irrespective of whether the patients is on pharmacological or non-pharmacological treatment plan?
- ✓ What are the caring experiences for the nurses in the management of patients suffering from chronic pain?

1.7 SIGNIFICANCE AND RELEVANCE OF THE STUDY

1.7.1 Identification of the knowledge gap

The process of synthesising and analysing the literature related to the caring practices within the management of chronic pain assisted the researcher to identify the

knowledge gap. There were several issues that were identified in the literature that required further investigation such as: (1) time as a determining factor in establishing the trusting relationship (Camille, 2010:27), in the PHC setting, time is critical because the interaction between the nurse and patient in PHC is limited as compared to the hospitalised patients; (2) trust need to be realised by patients in the relationship, Betham (2011:3) suggested that the processes of establishing trust should be explored further; (3) Irrespective of the consensus relating to the importance of communication in the establishment of trusting relationship, Schrader and Babler-Schrader (2011:372) points out that the currently practiced communication is task oriented and not patient's need oriented. This is the first comprehensive study that explored the nurse patient relationship with focus on communication, counselling, trust establishment and other caring practices as required in the PHC clinics in South Africa.

1.7.2 Contributions to the body of knowledge

In acknowledgement of the fact the concepts used in the study have been explored, but the use of mixed method design and the triangulation of the data collection instruments (focus group discussion and participative observation) in this study provides an enriched data of the concept. On the other hand, caring has been explored as the concept of "giving to the patients" but this study explores caring as a reciprocal process to benefit both the nurse and the patient. The Watson theory of caring (theoretical framework) which formed the basis of the study assisted the researcher to explore these reciprocal processes (Caritas processes 1, 3, 6, 7 and 10) benefiting the patient while (caritas processes 2,4,5,8 and 9) benefitting the patient (Watson, 2008:31). The already conducted studies related to this topic emphasised on evaluating caring as experienced by patients thus the patients survey were mostly utilised as the means to identify the level of caring in the unit. This study focuses on nurses as the providers of the care thus the respondents in this study are nurses.

1.7.3 Contributions to the policy and quality of the PHC services

Strengthening utilisation of PHC services is one of the cornerstone strategies identified in the Alma Ata declaration to achieve the millennium development goals (MDG). To date several implementation strategies were implemented in different countries including South Africa, but according to the recent report the quality of care is not improving in the PHC services (Rohde et al, 2008: 959). The results of the study may

assist the Department of Health with the evidence based contributory factors to the underutilisation of the PHC services by the patients suffering from chronic pain and therefore providing information which can be used to improve the management of chronic pain at PHC level. Development of a model for the improvement of the nurse-patient relationship may lead to better management of patients suffering from chronic conditions through the improved relationship between the nurses and patients. The study is conducted at the period of re-engineering the PHC services in South Africa thus the results may be integrated in the development of the policies in managing services in the PHC setting considering the caring factors that are essential for the service.

1.7.4 Contributions to the nursing education relating to establishment of nurse patient relationship

The assessment of the nurse's ability to provide counselling and communication skills are currently assessed and evaluated through the traditional method of assessment (Brunero and Lamont, 2010:137; Rosenberg and Gallo-Silver, 2011:3). The results of this research may assist the nurse educators to re-assess the teaching strategies relating to the communication and counselling skills required in the management of patients with chronic pain. Such a change in strategy would assist the student nurses to translate the learned information into the daily practice in their working environment. The information gathered from the focus group discussions indicated the concerns from the nurses that the theory and practice integration is not fully realised with regard to the management of patients with chronic pain in the PHC facilities.

1.8 THEORETICAL/META-THEORETICAL GROUNDING

As described in the purpose of the study, the development of the model of caring theory in the context of primary health care will be developed based on the existing theory described below. The Watson caring theory (table 1.1) formed the basis of the discussion in this study. The responsibility of the nurse in caring attitude is to assist the person to find the strength and courage to confront life (American Nurses Association, 2010:4). Although caring is a subjective phenomenon, there are guiding principles, which assisted the researcher to evaluate the caring factor of nurses. Kindness, decision-making, teaching and learning, hope and faith, environment, trust, expression

of feelings, spiritual practices and miracles (DiNapoli, Nelson, Turkel & Watson, 2010:18) guided the caring levels in this study.

Table 1.1 Summary of the theoretical grounding of the study

Carative factor (1979	Carative process (1985)	Refined carative processes (2008)
1. Formation of a humanistic-altruistic system of values	Practicing Loving-kindness & Equanimity for self and other	Compassion with self was added
2. Enabling faith-hope	Being authentically present to/enabling/sustaining/honoring deep belief system and subjective world of self/other.	Enabling belief system emphasised
3 Cultivating the sensitivity to the self and others	Cultivating of one's own spiritual practices; deepening self-awareness, going beyond "ego self".	Going beyond ego-self to authentic transpersonal presence
4. Helping-trusting, human care relationship	Developing and sustaining a helping-trusting, authentic caring relationship	Sustaining love
5.Expressing positive and negative feelings	Being present to, and supportive of, the expression of positive and negative feelings as a connection with deeper spirit of self and the one-being-cared-for.	Allowing for expression of feeling; authentically listening and holding another person's story for them
6. Creative problem solving caring process	Creatively using presence of self and all ways of knowing/ multiple ways of Being/doing as part of the caring process; engaging in artistry of caring-healing practices	Creative solution seeking through caring process and full use of self.
7.Transpersonal teaching and learning	Engaging in genuine teaching-learning experiences that attend to whole person, they're meaning; attempting to stay within other's frame of reference.	Authentic teaching-learning within context of caring relationship, stay within other's frame of references, shift towards a health-healing wellness

Carative factor (1979	**Carative process (1985)**	**Refined carative processes (2008)**
8.Supportive, protective, and/or corrective mental, physical, societal, and spiritual environment	Creating healing environment at all levels (physical, nonphysical, subtle environment of energy and consciousness whereby wholeness, beauty, comfort, dignity and peace are potentiated	Remain the same
9. Human needs assistance	Assisting with basic needs, with an intentional, caring consciousness of touching and working with embodied spirit of individual, honoring unity of Being; allowing for spiritual emergence.	Reverentially and respectfully assisting with basic needs, holding an intentional, caring consciousness, of touching the embodied spirit of another as sacred practice, working with life force/life energy/lie mystery of another
10. Existential-phenomenological-spiritual forces.	Opening and attending to spiritual-mysterious, unknown existential dimensions of life-death; attending to soul care for self and one- being-cared- for.	Allowing for a miracle and all this presupposed by a knowledge base and competence.

1.9 RESEARCH DESIGN AND METHODOLOGY

The research design and methodology for this study is discussed according to the phases of the study**.** In this study, sequential, explanatory mixed method (figure 1.1) was utilised due to the behavioural aspect of the study (Streubert & Carpenter, 2011:354). The initial phase of quantitative is to explore the nature of the nurse patient relationship for patients having chronic pain, as there is no existing information about the subject. The analysed quantitative data provided the baseline for the exploration of the positive and negative factors within the nurse-patient relationship.

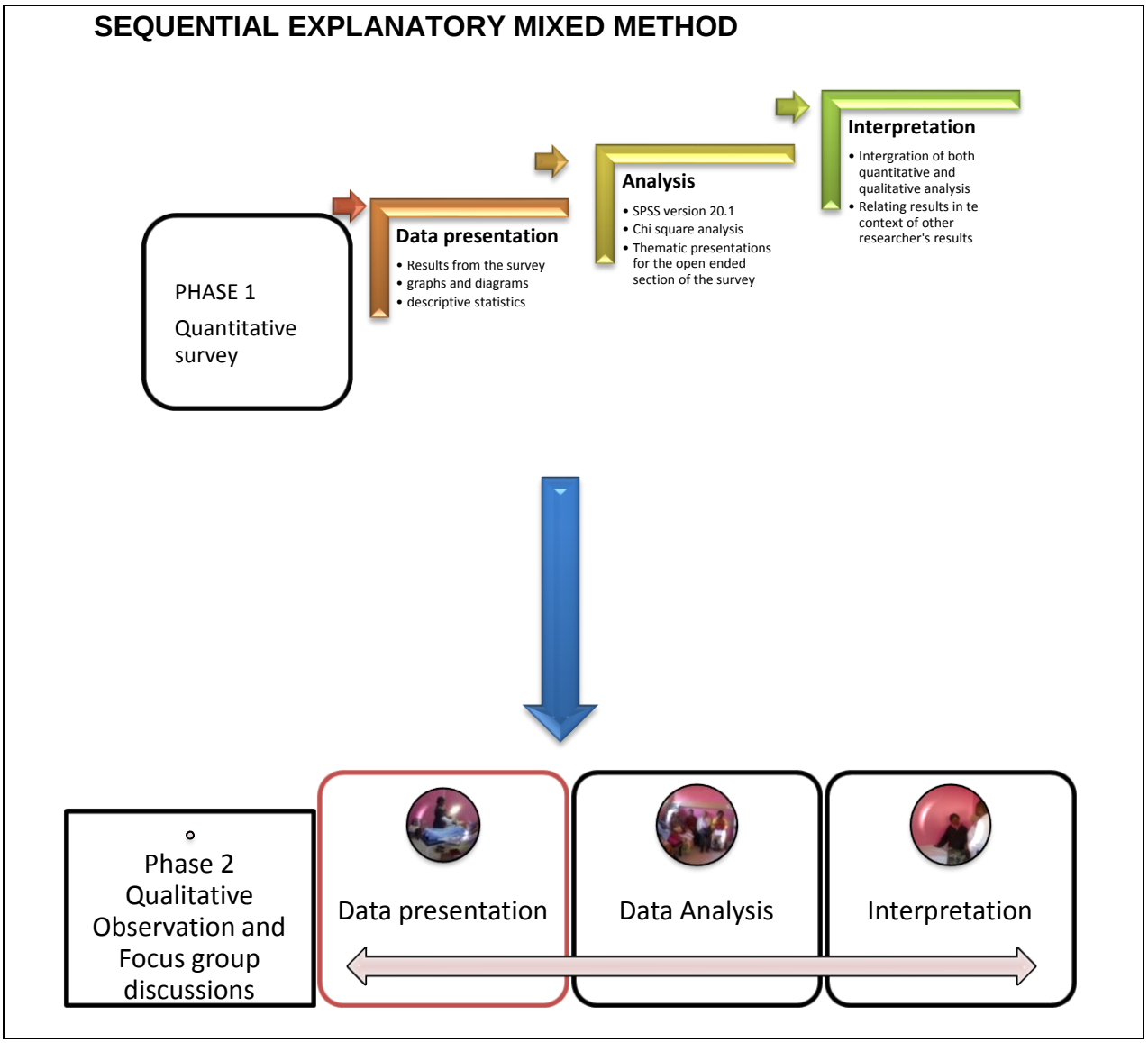


Figure 1.1 Structural overview of the research methodology

Polit and Beck (2010: 63) explain that the combined research design minimises possible researcher bias that may be entailed in the utilisation of a single research strategy. In addition, triangulated (combined) research strategies in this study seek convergence of information collected through different instruments (Onwuegbuzie & Leech, 2006:480). Relating to the research purpose of this study, the quantitative research component generated the variables of the nurse patient relationship, while the qualitative research (table 1.2) component generated the perception and experience of the nurse patient relationship phenomenon (Onwuegbuzie & Leech, 2006:484).

1.9.1 Rationale for methodological choice

1.9.1.1 Why mixed method

In the mixed method, the researcher adopts the pragmatic view that values both the objective and subjective aspects of the phenomenon (Creswell, Fetters & Ivankova, 2004:8). In this study the caring practices are so complex that both the subjective and objective data about the phenomenon provides a comprehensive and complete understanding of the nurse-patient relationship. Both the quantitative and the qualitative phase were given equal standing in the study. The mixed method used in this study is explanatory in nature (Creswell, 2009:211) as the time lines in phase 1 of the study starts with data collection followed by data analysis (figure 1.1) and only after analysis of the first phase data does the data collection and analysis of phase 2 follow. The two methods were intergraded during the interpretation phase of the study (Creswell & Clark, 2011:185) to allow a full description of the research report as they unfolded in every phase of the study.

1.9.1.2 Quantitative phase

The sequence starts with the quantitative phase in order to identify the outliers during the analysis of the data, which were then explored further in the qualitative phase. The quantitative data collection technique (survey) was utilised in the initial stage of the study. The research instrument utilised was developed for the study and the piloting of instruments was done to test the content validity and improve the formatting of questions (Creswell, 2009:150) before implementation.

1.9.1.3 Why survey

Descriptive survey is suitable in studying the research subjects' experiences of the interaction with nurses during the consultation (Greenhalgh 2002:592). Such experiences was based on what the research subjects feel, hear, believe, remember, decide, and do because of their nurse-patient interactions (Polit & Beck, 2010:338). The self-administered written questionnaire improves the objectivity of the research respondents. In this study, as a single researcher, the survey allowed the rapid turnaround of the questionnaires as a way of reducing the long periods of data collection that are described as one of the disadvantages of the sequential mixed method design. The survey also assists the researcher to generalise the findings of the nursing population working in the PHC setting in Tshwane district, as the sample size in the survey method is large enough to allow generalisation of the results.

1.9.1.4 Qualitative phase

Qualitative research focuses on describing and gathering an in-depth understanding of phenomena within its naturalistic, social, or cultural context (Creswell et al., 2007: 51; Denzin & Lincoln, 2005: 31). The outliers results identified from the quantitative phase are analysed in detail. The qualitative data collection process entails the non-statistical collation of the views and experiences of the sampled research participants, in relation to the nurse-patient and chronic pain management phenomena (Cornwell, 2009:15). In the qualitative phase of the data collection techniques utilised are the participative observation and focus group discussion (Bergman, 2008:17). The qualitatively gathered data provided tangible meaning to the phenomena entailed in the research topic (Creswell, 2009:211).

1.9.1.5 Why participative observations

Participative observation is the process of actions or occurrences as it happens between people (Borbasi, Jackson & Wilkes, 2005:497). The caring practices are

observed as the occurrence between the nurses and patients. In this data collection instrument, the researcher is involved with the participants and tries to understand the practices of the observed participants (Curry, Nembhard & Bradley 2009:1445). The researcher is involved by assisting the nurse in packaging and recording medication issued to the patient. The involvement of the researcher minimises the halo effect that is anticipated due to the research participants being observed (patient and nurse). The researcher is also able to record some of the research findings during the interaction as part of the activities includes recording, thus minimising the impact of self-reflexivity that may result during the analysis of data if all the information is reflected only after the observation. The activities chosen are based on the fact that in the normal consultation process they happen towards the end of the consultation session thus they allow the researcher to maintain a balance between observation and participation (Willig, 2009:27). This method allows the researcher to gain in-depth information compared to the questionnaire (Lambert & McKevitt, 2002:212). The participative observation was utilised in observing the caring practices as implemented by nurses in the consulting rooms.

1.9.1.6 Why focus group discussions

The focus group discussions explored the deeper understanding of the nurse-patient phenomenon as understood by nurses (Liamputtong, 2011:65). It also stimulates the discussion, while the dynamics of the group generates the central source of knowledge (Flick, 2009:196). The focus group discussion enriches the research data through the process of group interaction from all experienced parties thus also assisting in finding out more about the phenomenon through their own experiences about the phenomenon. The use of homogeneous groups in this study also facilitated easy interaction, as the participants are familiar with the subject under discussion. The focus group discussion as a qualitative data collection instrument included the pre-determined topic codes as identified from the quantitative data analysis data (Creswell & Clark, 2011:236). Due to nature of the data collection instrument, (focus group discussion) the researcher utilised a recording device during the focus group sessions.

1.9.2 Data collection sampling techniques and sample sizes determination

The different sampling techniques are utilised in different phases of the study as deemed appropriate. The summary of the sampling procedures are summarised in table 1.2 and table 1.3 below. The stratification of facilities is related to whether the facility is the provincial or local municipality according to the inclusion criteria. The clustering relates to the regions of Tshwane district. The quota relates to the size and type of the facility (clinics or Community health centre). The use of random sampling allows equal chances of the facilities to participate in the study.

The sampling techniques developed in stages where the sampling of the sites (facilities) to participate in the study was done and further sampling techniques relating to the recruitment of respondents to the survey was also done. The participants were given an opportunity and an equal chance to choose to participate in any of the three data collection techniques used in this study.

Table 1.2 Summary of data collection plans for the study

Mixed, sequential Explanatory	Objectives	Data collection instrument	Population	Sampling method	Sample size
PHASE 1 Quantitative	1	Self-administered questionnaire	Professional nurses in the provincial PHC.	Stratified, clustered, Quota, and random sampling	14 facilities (40%) 184 nurses (42%)
PHASE 2 Qualitative	1 & 2	Participative observation	Professional nurses in the provincial PHC.	Stratified, clustered and random sampling	47 nurses (10%)
PHASE 2B Qualitative	3,4 &5	Focus group discussions	Professional nurses in the provincial PHC facilities Tshwane district	Stratified, clustered, Quota, and convenience sampling	4-5 focus groups depending on data saturation level saturation

1.10 RESEARCH SETTING

The context (research setting) of this study was Tshwane district Primary health care service facilities. The revised municipality demarcation from April 2011, has divided the district into 7 regions (formerly called sub-districts). Each region comprises of the district hospital, CHC, clinics, satellite clinics, mobile clinics, home based care and school health services. The facilities are divided into two categories, provincial and municipality facilities. The sampling of the research sites combined different strategies in order to ensure representativeness of the participants (table 1.3).

Table 1.3 Site sampling techniques and rationale

Principle	Sampling technique	Description for the study	Rational for choice
Site population		PHC facilities in Tshwane district/(59 facilities)	Context for study: PHC
Site target population	Stratified	Provincial not local authority	Homogeneity (same management authority)
Accessible sites		Provincial/service provision for chronic pain patients compulsory in all facilities. (42)	Feasibility (request for permission to undertake study are stipulated under the same conditions)
Site sample size	Clustered	Regions (5) Size of facility (> 20 professionals)	Practicality and cost (Not embedded sampling for all three phases of the study/ rich data-maximum variations
	Random	14 facilities participating in the study.	Resource limitations and feasibility- denied access due to functional reasons (convenience).

1.11 DATA ANALYSIS

The data analysis in this study occurs in sequence of the data collection. First the data collected from the survey is analysed before the process of data collection in phase two starts and this is followed by the data analysis in phase two. Phase two has both participative observation and focus group discussion data collection techniques and therefore the data analysis includes both techniques.

1.11.1 Data analysis quantitative phase

The statistical presentation of data was used to convert and condense the collection of data into an organised visual presentation (Cornwell, 2009:218). The interpretive method enabled the researcher to examine the data and interpret it in order to form an intelligible impression and, to write a systematically structured report (Denzin & Lincoln 2005:15). The descriptive and inferential statistics were collated through the process of describing, interpreting, analysing, and summarising the data that has been gathered by the questionnaire (LoBiondo-Wood & Haber, 2006: 38). The descriptive statistics generated the correlation between the study variables but due to the complexity of the variables measured in this study, the analysis of the variance was utilised to generate the inferential statistics (Heffner, 2004:9.2). The SPSS version 21.0 software was utilised to analyse the data gathered from the questionnaire. The analysis includes the chi square test and frequency distribution tables.

1.11.2 Data analysis qualitative phase

The data analysis process in this phase of the study occurs within the same timelines as with the data collection process (figure 1.1). The data analysis has developed through several stages of coding the data, from open coding to thematic coding (Saldana, 2009:8). The process of coding is guided by Liamputtong (2011:278) approach of asking the questions: (1) what is the concern here? (2) Who are the people involved here and what roles did they play in this interaction? (3) What is the emphasis of the point and how often is it emphasised? (4) What is the rationale for the activities observed or discussed? (5) Which tactics are used in the interaction and for what purpose? (6) What are the intensions? The coding was done by using Atlas.ti version

7.0. software. The report of the analysis is presented by a combination of thick descriptions, verbatim quotes and themes.

1.12 ETHICAL CONSIDERATIONS AND RESPECT FOR HUMAN RIGHTS

In observance of the culture of human rights, the following steps are to be strictly undertaken in the protection of the research subjects' rights (figure 1.2):

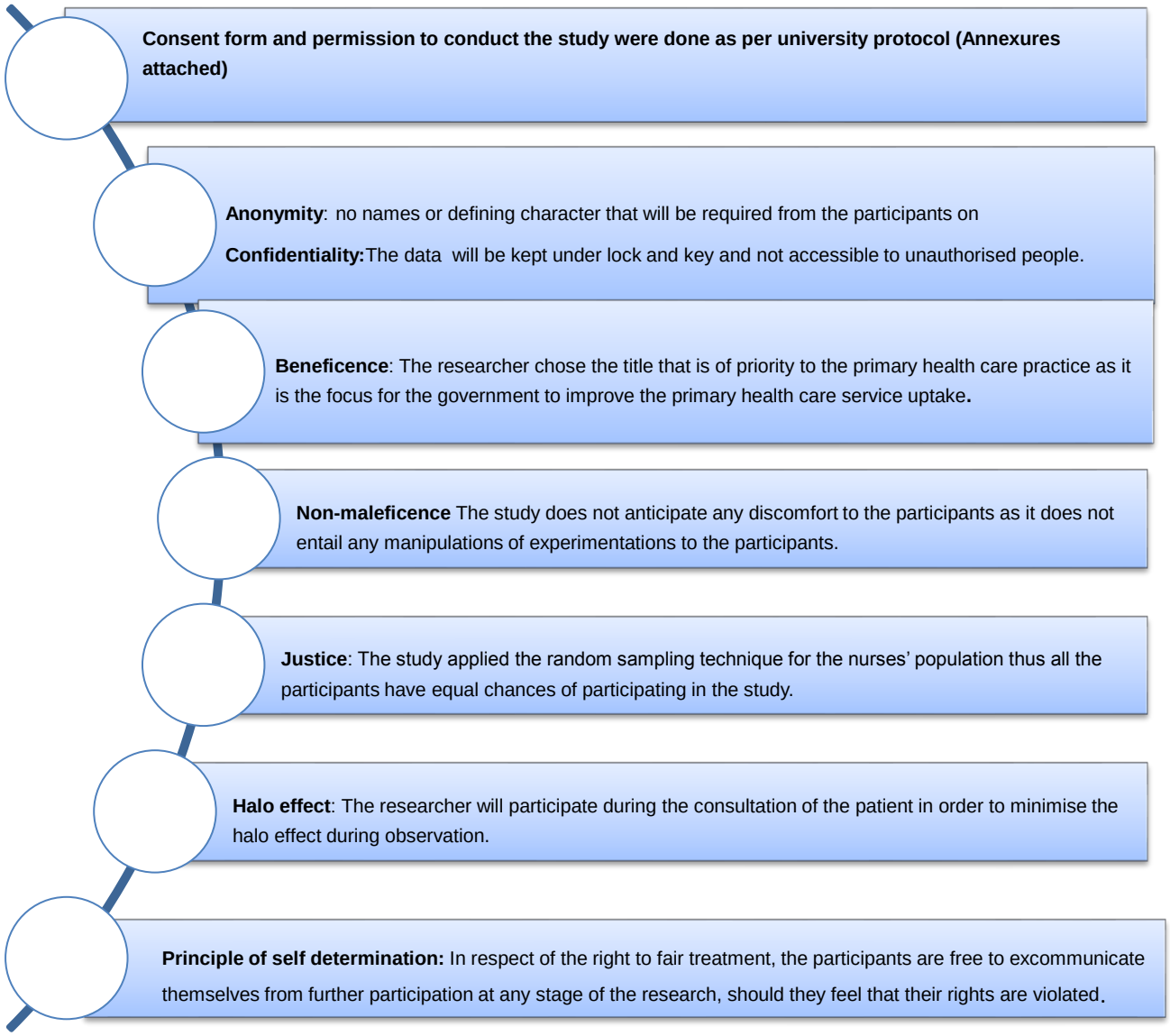


Figure 1.2 Summary of ethical considerations

1.13 SUMMARY OF THE CHAPTER

The prevalence of chronic pain amongst patients who are visiting the PHC facilities is high. The absence of the specific chronic pain clinics in the PHC setting clouds the burden of the disease within the facilities. It is estimated that about 67% of the patients who are living with chronic pain feel that the pain is undertreated and not properly managed. Despite the vast literature that confirms that the non-pharmacological approach to the management of chronic pain is essential, the implementation of such approaches is not properly understood and less implemented by the health practitioners in the PHC setting. A mixed method study was conducted to explore the caring practices related to the management of patients with chronic pain within the PHC setting.

CHAPTER TWO
LITERATURE REVIEW
2.1. INTRODUCTION

Trafford and Leshem (2008:68) define literature as the body of knowledge within a specific topic of interest. Literature can be accessed in the form of books, articles in journals, departmental reports, conference proceedings and other forms of collated information. The literature review is defined as the comprehensive inquiry about a specific topic which is followed by the interpretation of such literature in order to identify the research question (Aveyard, 2010:5) In considering this research topic, question and objectives, the review of the literature around the topic is necessary in order to allow the researcher to contribute to the knowledge of caring practices within the nursing profession. It is not enough to collect all this literature but as the researcher to logically, systematically and exclusively explore and analyse this literature through the process of literature review.

The primary objective of a literature review of this study is to provide the summation of the current viewpoints relating to the caring practices in the management of chronic pain. It also identifies the existing research evidence related to the management of chronic pain. The purpose of embarking on a literature review is to avoid duplication in the current body of knowledge, as that will not contribute to the development of the new knowledge relating to the caring practices in the management of chronic pain. Creswell (2009:25), furthermore, adds that the literature review highlights, examines and addresses the possible conflicts within the management of chronic pain in the PHC setting. The inclusion of the Watson caring theory is an explanatory framework that assists the researcher to identify the argument relating to the caring practices in the management of chronic pain. The theory argues that lack of integration of non-pharmacological strategies with pharmacological strategies in the management of chronic pain results in the misdiagnosis and under-treatment of chronic pain in the PHC setting (Watson. 2008:31).

This chapter presents a literature review of sources and evidence related to the role played by the caring practices in the management of chronic pain within the primary health care settings. The focus of literature is carative factors, chronic pain management, primary health care setting and the caring theories.

The literature review chapter presents (i) the data search strategy, (ii) implementation of inclusion and exclusion criteria and (iii) review of the related evidence. Trafford and Leshem (2008:76) identified four steps that can be utilised in the process of reviewing the literature, the four steps then guide the next sessions of this chapter as represented below (figure 2.1):

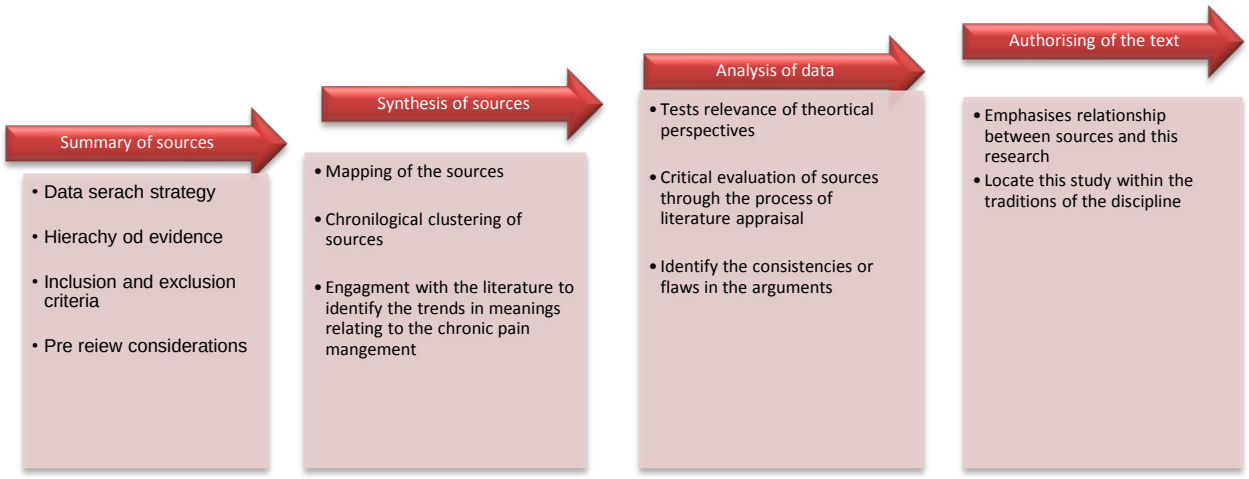


Figure 2.1 Stages of literature review

Firstly, the summary of the sources which indicates the different search engines which are utilised to identify the relevant literature for the topic, this also includes the data search strategy, the hierarchy of evidence, the implementation of inclusion and exclusion criteria of the sources of data and the pre-review considerations.

Secondly, the synthesis of sources that cluster the literature according to the prominent scholars within this topic, the research methodologies applied during those studies, the population sample, key research finding and the recommendations from those studies.

The third step includes the analysis of the data through the process of critically evaluating the arguments presented in the literature, identifying the consistency of use of concepts, tested the relevance of the methodological perspectives in those studies and finally presenting the researchers point of reference for this study.

The final step of the literature review includes the authorising of the text, where the researcher can draw the conclusions and justify the reasons for the research topic chosen and the contribution that will result from this study.

2.2. THE DATA SEARCH STRATEGY

The initial request of literature search was requested through the university librarians where the search terms included chronic pain management, primary health care, and nurse- patient relationship. The use of broader concepts assisted in refining the research topic and research question (Creswell, 2009:29).

The recent articles published each week such as (i) Scopus alert, (ii) science direct, (iii) STTI weekly release, (iv) Linked-IN from different universities and (v) the Amazon.com has assisted the researcher to track the recently published books and articles relating to the caring practices in the management of chronic pain.

Academic liaison with caring practices such as Watson caring science institute assisted the researcher in keeping up to date with the recent development. Through the Unisia's oasis library catalogue several e-resources and databases were accessed which included (figure 2.2)

Figure 2.2 Summary of search engines

Through these search engines, the researcher was able to access the e-resources, e-journals that are not older than ten years. As the study becomes more focused, the following search concepts were utilised.

- Nurse-patient relationship
- Caring practices
- Caring theories
- Chronic pain management
- Primary health care
- Pharmacological management of chronic pain
- Non-pharmacological management of chronic pain
- Assessing and measuring caring instruments

2.2.1 Hierarchy of evidence

Aveyard (2010:61) explains the hierarchy of evidence as the grading system in the literature that assess the quality of evidence in the research report. The order of hierarchy is guided by the research question. In this study the research question explores the caring practices within the nurse patient relationship in the management of chronic pain. The primary sources are placed higher in the hierarchy because they provide original source of evidence, which are considered to have sound epistemological grounding to the corpus of knowledge (Trafford and Leshem, 2008:74). The purpose of the primary sources was to identify the new knowledge as published through the journals as the recent status about the body of knowledge. Primary sources included peer-reviewed articles, originally published books, government policies and gazettes and peer reviewed conference presentations.

The use of secondary sources such as literature reviews provides the snapshot of what is currently known about the management of chronic pain (Trafford and Leshem, 2008:81). The purpose of the secondary sources was to establish the debate around the concept as indicated by Watson (2009:11). The secondary sources included the book and articles reviews and panel discussions from the conference proceedings.

The second consideration in the hierarchy relates to the mixed methodology approach as caring practices requires both quantitative and qualitative reports to validate the reported information for instruments such as surveys. The qualitative reports gathered from the in-depth interviews, focus group discussion and observations allow the researcher to have a deeper understanding of the experience of caring in the management of chronic pain

2.2.2 Pre-review considerations

Pre- review considerations are factors that may have contributed to the variations of findings within the literature. Firstly, the variation related to the inconsistency in the estimates of chronic pain prevalence. Some literature reports the prevalence of chronic pain as described in a specific category such “neuropathic” or “nociceptive” pain lasting

for longer than 6 months. On the other hand, chronic pain prevalence is reported according to the location of the back such as “low back pain” or “muscle pain”. The inconsistency in the description of chronic pain is acknowledged and therefore factored in during the analysis of literature.

Secondly, the use of the concepts “primary care” and “primary health care” denotes different settings for lower-middle income countries as compared to the developed countries. In lower income countries PHC refers to the nurses’ driven, free service in countries such as South Africa why in the United States of America “primary care” refers to the private service. The inconsistency in the definition of the setting also impacts on the difference in the roles of nurses working in such settings. Nurses in some countries such as South Africa have both prescribing and dispensing licences as additional roles in the PHC, while in other countries such as USA nurse are working under the direct supervision of the medical practitioner. In this review both settings were considered as the focus of the study is on non-pharmacological management of chronic pain, which is applicable in both settings.

Thirdly, the choice of mixed method design as a relatively new research methodology, the debate around the legitimacy of published literature still continues. The predecessors in the use of mixed method Denzin and Lincoln (2000), Tashakkori and Teddlie (2003), Creswell (1994) and Johnson & Onwuegbuzie (2006) resolved that the methodology is still under development and the nomenclature of mixed method is inconsistent. Based on this debate in the literature review in this study includes the methodologies which are more defined such as qualitative and quantitative design.

Lastly, in acknowledgement of the fact that, much has been published related to the chronic pain management and nurse patient relationship, the specific inclusion and exclusion criteria described below maintained the focus of the study.

2.3 IMPLEMENTATION OF INCLUSION AND EXCLUSION CRITERIA

The initial search resulted in 98 articles and as the search terms were delineated to the combination of the phrases, the analysis resulted in the number of articles that are tabled in section 2.3 of this chapter. Furthermore, the specific inclusion and exclusion criteria were implemented as described below:

- ✓ Inclusion criteria
    - Studies that focused on caring practices in the primary health care setting
        - ✓ Studies that discussed caring practices within the framework of the nurse - patient relationship
        - ✓ Grey literature from the “Health Systems Trust” as those articles are based on operational research (RCT) in South Africa and cannot be published through the journals because they are government subsidised.
        - ✓ Data published through the government gazettes and policy guidelines as they provide the framework for the functioning of the primary health care system especially that this study be conducted in the period of PHC re-engineering.
        - ✓ Studies focusing on chronic pain management in adults (18-65 years).

- ✓ Exclusion criteria
    - ✓ Publications which were not written in English in order to minimise the cost of translation of the article
    - ✓ Articles that were published more than 10 years ago, as they would be too out-dated to contribute to the current debate.
    - ✓ Articles, which were not peer reviewed as the authenticity of such articles, could not be established.

2.4. THE SYNTHESIS OF SOURCES

The synthesis of sources refers to the process of combining, modifying and rearranging the literature in order to provide logic reasoning (Aveyard, 2010:90). In acknowledgement of the wide corpus in this field, the synthesis is based on identifying the trends in meaning and their significances of their research findings (Trafford and Leshem, 2008:76). In the process of rearranging the literature, the sources are grouped according to the hierarchy of journals and the database of publishers for the three concepts of focus of the study (table 2.1). The study focuses on (i) nurse-patient

relationship, caring practices and caring theories (ii) chronic pain management and (iii) primary health care setting.

Table 2.1 Credibility rankings of journals and database

	Journals	Pro quest	Google scholar	CINAHL	Sage premier	SA publications
1	Journal of advanced nursing (18)	✓	✓	✓		✓
2	International journal of nursing practice (14)		✓	✓		✓
3	Journal of clinical nursing (8)			✓		✓
4	Holistic nursing practice (6)			✓		
5	Lancet (3)			✓		
6	European journal of Oncology (2)			✓		
7	Nursing standards (2)				✓	
8	Scandinavian journal of caring sciences (2)		✓		✓	
9	Contemporary nurse (2)					
10	Journal of clinical nursing (2)	✓				✓
11	BMC musculoskeletal disorders (2)		✓	✓		
12	Issues in mental health nursing (2)	✓				✓
13	Pain measurement journals		✓		✓	
14	Advanced emergency nursing journal	✓		✓		
15	European journal of Oncology nursing		✓			
16	The international journal of advanced nursing practice			✓		
17	Journal of nursing research and clinical studies		✓			
18	Journal of reproductive and infant			✓		✓

	psychology					
19	Journal of American Academy of nurse practitioners		✓	✓		
20	Nursing administration Quarterly			✓		

2.4.1 Mapping of literature

Literature mapping is a diagramming tool that outlines the literature review document (Machi and McEvoy 2008:50) that emphasises the connectedness of the literature amongst the scholars. The literature mapping facilitates the organisation of the information from several researchers (Creswell 2009:33) relating to chronic pain management. As an established process of linking authors through their articles, mapping of concepts is used for this study. Hart (2010:60) concurs with this by saying that concept mapping identifies the frequency of the use of the concept of the topic under study. Alias & Suradi (2008:4) prefer concept mapping as they summarise the information obtained from the multiple sources.

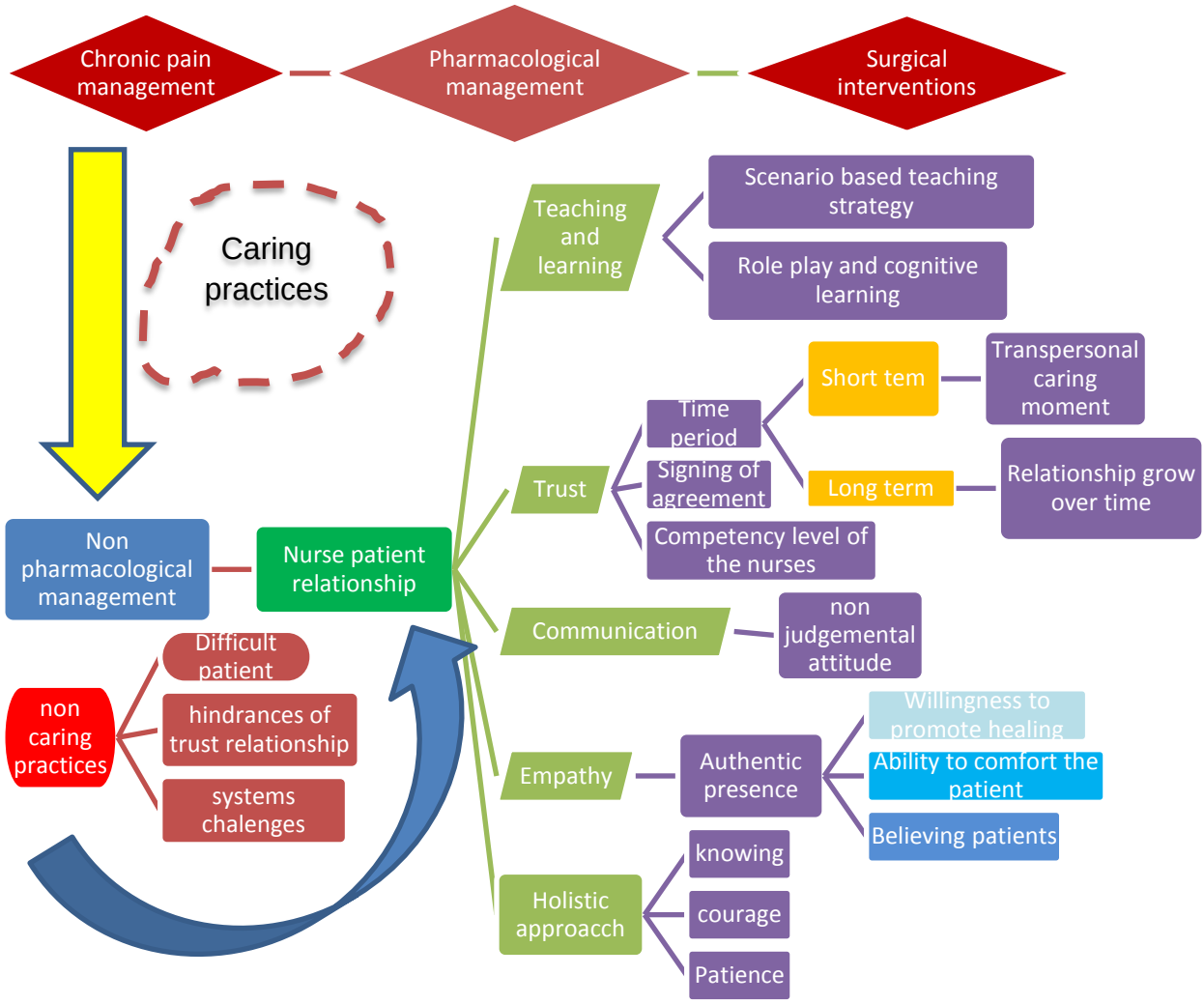


Figure 2.3 Concepts in chronic pain management

Based on the concept map presented above (figure 2.3) caring practices are mentioned within the literature but integration within the chronic pain management is not clear. Schrader and Babler-Schrader (2011:372) explains that caring practices cannot be realised until the relationship is completely patient goal oriented while Warelow, Edward and Vinek (2008:53) argue that caring practices are theorised and they are not put into practices. Several authors (Watson et al, 2009:145; Gallagher-Lepak and Kubsch, 2009:178; Macdonald, 2007:75) also agree that caring practices needs to be explored further.

Chronic pain management is not only devastating to the patients but provokes the feelings of hopelessness (Bloemberg et al. 2008:2039) and knowledge gap amongst the nurses working in the PHC setting. The focus of the study is to explore the caring practices in the management of the chronic pain. The use of the critical appraisal system formed the basis of a synthesis of the literature.

2.4.2 Critical appraisal system

A critical appraisal system is defined as the process of structuring examining the literature in order to determine the strength and limitations of the studies conducted in the management of chronic pain (Aveyard, 2010:92). The approach to the appraisal varies according to the type of literature. The appraisal process is summarised for review articles, quantitative and qualitative designs (table 2.3),

Table 2.2 Critical appraisal criteria

Review articles	Qualitative design	Quantitative design/ intervention strategies
Review address clearly focuses question	Clear aims of the study statement	Area of study clearly focused
Use of the right types of papers reviewed	Is the methodology appropriate	Are all participants clearly accounted for at the end of the study
Inclusion of relevant studies	Design appropriate to address the aims of the study	Were the groups similar at the beginning of the study
The rigour of the papers reviewed examined	Recruitment strategies appropriate	Were the groups treated equally
The results are combined from all reviewed papers	Data collection instruments appropriate	How large was the treatment effect
What are the results of such reviews	The relationship between the researcher and the participants adequately considered	How precise was the estimate of treatment effect
How precise the results are	Ethical issues taken into considerations	Can the results be applied in the context of this study
Can the results be applied to the local populations	Data analysis rigorously reported	What are the clinical importance of the study
Are there any missing outcomes that are not presented in the review	Clear statement of findings reported	Are there any missing outcomes that are not presented in the review
Does the review worth doing (my opinion)	What is the value of the research	Does the review worth doing (my opinion)

Source: Aveyard, 2010:92

Using the guideline from the different critical appraisal methods as described above (table 2.3; 2.4 and 2.5.)

Table 2.3 Summary of the relevant literature relating to NPR and Caring practices

Journal	Author and year of publication	Methodology Population and Sample	The aim of the study/ research question	Key research findings	Recommendations
Nurse-patient relationship					
Contemporary nurse 31: 142-152	Belcher M Jones L K (2009)	Qualitative explanatory descriptive study First year registered nurses	Experience and perception of building trust relationship with patients	Trust and rapport are crucial elements in an effective nurse patient relationship.	Teaching communication skills may increase the knowledge and skills of new graduate nurses to establish trusting relationships
Scandinavian Journal of Caring Sciences; 21(4), 500-506,	Berg L Danielson E (2007)	Qualitative interpretive phenomenological study of seven patients And Six nurses	Is trust a difficult concept?	Patients and nurses in long term relation do strive to develop trust in the nurse patient relationship	Trust is not mutually always achieved even over the extended period of interaction.

Journal	Author and year of publication	Methodology Population and Sample	The aim of the study/ research question	Key research findings	Recommendations
The international journal of Advanced Nursing practice 10 (1) 1-7	Dziopa & Ahern (2009)	Literature search review	To identify the constructs used in the nurse-patient relationship of psychiatric patients	Constructs identified were trust, empathy, being there, equality (power), individuality, authentic presence, support and respect.	Clinicians should continue to refine the critical elements of nurse-patient relationship in each context
Contemporary nurse 35 (2): 136-146	Brunero S Lamont S (2010)	Action research approach Nurses	To describe and articulate on managing a difficult relationship	A positive improvement in levels of stress, confidence, skills and knowledge enable the nurses to practice caring behaviours.	Implementation of the scenario based teaching strategy will allow nurses to reflect on their caring practices and improve care.
European journal of oncology nursing 12, 319-328	Dowling, M (2008)	Interpretive phenomenological design Oncology nurses and patients	What hinders the effective nurse-patient relationship?	Judgement labelling is eminent both from nurses and patients on first encounter	Open communication with trust will allow the caring moment to occur.

Journal	**Author and year of publication**	**Methodology Population and Sample**	**The aim of the study/ research question**	**Key research findings**	**Recommendations**
Scandinavian Journal of Caring Sciences 22 (4), 643-652	Halldorsdottir, S 2008	Synthesised theory	To synthesise the dynamics of caring from the patient's perspective	Nurses perceive caring, wisdom and competence as requisites for connecting with patients.	Developing a nurse-patient relationship needs to be explored in different contexts.
Advanced emergency nursing journal 29 (1); 73-81 Nursing ethics 14(4) 511-521	Macdonald MT (2007)	Qualitative case study of the nurses Constructivist approach to grounded theory	To understand the phenomenon of describing the patients as "difficult"	Time is a prerequisite to the effective nurse-patient relationship. .	Further research to explore hindrances to construct an effective nurse-patient relation is necessary.
International journal of nursing practice 16; 51-56	Pearcey P (2010)	Grounded theory Comparative analysis Semi-structured interviews Qualified nurses	To determine what nurses perceived as dominant values in clinical nursing work.	Caring was identified as a value. Daily targets and fast throughput of patients were cited as obstacles to caring behaviour. Nurse's experiences challenges in defining "caring".	It seems that " caring" is no longer a cause of concern for nurses where further research study is required to explore the root causes

Journal	**Author and year of publication**	**Methodology Population and Sample**	**The aim of the study/ research question**	**Key research findings**	**Recommendations**
Holistic Nursing Practice 2010; 24 (3): 142–147	Pross E Boykin A Hilton N Gabuat J (2010)	Qualitative approach Caring ability inventory (Registered nurses)	To describe practicing nurses' living of Knowing, Patience, and Courage.	Courage is important for nurses in practice in establishing the good nurse patient relations.	Nurses to engage with the on nursed (patient) while respecting their individual situation
Teaching and learning in nursing 6; 2-8	Rosenberg s Gallo-Silver L (2011)	Quantitative study Student nurses	Are nurses able to establish therapeutic communications?	Students should be facilitated through the processes that will encourage connecting with patients,	Use of role-playing, cognitive behavioural techniques to allow students to practice connecting with patients.
Journal of American academy of nurse practitioners 23; 370-375	Schrader DC Babler-Schrader EL (2011)	Advanced registered nurse practitioners	To determine the Instrumental, Relational and self-presentational tasks of the nurses	Nurse practitioners are concerned with instrumental goals rather than the patient interaction outcome (relational tasks)	Instrumental goals lead to patients lapsing into automatic interaction patterns during patient care. Nurses to be aware of their relational goals to improve care.

Journal	**Author and year of publication**	**Methodology Population and Sample**	**The aim of the study/ research question**	**Key research findings**	**Recommendations**
Annals of family medicine 6 (4) 315-322)	Scott JG Cohen D DiGcco-Bloom Miller WL Stanye KC Crabtree BF (2008)	Comparative analysis Primary care clinicians and physicians	To create a model that identifies how healing relationships are developed and maintained	Valuing/creating a non-judgemental emotional bond. Appreciating and managing power for the benefit of the patient; Displaying a commitment to caring over time	Exploration on how nurses manage power in the relationship should be explored.
Journal of Professional Nursing. 28:34-40	Ward J, Cody J, Schaal M, Hojat M (*2012)*	Longitudinal cohort study, with 214 nursing students	Why the decline in empathy for experienced nurses?	Lack of time Lack of support from colleagues, Expanded roles for nurses,	The art of nursing must be recognised as the criterion for successful completion of student nurses' basic study.
Journal of Advanced Nursing; 66 (3), 573-582	Mårtensson, G Carlsson, M Lampic, C (2010)	Self-administered questionnaires to 81 pairs (nurse and patient)	Which factors are of potential importance to nurses' satisfaction with the care provided	The use of nurse patient agreement is effective in improving satisfaction from the nurses -patient relationship	Other studies to explore other clinical practices within the nurse-patient relationship are required.

In summarising the reviewed literature work, table 2.3 above provides information about the publishing journal, year of publication and the author, methodology, study population, sampling technique and sample size, purpose of aim of the study, key research findings and summarised research recommendations. The studies included in the review explored the nurse patient relationship from the varied approaches in population and data collection instruments. Variations in the population range from patient's perspectives, nurses' perspectives and the multidisciplinary team members. The studies included in the review were carried out within the last 15 years. The variety of methodologies ranged from the literature review of NPR phenomenon, quantitative surveys and qualitative interviews and focus group discussions.

Findings from the studies differed and the variance is attributed to the difference in research design, sample sizes and data analysis techniques. In addition to the difference in methodology processes, the population studied were from different settings such as specialised units, general units and outpatient units. In acknowledgement of the variance in these studies, the direct comparison of studies has deemed not appropriate in this analysis. What allow the comparison are the similarities in the variables under study and the concepts related to the nurse patient relationship phenomenon. Based on the research purpose, the studies, which explored the NPR, were critically appraised separately from the studies, which explored chronic pain management.

2.5 THEMATIC REVIEW OF LITERATURE RELATING TO NURSE PATIENT RELATIONSHIP

Enquiry in the process of development of therapeutic NPR has consistently focussed on a number of "concepts" as identified in the conceptual analysis conducted earlier in this study. Empathy, trust, communication and listening and teaching and learning the establishment of therapeutic are identified by the researchers as concepts which can be hindrances and enablers in the establishment of the therapeutic relationship.

2.5.1 Establishing trusting nurse-patient relationship

Despite the consensus in the literature that trust is the cornerstone in the establishment of the therapeutic NPR (Dowling, 2008; Dziopa and Ahern, 2009 and Scott et al, 2008), trust is still not clearly realised by both the nurse and the patient within the healing environment. Belcher and Jones (2009) studied the perceptions of graduate nurses on

their experiences in establishing trust in the working environment. This qualitative study identified that the personality traits of individuals, intrinsic motivation of the nurse to help other people and feeling comfortable with the person are the pre-requisites to establish the therapeutic NPR. According to these pre-requisites it is clear that the no two individuals will successfully establish the therapeutic relationship with the same patient. If these pre-requisites are generally accepted as the guiding principles in the establishment of the relationship then patients and nurses should always have the choice of the therapist.

The study further indicates that in the process of sustaining the relationship, the art of building a rapport is based on the commitment of the nurse to provide and the patient to receive care. On the same note, the study highlights that the process is time consuming. Berg and Danielson (2007) in the study of exploring the trust as the difficult concept interviewed the nurses who indicated that you could only develop trust if you have enough time to spend with the patient. Based on the two studies, it may be assumed that time is really a challenge for the nurses to develop a trusting relationship with their patients. While Macdonald (2007:74), Pearcey (2010:52) and Ward et al (2012:35) concur with the above authors that time is the determining factor, considering the setting where the studies were conducted (hospital), it may often not be the universal agreement that **"time**" is inadequate in the hospital situation as the patients are in the ward for 24hrs. Time can therefore be a challenge in setting such as outpatient department and the PHC setting where the nurses have limited time with their patients.

Of note in the samples from studies Berg and Danielson (2007) and Belcher and Jones (2009), six nurses and seven nurses and six patients respectively, these qualitative studies do not represent the other settings. The use of snowballing technique is also a weakness of the study as acknowledged by the authors in the limitations of the study. It is also noted that the in vivo quote from the studies did not represent the patients' perspective of the establishment of the trusting relationship.

The strengths of both studies, however, acknowledged that the establishment of the trusting relationship cannot be attributed to the one aspect but also includes the environmental factors, language barriers, and knowledge and skill levels of nurses and the previous experiences of the patients. From the reviews is it still not clears how either

the nurse or the patient knows that the relationship will be therapeutic or not. Trust remains a subjective phenomenon whilst is it identified as the decisive factor in the evolution of the therapeutic relationship. The trust should be reciprocal in both the nurse and the patient for it to be effective (College of nurses of Ontario 2009:3). If trust is being breached the relationship will break down and not be repairable. Betham (2011:33) recommends that further studies to explore the process of establishment of trust are critical.

There is also a general assumption that the long-term interaction with the patient will eventually result in the trusting relationship. Berg and Danielson (2007: 501) warns that the trust may not develop even after a prolonged interaction between the nurse and the patient, is it aggravated by the fact that nurses do not necessarily believe what the patients are telling them (Morgan and Morfatt, 2008:342). Van Rooyen, Le Roux and Kotze (2008:22) argue that nurses who are working with terminally ill patients have demonstrated a good relationship with their patients. They associate the positive aspect of the relationship with the fact that oncology nurses have prolonged relationships with their patients, most often, they are dealing with emotions (personal, patient and relatives) and they engage the patients' family actively in the management of such patients. Camille (2010:27) disagrees that time is not the determining factor in the relationship but the skill of the professional such as listening is of paramount importance. To some extent, Camille (2010) responds to the increasing complaints related to the role of technology in the working environment where nurses are taking most of their time on the technology (computers) and not interacting directly with patients.

The mixed method study by Pross et al (2010) with 285 nurses participating, the quantitative phase of the study used the tool that was already tested for the validity and reliability and research findings triangulated through the focus group discussions, storytelling and interviews identified different constructs that determine the effective relationship. The study highlights that actually the first minutes of interaction between the nurse and the patient determines the outcome of the relationship. Even though the knowledge, courage and patience were reported as themes in the research study, all the three were related to the listening skill of the nurse and the feeling from the patient that he/she is being listened to.

2.5.2 Communication and listening as the determinant of nurse patient relationship

Just like trust, listening is universally accepted as the determinant of the therapeutic relationship (Scott, Cohen, DiGcco-Bloom, Miller, Stanger & Crabtree 2008:320; College of nurses of Ontario 2009:3). Babler-Schrader and Babler (2011) conducted the quantitative survey study amongst the 103 nurses to rate their level of competencies regarding the instrumental, relational and self-representational skills during their interaction with patients. The relational skills explored the frequencies of practicing the behaviours such as developing the rapport, establishing trust, listening and communicating effectively. Of the 590 statements that were generated from the content analysis, only 14 were associated with the listening and communication skills. It is evident that despite the knowledge that communication and listening are crucial in the relationship, they are not effective practices in the daily interaction with patients.

Listening is associated with attributes such as reflecting, summarising, probing and maintained eye contact or non-verbal cues to confirm that the nurse is listening (Dziopa & Ahern 2009:3). As you listen to the patients, adopt a non-judgmental attitude, share experience with the patient and give full attention as this will cause the patient feel that he is of value to you and you are interested in him (Scott, Cohen, DiGcco-Bloom, Miller, Stanger & Crabtree 2008:320).

Scott et al (2008) conducted the qualitative study with clear articulation of the research methodology, data analysis process and the acknowledgement of the biasness related to the study and the processes that were used to minimise the biasness. The outcome of this study suggested that trust is the upshot of the properly initiated relationship and not the determinant of a successful relationship. The study indicates that there are processes that lead to the trust as an outcome: Firstly, valuing the patient through demonstration of non-judgmental attitude, authentic presence, and connecting with the patient. Secondly: the appreciations of power, nurses share the information with the patient at their level of understanding. Thirdly, the ability to show commitment to the relationship by providing the actions that is associated with caring (eye contact, smiling, appropriate touch etc.). All the above procedures can only be realised if the nurse is communicating and listening effectively.

In their conclusion the conceptual framework developed relating to the process of developing physician-patient healing relationship; this study was recommended to be universal to all other settings. Even though the participants in the study were physicians, their setting is more similar to the PHC setting for nurses and therefore the adoption of the conceptual framework for the PHC setting is more relevant. The framework cannot be swept up with a presumption that the listening skill just comes spontaneously with every health practitioner. Brunero and Lamont (2010) conducted an action research to assess the confidence of nurses in their listening skills and realised that regardless of the educational program that the nurses were engaged in during their basic training, the confidence level in listening remains a challenge.

2.5.3 Demonstrating empathy in the therapeutic nurse patient relationship

"Empathy" as a concept, has also been considered as the determinant of effective communication and listening skill. Empathy has been identified as a cognitive skill, which allows the nurse to have the ability to interpret the situation from the patient's perspective. Empathy allows the nurse to communicate in a way of conveying the recognition of the patient's needs and concerns. Empathy involves the understanding the patients' perspective of the situation (Watson, 2008:82) In the process of empathising with the patient, the nurse remains objective; respond in a caring way, instilling hope in the patient and demonstrating knowledge, skill and experience in handling the matter. Ward et al (2012) conducted a longitudinal study amongst the 214 graduate nurses who were recruited from the first year level to the final year level. Using the reliability tested instrument of the Jefferson scale of physician empathy the conclusion from the study indicated that as the nurses progress in their profession there is evidence of a reduction in empathy. Contrary to other studies (Dowling, 2008 and Halldorsdottir, 2008) suggest that as the nurses are getting more skilled and knowledgeable in the profession, the level of empathy increases.

Ward et al (2012) concluded that students in the final year of study indicates that time constraints as the level of responsibility increases in the unit contribute to the loss of demonstrating empathy to patients. The other contributory factor to the loss of empathy is associated with the lack of documentation from the colleagues and managers in the working environment. From the perspective of nurses, the environmental factors are

more influential in the evolution of the therapeutic relationship as compared to the personal characteristics. Mårtensson (2010) in her study of evaluating whether the exercise of contractual agreement between the nurses and patients will improve the therapeutic relationship, concluded that environmental factors and job satisfaction level determines the empathy level of nurses. The utilisation of different test to measure the empathy amongst the nurses such as Care Q test did not improve the quality of NPR in the operating environment. Regardless of the difference in the designs used to measure the caring from different studies reviewed, the approaches suggested and conclusions seem not to provide solutions to improve the caring amongst the nurses. The studies reviewed continue to identify I the circle the factors that contribute to the decline in the caring practices amongst the nurses. There are several literature review studies, which explored the determinants of the establishment of the healing relationship, and instead the results added the list of factors that impedes the formation of an effective therapeutic relationship (Macdonald, 2007; Pearcey, 2010, Dziopa and Ahern, 2009). Dziopa and Ahern (2009:7) and Gamez (2009:127) following the literature review studies recommended that the researchers should continue to refine the elements of caring which was done in this field by exploring the caring practices in the management of patients with chronic pain.

The literature review was conducted by Dziopa and Ahern (2009) to assess the determinants of the calibre of the therapeutic relationship. The absence of the explicit explanation of the methodology employed in this study challenges the trustworthiness of the survey, however the study explained that the inclusion criteria of the articles were limited to the subjects who were published in the peer reviewed journals. In addition, the inclusion of the articles that were based on the evidence-based practiced increase the credibility of the field. The total of 31 research studies included in the review provided an adequate sample to allow the analysis of the constructs needed to demonstrate the therapeutic relationship. The constructs identified in the study area (I) Understanding and empathy (ii) Individuality (iii) providing support (IV) being there (v) being genuine (VI) promoting equity (vii) demonstrating respect (viii) demonstrating clear boundaries (ix) demonstrating self-awareness. The context of the study by Dziopa and Ahern (2009) focuses on the therapeutic relationship for the mentally ill patients but the constructs identified relates to the ten Caritas processes identified by the Watson human caring theory which did not receive a specific context of care (Watson, 2008).

Additionally the result of the study pointed out that even though the nurses are carers in the process of establishing a therapeutic relationship, both the nurses and the patients benefit equally from the relationship. The constructs such as respect, understanding and equality are examples of the reciprocal qualities in the establishment of the therapeutic relationship. Each construct as described in the results of the study highlighted the caring behaviours that form the evidence of the realisation of the quality of therapeutic relationship. The one construct that the author also acknowledged that there are no clear caring practices to display in the caring relationship relates to the presentation of the self-awareness of the therapist. The diagrammatic illustration of the constructs denotes that the constructs do not necessarily have any priority order but they are enforced according to the individual situation of the relationship. The results also highlighted that the implementation of the caring behaviours to achieve the quality therapeutic relationship requires the experience and the advancement of the training.

2.5.4 Teaching and learning the establishment of nurse patient relationship

Belcher and Jones (2009:145) stated that the current teaching methods in the colleges do not equip young nurses with effective communication skill and therefore they are unable to establish the trusting relationship with the patients. The limitations of the study were an inadequate sampling (7nurses) and the sampling techniques (snowballing), which increase the biasness of the results. In the recommendations and conclusions, the suggested resolution to the challenges related to the low point of establishing the effective NPR was the change in the teaching methods in the nursing schools. Communication as the affective skill is inappropriate if taught in lecturer rooms and not in the clinical setting. Brunero and Lamont (2010:1370) in agreement with Belcher and Jones (2009) conducted an action research with the same number of participants (7 nurses) to expose the nurses to the role-play, experiential learning and some in-service training through the e-learning package. The conclusions in the study reported the improvement in the confidence level of nurse to establish a relationship but not in any way indicated the success in implementing the therapeutic relationship. It may therefore

not be assumed that when the nurses' confidence level is improved they are likely to succeed in establishing the therapeutic NPR.

Rosenberg and Gallo-Silver (2011:3) recommend that scenario based teaching strategies will improve the skills for the students. The significant impact of this study cannot be established, as the study did not explain the methodology adopted in this subject area and thus the study cannot be replicated in a different context to validate its findings. Several other authors suggested the same (Meadows, 2007:160; Scott et al, 2008:32; Martensson, Carlsson and Lampic, 2010:580).

Gallagher-Lepak and Kubsch (2009), also recommend that caring practices need to be explored further. Warelow, Edward and Vinek (2008:52) suggest that nurses should practice caring and stop theorising it and in phase 2 of the study, through the process of participative observation, the researcher assessed if caring was practised and not theorised. Watson et al (2009:145) warns that it is only through the restoration of the caring practice that the image of nursing will be retained. Macdonald (2007:75) suggest that the concept/ elements of caring should be explored within a specific context as the phenomenon is complex to be generalised to the general situations. In this study the caring practices within the nurse-patient interaction was explored in the context of the patients suffering from chronic pain.

Table 2.4 synthesised the chronic pain management literature with more emphasis to the implementation of caring practices while the nurse and the patient are interacting.

Table 2.4 Summary of chronic pain management articles

Journal	Author and year of publication	Research design and methodology Population and Sample	Aim of the study/ research question	Key findings from the research	Recommendations
CHRONIC PAIN MANAGEMENT					
Journal of advanced nursing 60(3) 248-256	Allcock N Elkan R Williams J (2007)	A qualitative approach Patients	Explore patients' pain-beliefs and emotions at the point of referral to a pain clinic,	The patient believes were dominated by the search for a firm diagnosis cure. Patients believe that painkillers are a way of "fobbing you off".	Understanding patient beliefs and expectation and explain their own position in order to provide a sound foundation for working together is required.
Journal of clinical nursing 17 (15) 2032-2041	Bloemberg, A Hylander I & Törnkvist L (2008)	A qualitative study Focus group with nurses	Exploring district nurses experience in managing patients with chronic pain	Passive involvement and feeling of powerlessness is evident amongst the nurses	Recommend support and training to allow active participation.

Journal	**Author and year of publication**	**Methodology Population and Sample**	**The aim of the study/ research question**	**Key findings from the research**	**Recommendations**
Pain Rescue Management. 12(1): 39–47.	Boulanger, A. Clark, A. Squire, P. Horbay, G. (2007)	Computer-assisted telephone interview survey A Comparative study	Assess changes in the prevalence and treatment of Chronic non-cancer patients.	No markedly changed since2001, Physicians continue to demonstrate opiophobia in their prescribing practices	Better standardisation to further minimising the burden on the healthcare system and the economic system.
Memory Studies 4(1) 23–32	Burton T (2011)	Case study	Explaining the physiology of neuropathic chronic pain	Nociceptive stimulus with memory of pain may persist for many years, after the pathologic cause has been resolved.	Chronic pain is now understood to be a diagnosis, not a symptom; a perception as well as a sensation.
Journal of Clinical Nursing 17, 2001–2013	Courtenay M & Carey N (2008)	A systematic review of the literature	The impact and effectiveness of nurse-led care in the management of acute and chronic	Nurses play key roles in the diverse range of models of care that exist in acute and chronic pain.	Need for the development of nurse-led models in acute and chronic pain is paramount.

			pain		
Journal	**Author and year of publication**	**Methodology Population, Sample**	**The aim of the study/ research question**	**Key findings from the research**	**Recommendations**
Issues in mental health nursing 30: 295-303	Dewar A Osborne M Mullet J Langdeau S Plummer M (2009)	Naturalistic approach (Registered nurse and nurse managers)		In contrast to a medical-surgical unit, involves making decisions for the group versus decision-making for the individual.	Critical reflections of nurse's own beliefs about pain management and its linkage to addiction.
International Journal of Nursing Practice 17: 36–42	Dysvik E, Sommerseth R, Jacobsen FF. (2011)	Single case story combined with a narrative approach	Exploring the experience of chronic pain from the perspective of the sufferer	Complex factors, including a person's belief system, life experiences, personal resources, the meaning of pain and the nurses understanding affect the pain management outcome.	Listening to a patient narrative the total situation can be investigated, which might aid nurses in the quest to reduce pain and strengthen those areas that can contribute to a meaningful life.

Journal	**Author and year of publication**	**Methodology Population, Sample**	**The aim of the study/ research question**	**Key findings from the research**	**Recommendations**
BMC Musculoskeletal Disorders 11:51	Harding G Campbell J Parsons S Raman A Underwood, M (2010)	Qualitative Semi structured interviews Pain management clinics	Management of musculoskeletal pain when physical interventions are inappropriate or ineffective	The management strategy focused on psychological approaches in preference to physical approaches.	Moving from doing something to patients and instead facilitating behavioural and psychological changes as enablers in self-management of chronic pain
Journal of gerontological nursing Vol.35 No.7	Jablonski A Ersek M (2009)	Experimental study Nursing home staff		A marked significant gap exists between how care providers assessed and managed pain and the current best practice	Investigation on the root of poor adherence to evidence-based guidelines for pain management is needed.

Journal	**Author and year of publication**	**Methodology Population and Sample**	**The aim of the study/ research question**	**Key findings from the research**	**Recommendations**
Journal of Advanced Nursing; 61 (5), 484-491,	Jakobsson, E (2008)	Quantitative, questionnaire Student nurses	To explore nursing students' own worst experiences of pain and the worst imaginable pain.	Issues of hope of relief, grief, control over the situation, powerlessness and empathy for other people's pain where identified.	Further research is needed to explore why professional experience as a nurse diminishes the ability to imagine patients' pain.
Chronic Illness 8(3) 192–200	Lavie-Ajayi, Almog N Krumer-Nevo M (2012)	Phenomenological study	Explore experiences of patients living with chronic pain	Chronic pain is double phases: vivid but other hand illusive experience	Patients' needs to be taught to protect themselves from the power of the health care professionals.
Journal of General Internal Medicine 23 (9):	Mansion MP Crowley-Atoka M (2008)	Quantitative approach Out patients	Differences in perception of the term opioid and narcotic in the general population		Future research to explore whether such different understandings translate into differences in actual conducts.

Journal	**Author and year of publication**	**Methodology Population, Sample**	**The aim of the study/ research question**	**Key findings from the research**	**Recommendations**
International Journal of Nursing Practice 16 (1) 478–483	Rahimi-Madiseh M, Tavakol M, Dennick R. (2010)	Cross-sectional study, quantitative	Quantify the current knowledge and attitudes of nursing students about pain management	Knowledge of nurse towards pain management is inadequate	Attitudes towards pain management of nurses needs to be explored more.
Journal of Nonverbal Behaviour (2012) 36:1–21	Rowbotham S Holler J Lloyd D Wearden A (2012)	Semantic feature approach (interview)	Investigate co-speech gesture use during communication about pain.	35% of information about the pain experience was encoded in language and gesture simultaneously	Gestures are integral to the communication of pain
Journal of Advanced Nursing; 63 (1), p27-35,	Stenner, K 2008	A qualitative study	Exploring the benefits of nurse prescribing for patients in pain: nurses' views	Improved quality of care, appropriate prescribing of medication and improved safety.	Monitoring any improved relations and communication with patients through the extended use of nurses as prescribers,

Journal	**Author and year of publication**	**Methodology Population and Sample**	**The aim of the study/ research question**	**Key findings from the research**	**Recommendations**
International Journal of Nursing Practice; 17: 478–485	Tollefson J, Usher K, Foster K. (2011)	Phenomenological study	Understanding of the lived experience of relationships for rural people living with chronic pain.	The themes that emerged were: Pain as silence; Privacy and protection of personal information; No place out here to get support;	Support to patients to maintain meaningful contact with nurses.
SA pharmaceutical journal 76 (8) 10-18 2009	Van der Westhuisen (2009)	Quantitative study guide	The management of patients with chronic neuropathic pain	Effectiveness is unpredictable, dosing can be complicated, Analgesic effect is delayed with side effects common. step wise approach not entirely effective	Non-drug management is essential. An individualised patient approach is necessary Existing literature shows that no one drug appears to be more effective than another

In summarising the reviewed research work, table 2.4 above provides the information about the key findings relating to the management of chronic pain, study population, sample and sampling techniques. The subjects included within this section of the literature review explored patients' expectations in the management of chronic pain, nurses attitude to the management of chronic pain, the multi-disciplinary approach to the management of chronic pain, non-pharmacological management of chronic pain, pharmacological management of chronic pain and diagnosis of chronic pain.

2.6 THEMATIC REVIEW OF THE LITERATURE RELATING TO CHRONIC PAIN MANAGEMENT

Nurses and patients are supposed to be partners in the management of the chronic pain. Conway and Higgins (2011:3) conducted a literature review on the challenges related to the model of care in management of chronic pain. The upshot of which highlighted that the overreliance on biomedical view of pain does not simply contribute to an increasing demand for the need of service but also contradict the principle of early intervention to reduce the complications of chronic pain. The survey also showed that patients suffering from chronic pain are equally challenged by the community expectations about the pain management processes and outcomes while the health professionals are restricted by the organisational situations to provide an ideal model of care for the patients. Dewar et al (2009) naturalistic interview of nurses and managers dealing with patients in psychiatric units shared that unless the interpersonal and interpersonal effects of both the nurses and patients are taken into consideration, chronic pain will remain under diagnosed and under treated. According to the presented literature above, there are nurses' challenges and patient's challenges that may interfere with the caring relationship between the nurse and patients in managing chronic pain.

2.6.1 Identification of chronic pain by primary health care practitioners

Nurses require an additional skill to read both verbal and non-verbal information from the patient in order to identify the presence and level of chronic pain the patient is experiencing. Rowbotham et al. (2012) investigated the non-verbal gestures that are used by patients in order to communicate pain even without verbally expressing the

degree of pain they are experiencing. The semi-structured interviews conducted were short (4-10 minutes) in duration as compared to the traditional 40-45 minute interviews that are conducted at depths qualitative interviews. The survey findings revealed that it is not the duration of interaction with the patient that determines the proper diagnosis of chronic pain in the patient but the diagnosis is based on the ability of the nurse to interpret the combination of both verbal and nonverbal cues from the patient. The survey results showed that the gestures provide more accurate information pertaining to the location and size of the pain (74% and 92% respectively) while the remaining percent is complemented with the verbal information from the patient. Tollefson et al (2011) in the qualitative phenomenological study of seven chronic pain participants identified that patients are reluctant to verbally communicate their pain as they have a perception that health workers do not understand the pain phenomenon. Patients explained that there are no proper words to describe the pain because pain is silent but devastating.

Lavie-Ajayi et al. (2012) in the phenomenological study of six patients with chronic pain highlighted that patients continue to remain silent about their pain because of fear of being marginalised and stigmatised by both the community members and the health professionals. The survey refers to (Meadows, 2007) who describes that the inability of the nurses to diagnose and manage the pain with chronic pain properly leads to the demonstration of ability by the nurses and regard the patients as “difficult”.

Based on the studies above, the suggestion from (Mangione and Crowley-Matoka, 2008) that health professionals do not effectively diagnose the chronic pain in patients due to lack of understanding of terminology used by nurses during the interview of the patient’s required further exploration. Further exploration of the finding of this study also refers to several methodological errors which were identified in the field such as inadequate sample size (100 patients) for the survey study, the role of self-generated questionnaire with the absence of the validity and reliability check of the instrument.

Rahimi-Madisesh (2010) indicates that the complexity of the chronic pain phenomenon requires a mixed method study to comprehensively assess the knowledge and attitudes of health professionals towards the management of chronic pain. The recommendation followed the cross sectional survey study using the pre tested validity instrument from

146 respondents who showed that the knowledge of nurses regarding the chronic pain management is inadequate.

2.6.2 Pharmacological approach to the management of chronic pain

The high demand of the services for the management of patients with chronic pain as realised in the prevalence of chronic pain, dictates the change in the roles of different health professionals. The change in roles is also associated with the biomedical approach that is currently used as the model of care for the chronic pain management Conway and Higgins, (2011) in an attempt to improve the power of nurses in the management of pain, nurses were given extended role of prescribing medication which was seen by nurses as a means of improving their ability to manage chronic pain (Stenner & Courtenay 2008:29).

A qualitative study on the benefits of assigning the prescribing role to the nurses (Stenner and Courtenay, 2008) pointed out the benefits relating to the collaborative relationship between the nurses and doctors but did not point out the improved interaction between the nurses and the patients. The study would therefore not suggest that the extended role of nurses have impact on the chronic pain management outcomes. On the other hand, Westhuisen (2009:11) concludes that pharmaceutical management of pain is not the solution to their challenge of the burden of the disease as medication is sometimes not effective in chronic pain management, calculating dosages may pose a challenge, managing side effects and drug abuse by patients is even more complex. Boulanger et al, 2007:43) also warns that the pharmaceutical dependency will further burden the health system and the economy of the country. Despite all other challenges indicated, the adherence to the recommended drug management of chronic pain is poor (Makua et al. 2009:43; Jablonski & Ersek, 2009:1).

Despite the recommendations from various research studies that the use of non-pharmacological interventions improve the outcome of chronic pain management (Lindberg and Engström, 2011; Burton, 2011), non-pharmacological approach to the management of chronic pain is still not a default plan when planning treatment for the patients with chronic pain. In the literature review conducted by (Courtenay and Carey, 2008) the results report that the increase in the role of non-pharmacological treatment

programmes can effectively reduce the intensity of chronic pain without increasing the pain medication for the patient.

Dysvik et al (2011) attempted to challenge the consensus from the general literature in the quantitative survey of 88 outpatients with chronic low back pain by indicating that non-pharmacological interventions such as exercise and relaxation are not efficacious in the management of chronic pain. Based on the quantitative nature of the subject area, the sample is inadequate to allow the generalizability of the research outcomes. In the same survey, the researchers admitted that there were a high percentage of missing data (42%) even though the tool used was tested for the validity and reliability. It may therefore not imply that non-pharmacological management in the management of chronic back pain is not effective but exploration of other non-pharmacological intervention is essential.

Boulanger (2007) in a quantitative survey of (1055 patients and 100 physicians) reported that the pharmacological approach to the management of chronic pain is not reducing the impact of the disease prevalence amongst the Canadians. The comparative study analysed the change in the prevalence of chronic pain amongst the citizens between 2001 and 2007. The outcome of the survey indicates that despite the advanced guidelines for the management of chronic pain with the use of Opioids, 35% of the general population amongst the Canadians are still living with severe chronic pain, which affect the quality of their lives. The study further identified the possible barriers related to the underutilisation of Opioids, which are proven to be effective in the management of chronic pain. Both physicians and patients communicated the fear in the use of Opioids for various reasons ranging from side effects, addiction, and misuse to stigma. The study, however also indicates that the guidelines provides the use of non-pharmacological as the solution to the possible side effects of the Opioids use. What is evident in the survey is that there is no increase in the role of non-pharmacological management of chronic pain. Jablonski & Ersek (2009) conducted a randomised controlled trial by auditing the records of patients who were managed for chronic pain and concluded that insufficient use of non-pharmacological intervention does not indicate that there is adequate compliance to the pharmacological intervention

strategies as chronic pain still remain undermanaged irrespective of the availability of the chronic pain management guidelines.

Allcock et al. (2007) conducted the qualitative study of 3 focus group discussions with patients to explore the patients' expectations in the chronic pain management and the results indicated that patients did not mention the pharmacological intervention as the priority of the treatment plan. Patients described the use of pain medication as a means to dismiss them from the health care services.

2.6.3 The multi-disciplinary approach to the management of chronic pain

The implementation of the non- pharmacological strategy to the management of chronic pain in patients requires the multi-disciplinary team members. Irrespective of the diversity of the team members involved in the management of patients with chronic pain, the underlying principle is the constitution of the therapeutic relationship. The absence of the methodology information regarding a study by Adams, Poole and Richardson (2006) restrict the complete analysis of the survey, however the aim and the objectives and study results are clear to provide the credibility of the field. The development of the bio psychosocial model acknowledges that the physical, psychological, social and spiritual being sexist and do not necessarily follow the follow the sequence in order. Dysvik, Sommerseth and Jacobsen (2011:37) explain that management of chronic pain is complex and it is influenced by several factors.

Harding et al (2010) qualitative enquiry with the variety of health professionals confirmed that the bio psychosocial model by Adams, Poole and Richardson (2006) is essential in the management of chronic pain. The inclusion of the pain specialist, the anaesthetist, physiotherapist, clinical psychologist, nurses, acupuncturist, rheumatologist and the administrator confirms the complexity of chronic pain management. The results indicated that the patient and the pain specialist focus first on the identification of the cause of the chronic pain (diagnosis) and see the other multidisciplinary members as essential when all others have failed. The request of the patients when they visit the physiotherapist towards the final stage of the treatment plan communicates the need to engage with all other therapists earlier in the evolution of the treatment plan. The findings of the study also alleged that the patients come to the

health facilities with the degree of dependency on the health care practitioners who now nurses have the responsibility to wean patients off the dependency.

On the recommendation of the study, the author indicates that the treatment approach should shift from attempting to do something for the patients but rather involve the patient towards independence in managing chronic pain. The latter statement on the findings of the study and the recommendation suggest that irrespective of the effort to embrace the equal power between the nurse and the patients, nurses feel that they have more power over the patient. An element of blaming between the nurses and the patients is identified as one of the hindrances in successful governance of the therapeutic relationship. The assertion by the Buchbinder (2010) is evident in the case study report where the author says that sometimes the stories that are given by the patients are just fragmented and rhetorical thus misleading the treatment plan for the patient.

2.6.4 Nurses attitude towards management of chronic pain

The prevalence of chronic pain amongst the community poses a major challenge to the health system. 36-62% of adults live with lifetime chronic pain (Louw et al, 2007:105). Primary health care nurse are key role players in the management of chronic pain in the rural community (Courtenay and Carey, 2008) and they sometimes experience the feeling of powerlessness (Bloemberg, 2008:2039), experience knowledge gap (Jablonski & Ersek, 2009:1; Rahimi-Madiseh, Tavakol and Dennick, 2010:480) as they received limited information from the basic training (Lin et al, 2008:2037).

The literature review of critically evaluating the evidence regarding the effectiveness of nurse-led care in chronic pain by (Courtenay and Carey, 2008) highlighted that nurses have several key roles in the management of patients with chronic pain. Their findings suggest that nurses who received the extensive training in chronic pain management are able to work in the wide range of specialised nursing care areas. Additionally (Courtenay and Carey, 2008) used their findings to emphasise the importance of the multidisciplinary team cooperation in order to manage pain effectively. Strikingly, the

literature reviewed covered a wide range of benefits relating to the nurse-led care but none of the studies evaluated the educational interventions done by nurses to patients experiencing chronic pain. Of note was also the fact that the nurses were appraised for giving the care to their fellow colleagues who are living with chronic pain but none of the studies evaluated the effectiveness of such programmes in the working place. (Courtenay and Carey, 2008) present a clear discussion of the results of the literature review and the methodological flaws identified in each reviewed study but they did not show the methodological limitations of their discipline. Although the primary focus of the study was on primary care, the total number of primary care studies was 50% (n=7) less than the secondary care studies (n=14). One may argue that, chronic pain management is only given attention when the patients have already complicated and requires the advanced level of care and thus most studies are conducted at the secondary level of care. In acknowledgement of the fact that the nurses roles in caring for the patients and colleagues is outstanding, little or nothing has been mentioned regarding the self-care of the nurses.

As noted above nurses sometimes experience the feeling of powerlessness (Bloemberg et al, 2008) while caring for the patients. (Bloemberg et al, 2008) in a qualitative inquiry were 20 nurses participated in the focus group discussions and in depth interview, highlighted that nurses are sometimes personally involved when responding to the pain communication from the patient. In the theoretical framework, the involvement of the district nurses in dealing with patients with chronic pain yielded the two processes of detecting pain problem from the patient and responding to the pain problem from the patient. The results showed that the effective management of pain by the nurses result from the interaction of the three factors (i) patient's ability to communicate a pain problem, (ii) the collaborations with other health professionals and (iii) the pain support care from the organisations. Based on these three factors nurses are then able to deal with the pain actively or passively.

Similarly, (Jablonski & Ersek, 2009) when conducting the retrospective audit of medical records for 291 residents, concluded that even though there are systematic challenges in the management of chronic pain, there is also a need to address the individual staff motivation to react to the pain detection and management. The audit was reported to be part of the randomised controlled trial, the details regarding the sample and sampling procedures, data collection instrument and the data analysis process are clearly

articulated in the study report to comply with the academic principles. The findings relating to the adherence to the guideline on management of chronic pain is generally low (20%-40%). The low compliance ranged from flaws relating to the assessment of patients for pain, monitoring for side effects of patients who are on analgesic therapy and the recording of the non-pharmacological interventions applied in the management of patients.

The results may however be argued that, the use of a review of medical records in this study admissible but the triangulation of the data collection instruments would improve the rigours of the study because the document is not always the true reflection of the actual practice. Rahimi-Madiseh, Tavakol and Dennick's (2010) provided the evidence to suggest the lack of compliance to the chronic pain management guidelines by the nurses, is related to the lack of knowledge and skills. Additionally, the attitudes of nurses towards the patients who are living with chronic pain are not positive to encourage the nurses to improve the skills relating to the assessment and management of chronic pain. Lin et al (2007) concludes that the use of traditional classroom teaching of nurses in pain management do not develop the critical thinking and creative problem solving skills of nurses when dealing with chronic pain.

2.6.5 Patients' expectations in the management of chronic pain

Patients' experiences and challenges of living with chronic pain vary**.** Allcock et al (2007:250) study of the patient's pain- beliefs and emotions at the point of referral to a pain clinic focuses on the patients' expectations and priorities in accessing health care for the management of chronic pain. The use of focus group as the data collection instrument in the study is appropriate and increased the validity of the research findings. The results of the study highlighted that the complexity of the chronic pain is not only affecting the nurses but equally frustrates the patients who are living with pain. Patients indicated that they do not believe that the pain is properly managed if there is no firm diagnosis that is related to the pain they are experiencing. Secondly, patients also belief that the significant others finds it difficult to believe, support or assist the person who is reporting chronic pain with the absence of firmer diagnosis. Allcock et al (2007:250) also

realised that when patients are referred to the service for chronic pain management they expect to be told the diagnosis that lead to the chronic pain.

Even though Burton (2011:30) explains in the case study report that chronic pain is the diagnosis and not the symptom, but patients still experience a challenge that if there is no pathological defect that leads to pain, nurses do not believe them and if they believe, they are not helpful in managing pain.

Tollefson et al. (2011) small scale (n=7) qualitative, phenomenological study offers the diverse explanation of how patients suppress the experience of living with pain. Patients explain their pain as silent, not to be shared because as they share the physical pain the person receiving the message also start to experience the emotional pain as they realise that there is not much that they can offer to the patient. The study findings also highlight the impact of the chronic pain on the loss of social status and responsibilities. Patients who are living with chronic pain often experience social isolation, reduced self-esteem, loss of financial independence or even the ability to fulfil the social roles. Tollefson et al (2011) concluded that the factors that aggravate the tendency of the patient to keep silent about their pain, is the fact the patients belief that health professionals do not understand the patients' pain experience.

Lavie-Ajayi, Almog and Krumer-Nevo (2012) in conducting a similar methodological study (qualitative phenomenological, n=7) support Tollefson et al (2011) results that patients experience pain in two folds: where pain is vividly real and on the other hand, pain is experienced as illusions. Patients experience the vivid pain as destructing physical, social and emotional well-being of the person. The illusional experience relates to the invisibility of pain to the significant others, health professionals and family members.

Given the complexity of the chronic pain phenomenon from the nurses and a patient's perspective as described in the literature above, it is difficult to draw suggestive conclusions about the effective management of chronic pain. What is evident though from the studies above is the fact that the relationship is underlying to the application of the principles of the management of chronic pain. Relating back to the aim of this study, caring practices within the nurse- patient relationship were explored in order to share the practices amongst the nursing profession. In addition to the complexity of the chronic pain management and the difficulty in implementing the elements of caring, the

context of Primary health care aggravates the situation based on the fact that some authors had already indicated the time factors as the hindrance to the effective caring relationship.

2.7 THEMATIC REVIEW OF THEORIES RELATED TO CARING PRACTICES

Table 2.5 Nursing theories related to caring practices

Journal	Author and year	Methodology	Objectives of study	Findings	Recommendations
Nursing theories books	Smith ME Parker MC 2010		The book explore the purpose of nursing theory and how to study, analyse, and evaluate it for use it in nursing practice	Identified three theorists who describe care or caring as the defining concept of the discipline of nursing	Leininger was the first theorist to define care as the essence of nursing; she emphasises that care is only understood within cultural contexts. Watson's theory emphasise the spiritual dimension of care, transpersonal caring and connecting the spirit or soul of another Boykin and Schoenhofer' s theory focuses on nurturing the growth of the other as caring
	Masters K 2012	Analysis and evaluation of theoretical knowledge in nursing	Analyse the nursing theories according to; clarity, simplicity, generality, empirical precision and derivable consequences	Brief critiques of the theory was provided with the recommendation for improvement	Watson: transpersonal caring The concepts used are simple but abstract and thus they are difficult to measure. Recommendation: process remains evolutionary thus allow room for improvement and refinement. Boykin and Schoenhofer's and other theorists: the theory is clear and defined and is it broadly utilised in the nursing practice, does not need further contribution.

Journal	Author and year	Methodology	Objectives of study	Findings	Recommendations
Assessing and measuring caring in nursing	Watson J	Caring measurement tools 2008	To compile the caring measurement tools utilised in different parts of the nursing discipline in order to bridge opposing views and conflicting paradigms within the measurement of caring.	Several instruments were developed based on the theoretical framework, others multiple theories and others are not based on theory at all. Diverse approaches to interconnect the caring theories and caring measurements instruments may lead to refinement and expansion of the current theories.	Recommendation was to apply the mixed method in the view of understanding and measuring caring.

The purpose of the study is to explore the caring practices within the when managing patients with chronic pain. Masters (2012) in her presentation of different nursing theorist made it sound obvious that each nurse practitioner is aware of caring as the basic principle to guide their practice.

This section provides an analysis of the theories within the nursing practice that identifies the gaps within the practice of nurses. Several theorist acknowledge that even though caring/nurse-patient relationship is fundamental to the nursing practice, there is still a need to further explore the set of behaviours that are associated with the concept of caring. Halldorsdottir model indicates that not all the nurses are caring as it is alleged or thought to be obvious. The model indicates that the caring level of nurses ranges from being biocidic to biogenic:

- ✓ Biocidic: when the nurse can be decreasing the well-being of individual rather than increasing the well-being, such nurse display anger and anger while performing her duties.
- ✓ Biostatic: when the nurse is so cold that patients are even afraid to approach her when they have health related challenges.
- ✓ Bio passive ; this category include the nurses who are just performing their duties, task oriented, not engaging with the patients but always completing the organizational expectations within the regulated time frame.
- ✓ Bioactive: this will include the nurses who are concerned about the relational aspects of the patient, the make an effort to establish the caring relationship with the patients.
- ✓ Biogenic; this include the nurses who live the expectations of the nursing profession. They have the ability to create the caring moments with their patients.

Now that Halldorsdottir (2008:45), confirmed that not all nurses are caring in their practice, it is not known what percentage of nurses are actually ranging between the Biocidic and bio passive category. In this study, participative observation was aiming to identify the Biocidic from the biogenic nurses. The observation is based on the ability of the nurse to put the patient at the best condition for natural healing to occur, the theory by Nightingale.

The critique of Nightingale' theory (Masters, 2012:31) was that it was based on her observations and experiences but not derived from the testable statements. Despite the criticism, her model is still acknowledged as the foundation for nursing and still implemented across the discipline. Watson (2008:86) further interpreted her theory as healing, loving relationship because putting a person at the best condition for the nature to take its cause can only be done through caring practices. In this study, the observation of the caring practices is more critical than only listening to what he nurses about the caring practices. However, her theory was not used in this study because her theory is more relevant to the illness prevention and in this study patients are already sick and no specific cure is anticipated for these patients. Other theorist took forward her initiatives of providing a broad guideline and included the specific context of the healing.

Parker and Smith (2010: 315-375) analysed the work of the theorists who explained caring as the central concept in the nursing practice. She identified Leininger with the Sunrise model as the first theorist to include caring as the central concept. The emphasis of the model is on cultural context that influences the caring practices of the nurse, while not disputing the importance of cultural background of the patients, the theory is not explicit with regard to the total care of the patient (body-mind and soul) and therefore further theorists were considered.

The ten caritas processes, the transpersonal caring moment, caring as consciousness and caring healing modalities as explained in the Watson theory of caring (Watson, 2008:30) captures the totality of the patient. Furthermore, in the context of chronic pain where cure is not apparent, healing becomes the focus of the nurse -patient interaction. Though Masters (2012:63) reviewed the theory as containing too abstract concepts, for this study exploring such concepts was relevant as the healing for patients who are suffering from chronic pain is not concrete because medical perspective failed to identify evidence of pathology and therefore the healing process cannot be concrete. It is in this theory that the unity of body-mind and soul becomes more relevant as the pain manifest itself physically even though it is thought to origin from the mind and the spiritual(faith) is all that is left for the patient to experience healing.

In addition to the above mentioned issues, the theorist also describes her work as being under continued development, that provided the opportunity for the researcher to contribute to the developing process thus adding to the existing body of knowledge in nursing based on her theory of caring. Watson (2009:11) presents the discourse that is lingering within the nursing profession:

> "In addition to the debate about measuring caring there is the ambiguity around the concept itself… it is clear that further development of knowledge of caring through research and [caring] measurement approaches is one way to ensure that caring remains a seminal aspect of nursing's distinction as a discipline".

She further indicates that if caring is not researched adequately to inform the nursing practice, the survival of the nursing practice is threatened and those who will be remaining in the discipline will become hardened and insensitive to the patients' needs. In recommending the way forward, she indicates that the dichotomy between the qualitative and quantitative methodologies, are not assisting to explore the complex concept of caring and therefore are not ideally recommended in further research (Watson, 2009:270).

2.8 DIRECTIONS FOR FUTURE STUDIES WITHIN THE PARADIGM

On reviewing the studies in the phenomenon of chronic pain, it becomes clear from the acknowledgement by various authors that the need to use the mixed method approach is essential in shedding the understanding of the complexity of the topic. There is also a debate that the presence of the guidelines on the management of chronic pain does not predict the effective compliance of the guidelines. The consideration from the literature that the poor understanding of the chronic pain phenomenon challenges both the nurse and patients, the need to establish the common ground for understanding the phenomenon is critical. Table 2.6 below summarises the debate within the literature regarding the chronic pain management.

Table 2.5 Key findings & conclusions from the review of related literature

Findings from the literature
• The inability to identify the underlying cause of chronic pain may lead to the poor relationship between the clinician and the nurse • Generally chronic pain remains undermanaged and undertreated despite the availability of treatment protocols • The use of non-pharmacological approach in the management of chronic pain is only mentioned but there is no evidence of practice in the daily treatment plan of patients. • Evidence of power struggle between the nurse and patients adds to the complexity of chronic pain management • The misunderstanding between the nurses and their patient in the management of chronic pain is not necessarily related to the terminology used during the communication by the communication techniques. • When dealing with chronic pain phenomenon, the need to understand the pain communication gestures is still not clearly understood within the nursing practices • Extending to roles of nurses as prescribes did not yield the satisfactory results in improving the management of chronic pain.

The summary tabled above (table 2.6) illustrates that the continuing debates in the existing body of literature about the effective management of chronic pain is not

reducing the burden of chronic pain within the community. The focus area in the literature is the pharmacological management of chronic pain and the use of complementary therapies in the management of chronic pain. Turk, Wilson and Cahana (2011:2228) found that there is slight increase in the management of chronic pain with the use of pharmacological treatments. Vallejo, Barkin and Wang (2011: 342) warn that even though the use of Opioids in the management of chronic pain is effective, the impact of the use of such drugs in the long term was never evaluated.

Body et al, (2011) reiterates that the non-pharmacological approach to the management of chronic pain is broad, complex and requires the integration of the multidisciplinary team members. In the process of collaboration between the multi-disciplinary team members, the involvement of the patient as the key facilitator of the treatment plan is not acknowledged resulting in blaming of patient on non-compliance, dependency and being described as difficult. The suggestion within this approach to the management of chronic pain is that, the non-pharmacological management of chronic pain should be reserved to be implemented when the pharmacological approach has failed.

Apart from the pharmacological and the non-pharmacological approach to the management of chronic pain, the interpersonal and intrapersonal factors within the health practitioners and the patients are mentioned to have impact in the management of chronic pain. Watson (2008) whose work emphasises that the personal healing of the health professional is equally important as the healing provided to the patient. As illustrated in the summary of findings above, one of the unanswered questions from the studies reviewed relates to the power struggle between the nurses and patients. Although there are several generic principles in the management of chronic pain, lack of rational distribution of power in the development of treatment plan will remain a complex phenomenon that is not properly understood.

The literature review, in addition to imparting critical information relating to the debate within the management of chronic pain phenomenon, pointed out the different flaws in the use of a single research methodology. The varied research methodologies used illustrated the complexity that may result in trying to advocate for the particular approach to the management of chronic pain. Furthermore, recommendations from the reviewed studies recommended the use of multi-method or mixed method design.

As a result of the questions that arose from the literature review, this study explored the caring practices relating to the management of chronic pain in the primary health care

setting using the mixed method design. In addition to the mixed method, the study triangulated the data collection instruments between the survey, participative observation and focus group discussions. The study was therefore design to address the following questions:

- ✓ What are the current caring practices within the nurse patient relationship during the management of chronic pain patients in the primary health care services irrespective of whether the patients is on pharmacological or non-pharmacological treatment plan?
- ✓ What are the caring experiences for the nurses in the management of patients suffering from chronic pain?

2.9. SUMMARY OF LITERATURE FINDINGS

The identification of constructs in the establishment of a therapeutic nurse patient relationship has been studied extensively within the literature. Even though there is general consensus on the constructs of the establishment of NPR, the reviewed literature have failed to singularly apply the constructs in the complex phenomenon of the chronic pain. It is the author's view that the findings in the literature concretely developed the prospective researcher process in identifying the literature gap within the management of chronic pain. The themes presented are, (i) establishment of trusting relationship (ii) communication and listening as the determinant of effective NPR (iii) demonstrating empathy in NPR (iv) teaching and learning in the NPR (v) identification of chronic pain by the nurse practitioners (vi) pharmacological approach to the effective management of chronic pain (vii) multi-disciplinary approach to the management of chronic pain (viii) nurses' attitude towards the management of chronic pain and (ix) patients expectations in the management of chronic pain. Irrespective of the treatment approach in the management of chronic pain, the relationship factors are fundamental to effective management of chronic pain.

This chapter dealt with the literature from different sources as it was presented according to the different concepts of the study; Different search engines were utilised to summarise the literature. As the literature was synthesized, the research results and

recommendations were noted; the themes for the debate were also identified. Utilising the themes from the synthesised literature, the information was therefore analysed for consistency in the argument and the areas of research developments.

Based on the arguments provided from the sections of this chapter, the researcher was able to identify the research methodology for the study and the caring theory that will inform the research, which will be explained further in the next chapter.

As noted earlier, the questions that emerged from the literature review were:

- ✓ What are the current caring practices within the nurse patient relationship during the management of chronic pain patients in the primary health care services irrespective of whether the patients is on pharmacological or non-pharmacological treatment plan?
- ✓ What are the caring experiences for the nurses in the management of patients suffering from chronic pain?

The next chapters provide the overview of the theoretical grounding and methodological processes pursued to answer the above questions.

CHAPTER 3

THEORETICAL/META-THEORETICAL GROUNDING

3.1 INTRODUCTION

The previous chapter articulated the debate relating to the different concepts of the nurse-patient relationship, caring and the need for the development of communication skills and knowledge for nurses. The caring theories, which were explained by different authors, provided a framework within which chronic pain can be managed in the context of the primary health care setting. In acknowledgement of the need to further clarify "caring" in the nursing profession, several models such as positive patient environment, the creations of therapeutic milieu were suggested as models to improve caring within the nurse-patient relationship. All the information gathered will form the basis for the researcher to develop a conceptual framework of the study.

Trafford and Leshem (2008:84) define a conceptual framework as the researchers' map, which is more recent and defines the territories to be investigated, a mechanism for systematic abstract arrangements. In mixed methods design, conceptual framework can be used as a theoretical lens to guide the study. The theory shapes the type of questions to be asked to the participants (Creswell, 2009:66). In this study, the questions in the questionnaire were based on the Watson caring theory. The authors also indicate that the conceptual framework chapter serves as a link between chapter 2(literature review) and chapter 4 of research methodology. Chapter 2 explored the gap within the body of knowledge, assisted the researcher to differentiate between what should be included or excluded from this study. As chapter 4 will be dealing with choosing the methodological approach to the study, the choice will be guided by the conceptual paradigm adopted from this chapter.

The two authors further clarify that the conceptual framework of the study, if properly analysed by the researcher should:

- Identify and support the intellectual foundation for a gap in the corpus;
- Justify that the research outcomes will add a new contribution to the corpus;
- Create the foundation for the data analysis later in the study and;

- Support choices made by the researcher thought the research process.

The role of theory in mixed method can be both deductive (quantitative aspect where theory is verified) and be inductive (qualitative aspect where patterns are emerging) depending on the research question (Morse, 2003:197).

Table 3.1 Theoretical drives of the study

Inductive use of theory	**Deductive use of theory**
In qualitative phase of the study, the theory is delayed and can only be reflected upon towards the end of the inquiry. In this type of the theoretical framework the researcher is answering questions such as "What"	The theory is well established and forms the basis for the researcher to identify the logical relationship between the concepts of the theory. In this type of the theoretical framework the researcher is answering questions such as "How many"?
Application in phase one of the study	**Application in phase II of the study**
The use of focus group discussion and observations allowed the process of objective analysis of the caring practice phenomenon without the biases of the theory. **In this study the researcher is answering the question relating to "What are the caring practices when managing the patient with chronic pain".**	The availability of the theory assists in developing the variables to be considered when investigating the caring practices. The integration of the Watson caring theory and the theories of pain formed the foundation for the development of the survey in this quantitative phase of the study. In this study the researcher is answering the question relating to "How many nurses are aware of the caring practices".
Integration in mixed method: **Based on the QUAN + qual orientation of this sequential study, the deductive theory drives the study with an element of inductive theory embedded in the study.**	

Within this study the two conceptual frameworks integrated were Watson's theory of human caring and the pain theories. The pain theories explains the patho-physiology of the complex phenomenon of chronic pain and why the pharmacological management alone is not sufficient .The Watson's theory of human caring forms the basis of

understanding of non-pharmacological approach to the management of chronic pain. Watson theory of human caring incorporates the four main concepts of the nursing discipline

3.2 OVERVIEW OF THE THEORY

Watson's theory for human caring was developed in 1979 with the purpose of bringing meaning to the nursing profession. The purpose of the theory was to acquire the values, knowledge, practices and ethics of nursing in order to set aside the clear distinct between the nursing and the medical philosophy. The theory provides the caring language that can be utilised by nurses within different caring practices. The conceptual components of this theory include (1) the expanded concepts of (nursing, health, environment and person/ human. (2) Carative processes, (3) transpersonal caring relationship, (4) caring moment, and (5) caring healing modalities. For the purpose of this study, the first three elements of the theory were included in the study at different phases of the study.

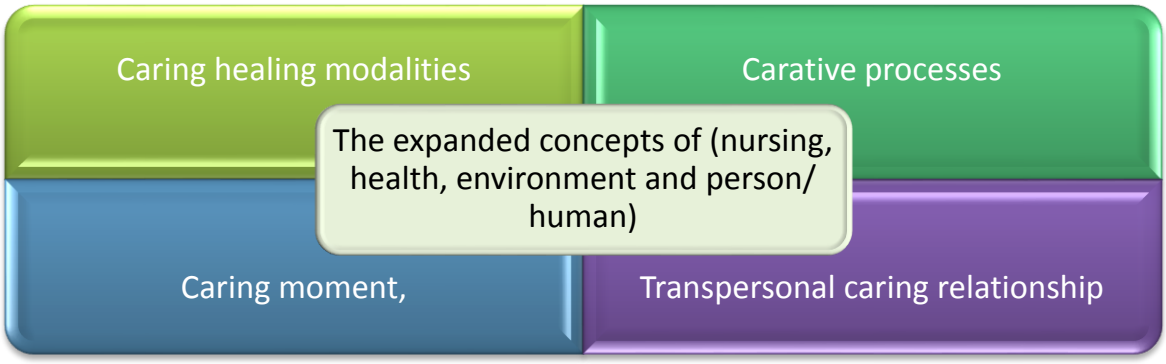


Figure 3.1 Summary of Watson's theory of human caring

The four major concepts of the nursing as explained in Watson's theory provided the theoretical perspective of the study. In this study, a person is perceived as the oneness of mind-body-spirit-nature where the caring relationship was based on the wholeness of a person and not understood as parts of the whole. The health perspective in this study referred to the harmony within the body-mind and spirit, while the environment is perceived as the nonphysical energetic field and nurse being seen as the environment. Lastly the nursing perspective of this study refers not only to the science but also the art of nursing.

The Caritas processes entail the Caritas language for the nursing practice and the key concepts for the measurement of caring within the nursing practice. The initial phase of this study where the researcher is exploring the nature of the relationship that exist

between the nurse and patients who are suffering from chronic pain, the caring language from the caritas processes underpinned the development of the questionnaire.

As the study advanced to the second phase, the transpersonal caring relationship from this theory was utilised to analyse the observed behaviour between the nurse and the patient in order to determine the availability or the absence of a caring relationship.

3.3 FOUR MAJOR CONCEPTS OF THE THEORY

3.3.1 Concepts clarification

Nursing practice and theory are based on the four concepts (human being/person, health, environment and nursing). Human being refers to the valued person who is being cared for in a respected manner. A human being is seen as the integrated fully functional being and not merely the combination of his different body parts. Watson, (2012:1) agree with the WHO definition of health of stating that health is not merely the absence of disease but the complete physical, mental, and social well-being. Environment refers to the social, psychological, emotional factors that may impact on the circumstances of health of an individual (Jarrin, 2012:18-22). Nursing as a discipline encompasses the collaborative care of individuals and their families (ICN, 2011). The purposeful integration of the four main concepts allows the creation of the healing environment for both the nurse and the patient. The nurse who is providing care bases the healing environment on the therapeutic relationship and the experience of caring behaviours.

3.3.2 The four concepts within the Watson's theory of human caring

The interaction between the human being who can either be a nurse or the patient and the nursing discipline allows the experience of the healing relationship. On the same note, the interaction between the human being and the environment provides an opportunity to integrate all aspects of the human being as the process of healing. While the health is experienced when there is interaction of components of human being, health is not only limited to the absence of the illness but involves the spiritual being. The interaction is not simple but complex as it integrates the internal and external

individual factors and the collective internal and external inter objective factors (figure 3.2). Each of these interacting factors needs to be taken into consideration when developing the therapeutic relationship. Further explanations of these factors are provided in the section below.

Watson (2008:10) explains that the realisation of the healing through the implementation of the ten carative processes is essential. The transpersonal caring moment, which is another component of the Watson human caring theory, is realised through the interaction between the environment, health and implementation of the nursing principles such as caring. Watson (2008) further explains that caring moment does not occur spontaneously but requires the active practice of the caring healing modalities (figure 2.3). The caring healing modalities as included as the components of non-pharmacological management of chronic pain.

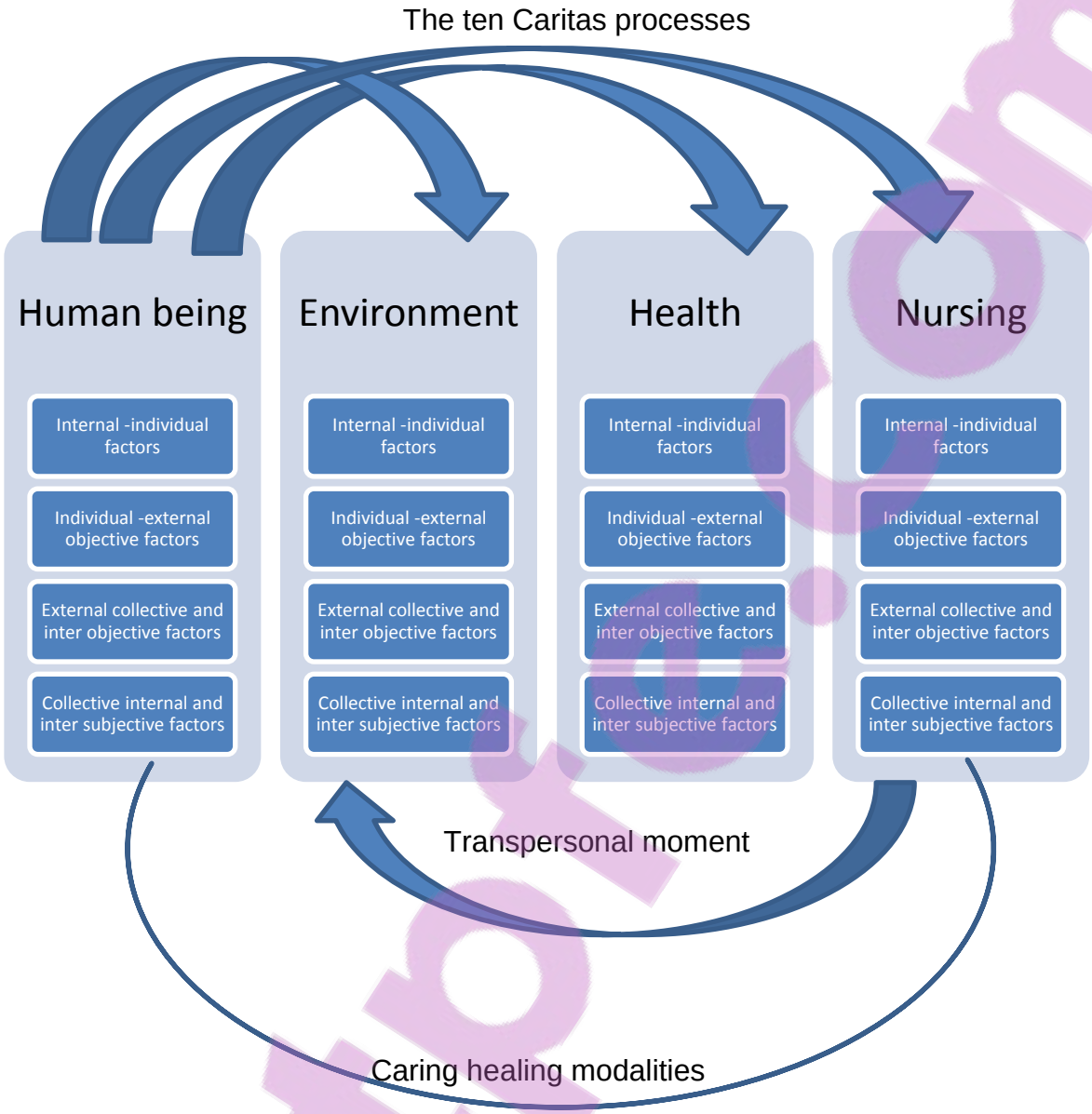


Figure 3.2: Interaction between the nursing practice concepts and Watson human caring theory

3.3.2.1 Human being/person (patient and nurse)

The complexity of the human being denotes that it is not always practical to separate the objective and subjective being in a person. A human being is influenced by both the internal and external environment and individual and collective factors, which are described below.

Internal- individual subjective factors

Isolation refers to the separation from the physical and non-physical environment where a person feels unwanted by the people around her.

Lived experiences: inform the references for the expectations in an encounter with the similar situation. Such references (good or bad) may lead to the barriers of the relation and connection between the two people.

Internal motivation: the willingness to benefit from the connection/relation comes from within and what the next person has been to create an environment that will enable the expression of feelings and requesting help.

- Individual – external objective factors

  Genetics: genetic makeup of individual will influence the personality traits in the relationship irrespective of the presence or absence of provocative environmental factors.

  Cognitive development: the level of knowledge and perception of an individual‘s in the relations will affect the dynamics of the relationship.

  Psychological development: the state of mind at the time of the connection will influence the level of connection between the two people in the relationship

  Physical body material (body): physical factors such as pain or illness may hinder the ability of the nurse to connect with the patient.

- External-collective and inter-objective factors

Group membership: prejudices such as classifying people as “sex workers and truck drivers” leads to judgmental attitude thus preventing the connection required to allow the healing process.

Nationalism: the nationality that you belong to; will influence the willingness to connect to the other person thus hindering the natural process of healing.

Job: Certain categories of jobs put individuals in the high status thus suppressing the need to express the fears and phobias. Nurses need not cry in case of death because she is used to the situation for the working environment.

Family structure: Family structures, which only allow certain people to make decisions, may hinder the relation, as there will be reservations to commit to the relation until she/he receives the authorisation from the family decision maker.

- Collective-internal and inter-subjective factors

Religion: acceptance the rejection of connection between the two people may also be related to the fear of breaking the religious beliefs in the process of interaction with the next person

Superstitions: negative superstitions such as (men should not cry while in pain) may lead to excessive suppression of feelings and the need for help.

Morals: What the society condone as acceptable behaviour may not necessarily benefit the two people in the relationship. While the nurse has the moral obligation to extend the willingness to help, the patient should exercise moral responsibility to present his challenges to the nurse

3.3.2.2. Nursing

- Internal- individual subjective factors

Empathy: defined it as “an expression of one’s sorrow at another’s plight” (Morse, Bottorff, Anderson, O’Brien & Solberg, 2006:79) Empathy is described as the central component in the nurse-patient interaction.

Caring intension: A person who enters the nursing profession must have the internal feeling of the need to care for others so that the caring actions are exercised with spontaneity.

Use of knowledge: Watson in the carative process 10 explains that allowing the nature to take place should be done within the context of skills and knowledge of the practitioner.

Preservation of dignity: Irrespective of the state of health “terminal or unconscious”, the need to respect the dignity of the person demonstrates the caring character.

Healing presence: When nothing else could be done medically, the presence of the caring professional provide the emotional healing of the person in need (pain)

- Individual – external objective factors

Experience: it forms the lived past and will be linked inter-subjectivity in the present in order to allow the process of healing to occur as explained in the transpersonal caring theory.

Working situation: The shift that the nurses are working and the time of the day affect the level of interaction between the nurse and the patient. The workload and the pressure of time, to some extend also limits the therapeutic connection between the nurse and the patient.

Health status of the nurse: Nurses need to be physically and emotionally healthy in order to create a therapeutic milieu for the patients

Communication skills: Morse et al (2006:77) explained the communication responses if the nurse demonstrates the art of communication and showing empathetic insight to the stimuli as connected, reflected and professional response.

- External-collective and inter-objective factors

Information management: Confidentiality and respect of the person’s privacy need to be respected in order to sustain the relationship/connection, which will be demonstrated by the trusting relationship.

Coordination of care: Patients who visit the facilities for follow up care will lose confidence if they have to relate everything afresh with every visit. Proper referral

to other team members for continuity of care will enhance cooperation from the patient.

Use of resources: In the development of nursing technology should be utilised as complementary to the nursing practice but not replace the caring values of the profession.

Advocacy: Nurses as being at the centre of the treatment plan of the patient need to advocate for the needs of the patients and not merely fulfil the routine tasks to relieve the symptoms.

- Collective-internal and inter-subjective factors

Relationships: The nurse and the patient should enter into the purposeful relationship with a common healing goal in order to create an environment that will allow the “miracle” to happen

Respect: Mutual respect does not only build the trusting relation but also allow the expression of both negative and positive emotions.

Cultural competence: In South Africa in particular, the diversity of culture demands the interest from the nurse to learn the basic cultural clues that will enhance the communication with the patients. Imposing the cultural values on the patient may result in failure to achieve the healing goal.

Use of language: the use of language ranges from the terminology, tone of voice, pronunciation of words and the use of hyperboles. The need to seek clarity during communication will enhance the development of a therapeutic relationship.

3.3.2.3 Environment

- Internal- individual subjective factors

Attitudes: the judgmental attitude is detrimental to the establishment of the healing relationship.

Personal values: What works for one person does not always work with the next. Before suggesting or advising the patient on any aspect, determine the common values that you share with the patient as a nurse.

Faith: The role of the nurse in the healing relationship is to instil faith and hope in the patient

- Individual – external objective factors

  Cleanliness: the environment where the interaction is taking place should be tidy, organised and free from the obstacles in order to encourage the person who is requesting the assistance to connect with the nurse.

  Room temperature: Too hot or too cold environment interferes with the comfort of both people who are interacting and sometimes distract the process of communication and cloud the non-verbal communication clues that will guide the process.

  Light: While communicating with the patient, the sense of sight is equally important to convey the message to the recipient. In case of chronic pain, facial expressions that imply a feeling of pain may be missed if the environment is not well lit.

  Noise: Disruptions by colleagues, other patients, telephone and the support staff may interfere with the connections during the therapeutic relations

- External-collective and inter-objective factors

  Political factors: In situations of political instability in the area or country may lead to the feeling of unsafe during the communication thus withdrawing important information that will be helpful in the relationship. Factors such as Xenophobia may create a barrier in the connection between the nurse and the patient.

  Natural disasters: In crisis management and where there are more people in need of help than those who are available to assist, the time factor and prioritisation may hinder the ability to connect to the patient.

  Economic factors: In the era of economic meltdown where every individual is struggling to survive, giving advices that are dependent on the money supply may lead to unrealistic treatment plan between the patient and the nurse.

- Collective-internal and inter-subjective factors

  Societal norms: Imposing factors from the community that dictates what is socially acceptable or not such as separating, the male and female duties in the household may affect the support that can be given to a patient suffering from chronic joint pains.

Racism: Subjective stereotypical thoughts about the other race will prevent the connection between the nurse and the patient. Even though on a one-to-one interaction the issue is being suppressed but the societal pressure will affect the relation between the nurse and the patient.

Sexism: In most ethic cultures in South Africa, men are superior to women thus irrespective of the role that the nurse with all the knowledge is playing above everything she remains a woman thus will not therapeutically connect with a male patient.

Classism: In the history of health profession, the medical practitioners occupied higher status than nursing thus transferring to the community the fact that it should be the doctor who is proposing a treatment plan and not a nurse. In South Africa where the PHC services are nurses driven, the community classifies the care as low quality.

3.3.2.4 Health

- Internal- individual subjective factors

  Personal meaning: the individual best defines Quality of health thus needs for health is unique amongst all the individuals. An individual need to find personal meaning of what health is to her and not to the general community of patients.

  Spirituality: the connection between the body mind and spirit (Watson, 2012:31) is emphasised in the quality of care that needs to be given to the patients.

  *Emotion*s: The concept of emotional intelligence refers to the ability to realise the emotions and express such emotions without hurting the next person.

Self-perception: As an individual, you need to clarify your own perception of health in order to be in a state of accepting the recommendations from the nurse who is an expert in the field of health.

- Individual – external objective factors

Laboratory tests: the objective measures from the investigations will objectively determine your level of health, irrespective of your feelings. High levels of cholesterol and blood pressure are classified as high-risk signs even though you as a patient do not feel any physical change in your health status. Communication of such reports between the nurse and the patient may lead to disagreement on the definition of health thus interfering with the relation between the two.

Stress management: Due to socioeconomic status in the world, stress has become the everyday challenge. There are several coping strategies, which are classified as promoting health (ventilation), and those that are not promoting health (denial).

Mobility: According to the basic human needs order of level, the ability to meet such basic needs is dependent on the mobility level of the individual. In case of impaired mobility due to ill health, a person becomes permanently partially dependent on others

Immunity: Chronic conditions such as Diabetes Mellitus, cancer, osteoarthritis and AIDS reduces the immunity levels of individuals thus reducing the health and predispose them to more other conditions which may result in a syndrome.

Exercise and rest: the balance between the exercise and rest improves the blood circulation and metabolism in the body thus maintaining the equilibrium.

Nutritional status: Under nutrition leads to the emotional instability of individuals leading to irritability while over nutrition leads to the lifestyle conditions such as arthritis, which may lead to immobility.

- External-collective and inter-objective factors

Support groups: Support can be available from the family, friends and the voluntary members of the community (NGO) in order to help the individual to cope with the condition.

Health insurance: The affordability of the health insurances allows the individual to have access to the advanced complex treatment therapies, which will improve their health status.

Health care system: In South Africa, PHC as the first level of care should be able to manage all the conditions at an early stage in order to minimise the costs related to the second level of care.

*Epidemic*s: the outbreaks of conditions such as MDR and XDR TB, which spreads by droplets, pose the health risk to the public and may result in the fear of infection from the health professionals thus maintaining the distance from the patients and preventing the connection required to allow the therapeutic relationship.

- Collective-internal and inter-subjective factors

Meaning of birth: Most communities attach birth to the feeling of a reward from God; it should never be prevented irrespective of the health risk involved.

The meaning of death: other perceives Death as the punishment from God thus is poorly accepted within the families and often they struggle to cope with the loss and result in the altered state of mental health such as depression.

Sense of belonging: Stigmatisation and social isolation based on the state of health of the individual leads to the poor adherence and the compliance to the treatment plan by the affected individual.

3.3.3 Relationship of the four concepts with management of chronic pain

The inclusion of the four concepts of nursing in the management of patients with chronic pain acknowledged the fact that the chronic pain management phenomenon is complex and requires the diversified interventions.

3.4 CARATIVE PROCESSES

The implementation of “carative processes” assists the nurses to manage the moral or ethical or even the professional conflicts that may arise during the delivery of care. Caring and science can co-exist and should not be seen as conflicting processes in the healing process. The caring relationship is required by both the nurse and the patient in order to sustain the healing practices. If nurses are interested in transforming their profession, they will require the shift of consciousness and implement intentional actions of changing the practice from inside moving outwards (Watson, 2009:146). In realising the change, the use of carative processes will be explained next.

- Formation of a humanistic-altruistic system of values

What patients bring to the relationship of nurse and patient is influenced by their cultural beliefs and own life experiences. It also indicates that not only the emotionally disturbed persons need psychotherapy but every individual. The acceptance of the individual by the other person leads to the improved self-esteem, self-fulfilment and self-acceptance (Tomey & Alligood 2006:149). The nurse is expected to practice loving kindness and concern for the welfare of self and others. Nurses have moral responsibility and devotion to provide care that is of value to the recipient.

- Installation of faith-hope

The factor describes the nurses’ role in the establishment of the effective nurse-patient interrelationship, which will promote the wellbeing of the patient. Such a relationship will assist the patient in adopting the health-seeking behaviour. When nothing else could be done medically to the patient, the nurse should encourage patients’ belief, honour patients’ beliefs and respect patients’ beliefs. The nurses have the ability to focus only on that patient at a given point in time (Carusso, Cisar & Pipe 2008:128).

- Cultivating the sensitivity to the self and others

Nurses have the responsibility to develop the emotional intelligence. The nurse should start but understanding and accepting her own feelings so that she will be able to assist the patient to explore his feelings. The recognition of the one’s feelings will lead to the fulfilment of the self-actualisation need. As the nurses acknowledge their sensitivity, they become more genuine in recognising the feelings of the patients.

- Development of the human care relationship of helping and trusting

The development of trusting relationship should be based on the principles of being realistic, truthful, honest and genuine. This factor explains that the nurse should not only demonstrate empathy to the patient but also acquire a skill to pass on her understanding of the patients' situation of the patient. Factors such as body posture, tone of voice, eye contact and facial expression play a role in the formation of the trusting relationship. A therapeutic relationship is demonstrated by the observable behaviour that is being portrayed by both parties, during phase 2 of the study where the participative observation instrument will be utilised such behaviours will be observed.

- Promotion and acceptance of the expression of positive and negative feelings

The ability of the nurse to remain calm even if the patient is angry, demonstrate the ability to accept patients' emotions. It is the responsibility of the nurse to encourage the patient to discuss his feelings. It may vary with patients the pace at which the patients will open up to express their feelings, which calls for the nurses' patience.

- Systematic use of the scientific problem-solving method for decision making

Creativity in planning the patients' care will require a desire to explore and discover the approaches that builds on the unique aspect of the clients (Carusso, Cisar & Pipe, 2008:128). The therapeutic use of self by the nurse, the art of engaging the patient in the process of creating a caring-healing practice is essential (Watson, 2009:44).

The nursing process is implemented through clinical assessment, diagnosis, treatment and care in the PHC setting. For the purpose of this study, the PHC guidelines and WHO guidelines guides the implementation of the chronic pain management principles are also regarded as systematic guidelines to be followed in the implementation of the caring process.

- Promotion of transpersonal teaching and learning

The purpose of the sharing of ideas and practices between the nurse and the patient will lead to the health-healing-wellness coaching model. The teaching and learning environment need not always be formal but can rather occur in the process of communication between the nurse and the patient. In case of chronic pain where healing is less anticipated the lifestyle modification play an important role in the adaptation to the condition.

Each nurse-patient encounter should provide the opportunity for personal growth of both the nurse and the patient (Lukose, 2011:28). In a case where the education is formal, the nurse should attempt to stay in the patients' frame of reference.

- The provision of the supportive, protective, and/or corrective mental, physical, societal, and spiritual environment

Apart from spiritual, social and cultural factors, basic factors such as comfort, privacy and safety will influence the provision of the supportive environment for the patient. The creation of healing environment is not only limited to the physical environment but rather include the non-physical such as feeling of trust as explained in the other carative factors. The environment should be peaceful, non-threatening and respecting the dignity of the patient. Allowing patients to do what they can for their help to create a supportive and not a dependency environment.

- The assistance with the gratification of human needs

Even though the patients who are travelling to the PHC facilities are not dependent on the nurses tending to meet their basic needs, nurses have the responsibility to enquire from the patient if there are any challenges for the patient in meeting the basic needs. In case where the patient requires assistance with the basic needs, they should be provided with respect such as minimising unnecessary exposure of the patient because he is unable to dress himself. The nurse should hold the intentional, caring consciousness of touching the embodied spirit.

- Allowance for existential-phenomenological-spiritual forces.

In the history of nursing, Nightingale understood that irrespective of the development of nursing as a scientific discipline, the healing process is natural and should be allowed by creating an enabling environment. Watson (2011:47) refers that as an opening and attending to the spiritual mysterious, unknown and existential dimensions of pain, joys and suffering, transitions of life change, life and death to unfold as a miracle.

3.5 TRANSPERSONAL CARING RELATIONSHIP

Transpersonal caring is described as the human-to-human interaction, which aims to protect, preserve and enhance human dignity. The transpersonal caring is closely related to the Florence Nightingale theory by stating that the nurses' role is to put the patient in an environment that will allow nature to take its course and let the healing

process (Jarrin, 2012:14). The process aims to help the next person to discover meaning in the suffering, which can be in a form of pain or illness. The patients are able to restore the sense of inner harmony irrespective of the external circumstances (Watson, 2012:65). Transpersonal relationship is based on creative personalised giving and receiving behaviours between the two people. A transpersonal caring moment is experienced if the nurse is consciously, intentionally and uniquely engaged with the patient.

The process of transpersonal caring begins when both the nurse and the patient as separate people bring together their unique life histories, which mark the past in their lives. In a given time and place there is an occasion where the two people experience and perceive the relationship. During this occasion there are actions and choices made by these individuals who are involved and they therefore decide on the way they are going to run the relationship. If the occasion is truly transpersonal, it will allow the presence of the spirit and openness and creates the ability to expand the human capabilities. The spirit-to-spirit connections between the nurse and the patient are based on the belief that it will allow the mutual learning environment. Figure 3.1 below summarises how the past, present and the imagined future experience has internal relations in the phenomenal field and internal subjective relations (Watson, 2012:73).

Parker and Smith (2010:357) further explains that transpersonal caring connection is realised through the verbal communication, actions, behaviours, non-verbal communication, expression of feelings, thought processes, tone of voice, the use of the senses, therapeutic touch, and cognition. Through the transpersonal connection, nurses are able to enter into the life space of the patient, detect his condition of being, and therefore react in such a manner that the patient is able to release his subjective impressions and thoughts. Gallagher-Lepak and Kubsch (2009:180) factored the carative factors within the transpersonal caring so that they should not be seen as different entities but rather complementary to each other, they summarised carative factors as experienced in the daily care of the patients through value clarification, cognitive restructuring, bearing witness, presence, active listening, advocacy, sensation information, therapeutic milieu, purposeful touch and spiritual support.

Watson (2012:76) summarises that the transpersonal caring relationship depends on several factors as described below:

- A moral commitment to protect and enhance human dignity;

- The nurse should possess the ability to recognise and discover feelings and connections to the patient (focus);
- The nurse should be willing to affirm the subjectivity, spiritual significance of the patient;
- Nurse to feel the human-to-human connection with the patient;
- Nurse ability to use her collective past to imagine the patient's feelings and suffering from various human conditions;
- Nurse ability to use the intensity of the relationship to generate the reflective process necessary for caring and help to be given to the patient;
- Nurse ability to integrate the subjective experience and emotions with the objective view of the situation
- Nurse ability to demonstrate the art of caring through hearing, sight, and be capable to experience the emotions of the patient

3.6. CONCEPTUALISATION OF THE WATSON CARING THEORY

Nurses are not faced with universal personalities therefore universal behaviour would not be accepted as the recommended behaviour. Routine tasks and conventional nursing can only be holistic if the nurse applies the carative factors (Lukose, 2011:28) Watson therefore argues that lack of preparation of the nurses in transpersonal nursing, will increases cultural stress and leads to potential conflict between the nurse and their patients (George, 2011:413). Nurse patient relationship is the process, which evolves through stages in order to achieve the maximum benefit to both parties. The factors such as trust, faith, sensitivity, support, learning, acceptance of feelings will determine the nature of the relationship between the nurse and the patient (George, 2011: 316). The robotic tendency where nurses implement the fixed way of doing things and often adopting the authoritarianism attitude will not assist the mutual process of problem solving for both the nurse and the patient (Watson, 2008:108).

Halldorsdottir (2008:644-646) in her study which aimed at exploring the dynamics of the nurse-patient relationship and caring practices, it was clear from the patients that, according to them caring is not the competency related to the execution of the series of

tasks but rather the experience of spiritual connection between the nanny and the patient. The same orientation of thought is shared by Watson caring theory, which emphasises the spirit-to-spirit connection in order to create “caring moment”.

The Caritas process approach within the nurse patient relationship will assist in managing the shortcomings that are related to the “Nursing Process” and “Evidence – Based approach (Watson, 2008:113) which are now recently seen as an alternative to the traditional Era I and II of nursing. In the caritas process, the nurse is allowed to draw all forms of knowing in a creative, individualised manner that will embrace theory, ethics, values and sound clinical judgement.

Figure 3.2 below summarises the key concepts that are related to caring practices as described within the ten carative processes of Watson caring theory. These concepts were integrated in chapter 4 during the instrument development process for data collection of the study.

Figure 3.3 Key concepts related to caring practices in managing patients with chronic pain.

3.7 PAIN THEORIES

Several theories have been developed to explain the mechanism of pain and to develop management techniques for patients suffering from chronic pain. The following exposition explains some of the relevant theories to chronic pain.

3.7.1. The gate control theory of pain

Melzack and Wall (DeLeo 2006:60) developed the Gate Theory of Pain in 1965. The Gate Theory describes the perception of pain to be more complex than merely a receiving and recording of pain signals, and describes the brain as an active system that filters, selects and modulates the input (Van der Westhuisen, 2009:10-11). The gates are located in the spinal cord. When the gates are opening, the pain message gets through easily and the pain becomes intense. When the gates close, the pain messages are prevented from reaching the brain cells and thus the pain intensity is reduced (Norval *et al* 2006:43). There are events and conditions that may open the pain gate and cause suffering, such as (Moore 2011:5):

- Sensory factors, such as inactivity and poor pacing of activities;
- Cognitive factors, such as worrying about the pain; and
- Emotional factors, such as hopelessness and helplessness.

Alternatively, there are conditions that can close the pain gate and reduce suffering. These conditions include (Moore 2011:5):

- Sensory factors, such as relaxation training and use of pain medication;
- Cognitive factors, such as distracting oneself from the chronic pain; and
- Emotional factors, such as having a positive attitude and overcoming depression.

Several authors (Burton, 2011:27; Dysvik, Sommerseth & Jacobsen 2011:39 and Lavie-Ajayi, Almog and Krumer-Nevo 2012:196) emphasise the importance of brain and mind in pain perception. They describe the Gate Control Theory of Pain as not only

describing physical stimuli and brain interpretation, but also involving how the patient feels at the time of experiencing pain. An example is that patients who are anxious and depressed experience more intense pain than those with a normal mood.

Honeywell et al. (2004) explain the mechanism of pain control by describing how when non-nociceptive fibres are activated, they interfere with the signals of pain fibres, thereby inhibiting pain. The “C” fibres are small and slow and they are responsible for chronic pain, which is mostly long term and throbbing in nature. The lamiae are situated in some areas of the dorsal horn and the spinal cord and regulate the pain stimuli in the peripheral nervous system. The lamiae will open the gates by inhibiting the effects of the non-nociceptive fibres, while the non-nociceptive fibres close the gates and inhibit the effects of the pain fibres.

The pain inhibition mechanism occurs in the body though the production of analgesia. The body has periaqueductal grey matter, which surrounds the cerebral aqueduct of the ventricular system and the third ventricle in the brain. When the grey matter is stimulated, the body experiences an analgesic effect by activating descending pathways that will inhibit receptors in the lamiae of the spinal cord. In the spinal cord, the opioid receptors are stimulated. The descending and ascending pain pathways interfere with each other constructively, so that the brain can control the degree of pain that is perceived, based on which pain stimuli are to be ignored to pursue potential gains. The brain determines which stimuli are profitable to ignore over time.

From the above explanation of the theory, it may seem evident that the mechanism of chronic pain is well understood, but Melzack, in Kugelmann (2005:52) after realising that pain is so complex that it can even slip through the effects of anaesthesia she stated:

> “Pain becomes a function of the whole individual, including his present thoughts and fears as well as his hopes for the future, therefore as a therapist you need to do everything to manage pain”.

This quotation is consistent with the second caritas process, where it is the responsibility of the nurse to assist the patient to have faith and hope about their

situations. From this theory, it also indicates that patients who are suffering from chronic pain require body, mind and spirit healing in order to cope with the pain. As the theorist realised that the Gate control theory of pain cannot sufficiently explain the complexity around pain management, the neuromatrix theory of pain was introduced.

3.7.2. The neuromatrix theory of pain

The Neuromatrix Theory of Pain was first proposed (Melzack) as a mechanism to explain phantom limb pain (Derbyshire 2000:467). Melzack proposed that such pain is mediated by a network of neurons, the neuromatrix, that respond to sensory stimulation while continuously generating a characteristic pattern of impulses indicating that the body is intact. To explain all the elements involved in the phantom limb phenomenon, for example the sensory, affective, motor and cognitive elements that are part of the phantom limb experience, Melzack proposed quite an extensive matrix, including at least three major neural circuits in the brain. One of them is the classical sensory pathway; the second consists of pathways through the brain stem to the limbic system, and the third to the parietal association regions.

The neuromatrix theory of pain explains that the brain possesses a neural network in the form of the body-self neuromatrix, which integrates multiple inputs to produce the output pattern that evokes pain. The synaptic architecture of the neuromatrix is determined by genetic and sensory influences. The 'neurosignature' refers to the output of the neuromatrix patterns of nerve impulses of varying temporal and spatial dimensions (Melzack 2005:87). In this way, the neuromatrix theory explains pain as a multidimensional experience.

The simultaneous convergence of many influences additional to the immediate sensory input creates the pain perception. Influences include one’s past experience, emotional state, cultural factors, cognitive input, stress regulation and immune systems (Trout 2004:558). The neuromatrix pain theory can assist with developing knowledge on how damage to the nervous system and cortical reorganisation can contribute to persistent pain.

Melzack (2005:84) describes the inputs that act on the neuromatrix programmes that would influence the ultimate neurosignature as:

- Sensory inputs from somatic receptors;
- Visual and other sensory inputs that influence how the situation is cognitively interpreted;
- Phasic and tonic cognitive and emotional inputs from other areas of the brain;
- Intrinsic neural inhibitory modulation natural to all brain function; and
- The activity of the body's stress-regulation systems, which include cytokines and the endocrine, autonomic, immune and opioid systems.

The theory is illustrated in Figure 3.2.

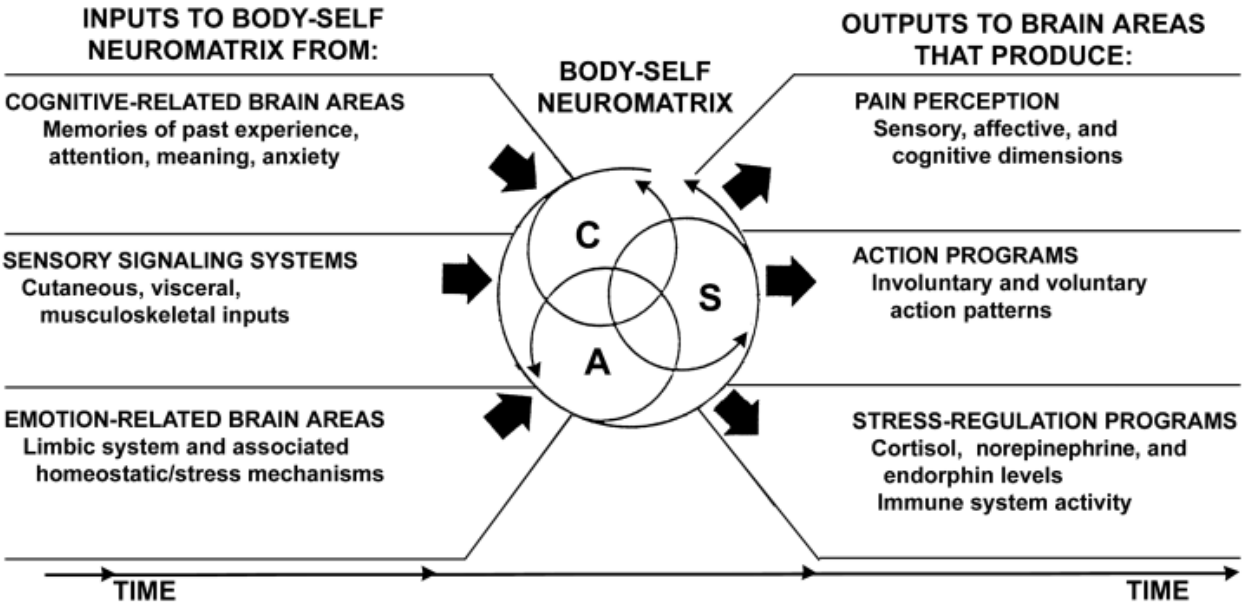


FIGURE 3.4 the body-self neuromatrix

Source: Melzack (2005:90)

In this theory of pain, Keefe and France (1999:141) in the analysis of the implementation of this theory realised that even though the complexity of the

mechanism is acknowledged, but the sequence of the complexity of the mechanism is still not well understood. It is not clear where it is the physical aspect of the pain that leads to the changes in the social behaviour of the individual or where all is triggered by psychological effect of the pain. Relating to this study, the concept of body-mind and soul as described by the transpersonal caring from Watson caring theory indicated that, all the aspects should be treated as a whole and not as a sequence of systems. In the caritas process 8, (creating healing environment at all levels) physical, non-physical, subtle environment of energy and consciousness integration will assist in preventing the complications of different systems of the body due to chronic pain.

3.8. SUMMARY

This chapter outlined the transpersonal caring relationship, which allows the nurse and the patient to share the phenomenal field to allow the process of healing to occur. The caritas processes of Dr Watson were illustrated as the practising of loving-kindness of self and other. The four concepts of the profession were described in the context of the "Watson theory of human caring". The "pain theories" provided the basic science of acute and chronic pain development. The discussions in this chapter will create the framework of the data synthesis and analysis in the sub-sequent chapters. The Watson theory of human caring facilitates the meaningful interaction between the nurse and the patient who is suffering from chronic pain when curing becomes unlikely.

The theoretical framework of the study provided the basis for the development of the data collection instruments. The Watson human caring theory and its components guided the development of the survey for the study. Caritas process identified the concepts for analysis in the phenomenon of caring. The four concepts of nurses denoted the importance of holistic care approach in the management of chronic pain. The transpersonal caring moment shared the determinants of establishing the trusting relationship and the caring healing modalities highlighted the essential behaviours of nurses when interacting with the patient. The pain management theories and the types of pain theories explain the rationale foe the need of different approaches in the management of chronic pain. Summary provided in theory provided in figure 3.6 below.

Theory	Components of theory	Relevance to the data

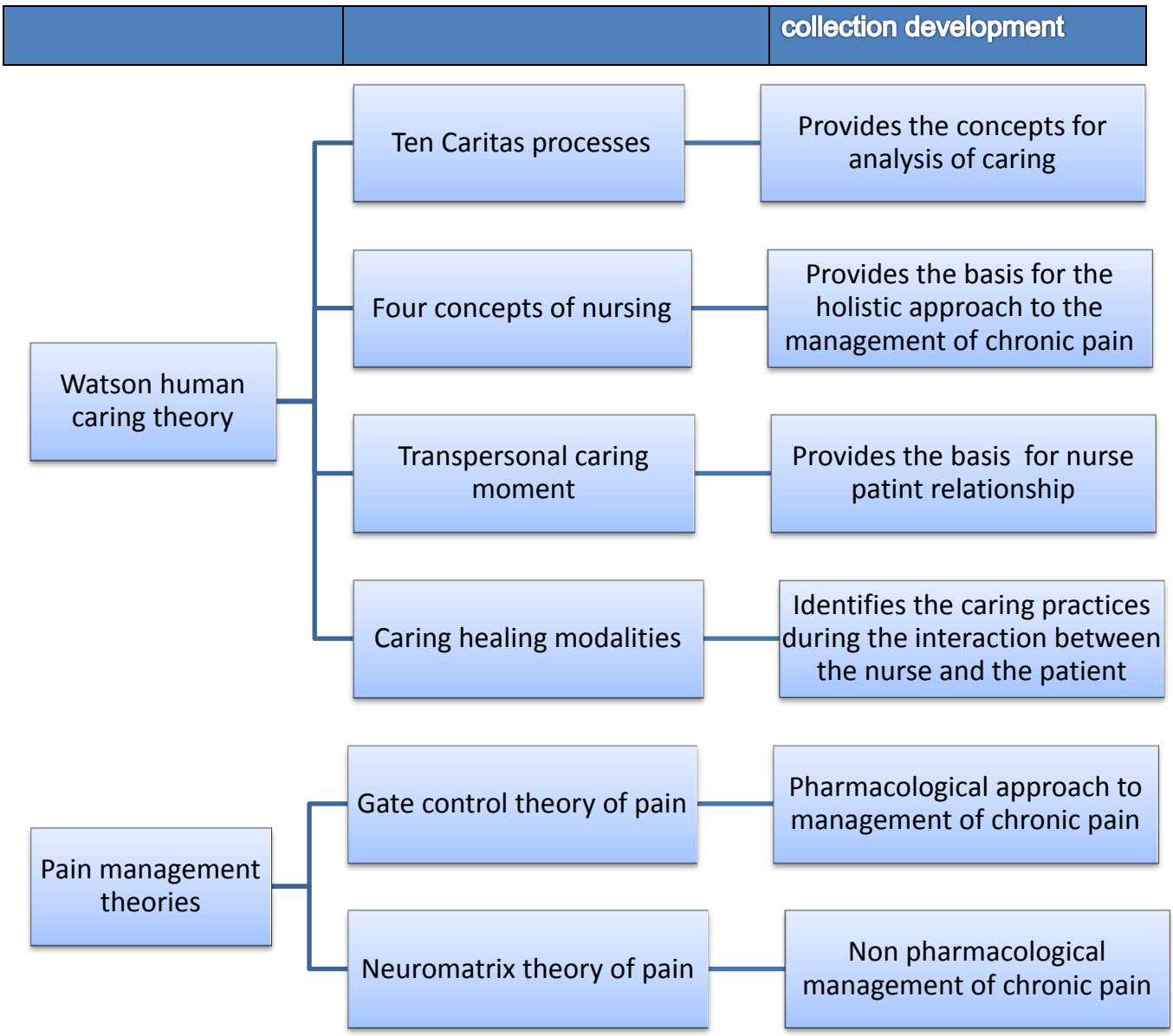


Figure 3.5 Summary of the use theory in the study

CHAPTER 4
RESEARCH DESIGN, METHODOLOGY, DATA COLLECTION INSTRUMENTS and DATA ANALYSIS

4.1. INTRODUCTION

Chapter 2 and 3 of this study provided the background for the decision related to the methodology of the study by analysing the trends from the previous scholars and the theorists. This chapter presents the research methodology in terms of research design, paradigm, design, data collection instruments and pilot study. Creswell and Plano Clark (2007:4) define research methodology as the philosophical framework of the study.

The methodology chapter is presented according to the phases of the study. Phase one of the study is quantitative in which the survey is the data collection instrument. Phase two of the study is qualitative which combines the participative observation and the focus group discussions as the data collection instruments.

4.2. RESEARCH PARADIGM

Tashakkori and Teddlie (2010:130) explain the pragmatist paradigm in the mixed method design as a way of assisting the researcher to meaningfully generate the information that is used to address the research questions. Pragmatism emphasises practical issues by combining both the inductive and deductive reasoning (Creswell, 2009:11). It emphasises that generation of knowledge is inter-subjective which includes both subjective and objective origins in which the individuals and the environment in which the data is generated, have the shared responsibility. In the social context, the shared responsibility includes the communication; cooperation and thinking in order generate new knowledge because the pragmatist belief that the truth comes from experience and thus truth can be verified at the end of history. In the pragmatism paradigm action-knowledge framework, complement each other rather than competing (Evans, Coon and Ume 2011:277). In the pragmatism paradigm, the transferability of knowledge is more important that the source of knowledge. In this study the combination of the actions of the nurses and their knowledge impacts on their ability to manage patients with chronic pain in the PHC setting.

4.3 RESEARCH DESIGN

Greene & Hall (2010:91) defines mixed method research as an intentional use of more than one research method in the same study where mixing can happen in any of the levels of study to provide deeper and broader understanding of the phenomenon (Tashakkori & Teddlie, 2010:257). Ivankova, Creswell and Stick (2006:3) define the combined design as the mixing of quantitative and qualitative data at any given phase of the same research study. Creswell, Fetters and Ivankova (2004: 8-10) explain that the use of the mixed method should be based on five specific criteria which include, the rationale for selecting the method, data collection methods, priority, integration of data and implementation sequence. For this work, the purpose of combination is to minimise the weaknesses of individual design and capitalise on the strengths of each pattern.

The research design for this study is sequential, explanatory, mixed method, which is more appropriate due to the complexity of the phenomenon and the research question (Streubert & Carpenter, 2011:354). The sequence of the study started with the quantitative phase explaining the caring behaviours using a questionnaire. The variables of caring practices generated in the process of the nurse patient relationship. In this first phase, quantitative research objective addresses the knowledge, skills and experiences relating to caring behaviours and the demographic data of the professional nurses who are working in the PHC facilities in Tshwane district. The key factors identified during the analysis of the questionnaire guided the data collection instruments in the following phases (Creswell, 2009:211; Guest, 2012:143).

Relating to the research question of this study, the qualitative research component generated the caring experiences for the nurses in the management of patients suffering from chronic pain(Onwuegbuzie & Leech, 2006:484). The summary of phases of the study is illustrated in the diagram below (figure 4.1).

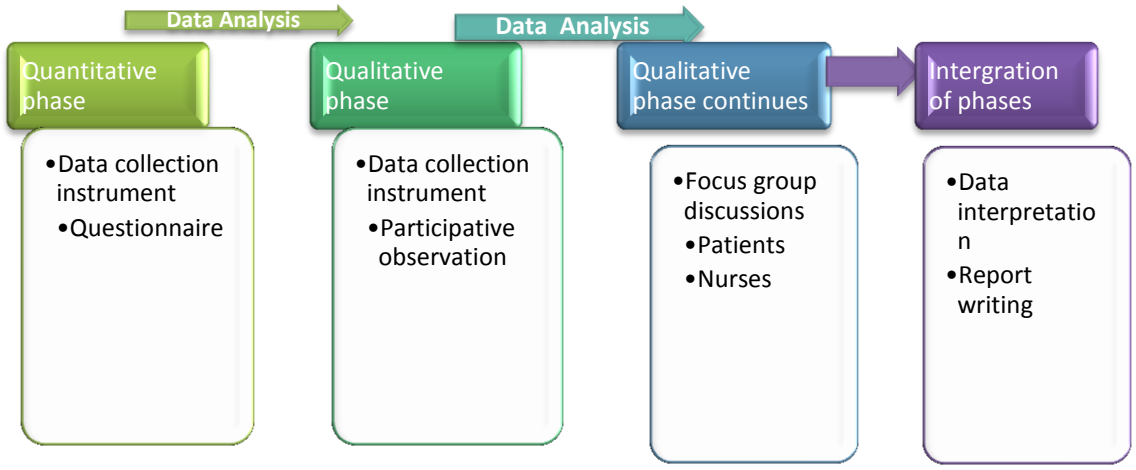


Figure 4.1 Sequential phases of the study

In this study the narratives from the qualitative component of the study added meaning to the numbers collected during the quantitative phase (Creswell & Clark, 2011:185). Both quantitative and qualitative aspects of the study had equal priority. The implementation method was sequential thus started with quantitative data collection methods (questionnaire) and then analysed the data then proceeded to the qualitative data collection method (focus group and participative observation). Creswell (2009:207) indicated that in a sequential mixed method where data collection is first done quantitatively, the recommended mixing should be embedding. In this case the data collection is completed, followed by data analysis and then the researcher will use the results of the initial stage of the study to plan and develop further data collection instrument and data analysis of the second phase of the study.

Polit and Beck (2010: 63) explain that the combined (mixed methods) research design minimises possible researcher bias that entailed in the utilisation of a single research strategy. The principle of triangulation with providing the strongest evidence through corroboration (confirmation) and convergence (tendencies of similarities) from what the nurses had reported and what was observed in practice during the interaction with patients in the clinics and allowed comprehensive research results (O'Cathain, Murphy

& Nicholl 2007:6). The mixed design also increased generalizability of the research findings

In complementary with the quantitatively gathered data, the qualitatively gathered data provides real meaning to the phenomena entailed in the research topic (Creswell, 2009:211). The findings from the qualitative data were used to assist in explaining and interpreting the findings from the quantitative phase. The qualitative data collection process entailed the non-statistical collation of the thoughts and experiences of the sampled research participants, in relation to the nurse-patient and chronic pain management phenomena (Cornwell 2009:15). In the qualitative phase of the data collection, the participative observation and focus group discussions were utilised (Bergman 2008:17).

Borkan (2004:5) argues that the differences in underlying epistemology of quantitative and qualitative designs make the true integration of the designs difficult but on the same note she acknowledges that most researchers who are working in the trans-disciplinary setting like in the nursing have successfully implemented mixed methods. The plan requires the experienced researcher who is familiar with both the qualitative and quantitative designs. In order to address this challenge for this study, the researcher invited the experts such as statisticians, language editors, experts in the PHC field and the availability of the research mentor maintained the research integrity. Considering the expensive and time-consuming challenges of the design, the researcher had allocated a period of three months to collect data to assure quality of data. The need to utilise the research team when using the design was also minimised by using the sequential, explanatory method as one data collection technique followed each other and not run concurrently.

4.3.1 Research setting

The researcher analysed the South African barometer report according to the Health systems trust (2011:73) that indicated Tshwane as the third last (50th place) municipality. Tshwane is the lowest (2%) amongst all other metros in South Africa with regard to the PHC utilisation rate. The low PHC utilisation rate was associated with the inaccessibility of the services due to patients bypassing the PHC facilities and seeking medical help at the hospital (Department of Health, 2011:122). The majority of patients (27%) who are suffering from chronic pain utilises the hospital instead of the PHC

(Nteta, Mokgatle-Nthabu & Oguntibeju 2010:6). The other reason for choosing the PHC setting for the study relates to the countries strategy PHC re-engineering in order to improve the health system of South Africa. Based on the situation described above Tshwane district PHC facilities were selected as the setting for the study.

The total land area of Tshwane district is 2198 square kilometres as redefined in 2011 after the re-demarcation of the municipality. It consists of the estimated population of 2 364 866 (Statistics SA, 2010:1). The racial distribution is 74.8% Black Africans, 2% coloured, 1.3% Indian and 21.9% whites. The languages spoken are northern Sotho (21.9%), Afrikaans (21.2%), Tswana (16.2%), Tsonga (9.5%) and others (31%). (Statistics SA, 2010:1)). The gender distribution consists of males (49.1%) and females (50.9%), (Statistics SA, 2010:1). 30% of the population are between 20-34years old. The highest qualification of the population is grade12 without university exemption (12%).

The economic indicators for Tshwane indicated that during the 2007 community survey, 26.8 % of the population were residing in the informal dwellings. The municipality had unemployment rate of 8.2%, 74.8% of individuals earning low income (below R680 /month), 6.8% of the population unskilled while 34.7% are semi-skilled, 8.7% of the population had access to flushing toilets, less that 5% having access to piped water within the dwelling (Statistics SA, 2010:1). The description above therefore estimated that 70% of the population residing in this municipality require the PHC services in order to meet their health needs.

The revised municipality demarcation from April 2011, has divided the district into 7 regions (formerly called sub-districts). Each region comprises of the district hospital, CHC, clinics, satellite clinics, mobile clinics, home based care and school health services. Figure 3, 1 below illustrates the regional demarcations of Tshwane district.

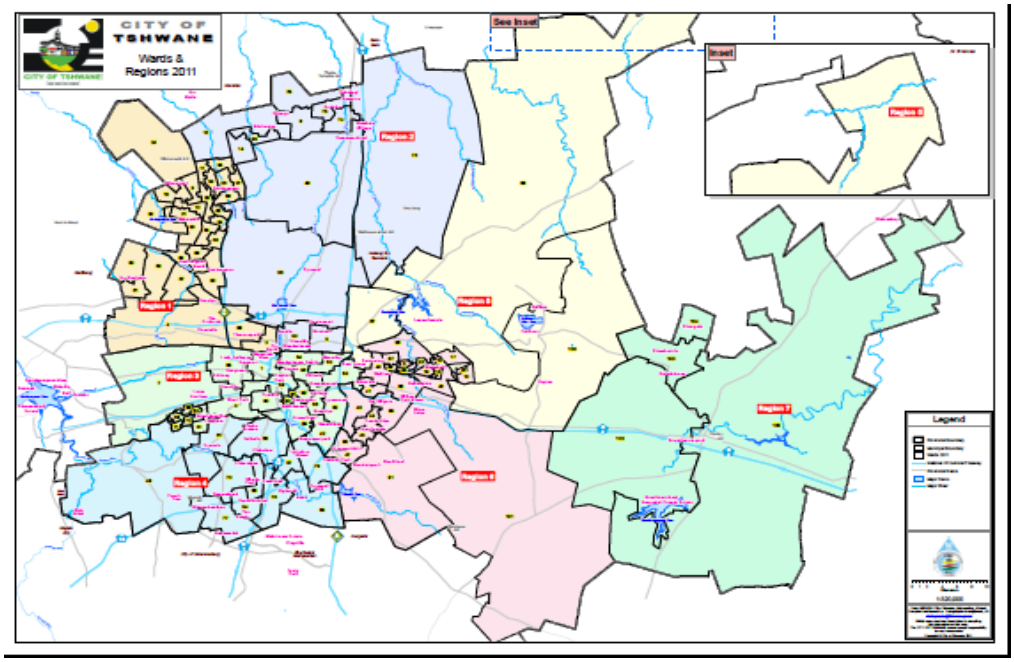


Figure 4.2 Tshwane district map showing Regions

Source: Tshwane district website

The regional distribution of the municipality assisted the researcher in the process of site sampling, which will be discussed further in the next section.

4.3.2. Site Sampling in quantitative phase of the study

The quantitative phase of the study requires site sampling. Polit and Beck (2008:339) defines sampling as the process of selecting a portion of a population that represent the entire population in order to make inferences from such a population. Botma, Greeff, Mulaudzi & Wright (2010:124) defined a sample as a subset of the accessible population for the research study while sampling refers to the procedure of selecting the subset. The essential element of sampling is the representatively of the elements in the sample. In this study, the inclusion of the facilities of all the regions that meets the research criteria allowed representatively the sample. As the purpose of the study was explanatory, the use of probability sampling method was mandatory (Botma et al. 2010:125); the next sections of the study describe the process of site sampling from the site population to the site sampled.

The site population refers to the entire institutions as aggregated by the researcher (Polit & Beck, 2008:337). In this study site population referred to the entire Tshwane district PHC facilities. The PHC facilities are provincial and municipal facilities. The

provincial (P) facilities report directly to the Gauteng provincial authority based in Johannesburg, while the local municipality (LM) facilities report directly to the Major of City of Tshwane. Due to these categories, nurses working in these facilities are operating under different conditions of employment.

Tshwane district consists of 64 PHC facilities of which 43 (67%) are provincial clinics while 21 (32%) are local municipality facilities. Provincial facilities consist of 12 Community Health Care centres (CHC) and 31 PHC clinics while local municipality consists of 21 clinics and no CHC. Table 4.1 illustrates the facilities in region 1 to 7.

Table 4.1 PHC facilities of Tshwane district according to the regions. (Sample frame)

Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7
Boekenhout	Adelaide Tambo	Bophelong (20)	Laudium clinic	Refilwe	Eersterus CHC (31)	Zithobeni
Boikhutsong	Dilopje	Laudium CHC (44)	Lyttelton clinic	Rayton	Holani	Dark City CHC
GA Rankuwa	Kameeldrift	Skinner (30)	Olivenhoutbosch clinic	Stanza Bopape II	Stanza Bopape CHC (61)	Ekangala
Pretoria north (20)	Kekana Gardens	Atteridgeville clinic	Rooihuiskraal clinic	East Lynne clinic	Nellmapius clinic	Kanana
K.T. Motubatse clinic (23)	Kekanastad CHC	Danville clinic			Phahameng clinic	Rethabiseng
Kgabo CHC	Mandisa Shiceka (20)	FF Ribeiro clinic			Pretorius park clinic	Sokhulumi
Maria Rantho CHC (25)	Eersterus	Hercules clinic			Silverton clinic	Bronkhorspruit
Phedisong 1 CHC	Ramotse	Phomolong clinic			Mamelodi west clinic	
Phedisong 4 CHC (25)	Refentse CHC	Folang clinic				
Phedisong 6	Suurman (20)	Hercules clinic				

Sedilega	Themba CHC (25)					
Soshanguve 2						
Soshanguve J (20)						
Soshanguve TT						
Soshanguve x						
Soshanguve CHC (63)						
Tlamelong						
Winterveld						
Karenpark clinic						
Rosslyn clinic						
Total: 455						

Key: **c** **Municipality clinics, which were excluded from the study**

C **Provincial facilities, which gave provisional permission**

() **Number of professional nurses in those facilities**

The site target population in the quantitative phase of the study refers to the institutions that the researcher intends to aggregate for the generalisation of findings (Polit & Beck, 2008:338). In quantitative phase, the target population was homogeneous in the sense that, facilities included in this study are having a similar set of conditions of service and the salary packages which are sometimes critically in affecting the relationships of employees and customers (patients) in the working environment (ICN, 2010:1)

The target population was 43 provincial PHC facilities and the CHC because they render more that 80% of the PHC service package that predisposes the nurses who are working in those facilities to more similar working conditions. The local municipality facilities do not operate under the same conditions of service with the provincial facilities. The homogeneity of the population in this study reduced the external factors that may influence the behaviour of nurses towards their patient (such as job satisfaction levels).

The study was a multistage (Creswell, 2009:218), thus required the clustering of the facilities in preparation for sampling at different stages of the study. The same site target population was utilised throughout the three phases of the study. The list of all the PHC facilities has been accessed from the Tshwane district health information department, which was updated on April 2011 following the merger of Tshwane and Metsweding as one district. All (43) provincial PHC facilities were accessible in terms of the geographical layout (within the 50km radius) and because they are also managed from the same district authority thus the process of requesting permission was the same and thus being cost effective for the researcher. The accessibility of the sites were also possible as the managers of the facilities were directly involved in the process of accepting the accountability of allowing the researcher to utilise the facilities.

The non-probability stratified sampling techniques are used in the selection of the site sample in order to allow enough participants for the three phases of the researcher study without necessarily using the same participants (questionnaire, observation and focus group) which increased the generalizability of the research findings in the setting of the study. In this study, the facilities were stratified according to the regions (1; 2; 3; 4; 5; 6&7). Region 4 & 5 were excluded from the study, as they did not have any provincial health facilities. All the CHC's in Tshwane were legible to be included in the study as they are large facilities with a staff complement of more than 20 professional nurses. Eligibility is defined as the specific characteristics of the site (Polit & Beck,

2008:338). The clinics with the staff complement of >20 professional nurses were also being included in the study thus allowing at least eight professional nurses (40%) to participate in the study from a facility. If eight nurses participated, in the study then a minimum of two completed the questionnaire, to participate in participative observation and the other four participated in the focus group discussions.

The researcher then randomly selected the sites. The process of systematic random selection of the sites included the alphabetical arrangement of the facilities according to the different regions from the sample size. The researcher chose every second legible facility and then telephonically requested the provisional permission to undertake the study from the facility manager (Annex 1),

Kelly (2010:1302) explains that the sample size needs to be planned based on the purpose of the research and the number of research parameters. As in this research, the purpose is not to test the hypothesis, the accuracy in parameter estimation (approach) was utilised to estimate the sample site. The interest was to obtain the sufficient narrow confidence interval for the research parameters for the quantitative phase of the study. Polit Beck (2008:349-351) explains that even though there is not a precise formula to determine the accuracy of the sample size, but representatively the sample is important in the quantitative component of the study.

Polit & Beck (2008:602) recommends power analysis as one of the procedures used to determine the sample size of the study in advance to reduce the risk of errors. In reference to the sample frame (Table 4.1), 14 PHC facilities participated in the study (7 CHCs and 7 clinics) in the quantitative phase of the study.

In this study, the research population included all professional nurses working in the primary health care facilities in Tshwane district. According to the Department of health human resource statistics (2009:1) 987 professional nurses were practising at Tshwane district (both local municipality and provincial facilities) (Annex 2).The target population included all professional nurses working at the provincial PHC facilities. According to the 2009 statistics (Department of Health, 2009:1), 884 professional nurses were permanently employed in Tshwane provincial PHC facilities (excluding local municipality professional nurses).

The inclusion criteria were:

- ✓ Professional nurse registered with the South African Nursing Council
- ✓ Professional nurses with additional qualification in Clinical assessment, treatment and care diploma.
- ✓ Professional nurses who have practiced in the PHC setting for more than a year, which allows adequate exposure to the system to allow confidence and improve competency levels of staff.
- ✓ Category of professional nurses who are I possession of the qualification that allows them to diagnose, prescribe treatment and dispense medication thus having complete responsibility of the management of chronic pain patients visiting the PHC facilities.

The exclusion criteria were:

- ✓ Professional nurses with less than one year of exposure to PHC services
- ✓ The local municipalities PHC facility nurses are not included in the study as they operate under different scope and working conditions as the provincial nurses.

Botma, Greeff, Mulaudzi & Wright (2010:124) explain accessible population as persons who meet the sampling criteria and are accessible to participate in the study. In this study, all professional nurses who were working at the sampled sites were included in the accessible population of the study.The stratified, convenient sampling technique enabled the researcher to represent the population as closely as possible (Polit and Beck, 2008:262; Cornwell, 2009:148). From each stratum (region) and sampled facilities, professional nurses who met the inclusion criteria were personally invited to participate in the study following the brief presentation of the study to them. All the legible respondents completed the questionnaire voluntarily. A convenience sampling technique was utilised, as the researcher would request the nurses who are available on the day of the visit to the facility to participate voluntarily in the study. Due to the quota requirement of the study, to achieve the required sample, the researcher revisited the facility.

According to the 2009 statistics, 455 nurses were working in the facilities that were legible to participate in the study at the time of data collection.

In order to minimise the biasness error the formula was used to calculate the sample size as indicated below (Naing, Winn and Rusli 2006:9):

$$n = \frac{Z2P\,(1-P)}{d2}$$

$$\frac{(1.96)\,2(0.2)\,(1-0.2)}{(0.05)\,2}$$

= 246

Where n = sample size,
Z = Z statistic for a level of confidence,
P = expected prevalence or proportion
(In proportion of one; if 20%, P = 0.2), and
d = precision
(In proportion of one; if 5%, d = 0.05).

In this case, because the total population is small the finite population correction was applied according to this formula (Bernard, 2011:141):

$$n' = \frac{n}{1 + (n - 1/ N}$$

$$\frac{246}{1 + (245/455)}$$

= 160

Hundred and sixty was then adopted, as the sample size of the study, further division of the sample to cover the different phases of the study will be discussed in each of the phases of the study

As this survey is the sequential explanatory strategy, the first process included the quantitative aspect of data collection (Creswell, 2009:211). In this stage, several processes were included in the development of this stage as summarised in the diagram below.

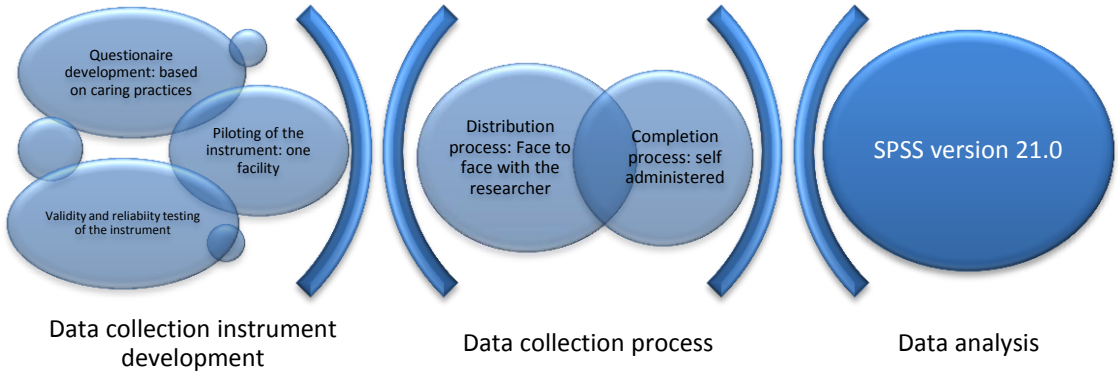


Figure 4.3 Processes of quantitative data collection

4.4. DATA COLLECTION QUANTITATIVE PHASE: SURVEY

Phase 1 of the study analyses current caring practices with particular focus on the nurse patient relationship during the management of patient with chronic pain in the primary health care services. In the process of analysing caring practices, the data collection instrument based on Caritas factors was developed. The self-administered questionnaire was used in order to identify the key concepts that were explored in the qualitative phase of the study. The following sections explain the questionnaire development, pilot testing, robustness and reliability testing and the dispersion of the questionnaire.

4.4.1 Questionnaire development

Watson (2009) compiled the 22 different tools developed by different authors, who were accepted and used for the assessment, and measuring caring practices. The existing caring practice measurement tools are hospital based and could not be adopted entirely in this study. The new instrument was developed to assess the caring practices in the context of PHC. In order to minimise the poor response from the questionnaire, the development of the questionnaire followed the Dill man's steps (Bernard, 2011:211)

The questionnaires were typed on the white sheet at the font size 12 and printed on the A4 size page for clear visibility. Each questionnaire had the summary of the purpose of the study to allow participants to refer to in case of any queries. The questionnaire was written in English in order to minimise the cost and errors related to the translation of the instrument. The questionnaire did not require any information that will interfere with the anonymity of the participants. Contact details of the researcher were included in the data leaflet in order to make a follow up in case any queries related to the subject.

The non-threatening questions such as the demographic data, qualifications and experience about the management of patients with chronic pain were placed at the beginning of the questionnaire. The Likert scale used to provide the response options from the participants in order to minimise the time consuming factor of the writing of the response to all the questions but rather use the choosing options.

The questionnaires were based on the caritas processes of Watson's theory as the conceptual framework of this study was based on her theory (Watson, 2009:253). Initially for each Caritas process, ten questions were constructed based on the key concepts of the Caritas process, following the factor analysis of the questions, only the questions that scored the Chronbach's alpha of .079 and above were included in the final version of the questionnaire (Annex 3).

A survey was the first point of the data collection process in the study, serving as the foundation of the subsequent phases of the study. The outcomes of the pilot study were integrated in the questionnaire before its distribution to the larger population. The questionnaire was self-administered and was written in English, which was not the first language of most, the respondents. The distribution of the questionnaires was preceded by a verbal presentation by the researcher to clarify the purpose of the study and the phases of the study.

Distribution and collection of questionnaires were done at three different intervals. In the initial distribution of questionnaires, eighty-six (86) professional nurses responded to the questionnaire from the region 1 & 2, in the second round an additional seventy six (76) from region 4 and finally twenty two (22) respondents were from region 6. The total of one hundred and eighty-four professional nurses completed the questionnaire. The actual respondents were sixty-two (62) respondents less as compared to the initial calculated 264-sample size in chapter four. There was a high (74.7%) response rate of the respondents (Bernard, 2011:196).

These phases resulted in a prolonged period of data collection (8 months) as compared to the initial (3 months) plan of the study. The delay resulted from the different conditions set by facilities for the study permission. The advantage to the researcher was the fact that the data was collected at different intervals of the year with a varied workload in the institutions. The other advantage to the researcher was related to the illegibility of the respondents. Those who were not eligible to fill out the questionnaire in the last quarter of the year because they had not attended the PHC service for one year were able to complete the questionnaire in the second quarter of the next year.

The questionnaires were then transported to the statistical package of social scientists (SPSS version 21.0) after cleaning and verification. In the process of cleaning and verification, there was (6%) of missing data from several items of the questionnaires. In order to allow the available case analysis as recommended by the literature (Schlomer, Bauman and Card, 2012:1) pairwise deletion was implemented.

4.4.2 Validity and reliability testing

Internal validity

Creswell (2008:162) defines threats to internal validity as the experience of respondents that may threaten the researcher's ability to inferentially report about the population under study. Botma, Greeff, Mulaudzi & Wright (2010:175) define internal validity as the degree to which the study results attribute to the outcome of the study. Several sources of errors have been considered for the study.

- The larger sample of more than 100 respondents accommodated the attrition error,
- The data collection process was done within the three months of receiving permission from the department of health in order to reduce the historical changes of the working environment of the professional nurses.
- To minimise selection biases, random sampling was utilised so that all participants had an equal chance of taking part in the study (Creswell & Clark, 2011:240).
- To minimise the compensatory rivalry, no monetary value was attached to the participants who took part voluntarily.

External validity

- Botma, et al (2010:177) defines external validity as the degree to which the results of the research study can be generalised to other populations. In order to reduce the interaction of setting and treatment error, respondents from an environment that has same characteristics were included in the survey. The random sampling that will be utilised in the study will increase the generalisation of the findings

- Reliability: In order to improve the internal consistency reliability, the research questionnaire constituted the kind of questions which measured the same construct and the correlation of such questions were evaluated during the factor analysis (Kathwohl, 2009:9.3) The Chronbach's alpha was utilised in order to assess the homogeneity of the questionnaire as it is self-designed (Botma, et al, 2010:177).

- Content validity of the instrument was ensured by presenting the questionnaire to a panel of experts to evaluate the content of the questionnaire (Key, 1997:1). The panel experts included study supervisor and clinicians managing patients with chronic pain in PHC setting.
- Face validity of the study was evaluated by the supervisor who evaluated whether the questionnaire was measuring what it needs to measure before distribution of the research respondents (Chen, Yen, Lin, Lee and LU, 2012: 392). The supervisor assessed the present ability of the questionnaire, the consistence in the use of language in the questionnaire, the number of pages of the questionnaire and the font size of the questionnaire.

- Piloting of the instrument: In order to improve the stability of the questionnaire, to improve the questions, format and scales (Creswell, 2009:150) pre testing of the questionnaire were done in one of the facility that is not included in the study but possesses the same characteristics with those facilities which were included in the survey. The outcome of the pilot testing was the respondents' fatigue, which was evident from the submission of incomplete questionnaires. Based on the Chronbach's alpha results, which was utilised to measure the validity and the reliability of the study, only the questions that rated above 0.79 were included in the final version of the questionnaire.

  The questionnaires that were collected from the pilot site were not included in the final surveys, which were analysed as they were having more than 50% of missing data. The pilot results also assisted in refining the format of the survey as the respondents shared critical elements on the layout of the survey. Finally the pilot results provided the basis for the rewording of the open-ended questions of the survey.

4.4.3 Questionnaire distribution and completion

The researcher issued the questionnaire to the respondents to complete and they returned them face-to-face to the researcher in order to permit an opportunity for questions from the participants if there were any. Each questionnaire completion lasted not more than 30 minutes depending on the writing skills and competency of the participants, as the questionnaire was a pen and paper design. The questionnaires

were distributed amongst all professional nurses who met the inclusion criteria. As described by (Hammersley, 2008: 26) questionnaire in social research reduce the biasness of receiving socially acceptable answers from the respondents as anticipated in this study.

4.4.4 Data analysis

The data analysis of the quantitative phase (Phase 1) of the study was done to identify the outliers, which were explored qualitatively during the focus group discussions (Cornwell, 2009:218). The statistical presentation of data was used to convert and condense the collection of data into an organised visual presentation (Cornwell, 2009:218). The interpretive method enabled the researcher to analyse the data and interpret it in order to make an intelligible impression and to write a systematically structured report (Denzin & Lincoln 2005:15). The descriptive and inferential statistics collated through the process of describing, interpreting, analysing, and summarising the data collected by questionnaire (LoBiondo-Wood & Haber, 2006: 38). The descriptive statistics generated the correlation between the study variables but due to the complexity of the variables evaluated in this study, the analysis of the variance was utilised to generate the inferential statistics (Heffner, 2004:9.2). The SPSS version 21.0 software was utilised to analyse the information collected from the questionnaire.

Data analysis was performed according to the divisions of the questionnaire. Demographic data, demonstration of caring behaviours, assessment of knowledge, skills and behavioural exposure of the nurses, assessment of the nurses' ability to perform pain management activities, assessment of level of frequency of exposure to non-caring behaviours from the patient, assessment of caritas factors knowledge and skills, impact of NPR on the management of patients with chronic pain, cultural and traditional practices as factors contributing to non-pharmacological management of patients with chronic pain, encouraging patients to be open about their health related challenges and perception of nurses about nursing as a career.

4.5 PHASE 2 OF THE STUDY: QUALITATIVE

Qualitative phase of the study included the triangulation of the data collection methods in order to minimise the weaknesses in one form of data collection instrument. Participant observation and focus group discussions were implemented as data collection instruments.

4.5.1 Participative observation

Participant observation is identified as one of the difficult data collection methods due to the demand for the researcher to be mindful of the personal reflexivity (Willig, 2009:27). In this study, observation required the full attention of the researcher therefore note-taking was performed immediately after the interview session. As the observation was based on the results from the first phase of the study, the researcher had a special focus of observation even though it was not restricted to only the observed behaviours.

Subsequent to the self-administered questionnaire as discussed (chapter 5), the researcher then proceeded to phase 2 of the study where the participative observation and focus group discussions were performed.

Participative observation is the process where the researcher observes the actions or occurrences as it happens between people (Borbasi, Jackson & Wilkes, 2005: 497). In this data collection instrument, the researcher interacts with the participants and will seek to understand the patterns of the observed participants (Curry, Nembhard & Bradley 2009:1445). This method allows the researcher to gain in-depth information as compared to the questionnaire (Lambert & McKevitt, 2002:212). The participative observation was utilised in observing the caring skills as implemented by nurses in the consulting rooms (Flick, 2009:226). This data collection technique complemented the quantitative aspect of the study in order to minimise the errors that may have resulted due to the completion of the questionnaire.

The researcher is the key instrument as the participative observer. Qualitative research focuses on identifying and gathering in-depth understanding of phenomena within its

naturalistic, social, or cultural context (Creswell et al., 2007: 51; Denzin & Lincoln, 2005: 31). Participative observation is suitable in studying the research subjects' experiences of the interaction with nurses during the consultation (Greenhalgh, 2002:592). Such experiences are based on what the research subjects feel, hear, think, remember, decide, and act as a result of their nurse-patient interactions (Polit & Beck 2010:338).

In recognition of the challenges relating to this type of instrument, several processes followed increased the reliability of the data (Tappen, 2011:225). The diagram below summarises the phases involved from data collection instrument to the data analysis of participative observations

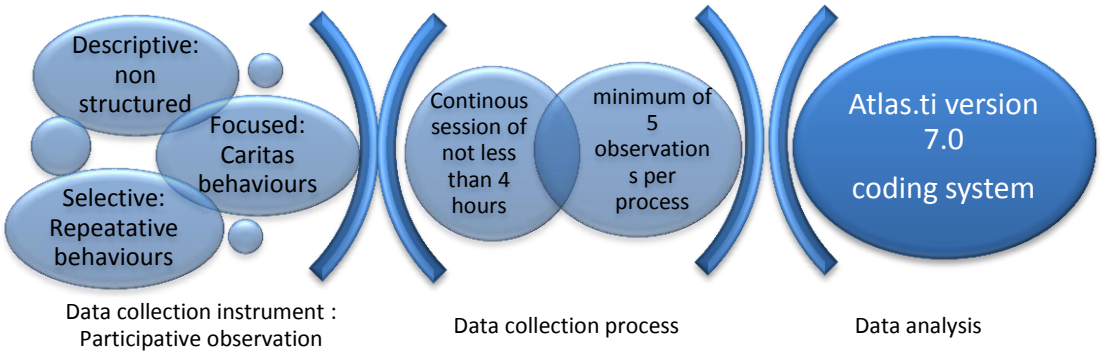


Figure 4.4 Processes of qualitative data collection (Participative observations)

4.5.1.1 Process of participant observation sessions

Observations were conducted in different CHCs in Tshwane district. The researcher's role was explained to the patient at the outset of the observation and verbal consent was obtained from the patient. In order to minimise the observational effect the researcher participated by packaging the medication of the patient and checked against the prescription for completeness. The researcher left the observation session at any point when she was requested by the nurse or the patient in order to respect the privacy of the consultation process and confidentiality of the patient. The participants were

sampled voluntarily and on convenience. Due to the convenience sampling, observations were conducted at different times of the day and days of the week. All observations were conducted on the day shift as patients with chronic pain are only seen during the day. The three levels of participant observation were followed in this study.

Professional nurses who had been working in the PHC setting for more than one year (community service period) were included in this phase of the study. Other categories were excluded from the study because of their limited scope of practice relating to the management of patients with chronic pain. Participants were recruited from the facilities, which gave permission to conduct the survey. Participants were female and had PHC qualifications. Participants were informed during the phase 1 of the study of the process to be followed in phase 2 of the study. Participants were given the consent form to choose between answering the questionnaire, observation and focus group discussion. Participants were not restricted to choosing one but could choose any data collection technique that they felt comfortable with.

4.5.1.1.1 The three stages of participant observation

- Descriptive observation stage

The initial level of observation, which provides the orientation to the field of study; the observation was more unstructured, not focused to any specific behaviour. The field note taking was used to capture all the observed behaviours during the consultation session. The descriptive observation serves to provide the researcher with the overview of the situation to be observed. It also serves as a pilot observation (Flick, 2009:227). The observation guide was piloted with five observations and refined in order to minimise the interferences during the consultation process. The outcome of the pilot indicated that the PHC services patients are neither grouped according to the reason of visit to the facility nor the condition they are suffering from. The other observation included the limited duration between the nurses and the patient due to the fast queue principle where patients are seen faster to allow them time to go back to work. It was from the pilot that the researcher decided to take notes after the consultation and not

during the consultation. In this study, the researcher realised that there is no specific chronic pain clinic and therefore patients who are suffering from chronic pain are seen amongst all other patients who are having chronic conditions. It was therefore not easy to identify the patients with chronic pain before the consultation. In order to avoid missing the patients, patients who were classified as having chronic conditions were observed. During this phase, the researcher realised that most of the patients (3 of 5) in this clinic were complaining of chronic pain. In order to move to the second stage of observation, the chronic conditions clinic remained the focus for the researcher. Further five observations to make the ten observations were taken by the researcher during this phase of observation.

- Focused observation stage

The focus was then directed to the caring practices that are specific to the patients who are suffering from chronic pain. At this stage, the repetitive observed behaviour served as an informal checklist. The researcher observed the frequency of specific behaviours and the variances in performing such practices.

In order to maintain the focus of the research objectives, observations were limited to the consultation session with the professional nurses who gave consent to participate in the survey. The observation started from the first appearance of the patient into the consultation room until she left the room. Patients were not followed to other health care workers including the lay counsellors even if the patient was referred from the nurses for further counselling in the adjacent room. The rationale for not following the patients was to keep the research to the study group focus (professional nurses). Patients who did not complain of chronic pain on the observation day were excluded from the research study. In this stage, the focus of the observation was to identify the caring practices and the frequencies of performing such practices in relation to the compliance of the standards as determined by the guidelines in the management of patients with chronic pain. Fifteen observations were taken from five different facilities during this phase. In this stage, the document sheet was used in order to maintain a record of the caring behaviours observed and add new dimensions of the caring practices.

- Selective observation stage

During this phase, more focus was based on gathering further evidence about the observed behaviours and identifying the patterns that needed to be explored further in

the focus group discussion sessions. This phase of observation, provided focus so that the researcher concentrates on seeing beyond the obvious observations (Bernard, 2011:286). At this phase the focus of observation is where the less communicated caring practice are realised. The focus was also on identifying the exemplary evidences, which was utilised in the process of data analysis, and report writing.

4.5.1.2 The instrument for participant observation

In the reviewed literature, acknowledgement of the fact that caring is a subjective phenomenon and its measurement is one of the scholarly debates relating to the ontological perspective of the concept. The debate states that there is no clear evidence to assess the caring behaviours objectively by only asking the patient or the nurse. Watson (2009:7) argued that the development of caring measurement instrument is not to deny the subjectivity of the phenomenon but rather to gain more insight into the concept. The purpose of including the participative observation method in this study was to identify the areas of weakness and strength in the caring practices while managing the patients with chronic pain. This process together with other findings from the study may assist the researcher to suggest some examples of excellence in practice or some form of interventions that may induce self-correction of the health care providers.

In this study, the observation instrument was guided by the findings from quantitative phase of the study. Sections, which were explored in this phase, were identified from the quantitative results of this study. The observation focused on the caring behaviours, on the use of medical terms when communicating with patients, eye contact, and patience, opportunity to ask questions, listening attentively and explaining the condition of the patient after consultation. In the subsequent sections, the observation was directed at the quality of communication and counselling skills (respectively) of the nurses when interacting with patients. Following the knowledge and skills scores of the management of chronic pain, the caring practices relating to the management of patients with chronic pain was observed. In conjunction with communication and counselling skills, the teaching and learning skills were observed and finally the motivation of patients to feel good about themselves.

Table 4.2 Focus area for the observation

Category	Focus area
Caring behaviours	Use of medical terms when communicating with patients Eye contact Patience Opportunity to ask questions Listening attentively Explaining the condition of the patient
Interactions	Communication skills Counselling skills
Management of chronic pain	Guidelines knowledge Holistic approach to the care Teaching and learning Motivation of patients to express feelings

4.5.1.3 Data analysis

In addition to the carative processes that will guide the observation process of the data collection, the researcher will collect some field notes (Creswell, 2009:181). The steps of data analysis, which included the organisation, and preparation of the data, development of the general sense and coding the data provided the guidelines. Saldana (2009:8) explains coding as a problem solving technique, which is explanatory in nature but not a specific formula to follow. Coding patterns such as similarities, differences, frequencies, causations, correspondence and sequences were utilised by the researcher to group the findings (Saldana, 2009:6). Coding was done electronically using the Atlas.ti, version 7.0. Data coded, and then analysed for themes and thick descriptions, were later used for the 3rd phase of the study.

In this qualitative phase of the study, data analysis was simultaneously considered with the initial data collection. This type of analysis that the coverage is based on often requires theoretical framework codes (Liamputtong, 2011:282), which were identified in the quantitative phase of the study. The analysis process followed the stages as shown below (figure 4.5)

Figure 4.5 Data analysis process during the participation observation

4.5.2 Focus group discussions

Focus group discussion can be used as a supplementary data collection method (Liamputtong, 2011:69). In this study focus group, discussion is used to validate the findings from both the questionnaire and the observation in the areas where the respondents could not provide deeper understanding of the caring practices relating to

the NPR in managing patients who are suffering from chronic pain. Total of nine focus group discussions were conducted from six participating PHC facilities.

The goal of focus group discussions was to understand the perspectives of the participants on a specific topic and uncover the opinions and factors influencing a specific behaviour (Curry, Nembhard and Bradley 2009:1444). The focus group discussions explored the deeper understanding of the nurse patient phenomenon as understood by nurses and patients (Liamputtong, 2011:65). It also stimulated the discussion, while the dynamics of the group generate the fundamental source of knowledge (Flick, 2009:196). The focus group discussion as a qualitative data collection instrument included the pre-determined topic codes as identified from the quantitative data analysis data (Creswell & Clark, 2011:236). As the relationship is the reciprocal experience, patients' focus group discussion and professional nurses' focus group discussion based on the same themes phrased differently. The focus group discussion was used to explore the challenges experienced by the nurses in the PHC facilities when managing patients with chronic pain.

Due to nature of the data collection instrument, (focus group discussion) the researcher utilised the recording device during the focus group sessions. In case of patients, the regular facilitator for the support group was trained to facilitate the specific session during the data collection period and then co-facilitate the group discussion with the researcher in order to increase the reliability of the information. The researcher conducted each of the "four" focus groups for nurses and for patients. The researcher first got informed consent from the patients after having explained their rights and autonomy (Annex: four, see informed consent letter for patients attached). The processes involved in this data collection instrument of the study are summarised in the figure below.

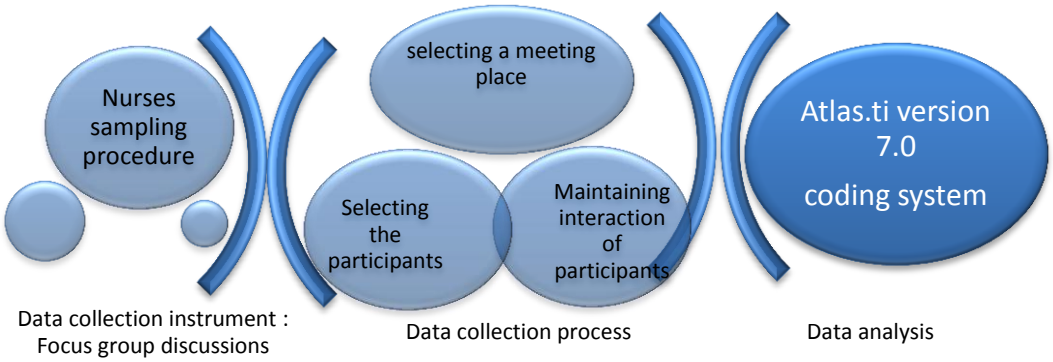


Figure 4.6 Processes of qualitative data collection (Focus groups)

Focus group participants comprised of professional nurses who are working in the PHC clinics. The groups were homogenous in terms of staff categories but participants had varied periods of work experience (2 – 15 years), working in both CHC and clinics, has PHC as a qualification and different age group. Forty-four (44) professional nurses participated in the focus group discussions. Participants were conveniently recruited to participate in the study. Sixty-one per cent (n=27) of the participants did not participate in any of the preceding phases of the study (survey or observations). Twenty-two per cent (n=10) of the participants participated in the survey and the remaining seventeen per cent (n=7) participated in the observations.

4.2.2.1 Focus group process

The researcher conducted all the focus group discussions. The focus group discussions were conducted at different times of the day depending on the convenience to the participants and the institutional regulations. The duration of the focus group discussions lasted between 45 minutes and an hour depending on the active participation and the number of participants. All focus group discussions were conducted in English but the participants were allowed to use their local language (Sotho) in cases where they were struggling to express themselves in English.

The process of the focus group discussions was initiated by the researcher through a five-minute introduction of the topic (nurse patient relationship and caring practices in the PHC setting). Included in the presentation were the research results from the survey and the observation sessions. In order to maintain the focus of the discussion, there was ground rules (respect of each other's opinion, active participation and keeping the discussion short and to the point) set including the duration of the discussion. Participants were also made aware that the interaction would be recorded and the researcher would do some note taking. For the participants who did not complete the survey, they were given the consent form to participate in the study and were made aware that it is voluntary and they have the right to withdraw at any stage when they felt uncomfortable.

As a means of stimulating the discussions, participants were allowed to share their experiences as the provider or recipient of care in the health care system and the caring practices that they observed. As there were more themes to be discussed for the study and the researcher had a limited time period, each focus group had to select three of the themes that they needed to discuss and therefore different themes were discussed in different focus groups. The themes of the discussions were based on the results of the initial phases of the study where the researcher required further clarity about the survey and observation results. The discussion guide was formulated according to the sections of the questionnaire and also included the general discussion of the topic (theme 1 of the discussion guide) in order to avoid missing the reach information from the participant

4.2.2.2 Focus group guiding instrument

Table 4.2 Themes for the focus group discussions

FOCUS GROUP DISCUSSION THEMES FOR NURSES
THEME 1: Introductory Question
1. What is the value of nurse patient relations in management of chronic pain?
THEME 2: Understanding Barriers and Benefits of NPR

Based on the survey and observation results, it is evident that not all the nurses working in the PHC setting are able to practice the good nurse patient relationship. With the special focus on the caring behaviours reflected on the slide (figure 5.5),

What are the barriers or challenges that your colleagues are experiencing in trying to establish good nurse patient relations?

What barriers have you observed from your colleagues with regard to patient relations?

How do you overcome such barriers?

THEME 3: Professional insight

As professional nurses, we do undergo some training in order to improve our skills. I am also aware that, it is the requirement for the performance appraisal that you have to attend at least one in-service training session per quarter. Can we reflect on how we translate the information learned from the trainings to the practical situations in the working environment with special focus on?

Communication skills.

Counselling skills.

Management of patients with chronic conditions (pain).

THEME 4: Community needs awareness

One of the key functions of the nurse is teaching, not necessarily in the classroom but rather, teaching and learning from the day-to-day interactions with the patients. According to the survey results, it was noted that there is a disagreement with regard to giving patients advice (27.2% strongly agree and 29.3% strongly disagree).

What are you experiences relating to giving patients advice?

THEME 5: The holistic approach

From the basic training in nursing, they mentioned that the holistic approach to the patient care is recommended. The approach included the social, spiritual, physical and emotional needs of the patient. A higher percentage of the questionnaire respondents (26.1% strongly agree and 18.5% agree) indicated that it is the responsibility of the family to satisfy the spiritual needs of the patients. It was also evident in the observations that little or nothing is done during the interaction with the patients to satisfy the spiritual needs of the patient.

5a Share the experiences of dealing with spiritual needs of the patients and how the cultural practices enhance or hinder your interaction with patients

5b Share the experiences in encouraging the patients to express their good or bad emotions in order to satisfy their emotional needs.

THEME 6: Trusting relationship

Patients can only be open in the interaction when they trust you, how to you motivate patients to trust you in the PHC setting where the encounter is of limited time and there is a possibility of not seeing the patient again.

4.5.2.3 Maintaining participation of the members of the group

In the process of encouraging active participation by members of the focus group, only the participants who are interested in the topic were recruited to the discussions. As the facilitator of the focus group, the management of side conversations was done by reminding the participants that it is important that one person is allowed time to talk before the others could even respond if they disagree with the other participant**.** A separate note-taking fieldworker was recruited for this study in order to allow maximum capturing of information during the discussion. Saturation was reached after conducting the four group discussions.

4.5.2.4 Data analysis

During data analysis, the codes compared with the raw data, was recorded or written during the sessions to minimise the drift in the definition of the codes (Cornwell, 2009: 190). The thematic analysis, which is the method of reporting the themes within the data, was utilised in order to make sense of what the participants said about the nurse–patient relationship phenomenon. As the other objective of the study is to develop a model, the researcher had also applied the discourse analysis, which was used to construct the type of knowledge based on practical and rhetorical meaning (Liamputtong, 2011:288). The analysis of the data was done with the assistance of the software of Atlas. ti version 7.

Grounded theory analysis process was utilised in this phase of the study. Different from the content analysis, grounded theory analysis develops from real data to abstract (theory). Objective 5 of the study is to develop a model for strengthening the nurse-patient relationship in managing patients with chronic pain in the primary health care setting.

Schematic representation of the development of themes

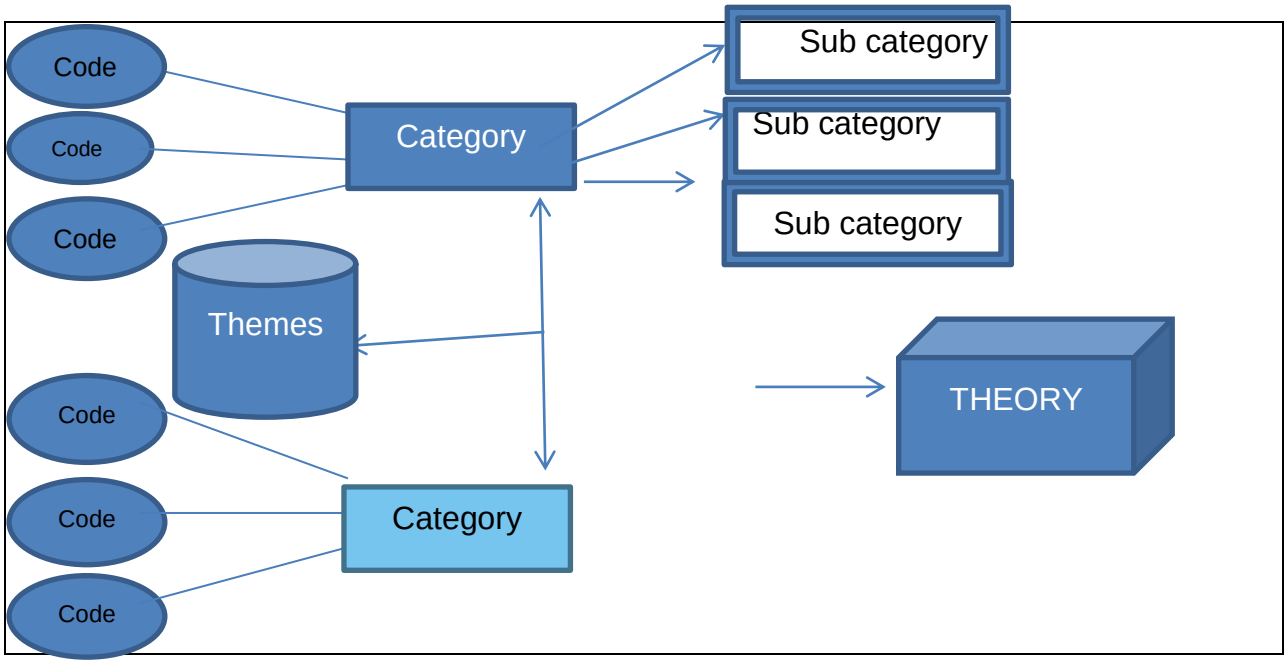


Figure 4.7 Schematic representations of the data analysis

4.5.3 Trustworthiness of the design

Credibility refers to the truth-value of the study (Botma et al, 2010:233). In this phase of the study, the participant observation was conducted over the period of not less than a month months in order to allow the prolonged engagement with participants. The researcher visited the facilities at different times of the day in different facilities in order to sample all possible work situations (peak and off peak). The process of observation continued until the saturation of data was reached at the sample size of 15.

Dependability is achieved if the findings of the study are consistent when the study is replicated under the same research setting (Botma et al, 2010:233). The clearest description of the research setting and methods for this study will allow the other researcher to test the dependability of the study.

Conformability: The researcher's participation was restricted to the packaging the patient medication and completing the registration which related to the neutrality of the researcher helped to minimise the halo effect that was anticipated (Botma et al, 2010:233), The researcher participation ensured by minimum direct interaction with the patients which would lead to the business of the findings of the inquiry. In order to minimise the researcher's biases in recording the experience, the use of audiotape complemented the behavioural observation, pen, and pencil recording by the researcher. When recording the themes of the findings, factors that shaped the findings were explained. Natural elements such as culture (considering issues such as eye contact) constituted part of the research report (Creswell, 2009:192).

Transferability refers to the degree to which the findings can be generalised to a larger population (Botma et al, 2010:233); *this was accomplished by* allowing the observation to continue until data saturation is reached. The thick descriptions of the data and the re contextualisation of the results in literature improved the generalisation of the data to a larger population. In the process of participant observation, the researcher kept the detailed records of what happened during the consultation and even note the aspects taken for granted. The researcher detached period from the situation and reviews the records from the possible biases or prejudice.

Authenticity relates to fairness and the ability to demonstrate a range of different realities, to present all participants' perspectives, concerns and voices (Tobin & Begley 2004:392). Fairness adhered to through leaving an audit trail and making an effort to include all voices of participants (patient and nurse).

4.6 ETHICAL CONSIDERATIONS AND RESPECT FOR HUMAN RIGHTS

Ethics as described by (Liamputtong, 2011:32) is the set of moral principles, which protects both the researcher and the research participants in the process of the research undertaking. Ethical issues are important to insure that the survey is credible and does not contribute to any harm by the participants' either physically or emotionally.

In observance of the culture of human rights, the following steps are undertaken in the protection of the research subjects' rights:

4.6.1 Consent form

Prior to the actual data collection process, the research's purpose of the study was explained to all the research participants/respondents. This explanation assisted in the inculcation of trust between the researcher and the participants. It also fosteredtransparency regarding the actual intentions of the study. The duration of the study, the research methods to be employed, the expected nature of participation and how the results will be used will be thoroughly explained to the research participants by the researcher in person. The participants were informed of their rights to participate voluntarily, and that their confidentiality (anonymity and privacy) was protected. No monetary incentives were offered; neither should they be coerced into participation. The written informed consent of the research participants was obtained (Creswell, 2009:198).

4.6.2. Permission to conduct the study

The ethical clearance and human rights issues in this study pertain to those scientifically approved protocols that also lend legal or moral credibility to the study(Creswell, 2009:199).. Prior to the undertaking of this study, ethical clearance was sought and obtained from the higher degree committee of the UNISA department of health studies. Written permission to conduct the survey was also sought from the National Department of Health, under whose jurisdiction all the research sites fall (Annex: 5). As the fiduciary custodians to the public healthcare facilities in the Tshwane District, the NDoH ensured that no harm would befall any of the patients and nurses to be utilised in its healthcare facilities.

4.6.3. Anonymity and confidentiality

Participants in the focus group were allocated numbers in order to protect the anonymity of the people (Creswell, 2009:167). For the professional nurses who were taking part in any type of data collection strategy, participants were not required to disclose their personal data to the researcher.

Total confidentiality was ensured through keeping the completed questionnaires in the lockable cupboard preventing unauthorised access to the data gathered during the interview. The questionnaires will be kept for the next two years after the completion of the data collection (Creswell, 2009:193).

4.6.4 Principle of beneficence

Beneficence is defined as behaviours or actions that purport to do good and avoiding harm to the other person (case 2000:13). This will include carelessness, untrustworthiness and ulterior motives.

The study benefited the participants (40% of the professional nurses working in Tshwane District) by allowing them to reflect back on their interaction with patients and how they could improve their caring behaviours towards the patients. The professional nurses also had an opportunity to voice their concerns about the psychological pain they experience in relation to the working environment. Nurses who were participating in the focus group discussions also benefited as they had a neutral environment to voice their concerns with regard to their care at the PHC facilities. Nurses were protected from victimization by conducting the focus group which excluded the managers who may continue to pursue what the participants discussed during the focus group discussions. The study results and recommendations may in future benefit the PHC managers in addressing the challenges in the PHC facilities as understood by the professional nurses. The researcher chose the title that is of priority to the primary health care practice as it is the focus for the government to improve the primary health care service uptake**.**

4.6.5 Principle of non-maleficence

In this study, no physical risk is anticipated to the participants, as the study does not entail any manipulations or experimentations to the participants(Creswell, 2009:192).; however, the discomfort may be related to the observed participants and those participating in the focus group discussion as they relate to the practical experiences they encounter in the workplace. In case of psychological discomfort to the participants, the researcher will not need the medical responsibility but will exclusively provide the reassurance to the participant and refer the participant to the nearest provincial institution EWP program or the institution of their choice for counselling.

- No research participant is to be exploited in any manner whatsoever. The use of facilitators who are already participating in the support group of chronic pain patients will minimise the feelings of loss of benefits from participating in the study.

- All participants will utilise the language that they are comfortable with within the focus group discussions. The patients interviewed in their commonly spoken language. The researcher will translate the data collection instruments during the data collection process. If such translation was done, it will be recorded that the information was translated and not completed by the participant directly...

4.6.6 Principle of justice

The study used the random sampling technique for the nurses' population thus all the participants have equal chances of taking part in the study. The research participants' selection is based on the research requirements and not on the vulnerability or compromised situation of specific people. Complete justice could not be done with regard to patients as only those already in support groups will be included but these are the patients suffering from chronic conditions and pain as opposed to the other acute patients who use PHC facilities as a once off visit.

4.6.7 Principle of fairness and researchers' integrity

The researcher will conduct a pilot study in order to detect any marginalisation that can arise from the study (Creswell, 2009:88). As the study deals with the relationship, the use of the triangulation of data collected by the researcher will minimise the biasness of the report. The researcher will revisit the research participants during the data analysis in order to validate the contradicting statements. The use of recording devices during the focus group discussion will assist in the verbatim reporting during the data analysis. The data collected will be kept safe for the next 5years for reference in case of any query (Creswell 2009:91) .The researcher will acknowledge all sources consulted.

The researcher understands and anticipates the halo effect that may arise from the direct observation and focus group discussion with nurses. The researcher will participate during the consultation of the patient in order to minimise the halo effect. The researcher will mostly be assisting the professional nurse with the packing of medication and completion of the register and allowing the professional nurse to interact with the patient directly.

Participants will not incur any financial loss when participating in the study. No incentives will be attached to the study. The focus group discussion conducted at the site to avoid travelling costs. The consultation with the qualified statistician and language editor will allow the researcher to publish the credible report

No recommendations suggested directly to the nurses in order to reduce interference in the normal functioning of the nurses at the facilities. On completion of the study, the report will be communicated directly to the NDoH district research coordinator who will then disseminate the information to all the relevant stakeholders.

4.6.8 Principle of self determination

In respect of the right to fair treatment, the participants are free to excommunicate themselves from further participation at any phase of the research, should they feel that their rights are violated(Creswell 2009:93

4.7 SUMMARY OF THE CHAPTER

The methodology chapter discussed the study design as sequential, explanatory mixed method. The methodology was discussed according to the phases of the study. Phase one is quantitative and the data collection instrument is the survey. Phase two of the study is qualitative and included two data collection instruments in order to triangulate the methods. The data collection instruments were participant observation and the focus group discussions. The process of analysis in quantitative data was completed before the data collection in phase two of the study starts. Following the data analysis in qualitative phase, the two phases were integrated at the data interpretation stage.

Based on the sequential design of the mixed method, the results of the study are presented following the process of presentation of the methodology as summarised in table 4.2).

Table 4.2 Summary of the methodology process

Quantitative phase
• Data collection: Questionnaire
Survey provides the overview of the nurses' rating of the understanding of caring practices by means of the Likert scale. The sections included in additional to the demographic data includes: Report on the frequency of demonstrating the caring behaviours, knowledge and skills competency levels, conflict management levels, exposure to the violent behaviour in the working environment and the caring practices behaviours
• Data Analysis:

The use of SPSS version 21.0 generated the descriptive and inferential statistics that was used to describe, interpret, analyse and summarise the data generated from the survey. In addition to the Chi square analysis, the narrative report was generated from the open-ended sections of the survey.
Qualitative phase
• Data collection and analysis
Unlike in quantitative phase, the data collection and the data analysis occurs simultaneously. The use of both focus group discussions and the participative observations minimised the weaknesses of single use of data collection instrument in qualitative data collection methods.
• Participative observation
The three stages of participant observation (Flick, 2009:227) formed the basis for the process followed in the participative observation method of data collection. Namely, descriptive observation, focused observation and selective observation stage. In addition, the survey report provided the integrated framework in the selective stage of the observation.
• Focus group discussions
Focus group discussions generated the in depth understanding of the caring practice phenomenon understudy. The themes use to guide the focus group discussions included the introductory question following the presentation of the findings from the quantitative phase of the study. The nurses understanding of the barriers and benefits of NPR, professional insight of the nurses, community needs awareness, the holistic approach, and the development of trusting relationships.

CHAPTER 5
DATA PRESENTATION AND ANALYSIS: QUANTITATIVE PHASE

5.1 INTRODUCTION

In the quantitative phase, the data collection process was completed followed by the data analysis process. The survey constituted of open-ended and closed-ended questions. The closed-ended section of the survey is presented in graphic presentation. The open-ended section is presented as narratives and themes of the study. Furthermore, the results generated from the survey formed the basis to develop the data collection instruments for the qualitative phase of the study.

5.1.1 Structure of the chapter 5

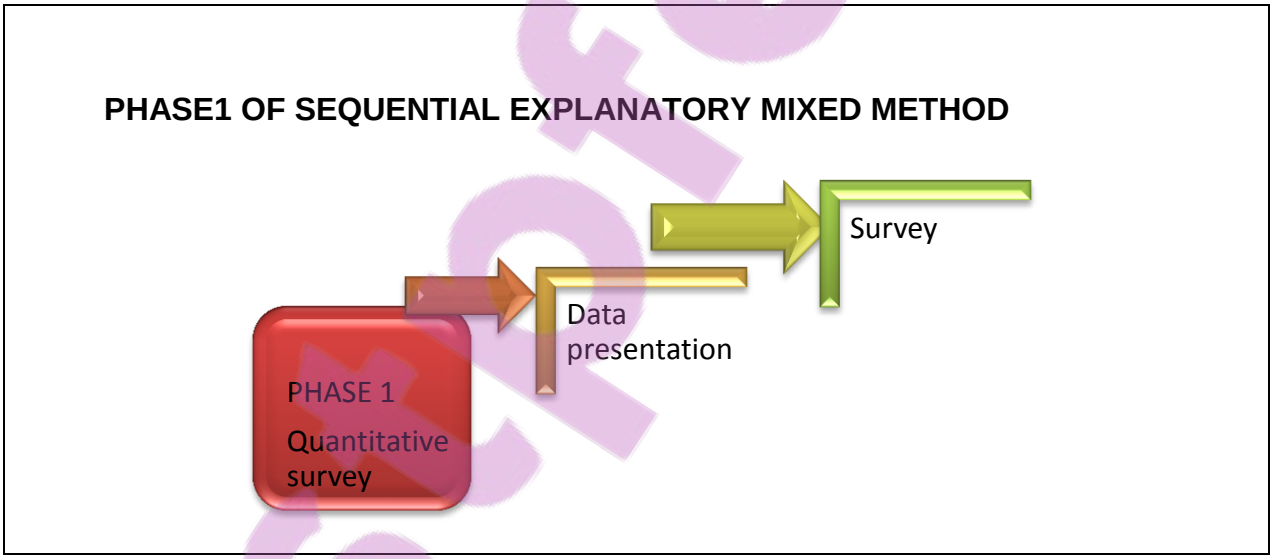


Figure 5.1 Structural overview of the results presentation

Figure 5.1 above summarises the sequence of the sections of Chapter 5. Following the introduction to the chapter, the researcher presents rationale for a phase-by-phase presentation of the study, followed by a presentation of the study results and finally the analysis of the research findings. In this chapter, the sequence of presentation will follow the recommended pattern of communicating research findings (Trafford and Leshem, 2008:158).

According to the steps as illustrated in figure 5.1, the first step includes the process followed during the data collection procedure, step 2 presents the graphic illustrations of the events following the statistical collation of data and the final step includes the analysis of the data.

5.1.2 Rationale for phase by phase presentation of study results and analysis

The study is a sequential explanatory mixed design. The parallel data analysis strategy minimises the conversion of qualitative data to quantitative data or vice versa but allows the clear presentation of the research findings based on the aim of the study (Creswell and Plano, 2007). The separate data presentation and analysis helped the researcher to minimise over presentation of quantitative phase results which is a common disadvantage of the sequential explanatory mixed method (Ivankova, Creswell and Stick, 2006:6) The parallel approach allowed the integration of the research findings at the interpretation level of the study (Chapter 8). The presentation and analysis of the data in the quantitative phase of the study when given separately from qualitative phase, allows the researcher to conform to the ontological and epistemological paradigms of each phase of the study (Sale, Lohfeld and Brazil, 2002:47).

The analysis of the quantitative data first assisted the researchers to identify the outliers, which were explored further in the qualitative phase of the study (Rudd and Johnson 2010:18). As the aim of the survey is to explore the caring practices in the PHC setting for the patients suffering from chronic pain and then develop a model to strengthen the NPR relationship, the separate analysis of the data from different stages of the study helped the researcher to develop logical relations between the theory concepts and research findings (Mengshoel 2012:374).

Phase 1 discoveries were a fundamental guide to the development of phase 2 processes, which included the observation guide, the focus group discussion questions. Phase 1 also generated the specific knowledge deficits as it addressed objective 1 and 2 of the study (to analyse the current caring practices within the nurse patient relationship during the management of chronic pain patients in the primary health care services; to investigate the experience of patients with regard nurses' caring practices when managing their chronic pain in the primary health care setting).

5.2 PHASE 1: QUANTITATIVE DATA PRESENTATION OF THE STUDY

5.2.1 Data presentation of phase 1 of the study

The questionnaire had five (5) sections: demographic data, generic caring behaviours, knowledge and skills, demonstration of Caritas factors and narrative section. The reporting of the results will follow the sequence of sections as mentioned above.

5.2.1.1 Demographic data

The demographic data included questions relating to the age of the respondent, gender, staff category, years of service in the PHC setting and the highest qualifications. In this report, years of service and highest qualifications were used as independent variables. Gender was excluded as a variable for data analysis as there were only two (2) male respondents for the survey. The staff category was also excluded, as there was only one staff category.

The three demographic variables presented in this section will form the bases for the cross tabulations during the Chi Square analysis of the data.

5.2.1.1.1 Age

Thirty-three percent (n= 61) of respondents were between the ages 41 and 50, which were the highest, while the lowest respondents were above 50 years of age at 16% (n=29). Only twenty-seven percent (n= 50) of the respondents were below 30 years of age. Figure 5.2 below summarises the age distribution of respondents.

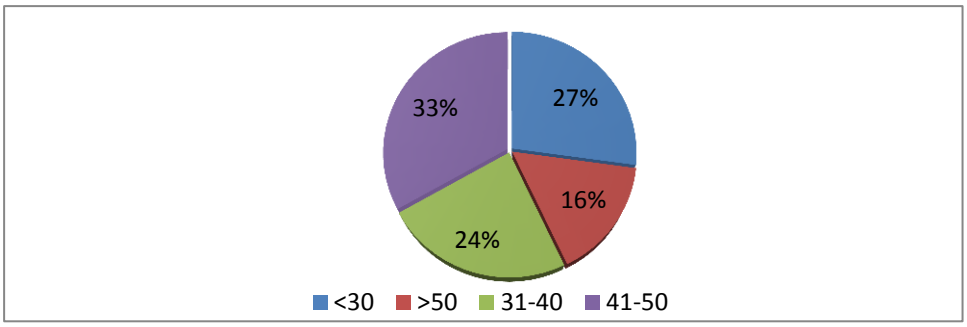


Figure 5.2 Age distribution of the respondents

5.2.1.1.2 Years of service

As compared to the age distribution above, the years of experience of respondents did not affirm that there are more experienced nurses working in the PHC setting, as the respondents with 1-5 years' experience numbered 41.8% (n=77). The comparison between the age and years of service of the respondents indicated that there are nurses who joined the profession at an older age.

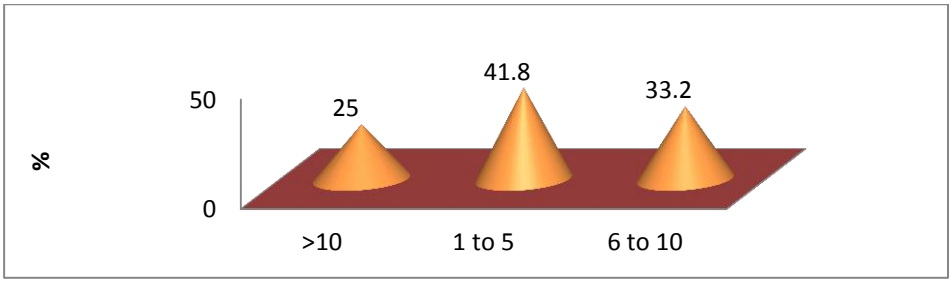


Figure 5.3 Respondent's Years of service

5.2.1.1.3 Highest qualification

Even though the PHC upgrading course training was terminated in 2006 in Tshwane due to the challenges relating to the quality of training, it still accounted for 19% (n=35) of the respondents in this survey. It was also apparent that the majority of nurses who are working in the PHC are not PHC trained and only have the basic qualifications of nursing training. Figure 5.4 below suggests that if the percentage of not-PHC-trained nurses is added to the semi-skilled nurses who completed the upgrade course, and then more than sixty percent (60.8%) of nurses allocated to work in the PHC facilities are under qualified.

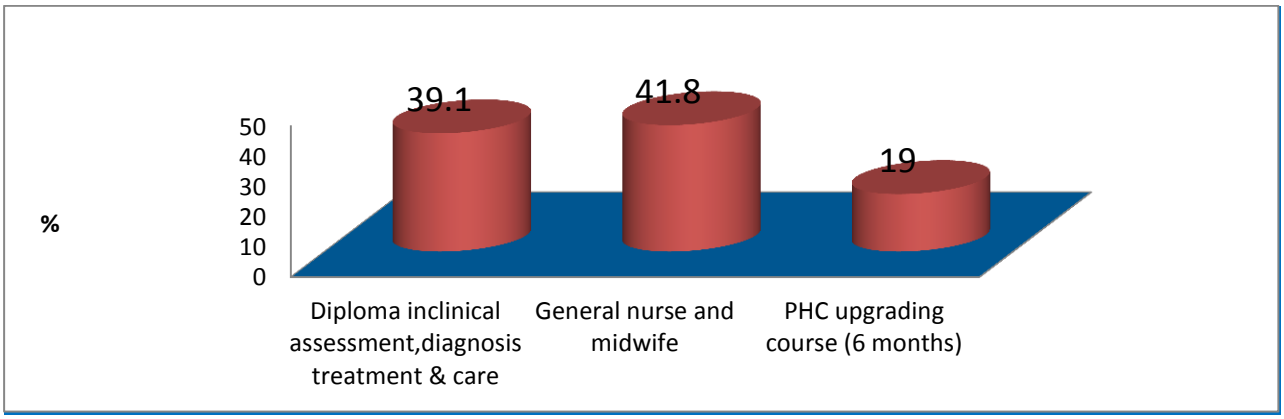
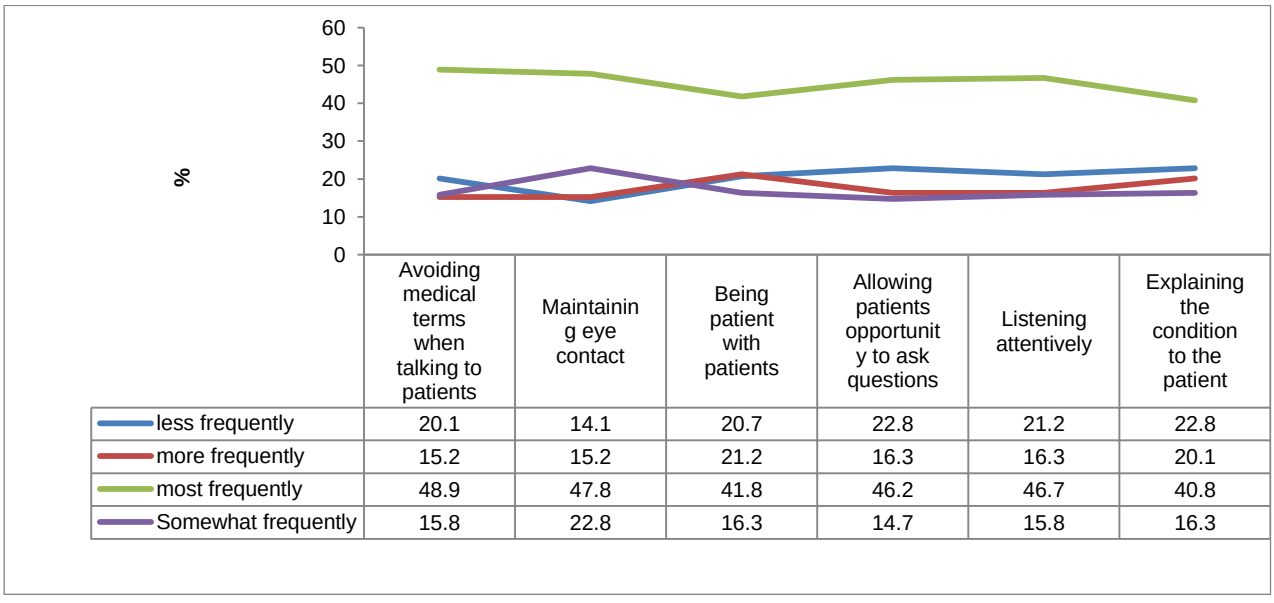


Figure 5.4 respondents' highest qualifications

Age analysis of the respondents indicated that there are still a reasonable number of nurses who could serve as mentors to the younger generation while the gender representation indicates that even though there is a slight increase in the number of male nurses, the nursing profession still remains predominantly female. The advanced age of the respondents does not translate to the more experienced nurses as evident in the years of service of the respondents when cross-tabulated. The minimal number of professional nurses with the PHC qualification poses a challenge to the minister of health's call for the re-engineering of PHC with such a shortage of skill (figure 5.4).

5.2.1.2 Demonstration of caring behaviours

The caring behaviours measured in these sections were avoidance of medical terms when talking to the patients, appropriate eye contact, being patient with clients, allowing patients the opportunity to ask questions, listening attentively and explaining the condition of the patient after assessment. Respondents were required to indicate their frequency of demonstrating those behaviours and rate themselves on a scale that ranged from less frequent, somewhat frequent, more frequent and most frequently. In all the caring behaviours that were measured, between 40- 50% of the respondents were confidently rating themselves as being caring.



	Avoiding medical terms when talking to patients	Maintaining eye contact	Being patient with patients	Allowing patients opportunity to ask questions	Listening attentively	Explaining the condition to the patient
less frequently	20.1	14.1	20.7	22.8	21.2	22.8
more frequently	15.2	15.2	21.2	16.3	16.3	20.1
most frequently	48.9	47.8	41.8	46.2	46.7	40.8
Somewhat frequently	15.8	22.8	16.3	14.7	15.8	16.3

Form 5.5 Demonstration of caring behaviours

5.2.1.2.1 Avoiding medical terms when talking to patients

Respondents who were between 41-50 years of age (45.9%; n=17), reported that they were avoiding medical terms less frequently, while younger nurses below 30 years reported that they avoid using medical terms more frequently (28.8%; n=26). The researcher also noted that more nurses (43.2%; n=16) within the category 1-5years of experience avoided using medical terms less frequently whereas nurses within the category of nurses above 10 years (18.9%; n=7) avoid using medical terms less frequently.

5.2.1.2.2 Looking at the patient when talking to them

The proportion of respondents who maintain eye contact was non-significant in all the categories of age grouping and qualifications of the respondents. Respondents with 1-5 years of experience reported that they are maintaining eye contact most frequently (42.2%; n=38) than other respondents who have more than 5 years of experience.

5.2.1.2.3 Being patient with clients

With regard to being patient with clients' behaviour, 39.4%(n=15) respondents who were below 30 years of age reported to be less patient while respondents who were between 41-50 years of age reported to be more patient (38.9%; n=30). Respondents reported that between 5-10years of experience the more they become patient with patients (42.8%; n=33). Respondents who had PHC as a qualification, 32.4 %(n=25) reported to be patient when dealing with patients.

5.2.1.2.4 Allowing patients' opportunity to ask questions

Respondents aged between 41-50 years old, reported offering their patients more of an opportunity to ask questions during their interactions (41.1%; n=35). There is also a difference in allowing patients the opportunity to ask questions with regard to years of experience of the nurses where respondents with 1-5 years of experience scored slightly higher than those with above 10 years of experience (38.8%; n=33 and 37.6%; n= 32) respectively. The same applies to other caring behaviours, respondents with PHC qualification did not report to be offering the patients enough opportunity to ask questions (35.2%; n= 30) as compared to the respondents who have general nursing and midwifery qualifications only (42.3%; n= 36).

5.2.1.2.5 Listening attentively

Respondents who are below 30 years of age admitted that they are actually not paying attention when interacting with patients (51.2%; n=20). Interestingly, as nurses gain more experience in their practice they reduce (33.7%, n=29) their caring behaviour of listening attentively as the patient relates their stories while the less experienced nurses (40.6%; n=35) reported to be more attentive. The level of qualification was not reported by nurses as the motivation to listening attentively when interacting with patients as (37%, n=32) reported to be listening to their patients attentively.

5.2.1.2.6 Explaining the condition of the patient after assessment

Fifty per cent (n=21) of respondents who were younger than 30 years of age reported that they actually don't take the time to explain to the patient, after an assessment, the condition they are suffering from. While 41.3 %(n=31) of respondents who are between 41-50 years of age practice the caring behaviour of explaining to the patient the condition after assessment. Newly qualified respondents with less experience (1-5 years) also find it necessary to explain the condition of the patient after assessment (42.6%; n=32) as compared to the respondents who are 6-10 years of experienced (21.3 %; n=16). The results were further analysed using the chi square test as summarised in table 5.1.

The chi square test was done in order to make any correlations between the variables of the study in this section of the questionnaire and the results are summarised in the table 5.1 below.

Table 5.1 Chi square results from caring behaviours

		Value	**df**	**Asymp. Sig. (2-sided)**
Avoiding medical terms when talking to patients	Highest qualifications	17.213a	6	0.009
	Years of service	9.481a	6	0.148
	Respondents' age	7.353a	9	0.600
Maintaining eye contact	Highest qualifications	4.971a	6	0.548
	Years of service	30.157a	6	0.000
	Respondents' age	9.977a	9	0.352

Being patient with patients	Highest qualifications	10.636a	6	0.100
	Years of service	37.375a	6	0.000
	Respondents' age	13.311a	9	0.149
Allowing patients opportunity to ask questions	Highest qualifications	20.365a	6	0.002
	Years of service	24.668a	6	0.000
	Respondents' age	21.175a	9	0.012
Listening attentively	Highest qualifications	11.233a	6	0.081
	Years of service	31.251a	6	0.000
	Respondents' age	21.606a	9	0.010
Explaining the condition to the patient	Highest qualifications	12.935a	6	0.044
	Years of service	32.465a	6	0.000
	Respondents' age	23.837a	9	0.005

Three of the six caring behaviours which were measured indicated the correlation between the age of the respondents and the caring behaviours which were: age of the respondents and allowing patients an opportunity to ask questions (p= 21.175; χ^2 =0.012; df=9), listening attentively and age of the respondents (p=21.606; χ^2= 0.010; df=9) and age of the respondents and explaining the condition of the patient had a high correlation of (p=23.837; χ^2 =0.005; df=9).

The study results also indicated that there was a correlation between the respondents' highest qualifications and the avoidance of the use of medical terms when talking to the patients (p=17. 213; χ^2= 0.009; df=6) the respondents' highest qualifications and allowing patients the opportunity to ask questions (p=20. 365; □χ^2=0. 002; df=6). Explaining the condition to the patient and the respondents' highest qualifications has a borderline significance of (p=12.935; χ^2= 0.04; df=6).

The highest correlation was noted on the years of service of the respondents in relation to maintaining eye contact (p=30.157; χ^2= 0.000; df=6), being patient with patients and years of service of the respondents (p=37.375; χ^2= 0.000; df=6), allowing patients an opportunity to ask questions and years of service of the respondents (p=24.668; χ^2= 0.000; df=6), listening attentively and years of service of the respondents ((p=31.251;

χ^2= 0.000; df=6) and explaining the condition to the patient and years of service of the respondents (p=32.465; χ^2= 0.000; df=8).

Caring behaviours of the professional nurses at the PHC facilities is regarded as one of the key priorities to improve the utilisation rate of the service (Hessel, 2009:287). According to Figure 5.5 above, it is evident that respondents rated themselves as practising caring behaviours more frequently in their daily practice. This element was explored further in phase 2 of the study (participative observation) as the findings of the study were not congruent with other studies which were conducted in the same setting where the poor nurses' attitude was identified as the key area of under-utilisation of the PHC facilities (Health systems trust, 2012:15;Department of health, 2010:1). Subsequent to those studies, staff attitude was listed amongst the six priorities of the ministerial task team for the government in order to improve the quality of service to the patients.

It was also necessary for the researcher to explore further on participants who accepted that they were not practicing the caring behaviour in phase 2 of the study (focus group discussion) in order to gain insight into the phenomenon around the responses given.

Statistical correlation between the respondents' highest qualifications and the avoidance of the use of medical terms when talking to the patients (table 6.1) emphasises the need to equip nurses with the necessary knowledge in form of qualifications in order to improve the relationship between the nurses and patients. Nurse who possess all forms of knowing (Empirical, Aesthetics, personal and ethical) in the working environment are able to demonstrate the caring behaviour with confidence without using a language that the patients cannot understand (Makua and Makua, 2013:30). Explaining the condition to the patient has a borderline significance (table 6.1) and raises a course for concern because for the patient to actively participate in the treatment plan discussed, he should have the knowledge of the condition he is suffering from (van Wyk et al , 2011:118).

Language is identified as one of the barriers to effective nurse-patient relationship (Watson, 2009:15). In this study the use of medical terms when talking to patients has been identified as an aspect in the language barrier that compromises the relationship between the nurses and their patients. The results also implied that nurses with more than 10 years of experience are using medical terms more frequently when talking to

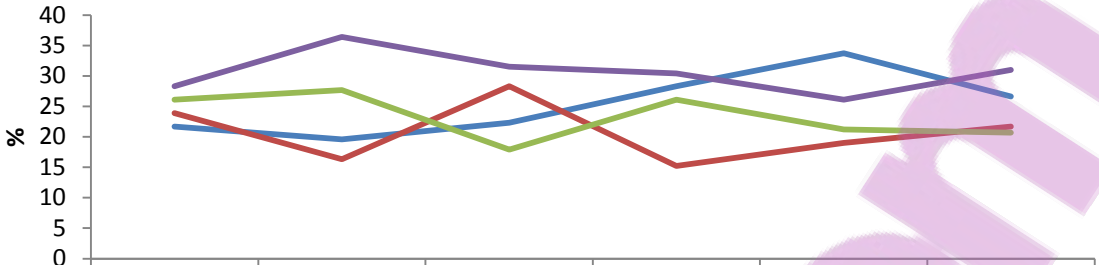
the patients. It was also realised that the more the nurses became qualified (PHC) the less they avoided using medical terms when talking to patients (Figure 5.5). Referring to forms of knowing as mentioned above, nurses need to balance all forms of knowing which will help them to minimise the creation of a communication barrier resulting from the use of medical terms.

Unlike the use of medical terms, looking at the patient when talking to them, being patient with patients, allowing patients' the opportunity to ask questions and listening are more of the skill rather than knowledge as there was a strong statistical significance (table 51) between these variables and the years of experience of the respondents. A repeated practice in the working environment improves the skills of the health practitioners (Rosenberg and Gallo-Silver, 2011:6). It is therefore essential that nurses working in the PHC setting should repeatedly practice these behaviours in order to improve their caring skills. Watson (2005:19) advises that it is a caring assumption that the caring behaviours should be practiced on the person him/herself before being transferred to the next person.

5.2.1.3 Assessing the level of knowledge, skills and exposure of the nurses

In this section respondents were asked to rate (scale of 4, low, average, above average and high) their perception of knowledge levels with respect to the assessment of patient's pain level, scope of practice, ethical standards, essential drug list and counselling and communication skills.

In figure, 5.6 respondents reported a balance of knowledge and skills in all the assessed areas. The largest number of respondents rated themselves as very high except for the knowledge of ethical standards where most respondents rated themselves as being average (33.7%; n= 62). Only 17.9 % (n=33) perceived their communication skills as low while 31.5 % (n=58) perceived their communication skills as very high.



	Assesment of patient's level of pain	Scope of practice	Communication skills	Counselling skills	Ethical standards	Essential drug list
Average	21.7	19.6	22.3	28.3	33.7	26.6
High	23.9	16.3	28.3	15.2	19	21.7
Low	26.1	27.7	17.9	26.1	21.2	20.7
Very high	28.3	36.4	31.5	30.4	26.1	31

Figure 5.6 Level of knowledge and skills

5.2.1.3.1 Assessment of patient's pain level

Respondents with general nursing and midwifery qualifications perceived themselves as having a high (51.1%; n=22) knowledge of a patients' pain as compared to nurses with PHC qualifications (32.5%; n=14). Respondents who were less than 30 years of age scored their knowledge of pain assessment as low (52%, n=25) while respondents who are between the ages 41-50 perceived their knowledge of pain assessment as high (51.1%; n=22). Respondents who have more years of experience (>10years) perceived themselves as a having high knowledge of pain assessment (42.3%; n=22) while respondents who have 1 – 5 years of experience perceived their knowledge as low (52%; n=25).

5.2.1.3.2 Scope of practice according to the SANC regulation

Respondents who have more than 10 years of experience as nurses, are confident that they know their scope of practice (50.8, n=31) while respondents who have nursing experience of between 1-5 years are not confident (54.9%, n=28). Respondents in the age category of 41-50 years rated themselves as having a very high knowledge of the scope of practice (43.2%; n=29) and respondents who were less than 30 years of age are less confident about their knowledge of scope of practice (47%, n=24). Contrary to the caring behaviours, respondents who have PHC qualifications rated themselves very high (41.7%; n=28) in relation to respondents who have general nursing qualifications who perceived themselves as average (55.5%, n=20).

5.2.1.3.3 Communication skills

Respondents with PHC qualification have more confidence in their level of communication skills (44.8%; n=26) while respondents with basic nursing and midwifery training were less confident (51.5%; n=17). Older respondents (>50years of age) perceive themselves as struggling with communication skills (30.3%; n=10). Respondents who have more than 10 years of experience are confident of their communication skills (43.1%, n=25).

5.2.1.3.4 Counselling skills

Similarly, respondents who have more than 10 years of experience are confident in their counselling skills. Respondents who are younger than 30 years of age doubt their level of confidence in counselling (46%; n=23) as they rated themselves as being average. The confidence of the respondents with PHC qualifications is sustained at (39.2%; n=22).

5.2.1.3.5 Ethical standards

Ethics nurses who currently practice seem to be a challenged, as both PHC trained and general nurse respondents rated their knowledge as fair (48.3%; n=30 and 45.1%, n=28) respectively. The trend continued even with all age categories where they rated themselves as average. Even though the respondents who have >10 years of experience developed confidence in the ethical standards of the profession, other categories still maintained at an average level.

5.2.1.3.6 Essential drug list (2008 version)

Respondents who are novices in the profession (< 5 years) are more confident about the EDL knowledge (42.1%, n=24). Respondents who are less than <30 years old are also confident about the EDL (31.5%; n=18). Respondents who have PHC qualifications are more confident (40.3%; n=23) as compared to the respondents who are general nurses who rated themselves as average (58.3%; n=28).

The results were further analysed using the chi square test as summarised in table 5.2 below.

Table 5.2 Chi square results and knowledge rating of respondents

		Value	df	Asymp. Sig. (2-sided)
Assessment of patient's Level of pain	Highest qualifications	15.662a	8	0.047
	Years of service	38.723a	8	0.000
	Respondents' age	35.460a	12	0.000
Scope of practice	Highest qualifications	9.042a	6	0.171
	Years of service	27.203a	6	0.000
	Respondents' age	35.460a	12	0.000
Communication skills	Highest qualifications	11.024a	6	0.088
	Years of service	19.319a	6	0.004
	Respondents' age	16.434a	9	0.058
Counselling skills	Highest qualifications	10.383a	8	0.239
	Years of service	14.131a	8	0.078
	Respondents' age	21.051a	12	0.050
Ethical standards	Highest qualifications	15.655a	6	0.016
	Years of service	7.117a	6	0.310
	Respondents' age	7.960a	9	0.538
Essential drug list	Highest qualifications	18.241a	10	0.051
	Years of service	6.091a	10	0.808
	Respondents' age	22.486a	15	0.096

Two of the knowledge assessments were statistically significant in relation to the age of the respondents, while the other two were borderline and the remaining two were not significant. The assessment of the patient's pain level indicated the correlation with age of the respondents (p= 35.460; χ^2 =0. 000; df=12), same as the scope of practice (p= 22.051; χ^2 =0. 009; df=9). The borderline skills were communication and counselling (p= 16.434; χ^2 =0. 058; df=9 and p= 22.051; χ^2 =0. 050; df=12) respectively. The ethical standards and essential drug list were not substantial in relation to the respondents' age categories.

Years of service and assessment of the patient's level of pain yielded the high correlation of (p= 38.723; χ^2 =0. 000; df=8), scope of practice and years of service (p= 27.203; =0. 000; df=6) and communication skills and years of service (p= 19.319; χ^2 =0. 004; df=6). The other three skills were not statistically significant.

Qualifications of the respondents had statistical significance when cross tabulated with the ethical standards (p= 15.655; χ^2 =0. 016; df=6) and the essential drug list had a borderline significance of (p= 18.241; χ^2 =0. 051; df=10).

The study conducted by Kounenou, Aikarini and Georgia (2011: 2233) suggested that the educational background of the health workers determines the level of communication with the patient, as it was also evident in this study that the respondents with the highest qualification (PHC) reported the highest level of communication skills (figure 5.6). The above statement was further confirmed by (Shama, Meky, Abou El Enein and Mahdy, 2009:266) where they found that formal training on communication skills does improve the practice and the relationship between the nurses and patients. Rosenberg and Gallo-Silver (2011:7) agrees with other researchers, but with the reservation that the training should be practical and not theoretical in order to yield positive results. In this study, the researcher could not agree with the "reservation", mentioned above, as the PHC training material in South Africa does not show the method of teaching of communication skills in the PHC course. As this was not the focus of the study, it may be recommended for the new area of research within the South African context.

Knowledge, skills and competencies are often regarded as the deciding factors when considering the right candidates for the job. It is often assumed that when a person is certificated, that may translate to the ability to perform skills related to the job (Pross, Boykin and Hilton, 2010:145). In this section of the questionnaire, nurses were also asked to confirm their level of knowledge and skills regarding the guiding principles in their practice while managing patients with chronic pain. The study results were congruent with the study conducted in South Africa (Dewing, Mathews, Cloete, Schaay and Simbay 2013:1) where nurses were reported to have knowledge about counselling and communication skills. From this study, it was also recommended that there is a

need to further assess the ability of the nurses to translate such knowledge into the daily practice in their working environment. Based on the high level of knowledge reported by the respondents in this study, the researcher sought more clarity in phase 2 of the study relating to the practice of such knowledge and skills.

Fakhr-Movahedi, Salsali, Negharandeh and Rahnavard (2011:174) when exploring communication and counselling skills of the nurses, indicated that, nurses do use communication as the essence of caring or as a reaction to the patient's needs. In exploring this section later in the qualitative phase of the study, the researcher further establishes the level and purpose of communication between the nurses and the patients within the PHC setting.

5.2.1.4 Assessment of the ability of the nurse to perform pain management activities

The researcher also requested the respondents to indicate their ability to manage situations relating to conflict involving the patient's care, complaints by patients, assessment of patients with chronic pain and protection of privacy and confidentiality. The responses were ranked on a scale of four (not certain, to a limited extend, with the support of the manager and adequately effective). Figure 5.7 below is summarised in the answers of the respondents towards such situations.

Respondents did see themselves as managing conflict well; only 30.4 % (n= 56) rated their confidence level as very high. It was also apparent that managing the patient's complaints was a challenge to the respondents as 30.4 % (n=56) of them perceived themselves as average. Respondents also suggested that the complexity of the chronic pain sometimes makes them lose confidence (28.3%, n=52) but they are still maintaining the patient's privacy and confidentiality irrespective of the situation (28.8%, n=49).

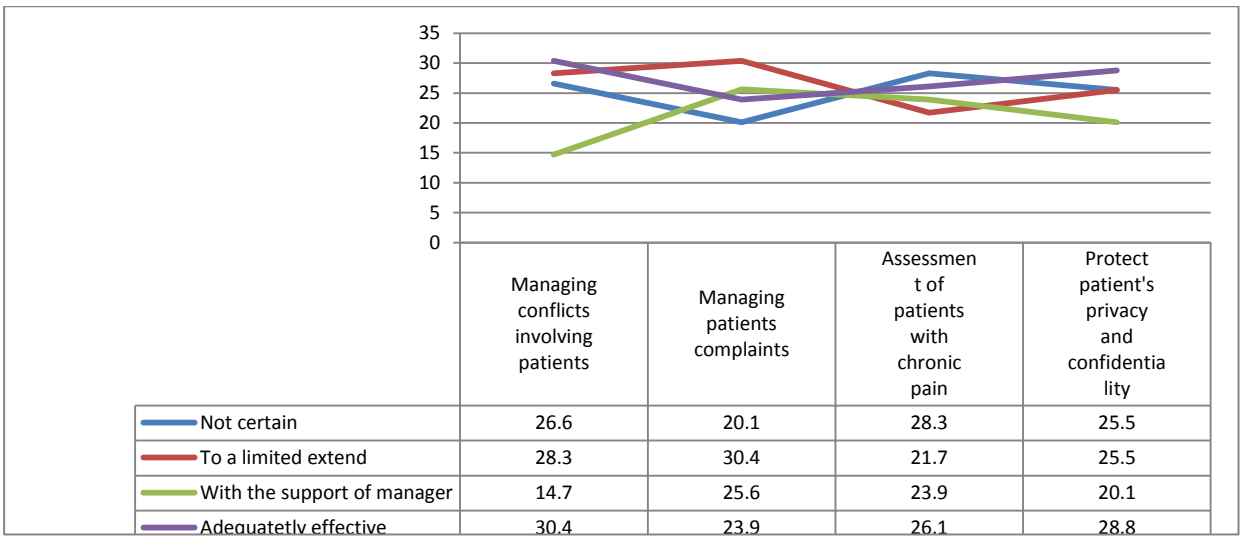


Figure 5.7 Assessment of the ability of the nurse to perform the pain management activities

5.2.1.4.1 Manage conflict involving patient care management

Respondents with PHC qualifications again claimed their confidence in this area as (50%, n=28), where they reported to be handling the conflict effectively. Respondents who had 1-5 years of experience were not certain that they could manage the conflict involving the patients' care more effectively (39.2%, n=22). While the respondents who were <30 years of age were not certain that they could face conflict (32.6%; n=16). Respondents who were between the ages 41-50 showed more confidence (30.3%; n=17) that they could manage conflict effectively.

5.2.1.4.2 Manage patient's complaints

Respondents who were between the ages 41-50 were more confident in handling the patients' complaints (30.3%; n=17). Respondents who were between the ages 31-40 indicated that with the support of the manager they could manage the patients' complaints (40%; n=18). Respondents, who are less experienced between 1-5years, affirmed that to a limited extent, they were able to manage patients' conflicts (46.4%; n=26). The respondents with PHC qualifications requested the support of the manager in managing such a conflict (55.5%; n=25).

5.2.1.4.3 Assessment of patients with chronic pain

The respondents with PHC qualifications reported that even though on average,

respondents lose their confidence of assessing patients with chronic pain as it gets more complex, they still remained confident with this activity (56.2%; n=27). Respondents who had 1-5 years of experience in the field were not certain about this activity (51.9%; n=27). Those who were thirty-one to forty years of age of the respondents also felt that they were confident in this area (41.6%; n=20).

5.2.1.4.4 Protect patient's privacy and confidentiality

Respondents of ages ranging from 41-50 years rated their ability to protect the patients' privacy and confidentiality as adequately effective (44.8%; n=22). The respondents who are <30 years of age and respondents who are >50years of age are not certain about protecting the patients' confidentiality and privacy (42.5%; n=20 and 25.5%; n=12) respectively. Thirty-six percent (n=19) of respondents who are novices (1-5 years of experience) reported themselves as confident in protecting the privacy and confidentiality of the patients. Respondents who have PHC qualifications are more confident in this area (39.6%; n=21) while respondents who possess general nursing qualifications only reported to be able to perform this activity to the limited extent (51.0%; n=24).

Table 5.3 Chi square results for management of conflict with the patients

		Value	**df**	**Asymp.**

				Sig. (2-sided)
Managing conflict involving patients' care	Highest qualifications	9.167a	6	0.164
	Years of service	23.707a	8	0.003
	Respondents' age	19.611a	9	0.020
Managing patient's complaints	Highest qualifications	16.195a	8	0.040
	Years of service	7.445a	8	0.490
	Respondents' age	30.579a	12	0.002
Assessment of patients presenting with complicated chronic pain	Highest qualifications	27.115a	6	0.000
	Years of service	8.331a	6	0.215
	Respondents' age	28.171a	9	0.001
Protect patients' privacy and confidentiality	Highest qualifications	23.707a	8	0.003
	Years of service	14.273a	8	0.075
	Respondents' age	27.561a	12	0.006

The correlation was evident in the cross tabulation of highest qualification and the assessment of the patient with chronic pain and highest qualification (p= 27.115; χ^2=0.000; df=6) followed by the correlation between protecting patient's privacy and highest qualification and confidentiality and highest qualification (p= 23.707; χ^2 =0.003; df=8). The correlation with managing the patient's complaints was borderline (p= 16.195; χ^2 =0. 040; df=8), while the management of conflict regarding the patient's care did not have any statistical significance. Statistical analysis showed no correlation between the years of service of the respondents and all the activities pertaining to the management of patients with chronic pain.

The results also indicated that the age of the respondents had correlation with all the activities of managing chronic pain that were measured in this department. Reported in

their order of the strongest to the weakest correlation, assessment of patients with chronic pain (p= 28.171; χ^2 =0. 001; df=9), managing patient's complaints (p= 30.579; χ^2=0. 002; df=12) protecting patient's privacy and confidentiality (p= 27.561; χ^2 =0. 006; df=12) and managing conflict involving patient care management (p= 19.611; χ^2=0. 020; df=9).In the process of assessing and managing patients who are suffering from chronic pain, nurses are sometimes faced with the conflict regarding the treatment plan. Patients sometimes complain that the nurses are not doing enough to assist them to manage pain (Goodrich and Cornwell, 2008:16). The assessment of patients who complained of chronic pain with no obvious underlying cause may become too complex for the nurse to manage (Al-Khawaldeh, Al-Hussami and Darawad 2013: 340). The right of the patient to their privacy and confidentiality is also an obligation of the nurse, which needs to be observed at all times (Kathleen and Hayes 2011:117).

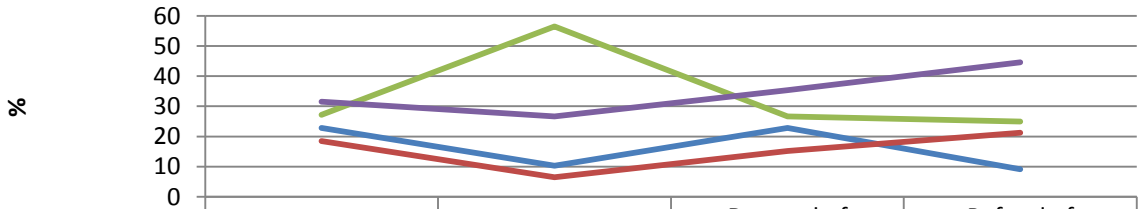
The activities mentioned above if not realised can be a challenge in maintaining a good relationship and practicing caring behaviours. Hsieh (2009:538) indicated that patients' complaints if managed properly provide an opportunity for the health institutions to improve the quality of care.

In this study, the respondent's acknowledgement of the fact that chronic pain can be so complex that it is difficult to manage was consistent with other studies (Berman et al, 2008:206; Harding et al, 2010:51 and Hall et al, 2008:1219). In this section, even though there was a statistical significance between the qualifications of the respondents and the assessment of patient with chronic pain, there was no statistical correlation between the respondents' qualifications and the management of conflict and complaints relating to the patient's care.

In reference to the discussion in sections earlier in this study, the study suggests that the formal training has an impact in improving the knowledge of the nurse to manage the condition of the patient irrespective of its complexity. What is not evident from this study is the ability of the formal training to improve the skill in managing the conflict relating to the management of the patient with chronic pain, as there was no statistical significance between those two variables.

5.2.1.5 Assessing the level of frequency of exposure to the following behaviours of the patients.

Respondents reported that only just above a quarter never experienced the verbal abuse, demand of treatment or refusal of the treatment ((27.2%; n= 50, 26.6%; n=49 and 25%; n=46) from the patients. It is a concern that, it implies that three quarters of nurses had received some kind of hostile behaviour from their patients. Even though 56.6 % (n= 104) never experienced physical abuse from the patients, the remaining percentage raises a cause for concern on the quality of relationship that exists between nurses and their patients. Figure 5.8 below summarises the experiences of nurses relating to the hostile behaviour from the patients while table 5.3 summarised the chi square results for this segment of the survey.



	Verbal abuse from patients	Physical abuse from patients	Demand of treatment from patients	Refusal of treatment by patients
Always	22.8	10.3	22.8	9.2
Mostly	18.5	6.5	15.2	21.2
Never	27.2	56.5	26.6	25
Sometimes	31.5	26.6	35.3	44.6

Figure 5.8 assessing the level of frequency in handling the hostile behaviours of patients

5.2.1.5.1 Verbal abuse from patients

Respondents between the ages 41-50 had experienced verbal abuse on more occasions than other age groups (44.8%, n=26). Respondents who have 1-5 years of experience reported the experience of verbal abuse more than other categories (51.2%; n=21). Respondents who have general nurse and midwifery qualifications reported the same exposure (51.2%; n=21) of experience of verbal abuse like respondents who are 1-5 years of experience.

5.2.1.5.2 Physical abuse from patients

More respondents who have the PHC qualification (45.1%, n=47) never experienced

the hostile behaviour from the patients. Even though physical abuse is not the common phenomenon in the PHC setting, respondents who have 1-5 years of nursing experience reported some occasional experiences of such behaviours (46.9%; n=23). The younger the nurses the more the risk of being physically abused by the patients (61.1%, n=11), as those nurses reported that the patients always physically abused them.

5.2.1.5.3 Demand of treatment from patients

Respondents who are <30 years of age are always phased with the demand of treatment from the patients (40.4%; n=17) as compared to respondents who are >30 years of age. While it is an expectation that the more qualified nurses should be able to engage the patients in choices of treatment plan, respondents who have PHC qualification reported to be challenged by patients who demand the treatment (54.7%, n=23). The respondents who have less nursing experience (1-5 years) seem to be the ones who are not challenged by patients with the demand of treatment (35.3%; n=23).

5.2.1.5.4 Refusal of treatment by patients

More experienced respondents (>10 years) reported that they sometimes encounter situations where the patients refuse treatment (36.5%; n=30). Sixty–two percent of patients do not agree with the treatment plan as given by the respondents who are PHC trained, as patients tend to refuse the treatment plan given by those nurses. A respondent who is between the ages 41-50 reported that more often than others when they suggest the treatment plan to the patients, patients sometimes refuse the treatment (47.5%; n=39).

Table 5.4 Frequency of exposure to violent behaviour

		Value	df	Asymp. Sig. (2-sided)
Verbal abuse from patients	Highest qualifications	15.362a	8	0.052
	Years of service	12.205a	8	0.142
	Respondents' age	20.428a	12	0.059
Physical abuse from patients	Highest qualifications	13.640a	8	0.092
	Years of service	7.596a	8	0.474
	Respondents' age	29.353a	12	0.003
Demand of treatment from patients	Highest qualifications	39.400a	6	0.000
	Years of service	4.722a	6	0.580
	Respondents' age	13.606a	9	0.137
Refusal of treatment by patients	Highest qualifications	27.336a	6	0.000
	Years of service	16.412a	6	0.012
	Respondents' age	26.368a	9	0.002

The results from the Chi- square analysis indicated the correlation between the age category of respondents and the encounter of hostile behaviour from the patients. The strongest correlation was observed with the respondent's age and the refusal of treatment by patients (p= 26.368; χ^2 =0. 002; df=9) and the physical abuse by patients (p= 29.353; χ^2 =0. 003; df=12).

There was a borderline statistical significance between the respondent's age and the verbal abuse (p= 20.428; χ^2 =0. 059; df=12) and no statistical significance in the demand for treatment of the patients. There was no statistical significance between the behaviours measured in this section and the years of service of the respondents.

The strongest correlation was observed between the respondents' qualifications and the demand for treatment of the patients and refusal of the treatment (p=39.400; χ^2=0. 000; df=6), (p=27.336; χ^2 =0. 000; df=6). The verbal and physical abuse did not indicate any statistical significance.

5.2.1.6 Assessing the Caritas factors knowledge and skills

In reference to the theoretical framework of the study, the ten carative factors formed the basis of the development of the questionnaire. The purpose of the section of the questionnaire was to measure the nurses' understanding of the specific behaviours as indicators of caring in the nursing profession. In each subsection, respondents were provided with the statement, which is an indication of either caring or non-caring behaviour. Based on their understanding of the statement they would rate it according to the Likert scale (strongly disagree, disagree, unsure, agree and strongly agree).

5.2.1.6.1 Formation of a humanistic-altruistic system of values

This carative factor has evolved to the caritas process of practising loving-kindness and equanimity for self and others. The statements, which were included in this subsection, are indicated in the figure 5.9 below.

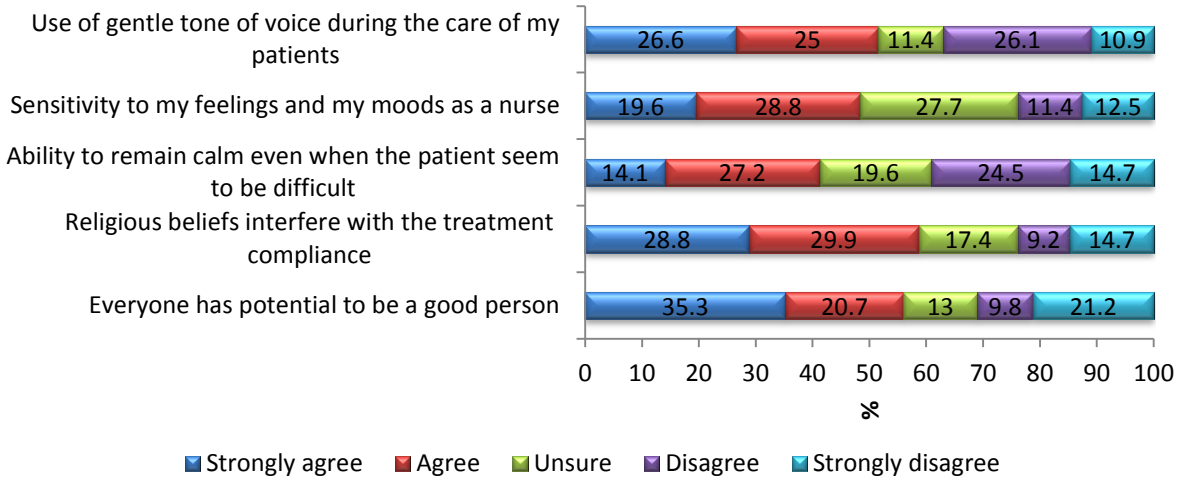


Figure 5.9 Caritas process 1: Formation of a humanistic-altruistic system of values

Irrespective of the high incidence of violence in the workplace, nurses remain optimistic that every person has the potential to be a good person and therefore should be treated with loving kindness (figure 5.9). The above statement affirms the suggestion that violence is triggered by environmental conditions that the person finds himself or herself in (Garrosa, Moreno-Jimenez, Liang and Gonzalez 2008:422).

From the five statements in this caritas factor, thirty-five per cent (35%) of respondents strongly agree that everyone has the potential to be a good person. This was accompanied by the use of gentle tone of voice when communicating with patients. Nurses also agree that personal feelings (28.8%) and the ability to remain calm even in the difficult situation (27.2%) contribute to the loving kindness.

		Value	df	Asymp. Sig. (2-sided)
Everyone has a potential to be a good person	Respondents, age	21.235a	12	.047
	Years of service	31.908a	8	.000
	Highest qualifications	30.698a	8	.000
Religious beliefs interfere with patient's treatment compliance	Respondents, age	9.886a	12	.626
	Years of service	22.710a	8	.004
	Highest qualifications	37.469a	8	.000
Remaining calm even when patients seem difficult	Respondents, age	18.189a	12	.110
	Years of service	30.334a	8	.000
	Highest qualifications	53.810a	8	.000
Sensitive to personal feelings as a nurse	Respondents, age	20.123a	12	.065
	Years of service	19.602a	8	.012
	Highest qualifications	40.992a	8	.000
Use of gentle voice	Respondents, age	30.712a	12	.002
	Years of service	41.605a	8	.000
	Highest qualifications	40.085a	8	.000

Table 5.5 Chi square results for caritas factor 1

The relationship, which is not therapeutic, may escalate from conflicts and complaints to hostile behaviour. Examples of such behaviour include verbal or physical abuse, refusal of treatment or rather the demand for treatment of the patients. In order to assess levels of relationship between the nurses and their patients, the researcher also included the extreme behaviour assessment as experienced by the nurses. Roche, Diers, Duffield and Catling-Paull (2010:17) discovered that even though nurses' experience violence in the workplace from different sources, violence from the patients to the nurses is acknowledged as the major challenge in maintaining a good relationship between the nurses and patients.

In this section the result was congruent with other studies in Africa, (Egypt) where 67.2% of nurses reported that they were exposed to violence in their workplace from patients (Mustafa, Lamiae, Amira, Abdel, Ayman 2010:35). Hegney, Tuckett, Parker and Eley, (2010:189) reported that violence in the public sector is high and continues to increase, which is congruent to this study. Kathleen and Hayes (2011:431) indicate that workplace violence irrespective of the source result in the loss of productivity, staff turnover, litigations and medical incidents which will then affect the quality of care that needs to be provided to the patients. As this element was not the primary objective of the study, the researcher will recommend that this area be explored further in other research opportunities.

Loving-kindness is more real than the temporary emotions of fear, despair, hurt or worry. When nurses believe that love and kindness is the cornerstone of the relationship, then they are able to instil faith and hope to a patient, which leads to the second caritas factor.

Ayaz et al, 2010: 451 indicated that trans-cultural challenges are not only limited to the customs and beliefs of the patients but include more variety of issues such a dialect, language and pronunciation of words. These variables were further explored in the narrative sections of the questionnaire.

In South Africa traditional and western medicine practices coexist and the patients use both systems concurrently (Grant, Haskins, Gaede and Harwood 2013:176). While nurses are aware of the importance of loving kindness, they also indicated that they feel that the cultural and religious beliefs of patients are negative forces that interfere with treatment compliance. Coker et al, (2010:144) rated culture as the third of forty most barriers to the effective management of chronic pain in adult patients.

Due to the negative phrasing of this statement in Caritas factor 1, the researcher further explored the question in the open-ended section of the questionnaire in order to ensure that the respondents were aware of the phrasing of the question. Even from the narratives, it was evident that there is a lack of consensus amongst the nurses relating to the statement and it is therefore explored further in the focus group discussion in phase 2 of the study.

5.2.1.6.2 Instillation of faith and hope

This subsection of the Caritas factor 2, explored the behaviours as displayed in figure 5.10. The effort by nurses to facilitate the process of encouraging the patients to believe in themselves was reported as the strong element in instilling faith and hope (33.2%) following the view that caring is the joint effort between the nurse and the patient (44.1%).

A quarter of respondents (25%) argued that as a nurse you need not support the faith of the patient. Only two of the chi square analysis done in this sub-section indicated that there is no correlation between the variables, measures. The summary of the results is presented in table 5.6 below.

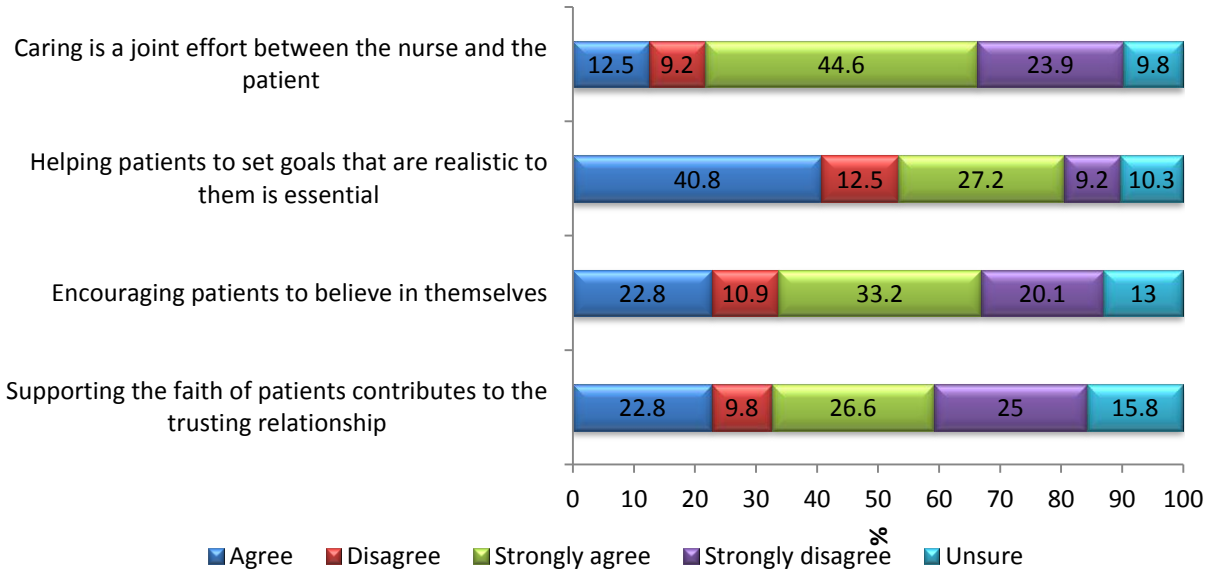


Figure 5.10 Caritas process 2: Instillation of faith-hope

Table 5.6 Chi square results for caritas factor 2

		Value	df	Asymp. Sig. (2-sided)
Supporting patients' faith contributes to the trusting relationship	Respondents, age	27.155a	12	.007
	Years of service	40.160a	8	.000
	Highest qualifications	41.952a	8	.000
Encouraging patients to believe in themselves	Respondents, age	18.105a	12	.113
	Years of service	31.158a	8	.000
	Highest qualifications	57.865a	8	.000
Assisting patients to set goals that are realistic	Respondents, age	19.735a	12	.072
	Years of service	51.184a	8	.000
	Highest qualifications	53.856a	8	.000

Caring is a joint effort between the nurse and the patient	Respondents, age	23.824a	12	.021
	Years of service	36.311a	8	.000
	Highest qualifications	41.338a	8	.000

The results also indicated some statistical significance as summarised in Table 5.7. The three variables which were not statistically significant are respondents' age and asking patients about their feelings (p= 17.827; χ^2 =0. 121; df=12); respondent's age and understanding things from the patient's viewpoint (p= 13.325; χ^2 =0. 346; df=12); years of service and seeing the strengths and weaknesses of individuals (p=11.754; χ^2=0. 163; df=8).

Tollefson, Usher and Foster (2011:483) in their study of the experiences of patients living with chronic pain indicated that patients were more devastated by the professionals (nurses) who do not understand their situation. Watson (2008:62) explains that for the nurse to offer hope for the next person who most often is the patient, she should possess such a hope herself. When a patient experiences illness, sense of loss, chronic pain or even loss of functionality, they need to be given the faith and hope. This report is linked to the earlier variable where the nurses and patient's cultural and religious beliefs interfere with treatment compliance. Williamson and Harrison (2010:764) warn that if cultural diversity is only viewed from the cognitive aspect of the definition of culture, this may lead to stereotyping amongst the health professional and thus lead to poor relationship in the health care system. Support, encouragement, realistic goal setting and joint effort were all necessary skills required by the PHC nurse in order to instil hope and faith to the patient (table 6.6)

This statement was also explored further in the open-ended questions in order to gain more understanding of the activities that will enhance such encouragement. Sometimes due the working conditions, nurses become hardened (figure 6.21) and become insensitive while losing their focus of being compassionate in performing their daily activities (Ward, Cody, Schaal and Hojat, 2012:36).

5.2.1.6.3 Cultivating the sensitivity to the self and others

Caritas factor 3 requires continued spiritual growth and insight from nurses indicated by some of such behaviours in figure 5.11.

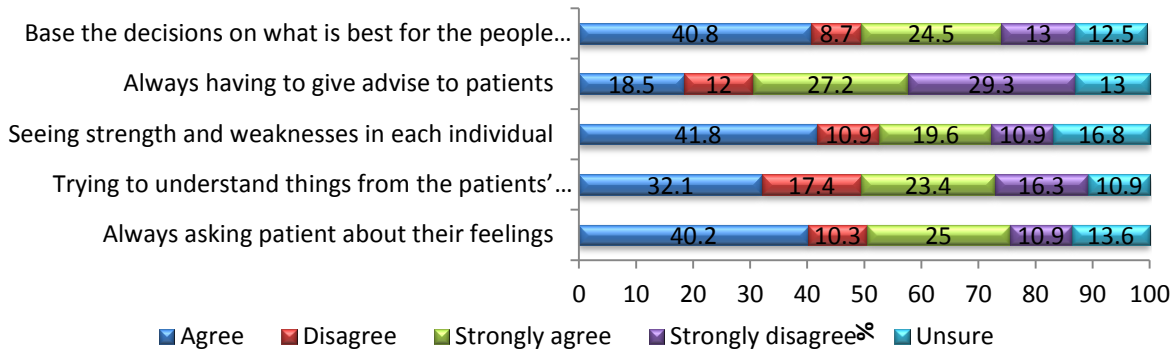


Figure 5.11 Caritas process 3: Cultivating the sensitivity to the self and others

There was almost a balance in the difference in opinion were nurses strongly disagree and strongly agree to the statement of always having to give advice to the patients (29.3% and 27.2% respectively). Basing the decision on what is best for the people involved, considering the strength and weaknesses in each individual and always asking patients about their feelings were all rated around 40% in agreement with the statements.

Table 5.7 Analysis of Caritas factor 3

		Value	df	Asymp. Sig. (2-sided)
Always ask the patient about his/her feelings	Respondents, age	17.827a	12	.121
	Years of service	35.631a	8	.000
	Highest qualifications	49.822a	8	.000
Try to understand things from the patients' point of view	Respondents, age	13.325a	12	.346
	Years of service	27.892a	8	.000
	Highest qualifications	39.548a	8	.000
See strength and weakness in each individual	Respondents, age	21.355a	12	.045
	Years of service	11.754a	8	.163
	Highest qualifications	25.710a	8	.001
Always having to give advice to patients	Respondents' age	26.671a	12	.009
	Years of service	38.867a	8	.000
	Highest qualifications	37.489a	8	.000
Base the decisions on what is best for the people involved	Respondents' age	29.504a	15	.014
	Years of service	29.217a	10	.001
	Highest qualifications	37.820a	10	.000

Table 5.8 did not indicate any statistical correlations while other variables indicated the strong correlations. Respondents with PHC qualification indicated that the nurse has the

responsibility to examine and discuss the health problems of the patient and not wait until the patients explains voluntarily.

Voster, Walker and Esterhuyse (2009:27) stated that the effective management of chronic pain should be multi-dimensional and the special focus should be given to the coping mechanism of patients who are living with chronic pain. The coping mechanisms are drawn from the cultural and traditional practices (Cioffi 2006:322). Various caring measurement tools as analysed in Watson (2009:108) agree with the respondents that involvement of patients in decision making, seeing strengths of a patient, asking about patient's feeling are strong indicators used to assess the level of caring in the health care system. Giving advice is not one of the recommended techniques in providing counselling to the patients. Advising does not translate in the behaviour modification of the two people who are having conversations (Dewing et al, 2013:1). This variable was explored further in the focus group discussions.

5.2.1.6.4 Development of the human care relationship of helping and trusting

As the nurse enters into a therapeutic relationship, it is not just the two in a relationship. The family, social environment, work environment and the community are also involved. It is the responsibility of the nurse to realise that, by considering the situational factors that may affect her relationship with the patient. About forty-three percent (42.9%) of the respondents in this study agreed with the statement above. Respondents also agreed to all other statements, which were assessed in this section of the study.

Thirty to thirty-three percent (30-35%) of the respondents strongly agree that faith and good NPR may assist the nurse in identifying the underlying and unexpected problem from the patient while reducing the hostility from the patients to the nurses. The essence of NPR was also explored further in the narrative section of the questionnaire. Figure 5.12 below is summarised other responses from the questionnaire.

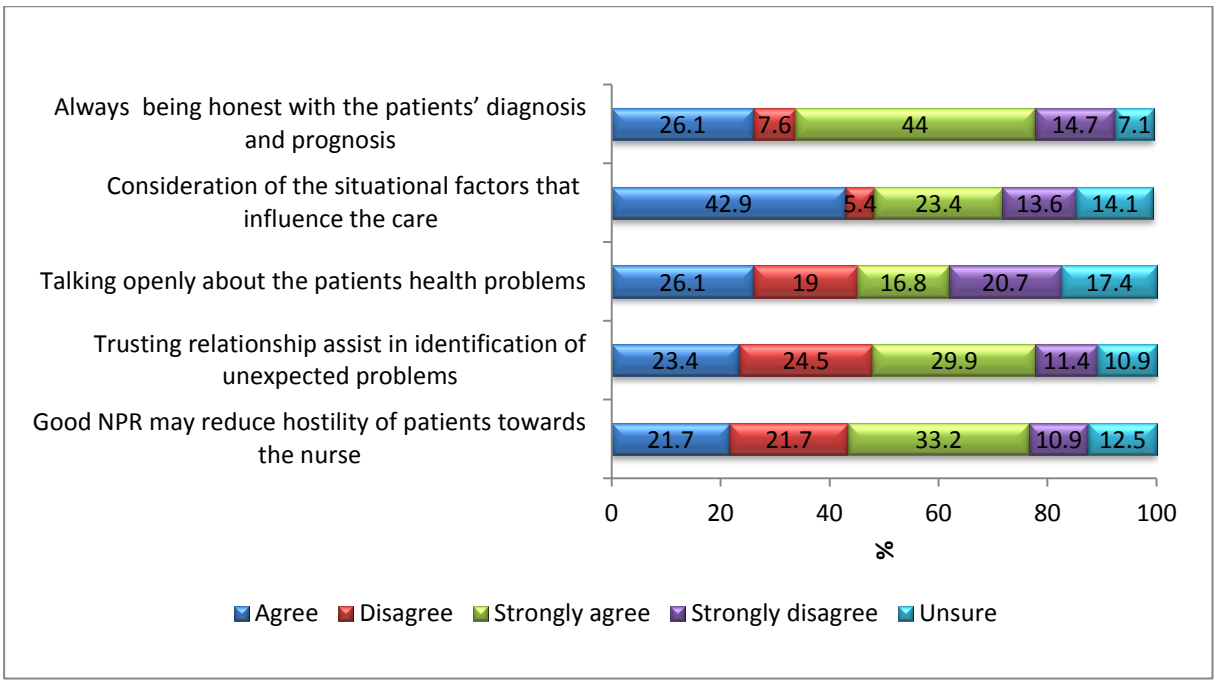


Figure 5.12 Caritas process 4: Development of helping and trusting relationship.

Table 5.8 Chi square results for Caritas factor 4

		Value	df	Asymp. Sig. (2-sided)
The good caring practices may reduce hostility of patients toward the nurse	Respondents' age	19.619a	12	.075
	Years of service	36.581a	8	.000
	Highest qualifications	36.160a	8	.000
Trusting relationship assist one in identification of the unexpected problems from the patient	Respondents' age	37.471	8	.000
	Years of service	36.199a	8	.000
	Highest qualifications	35.434a	8	.000
It is the responsibility of the nurse to speak openly about the patients' health problems	Respondents' age	8.951a	12	.707
	Years of service	12.533a	8	.129
	Highest qualifications	57.081a	8	.000
Consideration of the situational factors that influences care of patients	Respondents' age	61.693a	15	.000
	Years of service	15.123a	10	.128
	Highest	47.960a	10	.000

	qualifications			
Always being honest with the patient's diagnosis and prognosis	Respondents' age	28.621a	15	.018
	Years of service	19.489a	10	.034
	Highest qualifications	49.455a	10	.000

The variable relating to whether happy patients required the nurses attention did not have any statistical significance in cross tabulation for both the years of services and the respondents' age. There was also no statistical value for the variable of respondents' age and the discussion of sensitive issues with the patients. All other variables yielded the strong correlations between the cross tabulations (table 5.9).

The respondents in this study pointed out that developing a trusting relationship is influenced by situational factors. Reed (2010:30) summarises all the situational factors as the principle of wholeness, which refers to seeing a patient beyond the physical being but including the social, environmental, community and spiritual dimensions. Bambeke, Symons, Debaeye, De Winter, Schol and Van Rooyen (2010:670) also recommended that it is only through the consideration of the situational factors of the patient that the patient centred care can be realised.

The extended education received by the clinical nurse practitioner (PHC nurse) should allow her to identify the situational factors that may be essential in the development of the helping-trusting relationship as Bergman, Perhead, Eriksson, Lindblad and Fagerstròm (2013:330) discovered that the more qualified the nurses are, the more the patients are satisfied with the care they receive.

In the literature review, Camille (2010:27) argued that "time" is not the deciding factor in the establishment of good NPR but the proper utilisation of the first few minutes is critical. Mitchell (2007:80) commented that the patient might not remember the medication he was given but will always remember the person who gave him the medication even if the encounter lasted less than five minutes. The relationship is established between the nurse and the patient that influences the direction of the patient care. All the six themes were in alliance with the literature documented (Babler-Schrader and Schrader, 2011:373).

5.2.1.6.5 Promotion and acceptance of the expression of positive and negative feelings

The respondents understand that promoting and accepting the feelings of the patient is not to avoid talking about them. Respondents strongly disagree (25%) and additional thirty one per cent (31%) disagree that each patient's problem needs to be discussed irrespective of its sensitivity to the emotions involved.

While the respondents agree that expression of feelings by patients need to be promoted and accepted, they seem to be referring to the negative feelings. Nurses see their role as intervening only when there is a problem because 37.5% of the respondents agree that when patients are stable (positive feeling); they need no interaction with them. The highest percentage (32.6%) of respondents was not certain whether they should continue giving attention to the patients who are happy about the treatment plan for their chronic pain.

The majority of the respondents (40.2% agree and 32.1% strongly agree) indicated that the ability of the nurses to correct the incorrect data from the patients without hurting the patient is central to the promotion and expression of both positive and negative feelings.

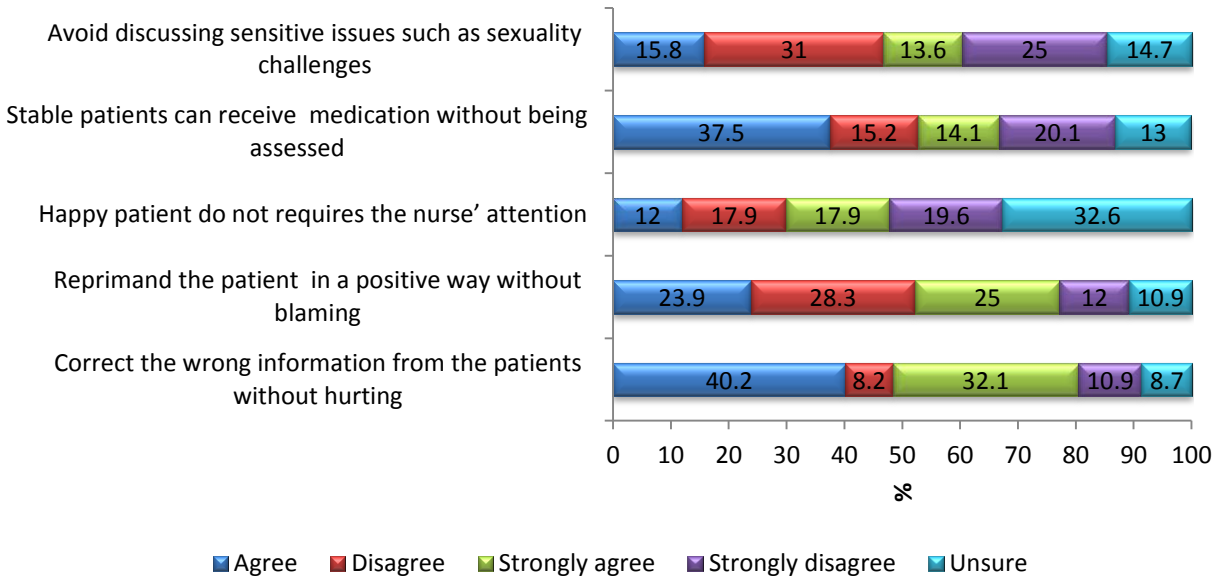


Figure 5.13 Caritas process 5: Promotion of the expression of positive and negative feelings

Table 5.9 chi square result for Caritas factor 5

		Value	df	Asymp. Sig. (2-sided)
I can correct the incorrect information from the patients without hurting his feelings.	Respondents' age	29.176a	12	.004
	Years of service	27.842a	8	.001
	Highest qualifications	51.873a	8	.000
I can reprimand patient for non-compliance with treatment plan positive without blaming	Respondents' age	32.703a	12	.001
	Years of service	49.340a	8	.000
	Highest qualifications	36.530a	8	.000
In my opinion, happy patients do not require the nurse's attention	Respondents' age	14.121a	12	.293
	Years of service	12.563a	8	.128
	Highest qualifications	59.187a	8	.000
Stable patients can just receive their medication without being assessed by nurse at the PHC	Respondents' age	24.889a	12	.015
	Years of service	17.584a	8	.025
	Highest qualifications	33.354a	8	.000
I avoid discussing sensitive topics such as sexuality challenges with patients	Respondents' age	11.162a	12	.515
	Years of service	21.462a	8	.006
	Highest qualifications	51.714a	8	.000

Chronic pain is the lived experience of the people who are living with it. The complexity of the chronic pain results from the interaction of the emotional, social and physical aspect of an individual leading to the compromised quality of life of the patient (Dysvik et al, 2011:38). Chronic pain may or may not be associated with debilitating conditions or end of life stage of the condition and it therefore raises emotional fear in the patients who are living with it.

Nordby (2007:19) indicated that it is an assumption that nurses understand how patients think and feel about themselves. Patients living with chronic pain sometimes feel hopeless, miserable and lose hope in the health care system (Maree, Wright and Makua, 2009:7). In such instances, it is the responsibility of the nurse to assist the patient to feel good about him or herself. Thoughts and emotions are central to the

human behaviour and experiences (Watson, 2008:102). In any human interaction, good or bad feelings that are experienced supersede the information exchanged in the conversation. This variable was explored further in the narrative sections in order to identify the activities that the nurses are doing in order to make patients feel good about them.

In realising the departmental guidelines of the “fast queue” with the purpose of reducing waiting time for the patients, where stable patients just collect medication without interacting with the nurse and the high percentage of uncertainty about this aspect (happy patients do not require nurse’s attention) was explored further in the focus group discussions in order to clarify the stance of the nurses about the situation.

5.2.1.6.6 Systematic use of the scientific problem-solving method for decision making

Nurses in the PHC setting are working independently with no direct oversight of the medical practitioner. It is therefore their responsibility to diagnose, prescribe and issue the medication. In this section, the nurses (42.4%) strongly agree that referring to the patients’ previous records will enhance the scientific direction of the patient’s chronic pain (figure 5.15).

Respondents (40.8%) also indicated that in their working situation they are aware of the treatment guidelines that need to be observed in order to manage patients with chronic pain more effectively. There was a disagreement (38%) and the additional (13.6%) strong disagreement with the fact that the social status of an individual may influence the nurse attitude when managing patients with chronic pain (figure 5.14). This was in line with the commitment of the nurse in their pledge where they argue that the patients will be treated equally regardless of race, colour or social standing in the society.

Nearly 30% of the respondents agree that it is the severity of the patient’s condition and the individualised plan of care that determines the scientific management of the patient with chronic pain.

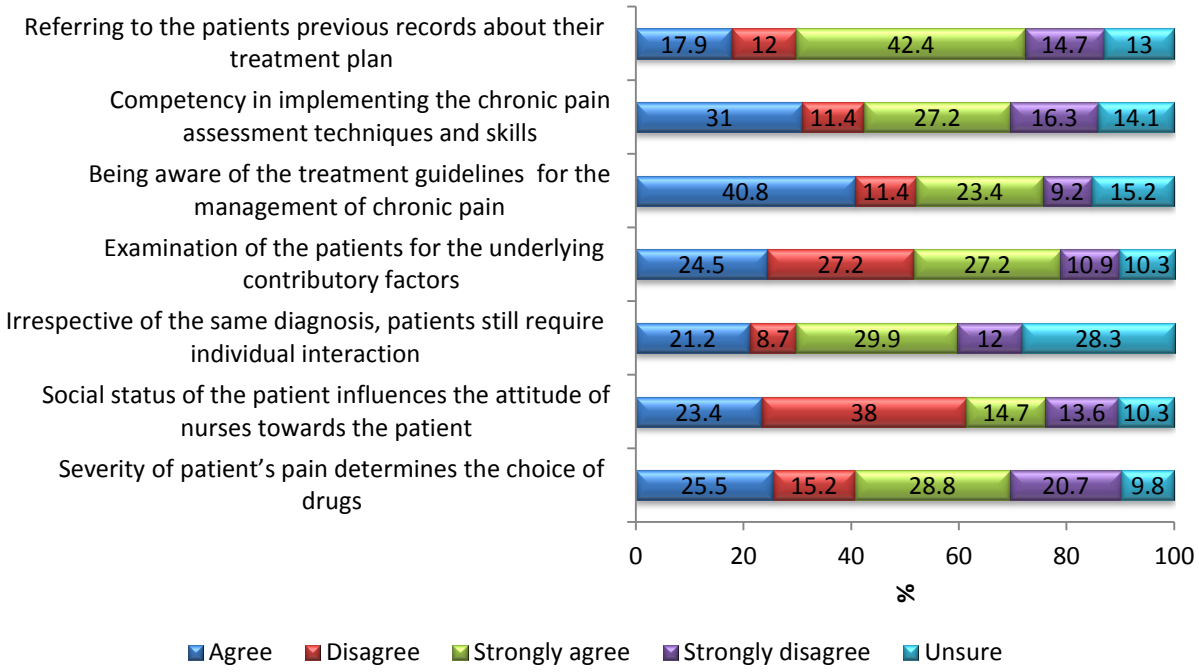


Figure 5.14 Caritas process 6: Systematic, scientific problem-solving method for decision making

The statistical significance in all the variables measures in this section of the study suggest that there is general confidence amongst the nurses in managing patients suffering from chronic pain

Table 5.10 Analysis of Caritas factor 6

		Value	df	Asymp
The severity of patient's pain determines the choice of drugs in the management of chronic pain	Respondents' age	25.014a	12	.015
	Years of service	33.096a	8	.000
	Highest qualifications	25.116a	8	.001
The social status of the patients influences the position of nurses towards the patients	Respondents' age	31.387a	12	.002
	Years of service	29.852a	8	.000
	Highest qualifications	29.468a	8	.000
Irrespective of the same diagnosis, patients still require individual interaction with the nurse	Respondents' age	45.461a	12	.000
	Years of service	37.016a	8	.000
	Highest qualifications	45.663a	8	.000
Examines the patients for underlying contributory factors to their pain	Respondents' age	36.664a	12	.000
	Years of service	45.272a	8	.000
	Highest qualifications	46.359a	8	.000
Being aware of the treatment guideline available for the management of chronic pain	Respondents' age	23.735a	12	.022
	Years of service	37.771a	8	.000
	Highest qualifications	32.718a	8	.000
Competency in implementing the chronic pain assessment techniques and skills	Respondents' age	26.124a	12	.010
	Years of service	23.036a	8	.003
	Highest qualifications	35.092a	8	.000
Referring to the patient previous records about their treatment plan the was discussed in the last visit	Respondents' age	28.896a	12	.004
	Years of service	34.310a	8	.000
	Highest qualifications	47.107a	8	.000

The statistical significance in all the variables measured in this section of the study suggests that there is general confidence amongst the nurses in managing patients suffering from chronic pain.

The nursing process is one of the scientific tools that were adopted in assisting the nurses in systematically solving the patients' problems. In the hospital situation, such a tool is based on individual activities that are planned by the nurse to perform on the patient in order to solve a particular health challenge. In a PHC setting, the activities planned following the assessment will be implemented by the patient at home. The statements in the subsection of the questionnaire were based on the broad principles as they apply to the PHC setting.

The uncertainty was identified when the same percentage of respondents contradicted each other (disagree and strongly agree) on the examination of the patient in order to identify the underlying contributory factor of the patients who are suffering from chronic pain (figure 5.14). Even though the patients' expectations from the health facilities are to establish the diagnosis so that they can be believed when reporting the severity of pain (Allcock, 2007:249), chronic pain does not always have an underlying cause (Moore, 2011:137). It is therefore essential that the PHC nurse is skilled to use all forms of knowing in order to manage patients who are suffering from chronic pain.

5.2.1.6.7 Promotion of transpersonal teaching and learning

In the results indicated below, nurses strongly agree (35.9%) and agree (39.7%) that teaching functions are what they liked most in their interaction with patients.

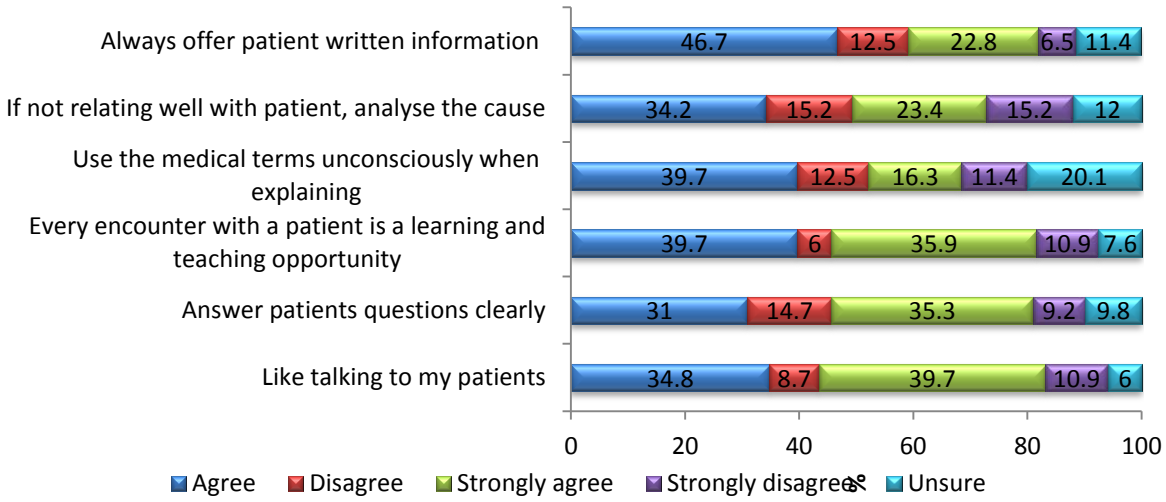


Figure 5 15 Caritas process 7: Promotion of transpersonal teaching and learning

The chi square results in Table 5.11 indicated the combination of significant and non-significant statistics between variables studied in this section. The use of "medical terms" while interacting with the patient was not statistically significant for both the respondent's age and the years of service (table 5.11)

Table 5.11 Chi square results for Caritas process 7

		Value	df	Asymp. Sig. (2-sided)
Enjoy talking to my patients	Respondents' age	31.898a	12	.001
	Years of service	31.283a	8	.000
	Highest qualifications	62.614a	8	.000
Answering patients questions clearly	Respondents' age	25.128a	12	.014
	Years of service	32.408a	8	.000
	Highest qualifications	43.794a	8	.000
Every encounter with a patient serves as learning	Respondents' age	29.997a	12	.003
	Years of service	26.924a	8	.001

and teaching opportunity for the nurses and patient	Highest qualifications	33.369a	8	.000
Sometimes use the medical terms unconsciously when explaining the condition of the patient	Respondents' age	13.596a	12	.327
	Years of service	14.595a	8	.068
	Highest qualifications	51.533a	8	.000
If not relating well with the patient, I try to analyse what I can do in order to reach patient	Respondents' age	22.534a	12	.032
	Years of service	41.892a	8	.000
	Highest qualifications	34.957a	8	.000
Always offer patient written information to remind him at home	Respondents' age	23.112a	12	.027
	Years of service	15.341a	8	.053
	Highest qualifications	25.170a	8	.001

The expectation from the nurse is to provide information to the patient but Watson (2008:31) highlights that the conventional way of giving information to the patient is less effective as compared to the coaching technique. Figure 5.15, indicated that nurses believe that when you offer a patient written information you are fulfilling your role as the professional nurse. This is contrary to the principles of coaching where written information should only be used as the supplementary process following interaction with the patient.

The management of chronic pain in patients requires a combination of both pharmacological and non-pharmacological interventions. The latter requires lifestyle modification, which patients need to learn in order to change their behaviour. The literature study (Friberg, , Granum, and Bergh, 2012:179) revealed that irrespective of the nurses acknowledging that teaching is their core function, the task is not fulfilled structurally but rather is implemented haphazardly. The study further indicated that the education programmes for the patients did not translate into patient empowerment.

Patient education is often carried out for the purpose of ticking off the key performance areas for nurses and not for results in health promotional activities. Nurses are

sometimes guilty of not practicing health promotion activities regularly for personal self-care (Carlson and Warne, 2007:510). The inclusion of this subsection in the questionnaire was to establish the nurses' commitment to the teaching and learning role in their interaction with patients. Even though McElligott et al (2009:213) reiterates that nurses irrespective of their educational level, they do not comply with health promotion activities and often received superficial education about teaching patients strategies to modify lifestyle respondents, in this study respondents are confident that education is essential (figure 5.15).

Scott et al (2008:142) realised that in cases where there are challenges in the relationship between the nurses and the patients, most often the blame is put on the patients. In providing e-learning approaches, nurses will be able to reflect on their own behaviour and learn strategies to improve their relationship with the patients.

Together with counselling and communication from the sections discussed earlier in the study, teaching strategies formed part of the observation in phase 2 of the study; the details of the report are discussed in chapter 6 of the study report.

5.2.1.6.8 The provision of the supportive, protective, and/or corrective healing environment at all levels

Even though nurses strongly agree that spiritual needs are the responsibility of the family (26.1%), they see their role as nurses as respecting such spiritual practices (40.2%). Almost twenty per cent (19.6%) of the respondents were not sure of who should be responsible for the spiritual needs of the patient.

The qualifications of the respondents demonstrated the strong statistical significance to the variables measures in this section as compared to the non-significance with the respondent's age and the years of experience (table 5.12).

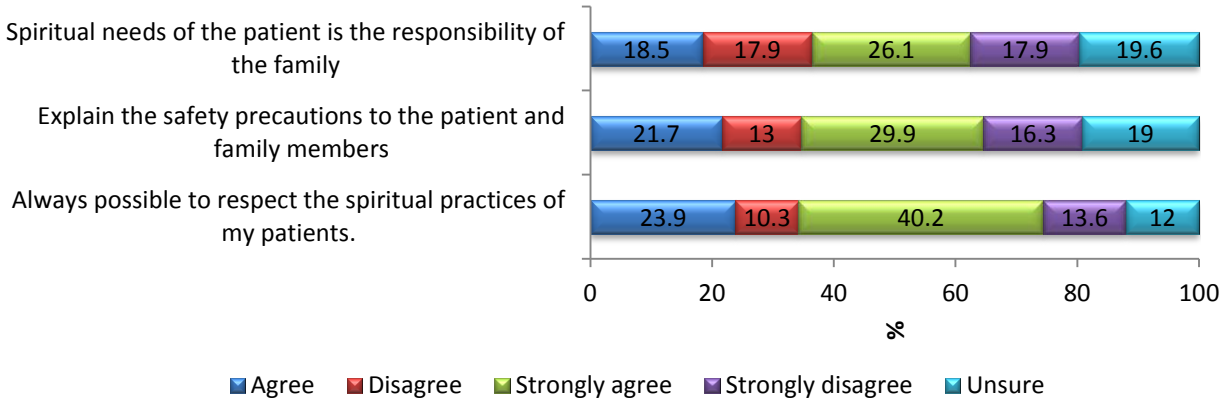


Figure 5.16 Caritas process 8: creating a healing environment at all levels

Table 5.12 Chi square results for Caritas factor 8

		Value	df	Asymp. Sig. (2-sided)
As a nurse, it is always possible to respect the spiritual practices of my patients	Respondents' age	27.276a	12	.007
	Years of service	16.109a	8	.041
	Highest qualifications	56.384a	8	.000
Explaining the safety precautions to the patient and family members.	Respondents' age	7.598a	12	.816
	Years of service	25.007a	8	.002
	Highest qualifications	53.803a	8	.000
The spiritual needs of the patient is the responsibility of the family	Respondents' age	12.948a	12	.373
	Years of service	26.627a	8	.001
	Highest qualifications	55.824a	8	.000

Patient openness is regarded as one of the pillars of creating a healing environment within the caring practices (Lourdes & Tejero 2010:610). When patients realise that the environment is safe and secure enough, they are then open to talk about their

challenges. The nurse has the reciprocal obligation to ensure that she/he creates such an environment. This question was intended to explore the activities made by the respondents in order to create openness from the patient. The responses were congruent to the literature (Moir, van den Brink, Fox and Hawken 2009:69) and therefore affirmed that the respondents are aware of their responsibility in creating the environment that is safe enough for the patients to be open.

Carron and Cumbie (2011:555) warned that holistic care is not complete until the spiritual care is also considered. They further indicated that only when the nurse patient-relationship is established well enough to instil trust in the patient, spirituality care might not be fully taken care of. Not undermining the other dimensions of care in the management of patients with chronic pain, special focus was on spiritual health as chronic pain a debilitating condition as explained in the introduction of the study and the management plan is not complete if it does not include spiritual care (Tiew, Creedy and Chan, 2013:576).

Taylor (2007:45) warned that patients can only accept the spiritual care of the nurses who have demonstrated loving-kindness (Caritas factor 1), ability to instil hope (Caritas factor 2) and those that they can trust (Caritas factor 4). The spiritual care of patients was integrated into the focus group discussion (phase 2 of the study, Chapter 6) relating to the cultural and religious beliefs of the patient based on its complexity of integrating several Caritas factors under study The focus group discussion also included the type of education that is included in the PHC training that assists nurses to gain confidence in the management of the spiritual needs of the patient.

5.2.1.6.9 The assistance with the gratification of human needs

In this study, respondents also supported the assumption by agreeing to the assertion that self-actualisation needs can be achieved if basic needs are met (37%). On the other hand, respondents indicated that they are not certain if patients' reason for visiting the clinics is for physical health (35.9%). Due to the high uncertainty in this variable, it was further explored in the focus group discussion (phase II of the study).

Only above a quarter (26.6%) strongly agree that emotional pain requires as much attention as physical pain. The qualifications of the nurses indicated a strong association with all variables measured in this Caritas factor followed by the years of

service as tabulated below (table 5.13) which is the same pattern as indicated in the variables measured in carats factor 8.

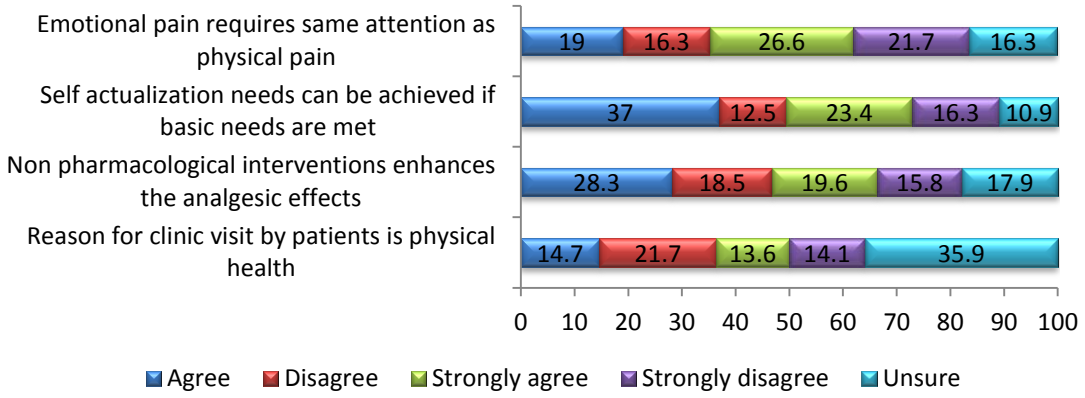


Figure 5 17 Caritas process 9: The assistance with the gratification of human needs

Table 5.13 Chi square results for caritas factor 9

		Value	df	Asymp. Sig. (2-sided)
Patients reason of the visit to the clinic is for physical healing	Respondents' age	17.799a	12	.122
	Years of service	21.575a	8	.006
	Highest qualifications	27.218a	8	.001
Non pharmacological management of chronic pain enhances analgesic effects the pain medication	Respondents' age	23.509a	12	.024
	Years of service	19.015a	8	.015
	Highest qualifications	38.637a	8	.000
Self-actualisation needs can only be achieved if the basic needs have been satisfied	Respondents' age	14.928a	12	.245
	Years of service	24.051a	8	.002
	Highest qualifications	30.961a	8	.000
The emotional pain for the patients requires the same attention as the physical pain	Respondents' age	19.831a	12	.070
	Years of service	23.388a	8	.003
	Highest	34.171a	8	.000

	qualifications			

Chronic pain can affect the ability of the patient to satisfy low and high level human needs. From the history of nursing, identification and satisfaction of basic needs of the patients are primary to all nurse practitioners but often there is an assumption that when basic needs are met then the higher order needs will also be met (Moore, 2011: 400-410). In this sub-section of the study, the focus is on higher order needs such as self-actualisation, emotional needs and the need for affiliation.

Watson (2008:147) indicates that the human body is the whole being and therefore if any dimension of the body is affected then the human being is wholly affected. It therefore indicates that the physical touch results in emotional healing for the patient. In a good NPR, nurses have the ability to touch the soul of the patient. Applying some form of non-pharmacological interventions such as massage, therapeutic touch, sharing space and even aromatherapy are seen as physical activities but they also assist in meeting the self-actualisation needs of the patient.

5.2.1.6.10 Allowance for existential-phenomenological-spiritual forces

Respondents agree (29.3%) that they do believe patients as they report their pain. Of interest was the fact that about thirty per cent (29.3) respondents disagree that nursing is a rewarding career for them while (19.6%) agree that nursing is less satisfying than they thought. Nearly a quarter of nurses are not certain (23.9%) whether nursing is satisfied or not.

Even though (30%) respondents were convinced that they are not challenged by working with people from the different cultures, 25% indicated that they regard that as a challenge. Forty-one percent of the respondents agree that they have a challenge in conveying empathy for the patients, while 28.8% also indicated their uncertainty in helping patients feel good about themselves. In the statistical analysis, the variables (nursing is a rewarding career for me) indicated the strong association (0.000) with all the three independent variables of the study (respondents' age, highest qualifications and the years of service).

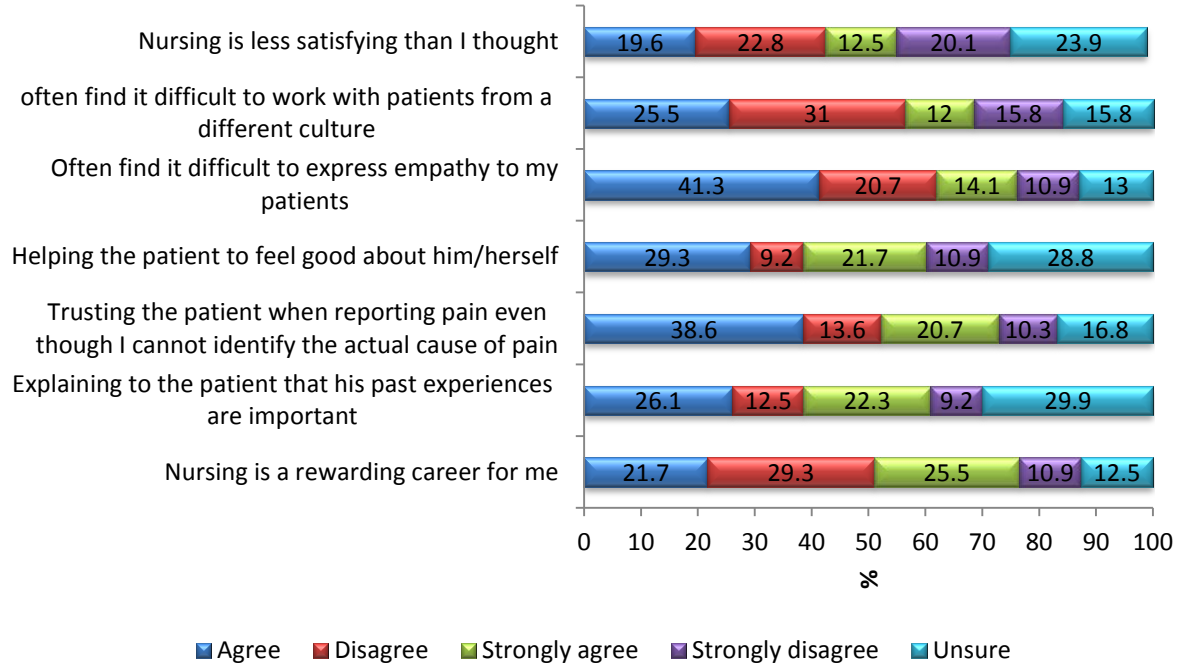


Figure 5.18 Caritas process 10: Allowance for existential-phenomenological-spiritual forces

Table 5.14 Chi square results for Caritas factor 10

		Value	df	Asymp. Sig. (2-sided)
Nursing is the rewarding career for me	Respondents' age	38.820a	12	.000
	Years of service	36.087a	8	.000
	Highest qualifications	35.755a	8	.000
I explain to the patient that his past experience is important in the management of his condition	Respondents' age	36.356a	12	.000
	Years of service	26.947a	8	.001
	Highest qualifications	36.303a	8	.000
I trust the patient when reporting pain even though I cannot identify the actual cause of pain	Respondents' age	16.319a	12	.177
	Years of service	30.643a	8	.000
	Highest qualifications	39.659a	8	.000

I help the patient to feel good about himself/herself	Respondents' age	37.888a	12	.000
	Years of service	14.049a	8	.080
	Highest qualifications	33.989a	8	.000
I often find it difficult to express empathy to my patient	Respondents' age	25.185a	12	.014
	Years of service	14.049a	8	.080
	Highest qualifications			
I often find it difficult to work with patients from different culture than mine	Respondents' age	25.811a	12	.011
	Years of service	9.732a	8	.284
	Highest qualifications	23.655a	8	.003
Nursing is less satisfying than I thought	Respondents' age	26.873a	12	.008
	Years of service	9.988a	8	.266
	Highest qualifications	20.398a	8	.009

In this factor it is clear that nurses need to acknowledge the fact that science does not have the answer to all the health challenges that human beings are experiencing. This is more relevant to the chronic pain as some patients experience the chronic pain with no underlying contributory factors and nurses have to believe the patient as they report their pain (Lavie-Ajayi et al, 2012:196).

This section was further explored in the narrative section of the questionnaire in order to explore the reason for the choice of nursing career. Diab, Flack, Mabuza and Reid (2012:3) indicates that sometimes the choice of career is not based on rational choice relating to the requirements of the career but rather the pragmatic utilisation of the opportunity as it arises. Watson (2008:143) reminds nurses that they are honoured and privileged to be given an opportunity to provide care to others and that should be done with their full commitment.

Diab et al, (2012: 2251) in the study conducted in South Africa it indicated that the choice of career is often influenced by the role modelling from the people who are already in the profession, motivation from family members, feeling that there is a need to help the community. As literature (Scott, Engelke and Swanson, 2008:80) indicates that the reasons for entering the profession are not necessarily the reasons for

remaining in the profession, the responses indicate that the activities in the profession are the ones that motivate the respondents to remain in the profession.One of the disadvantages of the self-administered questionnaire is the fact that questions are subject to the different interpretation by the respondents and your unavailability during the answering of the questions deny you an opportunity to clarify some of the questions (Bernard, 2011:193).

Based on the feedback from the pilot section of the questionnaire, some of the questions, which were not very clear, were further explored as open-ended questions in order to verify the understanding of the question asked earlier in the Likert scale section. The next section provides a summary of the responses from the respondents.

5.2.1.7 How does nurse patient relationship impact on the management of patients with chronic pain

The purpose of this question was to establish the respondents' understanding of the significance of NPR when managing patients who are suffering from chronic pain. Responses were segmented into sentences and then open coding was used. As this process is not the end of the study, the codes developed from this section will further be explored together with the qualitative phases of the study. Figure 5.20 summarises the themes that were produced from the respondents.

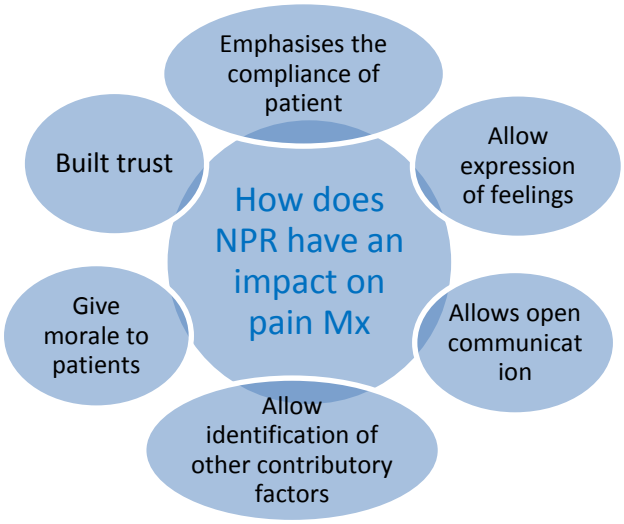


Figure 5.19 Themes for relationship between NPR and chronic pain management

5.2.1.8 The experience of benefits of good nurse patient relationship

As the nurses understand the impact of the NPR, the next question was for the respondents to explain their experiences of the benefits of good NPR. As the responses were analysed, the researcher categorised the benefits into the patient and the nurse/system. Figure 5.21 below is summarised the responses from the respondents.

Benefits to the nurses and health system

Benefits to the patient and family

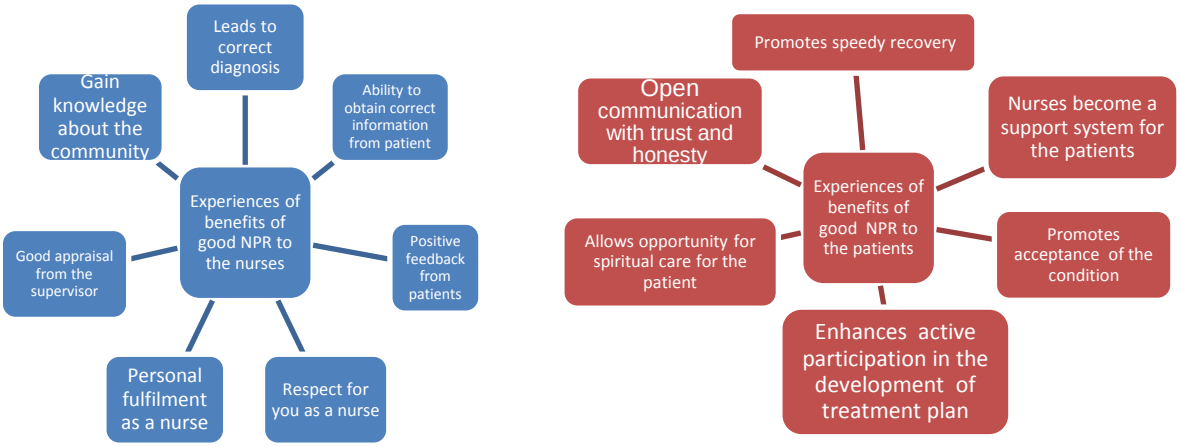


Figure 5.20 the experience of benefits of good nurse patient relationship

5.2.1.9 The nurses' experiences of poor nurse patient relationship

This question explored the experiences of nurses about the poor NPR. Nurses also acknowledged that some of their colleagues are making their work more difficult because they are "rude". Figure 5.21 summarises some of the experiences of nurses.

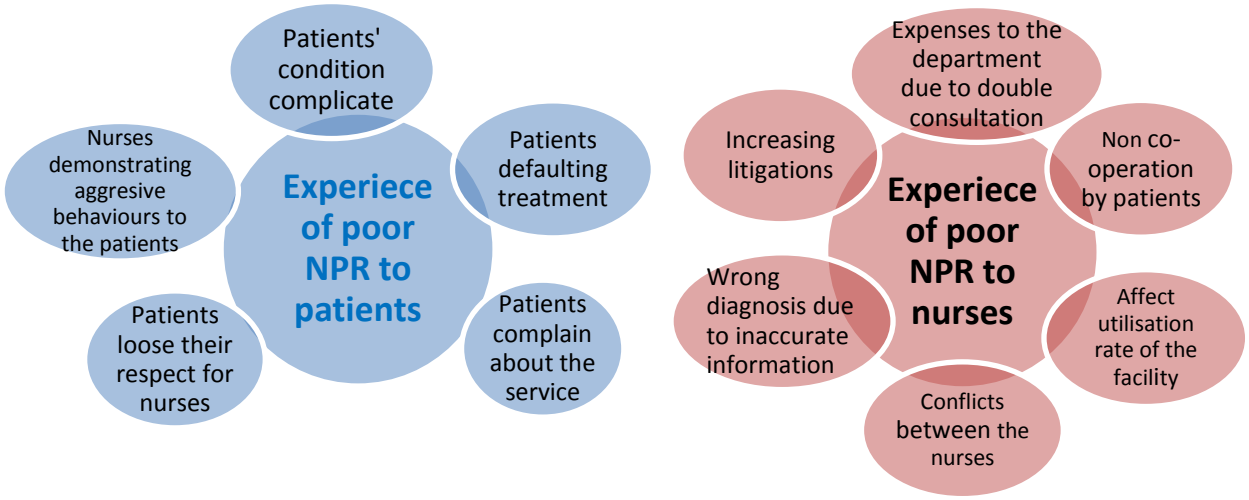


Figure 5.21 the nurses' experiences of poor nurse patient relationship

One of the respondents, after explaining the impact of NPR in the management of patients with chronic pain, she further wrote “BUT”

“*Sometimes patients come with an attitude that all the nurses are the same and I agree that some nurses are rude or impatient with the patient(s)”*

In this study, it was also apparent that some pattern of reflections by the nurses’ behaviours is essential. Some of the direct quotes from the respondents below are indicative of that.

“Rude nurses who do not know how to treat patients”

“Nurses judge patients”

“Nurse using vulgar words to the patients”

“Criticism of patients by nurses”

From these phrases, it may also be interpreted that the relationship does not start from the physical encounter between the nurse and the patient but can also be established from the previous experiences with similar encounter. It may also raise awareness that even though the encounter can be for a short period, the impact has the long-term effects.

5.2.1.10 Cultural beliefs and traditional practices as factors contributing to the non-pharmacological management of patients with chronic pain

This question explored the nurses understanding of the impact of cultural and traditional practices that may be beneficial in the management of chronic pain and consider such practices when establishing the relationship with patients. The responses were sorted into three categories: Positive, negative and neutral stance of the responses to the statement.

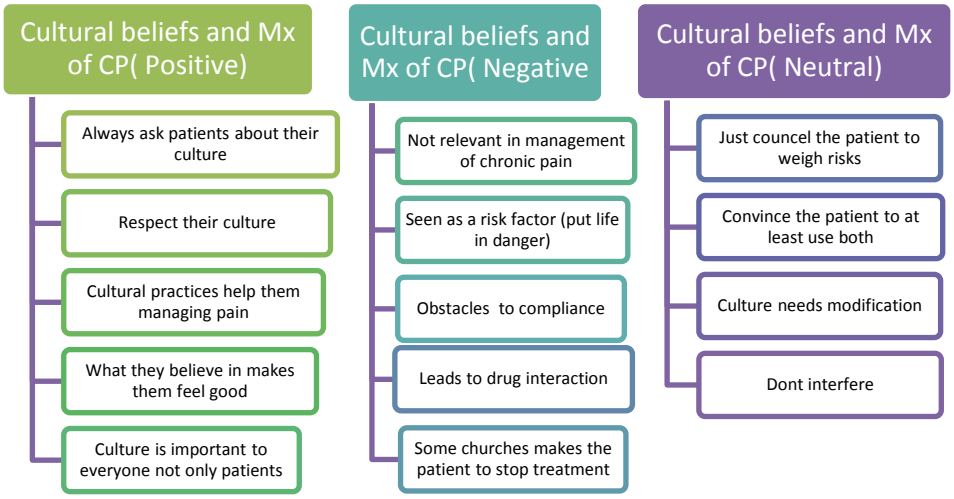


Figure 5.22 cultural and traditional practices as factors in management of chronic pain

5.2.1.11 How nurses help the patients to feel good about themselves

In this question when respondents were asked about how they make patients feel good about themselves, their responses were summarised: The responses were more generic and according to the literature, this was further explored during the phase 2 of the study during the participant observation sessions.

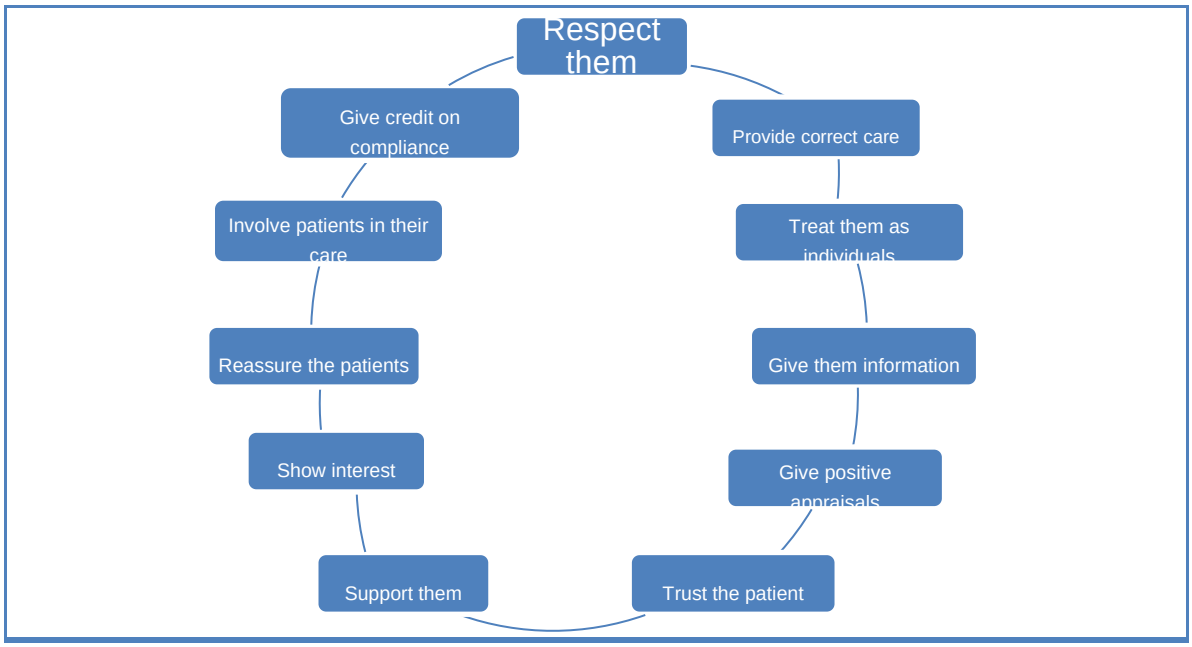


Figure 5.23 Responses to how to help patients to feel good about themselves

5.2.1.12 how the nurse encourages patients to be opens about their challenges in living with chronic pain?

The responses were classified according to the categories as indicated in table 5.15 below.

Table 5.15 Strategies to encourage the patient to be open about their challenges

Professional approach	**Systems enablers**	**Personal qualities and attributes**
Being a good listener	Allow choice of health practitioner	Be open and honest
Set up a trusting relationship	Tell the patient about other support systems available	Be authentically present
Ask open ended questions	Easy way to create privacy	Share your experiences with the patient
Give advice where appropriate	Give written information	Minimise distractions and interruptions
Allow for expression of feelings		Show empathy and understanding
Give the patient the opportunity to ask questions		Tell the patients about the benefits of being open.

5.2.1.13 what do you like in nursing as a career?

In summarising the knowledge, skills, experiences and caring behaviour assessment in the management of patients with chronic pain, respondents were asked to share their reasons for selecting nursing as their career.

Table 5.16 what nurses like about nursing as a career

What do you like about nursing as a carreer	Saving lifes
	Dealing with different conditions
	Personal growth
	Positive feedback from the patients
	Self fulfilment
	Being next to the patients
	Making difference in the society
	Knowledge of knowing a person
	Listening and examining the patients
	Learning opportunity
	Motivating people

The analysis of the quantitative phase of the study follows the sequence of results presentation. The demographic data of respondents is followed by the demonstrations of caring behaviours, assessment of knowledge and skills of the respondents, the ability of the respondents' to manage chronic pain effectively, the level of exposure to violent behaviour from the patients and finally the analysis of the understanding of the caring practices as presented through the caritas factors/ processes.

5.2.2 Summary of the chapter

The results confirm the perception of nurses that they are providing is individualised care (Suhonen, Efstathiou, Tsangari, Jarosova, Leino-Kilpi, Patiraki, Karlou, Balogh and Papastavrou, 2010:1167). There are several aspects of the survey that required further explanation and they will form the basis of discussion for chapter 6 (qualitative study results). Those aspects include reasons for not practicing the caring behaviours; translation of high knowledge and skills of the professional nurses into the caring behaviour practices; aspects relating to the communication and counselling skills; spiritual care of the patients, encouraging patients to express their feelings and supporting such feelings; teaching strategies for the patient and managing patients who are stable in their condition.

CHAPTER 6
DATA PRESENTATION AND ANALYSIS: QUALITATIVE PHASE

6.1 INTRODUCTION

Chapter 5 of the study presented the results from the quantitative survey. Based on the methodological choice of the study (sequential explanatory mixed method), the data collection and analysis of this phase could only be done following the analysis of data from quantitative phase. Chapter 6 presents the data and the analysis of a path from the qualitative phase.

6.1.1 Structure of the chapter

The data collection approach in this phase of the study combined focus group discussions and observations. The data presentation, analysis and interpretation occurred within the same timelines (figure 6.1). The purpose of this chapter is to answer objective 3 and 4 of this study (to observe the caring practices within the nurse patient interaction for the patients suffering from chronic pain in the Primary health care setting; to explain the nurses' caring practices when managing their chronic pain in the primary health care setting)

Liamputtong (2011:318) describes the three different ways of presenting qualitative data: Option1: report without interpretation, Option 2: report and add some interpretation in order to make connections between the reported statements and Option 3: report, interpret and analyse in depth. The researcher used option 3 for the presentation of this research report and the rationale for the choice is explained in section 6.1.2 below.

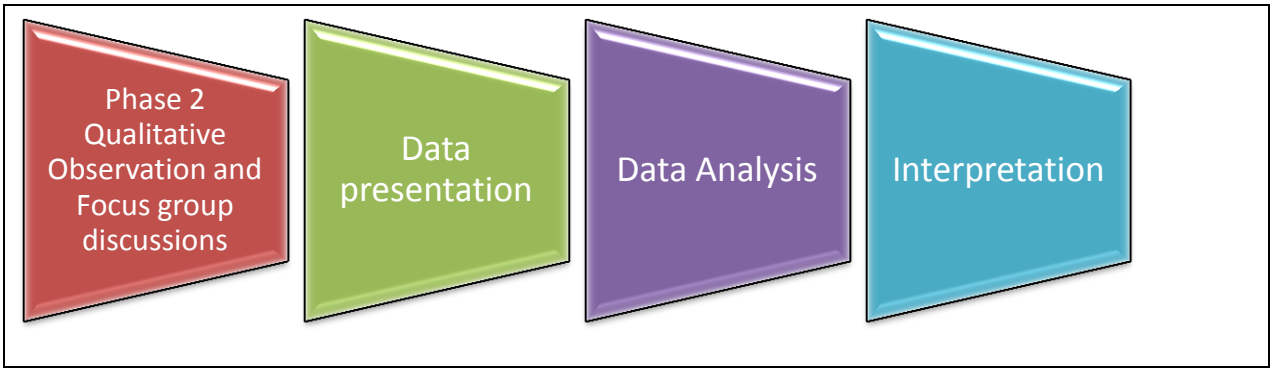


Figure 6.1 Structure of the chapter

6.1.2 Rationale for the data presentation style

Creswell (2009:220) recommends that the report presentation of the mixed method study should use two distinct phases with separate headings (Chapters). In this as referred to in chapter 5, while the integration of the methods happens at the interpretation level (chapter 6). The separation also clarifies the time lines of different phases of the study, in chapter 5, time lines between data collection and data analysis is different while in chapter six both data collection and analysis happens within the same timelines (figure 6.1).

The presentation of qualitative study prioritises subjective data over the objective data and it is written in a first person language, which is different from the quantitative research report (Liamputtong, 2011:318). Such separate presentation allows logical sequence across the data sets (Mengshoel, 2012:374). Onwuegbuzie and Johnson (2006:53) warned that sometimes such a presentation might result in a lack of integration of the research method, which will then jeopardise the legitimacy of the research study. For this study, the integration of results from different phases of the study is integrated in the data interpretation and discussion Chapter. Curry, Nembhard and Bradley (2009:1449) reiterated that separate quantitative and qualitative data presentation allows the plausible explanation of the phenomenon under study. However, they indicated that if the rationale of using mixed method is clearly explained, as is the case in this study (Chapter 4), the sequential presentation of results is acceptable.

Mixed method design is recommended in the research where there is a multidisciplinary team with different areas of expertise. In this study because there is a single researcher the separate presentation of the data assisted the researcher to ensure the scientific completeness of the data (Curry et al, 2009:1449).

6.2 PHASE 2: QUALITATIVE DATA PRESENTATION

The qualitative phase of the study implemented the two different data collection techniques, which were used to triangulate the data collection process, which in turn improved the rigour of the study (Liamputtong, 2011:317). The data collection techniques were participative observation and the focus group discussion. The report of

this study presents the report of these techniques in different sections of the same chapter (chapter 6).

6.2.1 Data presentation of participant observation

The purpose of the observation as indicated in chapter 4 of the study was to observe caring behaviours as demonstrated by nurses during their interaction when managing patients with chronic pain.

6.2.1.1 Data results for participative observation

6.2.1.1.1 Participants

Participants were not restricted to choosing one but could choose any data collection technique that they felt comfortable with. The summary of the participants who were mentioned in the survey is presented below:

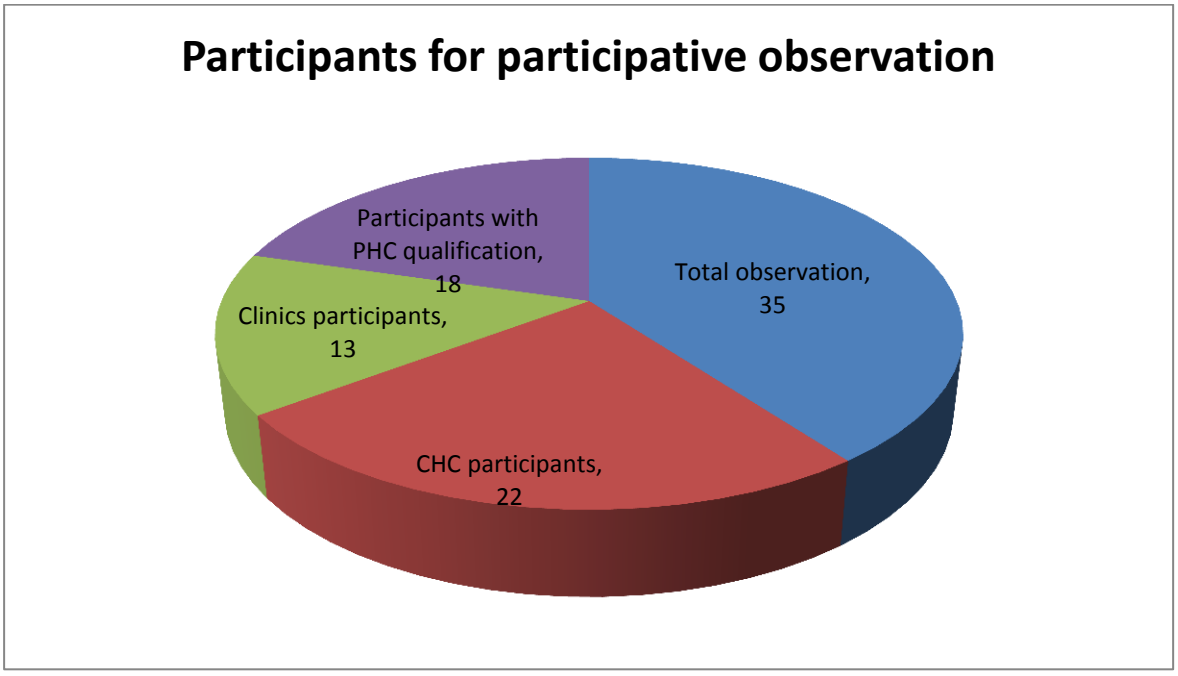


Figure 6.2 Summary of participants

6.2.1.2. Results of caring behaviours during participative observation

The result of the study is presented through the narratives, which combine the “vivo quotes” and the researchers’ analysis of the observation (Curry et al, 2009: 190).

6.2.1.2.1 Caring behaviours

Nurses are aware of the expectations that it is required of them to practice caring behaviours (n=35 observations). The results from the observation corresponded with the results from the survey where the respondents rated themselves as practicing the caring behaviours more frequently **(**above 40%). Watson (2009:247) explains that it is through these caring behaviours that the patient should feel the authentic presence of the nurse. Instillation of faith and hope in the patient and cultivation of sensitivity to the patient and the nurse are also demonstrated through this caring behaviour.

The nurse was observed to be practicing this behaviour in the initial stage of interaction as there is an effort by the nurse to create a private space to interact with the patient but often it is not sustained during the consultation (borrowing of equipment by colleagues from the other rooms). The time management challenges relating to the demand of service from the long waiting queues clouded the authentic expression of cultural patterns of nurses regarding their level of patience with the patients. Language (20%; n=7) posed a serious challenge in the establishment of an effective relationship between the nurse and the patient. The summary of the results is shown below.

Table 6.2 Caring behaviour observation results

Caring behaviours	Stage 1 (Descriptive)	Stage 2 (Focused)	Stage 3 (Selective)
Listen attentively	Activities which were observed to be interfering with the nurse's attention (externally) included: • Regular opening of the door by the colleague or other health care worker. • Ringing of the phone/ cell phone • A door that is not properly closed • Patients who are waiting in front of the doorway. • Nurse completes the notes for the previous patient. • Tick register that needs to be filled out	Observed non-verbal cues that suggest attentive listening were: • Nodding, pausing, allow patient to relate without interruptions, Areas that suggested that information was lost in the conversations were: • Lack of follow up on emotional issues raised by the patient. • Questions asked by the nurse not relating to the patient's main complaint without first addressing the patients' needs.	The quality of the information captured in the patient's file did not reflect the information shared by the patients as the evidence that the nurse was listening to the conversations. Notes are written in shorthand e.g. "no complaints rose". In other instances, the reflection skill was not evident as a means of confirming the information shared by the patient.
Patience	Average time spent with the patients was	As routinely as the patient enters the	In some occasions, the nurse will

	10minutes as patients were expected to be seen through the “fast queue”. Nurses are expected to consult all the patients who are waiting in the fast queue before 13:00 irrespective of the number. The PHC facilities do not have the booking system even though patients are given return dates, hence they cannot calculate the number of patients to be visited in a day.	consulting room, she is asked her name, and as an “assistant”, the nurse will instruct me to give her the patient’s medication and with the medication ready to be dispensed to the patient, she will start asking the patients about how he feels.	realise while already giving the patient medication that the patient is actually experiencing some side effects from that medication and then draw off the medication and refer the patient to the physician. More time was spent with patients who are having “unstable vital signs recordings from the observation room”
Avoiding medical terms	Nurses who are familiar with the local language were able to avoid the medical terms when talking to the patients. Nurses were using the medical terms when communicating in English to the	The nurses seem to be aware of the use of medical terms as often they are struggling with the right word and often ask, “what is it in our language”? Sometimes it will be the patients who will say the “word”	Most commonly used “medical terms” were observed when the nurse explains the side effects of the medication such as: Ulcer, BP, diarrhoea, arthritis.

	patients who did not speak the same language as theirs.	depending on her understanding of the context of the communication.	
Appropriate Eye contact	Different seating arrangements in the consulting rooms were discovered: • Face to face on the opposite side of the table • At an angle of the table of the board where the nurse is close enough to come to the patient but facing opposite directions	The time spent by the nurse writing the records creates a barrier to the maintenance of eye contact. Nurses tend to lose the facial expressions by the patients because of failure to maintain the eye contact.	In one observation the nurse was telling the patient that she was going to refer her to the doctor and the patients' facial expression changed immediately but the nurse missed that, as she was not maintaining eye contact. The patient went away without expressing her opinion about the decision taken in the consulting room.
Allowing patients to ask questions	As a generic pattern, patients were asked the close ended question which does not encourage the patient to ask question "Do you have any question?" "Do you have any problems with the	Open ended questions which were asked during observation included: • What can I do for you today? • How can I help you?	The observer also noted that patients were not guided to ask questions relating to: • Good feelings • Bad feelings • Coping with pain at home • Spiritual needs of the patient

	medication?”		• Cultural practices at home • Social impact of the pain on everyday activities.
Explaining the condition of the patient after consultation	Nurses were noted to be asking the patients if they are aware of their diagnosis. In cases where the patient is not sure the nurse will repeat the diagnosis to the patient (where possible in the local language)	It was not noted as the routine practice to give feedback to the patient about the state of health on that day. In cases where investigation results are given, the report is none specifically but rather just said “ There are no problem” or “ results are not good, I need to refer you to the next level of care”	Literature indicates that patients need to be actively involved in their treatment plan and take ownership of the responsibility of their state of health (Setswe, Naude and Zungu 2011:55). Active involvement of the patient in the decision of the treatment plan was not evident in the observations.

Caring behaviours above were observed as the face value towards the establishment of the good nurse-patient relationship. The second step was to observe the inside information in the interaction of the nurse and the patient through counselling and communication skills (special focus to the content of the conversation).

6.2.1.2.2 Counselling and communication skills

The patient through the process of communication and counselling can realise the integration of the caritas processes. Counselling and communication skills can either be

patient centred or health provider centred (Berry, 2009:510) where patient centred communication is positive and recommended. It is through the effective counselling and communication skills that the nurse is able to promote the expression of feelings about the condition and allow the nurse to systematically and creatively engage in problem solving kills (Rowbotham, Holler, Lloyd and Wearden, 2012:7) In this section the observation of counselling and communication skills as the tools to establish a trusting nurse-patient relationship (caritas process 4) were based on patient centred communication and promotion of expression of feelings as described above and results of observation are summarised (table 5.18).

Table 6.3 Counselling and Communication observation results

Strategy	Activities/ Behaviours measured	Observation results
Patient centred communication (Berry, 2009:512)	Requesting opinion from the patient	• Evidence of information giving and seeking during the communication was noticed where the nurse would ask the patient about the treatment he is taking and also give information about how to take medication at home (e.g. take one tablet at night. • What was not evident was the involvement of patient especially relating to the change of treatment plan. It was also noted that nurses were giving advises to all the patients.
	Paraphrasing of the information by the patient	• Even though paraphrasing was not routinely practised, some nurses were confirming the information given by asking the patient to repeat the instructions given and thus clarifying any confusion about the treatment.
	Raising statement of concern with the patient (no blaming)	Taking chronic medication can be emotionally exhausting to the patients and thus lack of treatment supporter may result in the defaulting of treatment. In communication, nurses were observed

		not to be sensitive to the challenge of adherence to the treatment plan by the patients. Statements such as: “ You were not taking your medication as prescribed that is why your pain is not controlled” Or “If you continue taking red meat, your arthritic pain will not get better”
Promoting the expression of feelings about the condition and allowing the nurse to systematically and creatively engage in the problem solving skills	Ability to remain emotionally calm, while patients express their concerns about the condition	In all the observation, there was no evidence of conflict between the nurse and the patient; both were calm until the end of the interaction.
	Helping the patient to see things from the different point of view	Difference in opinions was observed in cases where the patients shared their traditional and spiritual practices in trying to manage the chronic pain. Nurses mostly emphasised that there is a possibility of drug interaction between the traditional medicine and the western medications without further exploring the opinion of the patient about the alternatives.

The researcher did not observe any evidence of emotional or physical conflict between the nurses and the patients despite report from nurses that they experience violent behaviours more often (ranging from 26% to 44.6%). Based on lack of concrete evidence from this study, this section of violence from the patients will not be explored further.

Contrary to the rating scales (30.4% very high and 15.2% high) from the first phase of the study (questionnaire), Observations suggest that nurses require an additional skill development plan in order to improve their counselling and communication skills. In acknowledgement of the systems related issues (workload) and interruptions due to sharing of equipment, the listening skills and the capturing of the patient's shared information requires further exploration in the subsequent phase of the study

6.2.1.2.3 Management of patients with chronic pain

Effective communication and counselling also depends on the subject knowledge of the counsellor. Scott et al, (2008:315) explains that providing the supportive and holistic care (mental, physical, social and spiritual being to the patient depends on the quality of communication between the nurse and the patient. The treatment guidelines that are available in the PHC facilities are based on pharmaceutical management (Essential Drug List) and are therefore not guiding nurses on how to communicate effectively. PHC facilities did not have the standard pain assessment tools thus there was no evidence of the quality of pain assessment in the patients records. Patients were all given medication that was recommended for mild pain (EDL 2008). As the focus of the study was not to assess the management of the adherence to the treatment guidelines, it was just noted as part of the observation but it was not pursued further in the study even though it raised concern about the quality of management of chronic pain in the PHC setting.

6.2.1.2.4 Teaching and learning opportunity

Nurses acknowledge teaching as one of their core functions in their daily activities (caritas process 7). On the other hand, nurses also ranked the teaching function as one of the most time consuming activities that needs to be planned separately from routine consultation (Friberg, Granum and Bergh, 2012: 181). The teaching and learning focused on the quality of teaching, social environment of the patient, evidence based information and empowerment as communicated by the patient (table 6.19)

Table 6.4 Teaching and learning observation results

Teaching and learning	Techniques	Results of observations
Providing opportunity to practice self-administered care	Consideration of the beliefs and background knowledge of the patient	The establishment of the knowledge level of the patients did not precede the advice that was given by the nurses. It was not noted in the patients' record what the patient already know about the subject. Information given was more generic and not specific to the patients' social environment (situation). Nurses did not provide the patient with an opportunity to explore the ways of effectively implementing the treatment plan in order to learn from them the challenges that they may encounter. "One patient asked the nurse after being educated on taking medication 6hourly, whether she should wake up at midnight in order to take medication while she is already struggling to fall asleep spontaneously. Nurse responded without further engaging with the patient by saying, and then you can take it just before you go to bed.
Teach patients to schedule and implement treatment plans.	Empowerment resulting from the education	All patients were given information about the need to exercise but no particular exercising technique was mentioned to the patient. It was not clear whether the patients

		would be able to implement the advice at home based on the information given.
	Evidence based education	Even though the nurses did not have the information leaflet to give to the patients, the information given was evidence based: “The medication you are taking will not cure the pain but will help to control the intensity of the pain and therefore you are advised not to stop medication even if you are feeling better”.

6.2.1.2.5 Motivation of patients to express both negative and positive feelings

In the PHC setting, most patients do not require the assistance of gratification of basic needs but requires motivation in order to satisfy the higher order needs such as self-esteem (caritas process 9) and spiritual needs (caritas process 10). As indicated earlier in the study that there are no specific pain management clinics, patients attend the chronic conditions clinic in general. It was noted that some of the patients who are attending this clinic are suffering from chronic pain relating to incurable diseases such as advanced stages of cancer and HIV and AIDS. Such patients presented with the signs of emotional pain, which required attention of the nurse. It was due to such patients that researcher observed the management of emotional pain.

Motivating patients to feel good about themselves is an effective method in satisfying the higher order needs (Adams, Poole and Richardson, 2006:297). The purpose of the motivation is to assist the patients to shift from attaining pain relief from biomedical interventions towards accepting, adapting to living with the condition (Harding et al, 2010:4). As a follow up from the concepts that were mentioned by the respondents of the questionnaire, the focus of the observations was based on those principles. Table (6.4) below summarises the results from the observations.

Table 6.5 Motivation of patient to express both positive and negative feelings

Strategy	Activities	Result of observations
Establishment of trusting relationship	Showing respect of the patients	Even though nurses were not observed to be addressing the patients with name or surname but they were addressing patients in a respectful manner depending on the age difference between the patient and the nurse How are you Sesi (sister), mama (mother), buti (brother), papa (father), koko (grandmother)
	Praise	Several observations were noted where nurses would congratulate the patients for coming to the facility regularly, having their weight management under control and even taking the medication regularly.
	Support	The support that the nurses were observed to be giving was to give patients the list of community resources available that can assist then in managing or coping with the pain, they are experiencing. "*I know of the home based caregivers who can assist you with daily chores on the days that you are experiencing severe pain. I will write you the referral letter and you can give it to them so that they can start visiting you" [nurse]*
	Reassurance	Patient who had been admitted to the hospital for several weeks and missed the appointment date the clinic and the medication that she was so used to, was now changed. "*I was so worried about you when you did not turn up on your appointment date but I knew that there must have been a serious reason why you did not come, it is good that they reviewed your medication at the hospital, it will reduce the nausea that you have been experiencing from the Ibuprofen [nurse].*

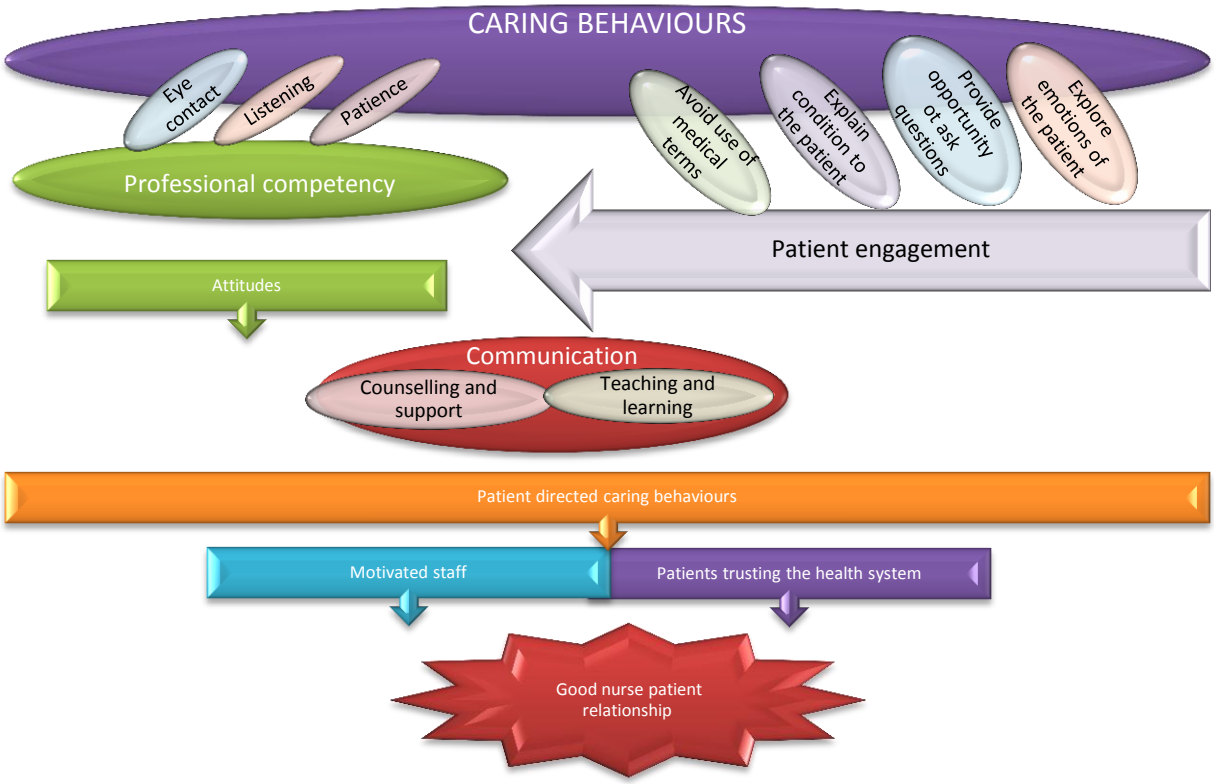


Figure 6.3 Summary of key relational aspects relating to caring behaviours

- From the diagram above, nurse are expected to bring a range of alternative behaviour into the relationship with the patient. There are behaviours that will assist the nurse to improve the professional competence (listening, patience and eye contact) while the other skills will allow the patient engagement (avoiding use of medical terms, explaining the condition to the patient, providing patients with the opportunity to ask questions and exploring the emotions of the patient)
- Patient engagement will direct the implementation of the caring behaviours towards improving the professional competence and manage the attitude that may prevail in the interaction between the nurse and the patient.
- Professional nurses also have the responsibility to deal with their own attitudes towards the establishment of the caring relationship. Their attitudes should be open to acknowledge, realise and appreciate patients' emotions, feelings, traditions and religions.

- In the process of communication, counselling and teaching and learning principles guide the process by avoiding imposing ideas on to the patient or even misinterpreting the information given by the patient.
- It is only if the above behaviours are implemented that the interaction will be patient directed and not health worker directed.
- When the interaction is patient directed there will be mutual benefit to both the patient (trust) and the health professional (motivation).
- All the above explained will assist the nurse and the patient to develop the sustainable nurse patient relationship.

Bernard (2011:323) indicates that participant observation is one of the most reliable forms of data collection, however (Liamputtong, 2011:156) warns that as the researcher engages in participative observation, she/he should be aware he/she brings the subjective self, personality traits, personal preferences to the research study. As a researcher who is fully aware of the challenges relating to participative observation added focus group discussion as a means to triangulate the data collected and analysis from the observation part of the study.

Willig (2009:10) explains that reflexivity (both personal and epistemological) needs to be critically managed when using the participant observation method. The researcher therefore acknowledges that the observation cannot be standard but the use of different stages of observation minimised the biases of the observation report. The use of detailed notes from the observation (notes, video recordings and pictures) assisted the researcher to maintain the reflective distance when observing the interaction between the nurses and patients.

The researcher also acknowledges that communication occurs within the health systems context, which may influence the interaction between the nurse and the patient. Although the systems issues were observed, the research took note of such health systems issues and in order to avoid the prejudices while trying to interpret the findings, such issues were explored further in the focus group discussions.

6.2.2 Focus group discussions

6.2.2.1. Focus group discussion participants

Focus group participants comprised of professional nurses who are working in the PHC clinics. The groups were homogenous in terms of staff categories but participants had varied periods of work experience (2 – 15 years), working in both CHC and clinics, has PHC as a qualification and different age group. Forty-four (44) professional nurses participated in the focus group discussions. Participants were conveniently recruited to participate in the study. Sixty-one per cent (n=27) of the participants did not participate in any of the preceding phases of the study (survey or observations). Twenty-two per cent (n=10) of the participants participated in the survey and the remaining seventeen per cent (n=7) participated in the observations.

Table 6.6 Focus group participants summary

	FG1	FG2	FG3	FG4	FG5	FG6	FG7	FG8	FG9
Number of participants	6	3	5	4	8	6	4	5	3
Years of experience 1-5/6-10/>10	1/2/3	1/1/1	1/4/0	0/0/4	3/4/1	4/1/1	4/0/0	5/0/0	2/1/0
Type of institution	CHC	CHC	CHC	Clinic	CHC	Clinic	Clinic	CHC	Clinic
Gender Female/Male	5/1	3/0	5/0	4/0	7/1	6/0	4/0	5/0	3/0
PHC trained/not PHC trained	3/6	0/3	4/1	2/2	5/3	2/4	3/1	2/3	0/3
Theme discussed according to discussion guide	1/2/3	1/4/5a	1/5b/6	1/2/4	1/5a/5b	1/3/6	1/4/3	1/5a/2	1/5b/6

* Theme 1 discussed in all the focus groups because it was an introductory question

6.2.2.2. Focus group data presentation and analysis

At the initial stage of data analysis, the researcher used the combination of in vivo (Saldana, 2009:74) and descriptive (Saldana, 2009:70) codes. The purpose of in vivo coding was to present the direct quotes as expressed by the participants while the descriptive coding was to allow the researcher to report the context of the interaction of the participants. In the second stage of coding, the researcher used the focused coding (Saldana, 2009:155) in order to develop the categories that will be used in reporting the results of the focus group discussions.

The analysis was done with the assistance of the computerised program on version 7 of Atlas.ti. The coding and the categories were developed by the researcher (MR) and the independent coder (TM) and the codes were compared and in cases of disagreements there was a reference to the source of data to gain more clarity on the theme. There were 5 categories, which were developed in this study which are: Category 1: faith and hope by the nurses, Category 2: working in fear, Category 3: support from the colleagues, Category 4: systems challenges and Category 5: educational relevancy. Category 4 was further divided into 4 sub categories: *Language as a barrier, Dual health systems in South Africa*, *extended role of the nurse in the PHC and Ethics / disciplinary procedure*

6.2.2.2.1 Category 1: Faith and hope by the nurses

Nurses acknowledged that the relationship between the nurses and patients is not always healthy. Nurses reported that there are instances where respect is lacking from both the nurses and the patients. There were repeated references to the statement that nursing now is not the same as nursing before. There were also nurses who still believed that, nurses are doing everything in the possible situation to render the quality of care.

"We try, we really are, and otherwise the patients will be phoning the presidential hotline [national complaints reporting line] day and night. Patients are happy with our service…they are utilising the services (participant 1)".

Based on caritas process one and 2 (Watson, 2008:48) care starts with the provider and the nurse has to have faith before she can transfer the faith and the hope to the person who is under his/her care. It will be discouraging if the providers of service are hopeless in the situation.

Nurses also acknowledged that failure to practice some of the skills as indicated in the survey does not necessarily mean that [we] nurses are not caring. It is the professional expectation that nurses should maintain eye contact when interacting with patients as a means of communicating authentic presence.

"Eye contact can also be seen as habit/ primary socialisation behaviour. Some of us irrespective of having knowledge about eye contact, we still find it difficult to face an older person… directly in the eyes" (professional nurse from CHC). Yes, we do look up occasionally to observe non-verbal cues from the patient (participant 2).

6.2.2.2.2 Category 2: Fear/ Confidence

The environment that the nurses are working in need to be conducive, in order to allow them to experience the therapeutic interactions between the nurses and the patients (RNAO, 2002:57). During the focus group discussions nurses indicated that they are not

free to implement the treatment plan with the patients due to the fear of verbal abuse from the patients.

"***We actually minimise the communication with the patient, we just … to avoid the interrogation from the patients. Sometimes you do what the patients instruct you to do because you do not know if you have been trapped" (participant 3).***

One of the participants with tears visible in her eyes shared the story of how the patient stood up from the chair and pushed her against the wall.

"I was never as frightened as that day, I didn't know what to do next, I thought of going to the police station to open the case" (participant 4).

Participants also indicated that even the system or managers in the working situations could not protect them.

"Patients do not even respect our managers; maybe we need to acknowledge that it is the current generation of young people who are not afraid to challenge the authorities"

From the interaction of participants, it was also noted that nurses are no longer confident in their knowledge

"They [patient] seem to know everything, they will refer you to the research they have read, the advice they got from the other nurses, the television broadcast and social media. Even if you try to counsel them, they seem to know more than you do.

Nurses were also citing the patient's right charter as the barrier to establish the good relationship with the patients. They often cited that, it is the government that is making them to treat us like this because they are having the rights and they are always right.

"I would give an example of the patient who travels more than 40km to consult in this particular clinic, On assessment you realise that the problem she is experiencing requires "home visit" and you suggest that maybe you need to refer her to her nearest clinic so that the nurses can make a follow up, you will be surprised of the response…"

6.2.2.2.3 Category 3: Support from the colleagues

Teamwork in the work environment is critical in order to maintain the quality of care. Participants, who are working in the CHCs where there is a full time medical practitioner, indicated that, there are inconsistencies in the practice between what nurses do and what the doctors are doing. There were reports that, there are instances where nurses provide the non-pharmacological management but on the same day, the patient is seen by the colleague [nurse or doctor] who will prescribe medication for the patient without discussing the patient's condition with you.

"When the patients realise such discrepancies they no longer trust you [nurse]". You may not even realise on the day of the consultation but on subsequent visits when you try to make a follow-up with the patient about the agreed treatment plan".

Participants also shared the different ways that they used to communicate to each other without making the patient aware of the difference in opinion so that they can remain discussing their differences in the absence of the patient.

"It was the norm, we all knew that when you see your colleague… It was an indication that you may have stepped out of the ethical standards. Because it was a means of protecting the image of the profession and for the patients not to lose confidence in us, you [the responsible nurse] will not take an offense in the situation but now … pride is our challenge.

On the other hand, other participants indicated that, as colleagues they are aware of the unethical/breech in the confidentiality of the patient but they are not free to communicate the behaviour with the colleague.

"*Nurses can be bully sometimes… so the best thing is to do what is best for the patient and forget about your colleague. You are here for the patient and not the colleague."*

Participants who were younger in the profession indicated that, lack of teamwork in the working environment affects them, as they are not having role models at work, lack of encouragement to continue with nursing as their career.

"We are not happy at work, to tell you the "GOD"' truth, I don't look forward to coming to work in the morning. There is less to look forward to, no support and mentoring, "Nothing".

6.2.2.2.4 Category 4: Systems challenges

- *Sub category 1: Language as a barrier*

South Africa has eleven official languages with more additional dialects. Patients in the country have the right to be seen by the practitioner of their choice. In addition to the situation, South Africa also has additional people who are from the neighbouring countries who utilise the health facilities in South Africa. It is the responsibility of the nurse to learn the languages in order to provide quality communication and counselling to the patients. Participants indicated the level of frustrations they experience in interacting with patients.

- *Sub category 2:Dual health systems in South Africa*

The South African government has recognised the traditional medicine as the alternative health system for the South African. From the participants, it was communicated that, as nurses they did not receive any form of training relating to the traditional medicine system integration.

- *Sub category 3:Extended role of the nurse in the PHC*

Participants indicated that, as a PHC nurse, you are expected to assess, diagnose, prescribe and even dispense the medication to the patient. It sometimes becomes difficult to do all that and even continue to fulfil your primary role as the nurse.

“Really, we [nurses] are not hiding behind the workload but the expectations from the employer are difficult to achieve. Honestly speaking, we [nurses] are not counselling the patients, it becomes more of the telling or otherwise if they are HIV positive, they are referred to the lay counsellors”

- *Sub category 4: Ethics/ disciplinary procedure*

Ethics had formed part of the basic training for the nurses. The government has also put systems in place to deal with misconduct in the workplace in order to maintain the quality of care. From the participants there were discussions that the management is not implementing those procedures effectively in order to correct the wrong behaviours.

“They [managers] are not consistent in implementing the policies relating to the discipline of nurses against them misconduct, they [managers] are afraid of the labour unions because they protect the nurses”

6.2.2.2.5 Category 5: Training system not relevant

Participants indicated that every manager has the responsibility to ensure that he/she keeps records of the skills audit of all personnel. It is from this skills audit that the training needs are identified and the in-service education conducted. Participants indicated that even though they had just completed their training, when they get to the working environment things are done differently.

“I was taught about the pain rating scales at the college and that was the last time I saw those scales, they are not available her in the workplace, you have to improvise for everything and that can be time consuming. Maybe, if there are new developments, nurse educators must be aware of them and maintain the practical things that are done in the clinical environment”.

6.3 CONCLUSION

This chapter presented the three phases of data collection and analysis. The presentation of the questionnaire was done through the statistical analysis using the descriptive statistical package from the SPSS version 20. Data was presented in the form of graphics, tables and chi square tests. Following the analysis of the data, the participant observations were presented as narrative and all other areas that required further clarity were discussed in the focus group discussions and presentation of the data was done in a form of coding and recoding and development of categories.

CHAPTER 7
DATA INTERPRETATIONS, DISCUSSIONS AND MODEL DEVELOPMENT
7.1 INTRODUCTION

The study is a sequential mixed method study, which started with the quantitative phase data collection and was then followed by data analysis. The second phase of the study is qualitative where the data collection process from both participative observation and focus group discussions were carried out simultaneously. The characteristic of the mixed method is integration of the phases within the study. As illustrated in the overview of the study in chapter one, the integration in this mixed method design is planned to occur during the interpretation phase. In Chapter 8, data integration, discussion and the model development are presented. The integration section presents the comparison of the research findings from all the three phases of the study. The discussions presents the descriptions of the actual processes of the study in relation to the planned activities of the study, areas of agreement and disagreement in the research findings and the methodological issues related to the study. The model development section presents the unique contributions made by the study, the plan of the dissemination of the research findings and highlighting the implications for future research.

7.2 SYNTHESIS OF FINDINGS FROM DIFFERENT DATA COLLECTION INSTRUMENTS

The findings from the two phase of the study were presented separately but the integration of the results provide comprehensive insight into caring practices related to the management of patients with chronic pain. The joint interpretation of the survey, observation and focus group discussions highlights the issues relating to the caring practices when managing patients with chronic pain.

Table 7.1 Summary of findings from all data collection instruments

Survey	**Participant Observations**	**Focus group discussions**
Caring behaviours Listening skills was generally acknowledged as lacking when	Caring behaviours Quality of information reflected on the patient's records did not correspond	Caring behaviours Language is identified as the major barrier to the listening skills of the

interacting with patients (51.2%) of respondents agreed to that. **Level of knowledge and skills in the management of chronic pain** 20.7% do not have adequate knowledge of guidelines regarding the management of chronic pain in the PHC setting. **Assessment of the nurses' ability to manage patients with chronic pain** 21.7% of respondents are not confident that they can assess the patent's pain comprehensively. **Assessing the nurses frequency of exposure to violent behaviours from the patients** *31.5% of nurses occasionally experienced verbal abuse from the	to the amount of information given by the patients. **Level of knowledge and skills in the management of chronic pain** Patients are not involved in the decisions relating to the treatment plan but rather just given medication **Assessment of the nurses' ability to manage patients with chronic pain** *messages given were vague and not specific to suit the patients situation and level of pain s/he is experiencing **Assessing the nurses frequency of exposure to violent behaviours from the patients** *no hostile behaviours were observed during the data collection period	participants. Working conditions were also cited as barriers to practicing caring behaviours towards the patients. **Level of knowledge and skills in the management of chronic pain** Minimal communication with the patient because they are afraid, as levels of hostile behaviour is rising within their working environment **Assessment of the nurses' ability to manage patients with chronic pain** Nurses associated the lack of compliance to the standard of care for the patients with chronic pain with the systems challenges **Assessing the nurses frequency of exposure to the violent behaviours from the patients**

patients		The level of violence is high to an extent that, patients are even violent to the authorities and, the nurses feel that they are not safe in the workplace

Survey results regarding the caring behaviours indicated a high level of confidence from the respondents, displaying that they are practicing caring behaviours more frequently. Contrary to the observations where patients and nurses are not sharing information but the interaction is dominated by the nurse. The justifications as noted from the nurses' focus group discussions associate the limited interactions with the patients to the severe and under estimated challenges of language in the PHC setting.

The survey further reported high levels of confidence in nurses, on the knowledge of chronic pain management and the expected caring practices/behaviours that will improve the relationship between them and the patients. The transfer of such knowledge to the patients was not evident, because the nurses were not readily involving the patients in the development of their treatment plan. The focus group discussion pointed out the systems challenges that related to minimally supporting a positive patient environment.

In general, the survey reported that the focus group discussions agree in principle on the key caring behaviours/practices expected while managing patients with chronic pain. The subsequent section of the chapter provides further details about the discoveries of the study.

Table 7.2 Summary of understanding of the caring practices as classified according to the ten Caritas processes.

Survey results	**Observation results**	**Focus group discussions**
Caritas process 1 Be sensitive to own moods and feelings when	**Caritas Process 1** *Patients are not given opportunity to share their	**Caritas process 1** Cultural and religious beliefs, interferes with

interacting with the patient. **Caritas process 2** Supporting the faith of the patient, this contributes to the development of trust. **Caritas process 3** Understanding things from patient's perspectives, improves the relationship **Caritas process 4** Consideration of situational factors contributes to the establishment of trust **Caritas process 5** Correcting wrong information without hurting patient, promotes the expression of positive and negative feelings. **Caritas process 6** Level of knowledge, improves the patient's problems scientifically and systematically. **Caritas process 7** Every encounter with the patient should be treated as a learning and teaching opportunity **Caritas process 8** Explaining the safety precautions to the patients and family is essential	religious beliefs **Caritas process 2** *Patients are less involved in the planning of treatment **Caritas process 3** *Emotional feelings were not explored with the patient **Caritas process 4** *Patient who mentioned social issues were referred to the social worker. **Caritas process 5** Patients were leaving the consulting rooms with incorrect information which were never rectified **Caritas process 6** More qualified (PHC) nurses assed the patients better **Caritas process 7** Nurses were generally giving advice to the patients **Caritas process 8** generally patients are not accompanied by family members to the PHC services **Caritas process 9** Patients were not asked about their emotional pain.	treatment compliance **Caritas process 2** *****Nurses reported that there is no "time" to spend with the patient. **Caritas process 3** It is not general practice to ask patients about their feelings unless there are obvious clues, such as crying. **Caritas process 4** Nurses blame the rigid policies and guidelines that are not flexible **Caritas process 5** Patients' rights charter seen as the barrier to effective communication**.** **Caritas process 6** Having information but not practicing the skill is not effective **Caritas process 7** Extended roles of the nurse's makes it difficult for them to do everything, some of the activities should be referred to other categories of staff such as health promoters**.**

Caritas processes 9 Emotional pain requires the same attention as the physical pain.	**Caritas process 10** Nurse did not believe the patients when they were reporting pain without evidence of the underlying cause.	

7.3 THE DISCUSSION OF THE STUDY RESULTS

The debate drought present in the literature relating to the caring practices in the management of chronic pain highlighted the complexity of the phenomenon. Notably, the discourse around the phenomenon was investigated extensively with regard to the patient satisfaction regarding the management of chronic pain. The current study, unlike other literature focused on the clinicians' awareness of the caring practices that are essential in the management of patients with chronic pain.

Additionally, the knowledge gap as discovered through the literature review, the limitations from the methodologies implemented from the previous studies and the variance in the population groups led to the need to ask the following questions in this current study. The questions in this study were:

- ✓ What are the current caring practices within the nurse-patient relationship during the management of chronic pain patients in the primary health care services, irrespective of whether the patients are on a pharmacological or non-pharmacological treatment plan?
- ✓ What are the caring experiences for the nurses in the management of patients suffering from chronic pain?

In acknowledgement of the challenges noted during the literature review where some studies were excluded from the process because they were not published in English might have compromised the inclusivity of the existing literature knowledge. Furthermore, not all the listed data bases and search engines that related to the management of chronic pain were included in the literature review.

Apart from the above mentioned challenges relating to the literature review, the review pointed out the need to adopt the mixed methods approach in this current study. The

choice of the mixed method dictates that the study should be conducted in phases. The overview of each phase is described in the subsequent sections of the study.

7.3.1 Overview of the Phases of the Study

The study was planned in two phases and the second phase triangulated the data collection instruments. The phases are surveys in the quantitative phase, followed by participative observation and focus group discussions in the qualitative phase. The survey included hundred and eighty-four self-administered questionnaires. The thirty-five participative observations were done by the researcher. Finally the nine focus group discussions with a varied number of participants were conducted.

7.3.2 Site selection and participants selection issues

There were a number of unavoidable factors that were noticed in the process of site selection. The initial plan was to include different facilities from all regions in the Tshwane district. Due to the recent changes in the boundaries that had occurred at the time of site selections, new facilities had been added to the Tshwane district but still operated under the Metsweding district. The variations in the facilities led to the delayed process in accessing permission to collect data in those facilities.

The poor responses in the questionnaires from the initially selected sites for the study led to subsequent visits to other facilities. New requests for permission to participate in the study were ordered. The other contributory factor was the change in management in the facilities, where facilities that granted permission to conduct the study initially, at the actual point of data collection the new manager did not know anything about the study thus denying the researcher permission to continue with the study.

Due to the above-mentioned challenges, the duration of phase 1 of the studies was prolonged beyond the initial timelines settings for the study. Secondly, the focus of the study was the chronic pain patients. In South Africa, in the public sector, there are no dedicated pain management clinics. In addition to the absence of pain management clinics, patients who are living with chronic pain were seen at the chronic conditions section of the facility. Patients who were included as chronic pain patients were patients with neuropathic pain due to any of the following conditions (i) Diabetes Mellitus (ii) HIV and AIDS (iii) Cancer (iv) Osteoarthritis (v) Other chronic muscular-skeletal.

In phase two, during the participant observation, patients who were part of the observations indicated that their anonymity would be compromised if they gave written consent, as the nurse who was assisting them would have full disclosure of their personal details. The use of verbal consent improved the acceptance of participation from the patients. Language barrier was also identified as the barrier in communication between the nurses and the patients. The communication barrier clouded observations of the caring practices.

7.3.3 Evaluation of findings

In general, many of the findings from the data collection instruments of the current study were consistent with the findings from previous studies. Of note from the current study were the insights and clarifications about the understanding of the nurses regarding the caring practices when managing patients with chronic pain. The most notable insight was realised during the focus group discussions when the nurses shared their experiences about the caring practices in their own working environments. The other discovery was the fact that as nurses were discussing the findings from the survey, areas of disagreement and agreement with the findings were associated with the specific categories of nurses. During the focus group discussions, nurses blamed the current political situation of the study on the level of caring that they provided to the patients.

In general, the findings from the study suggest that, nurses rate themselves as skilled enough to provide the essential caring practices to the patients suffering from chronic pain. 40 -50% of participants in the survey reported to practice any of the six caring practices which were measured in the study most frequently (Figure 5.5). In contrast, the results from the participative observations indicated that the average time spent by nurses and the patients is between 5 -10 minutes, which includes assessment, diagnosis, developing a treatment plan and, packaging and dispensing medication. In that process, 26-36% of the respondents indicated that their counselling, communication skills and assessment of patients according to the prescribed guidelines was very high (figure 5.6).

An unexpected but striking finding from the observation was the feedback given by the patients with regards to any deviation from the routine practice of the nurses. As the patients were attending the clinics regularly during observation, if the nurse was

demonstrating more caring practices than they usually did, patients would ask why there was a difference on that day.

Notably, from the focus group discussions, participants confirmed the escalating rates of exposure to violent behaviour from the patients but in the institutions there were no records of incidences of violent behaviours. Of those that were reported they were not investigated, those that were investigated it turned out that no measures were taken. Interestingly, from the focus group discussions it was also evident that the nurses also displayed hostile behaviours towards the patients; colleagues who were aware of the incidence did not report the case unless the patient lodged a complaint.

7.3.4 Survey findings

Many of the themes that emerged from the open-ended section of the survey were similar to the existing constructs for the measurement of good NPR (figure 5.19). Participants indicated that the significance of the good NPR which is demonstrated through the caring behaviours is significant in (i) building trusting relationships, (ii) allowing the expressions of feelings by the patient, (iii) providing the nurse with the opportunity to identify the underlying contributory factors that may hinder or enhance the effective management of chronic pain in patients, (iv) improving communication between the nurses and the patients (v) encouraging the patients to become part of the treatment plan and (vi) assisting the patient to feel good about themselves.

Watson (2008) and Fakhr-Movahedi et al, (2011) who researched extensively within the caring behaviours also noted the themes identified above as the key benefits to the good NPR. Researchers such as Rosenberg and Gallo-Silver (2011), add to the findings that, the ability of the nurse to practice caring behaviour is developed with the experience of the practising nurse and similarly lost when not practiced.

To a greater extent, researchers such as Dewing et al (2013) and Pros et al. (2010) disagree by stating that the nurses inability to practice caring behaviours is attributed to the teaching methods. Communication and counselling skills are taught in theoretical and non-practical ways thus resulting in nurses just having the knowledge of the subject but not being able to perform the caring behaviours.

As evident from this survey, nurses have demonstrated to have the knowledge of caring behaviours, the management of chronic pain and even the benefits or executing such

behaviours but practically during the implementation, such behaviours are not demonstrated.

On the other hand, participants are aware that failure to treat the patient in a caring manner is contributing to the unfavourable working conditions that they are experiencing. An interesting theme that emerged from the experience of poor NPR indicated that when patients are not treated with care, they revisit the health facility more often and thus increase the daily workload of the nurses.

The issue of cultural and religious practices was categorically highlighted in the survey as one of the critical elements that hinders the establishment of the caring relationship between the nurses and the patients. 28.8% and 29.9% strongly agree and agree, respectively, that the relationship between the nurse and the patients is not effective because of the interference of the cultural and religious practices of the patients. Notably, the study on the development of the support systems for the patients who are living with chronic pain indicates that the nurse needs to understand the patient's religious beliefs and cultural background in order to provide a comprehensive care package to the patient (Grant et al, 2013).

Notably, the respondents in the survey did not identify self-care as a critical element in the development of the good NPR. Factors such as being aware of the tone of voice as a health worker, being sensitive to the personal feelings and emotions of the patient, the ability to remain calm even when the patient seems difficult yielded a high level of uncertainty about the topic amongst the respondents (figure 5.9). Based on the findings it can be concluded that respondents blame the failure of the relationship between the nurses and the patients on patients' factors and not health worker factors.

Additionally, participants did also not identify the involvement of patients in the development plan as essential caring behaviour; it may therefore be concluded that participants did not regard caring as a joint effort between the nurse and the patient (figure5.10).

7.3.5 Participant observation findings

The overall purpose of this data collection method was not triangulating the findings from the surveys with the actual practices of the clinicians. Secondly, the purpose of the observation was to identify the most frequently occurring caring practices in the management of chronic pain patients. In acknowledgement of the fact that some of the documented caring practices, such as, eye contact were not consistently practiced during consultations, there were other ranges of alternative behaviours that were displayed during the interaction with the patients.

During the observation, not only the caring behaviours were critical in the establishment of the good nurse patient relationship. Several constructs identified included (i) the level of patient engagement in the interaction between the nurse and the patient, (ii) professional competency levels (iii) communication techniques, (iv) degree of trust before the encounter between the nurse and the patient and (v) level of motivation of the nurse to establish a good relationship.

Significantly, working conditions that do not support the initiative of encouraging the establishment of a trusting relationship between the nurses and the patients complicate further the complex phenomenon of chronic pain management. The development of standards to regulate the waiting time in the health facilities without provision or support to ensure an adequate number of health professionals in the health facility, compromises the quality of care provided to the patients with chronic pain.

ICN (2007) recommends that the effective nurse patient interaction is dependent on the ability of the health institution to create a positive working environment. The impact of a non-positive working environment is high staff turnover; lack of motivation of staff and subsequently less competent staff are left in the working environment with or without a minimal number of mentors. There are various other system related challenges noted during the observation which included but was not limited to lack of specialised pain clinics, unavailability of other team members who are essential in the management of patients with chronic pain to provide alternative therapy.

7.3.6 Focus group findings

Additional to the participative observations, focus group discussions were used to triangulate the qualitative phase of the study. Based on the findings from the other

phases of the study, five themes were developed to explore further the caring practices in the management of patients with chronic pain. These were an understanding of the barriers/benefits related to the NPR, the professional insight of the practitioners who are providing care to the patients, community needs awareness, the use of holistic approach in the management of patients with chronic pain and the development of the trusting relationship.

7.3.7 Areas of agreement/disagreement between the research finding and the literature

The independent variables measured in this study included the age of participants, the qualifications and the years of service, which are consistent in most literature. The research findings, five of the six measured caring behaviours indicate that the years of service has a direct correlation with caring behaviour. Although the survey measured the caring practices subjectively, which other studies had done consistently, generally nurses are often associated with caring as their core function within the health profession (ICN, 2007). Generally, nurses do not actively involve the patients in the development of a treatment plan and as a result the caring behaviours that are intended to the patients are not realised and thus patients report nurses as not being caring (Department of health, 2010).

By contrast, the studies that investigated caring from the patient's perspective reported that patients do not feel that the nurses are as caring as they report to be (Nteta et al, 2010). In South Africa in particular, the ministry of health has identified the bad attitude of nurses towards the patients as one of the six key factors that affects the quality of service rendered in the facilities (Department of Health, 2010). Additionally, the report on the utilisation of PHC services have not improved in the past twenty years despite the efforts of the government to improve access through the development of service delivery platform within every five kilometres.

Additional to the list of tools that measure caring internationally, caring is referred to as the list of activities done to the patient in response to the request from the patient (Watson, 2009). Caring is rarely or never measured in terms of the nurses' behaviours towards the self, consideration of the patients' cultural and traditional practices and involving the patients as partners in their care.

In general, literature also agrees that the non-pharmacological approach to the management of chronic pain can reduce the complexity of the over burdening phenomenon but the implementation of such non-pharmacological approaches have never been investigated. In this study, the results indicated that lack of an inclusive treatment plan, which can only be discovered through the development of the therapeutic NPR, is not given priority in the management of patients with chronic pain.

7.3.8 Critical evaluation of the methodology used

As explained in the methodology chapter of the study, the planning of the current study was comprehensively done so as to address the complex issue of chronic pain in the PHC setting. The researcher in acknowledgement of the subjectivity of the topic adopted the mixed method approach, which addresses both the subjective and the objective aspects of the research topic. The absence of previous similar studies, which could be replicated, allowed the researcher to develop a unique opportunity to engage the nurses working in the PHC setting to explore the caring practices in the process of managing patients with chronic pain. The successes achieved from the decision to use the survey, participative observations and the focus group discussions, have sufficiently highlighted the gap in the management of patients with chronic pain simultaneously addressing the caring practices challenges as realised by the health care practitioners in the working environment.

The use of participative observations is criticised as the methodology with limited potential (Creswell, 2009 and Curry et al, 2009). When used exclusively in the investigation of the complex phenomenon it has demonstrated and added value when triangulated with focus group discussions and the survey. Similarly, the criticism of the use of surveys in the subjective phenomenon such as pain and caring as it applies in this study was debated in the literature (Creswell and Plano-Clark, 2007). Admittedly, the use of the survey in this study would deny the researcher to objectively highlight the areas that requires focus in the development of the future plans of the study. In this study the use of a survey provided the foundation for identification of possible unexplored areas in the caring practices of the nurses within the PHC setting. The results of the survey were utilised to develop the focused observations and the plan of the focus group discussions.

As described by other theorists (Parker and Smith, 2010), caring should be seen as concrete execution of the set of activities towards the patient. In this study the focus group discussions indicated that nurses required the care equally as much as their patients. Different nursing organisations such as ANA, ICN and DENOSA who are often accused of trading the priority of patients care for the benefits of the nurses, through the use of this methodology in the study can improve the caring environment for both patients and nurses.

7.4 DISSEMINATION OF RESEARCH RESULTS

7.4.1 Model development process

Sudsawad (2007:6) indicated that research does generate new knowledge but it is often a challenge to have the knowledge translated into the change in practice. There are several factors that may influence this lack of transition such as the method of communicating the required change. She further indicates that communicating research findings by combining different methods is more effective than concentrating on a single method. In addition to that, the methods should be active engagement rather than passive engagement where there is an assumption that people will read the information and start implementing the change. Active methods include educational outreach, audits, feedback systems and reminders.

As highlighted by the key findings from each of the data collection instruments used in this study, the nurses' individual understanding of caring practices in the working environment varies from the actual practices and the group influence to the understanding of caring within the working environment. The conclusions from the literature review, results of this study and the theoretical framework from the Watson human caring science, provided the insight in developing the model for the caring practices in the management of patients with chronic pain. The development of the model in this study highlights the notable caring practices that are essential in the management of patients with chronic pain. The development of the model is essential to diagrammatically illustrate the concepts identified in the study with the hope that the elements of the model can be practically applied by the clinicians when managing patients with chronic pain in the PHC setting (Sudsawad, 2007:11). The use of the model in this study aims to change individual behaviours of nurses working with the

patients suffering from chronic pain. The development of the model is based on the principles by Eccles et al, (2005: 111) that:

- The factors targeted on the model are changeable factors such as attitudes, beliefs, motivations, knowledge and perception of external constraints.
- The model will consider the assumptions that health workers do not always have complete control over their actions and situations that they are working in.

In order to comply with the principles mentioned above, the knowledge transition process is applied to ensure a systemic process of suggesting change in the behaviour of the nurses who are working in the PHC setting.

7.4.1.1 KNOWLEDGE TRANSLATION PROCESS

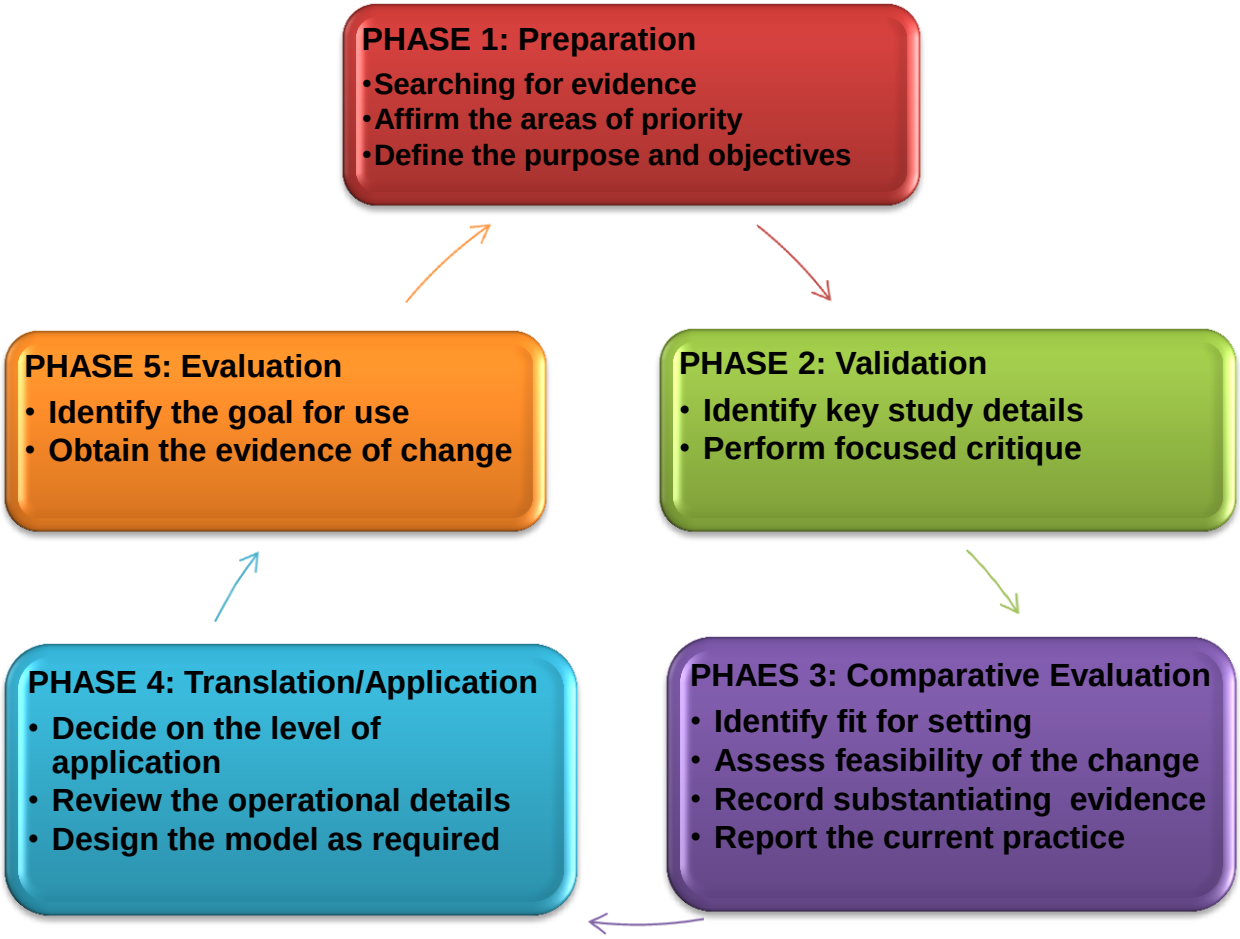


Figure 8.1 Stages of knowledge translation

In communicating these research results, the researcher adopted the Stetler model of research utilisation. The model consists of five stages: preparation, validation, comparative evaluation, translation/application and evaluation.

7.4.1.1.1 Preparation stage

Preparation stage involves the literature sorting, prioritisation of the concepts to be studied and identify the purpose of knowledge generation and how to translate such knowledge into the improved system of service delivery. The intense process of the literature review in chapter two of the study depicts the initial stage of preparing for the dissemination of the research findings. The literature review provided the evidence from the research to identify the need to change the current practice. In this study the need for change relates to the practicing of caring behaviours when managing patients

with chronic pain. The triangulation of data collection instruments in this study and the comparisons of the study results affirmed the priority areas that require change. Purposefully formulated research aim and objectives and the study methodology as described in chapter 4 of the study provided the research evidence to generate the need for change in the current practice.

7.4.1.1.2 Validation phase

Involves the critiquing of the literature sources for clinical relevance and thereby making a decision to accept or reject the sources. Following the data collection process in the study, the researcher analysed the findings as described in Chapter 6 and 7 of the study report. The analysis identified the areas of agreement and the areas of disagreement in the topic. As discussed in the key findings of the study, Firstly the results indicates that nurses do not prioritise self-care as one of the caring practices before providing the care to other people. Secondly, patients are not actively involved as partners in the development of the treatment plan, thirdly the cultural and religious beliefs and practices of the patients are perceived as barriers in the management of patients with chronic pain. Finally the working environment of the nurses clouds the objective assessment of the caring behaviours of the nurses who are managing patients with chronic pain.

7.4.1.2.3 Decision making

The decision to continue is based on the assessment of the fit for settings, feasibility of the implementation of the dissemination of the research findings, identification of the risk factors relating to the dissemination of the study results and the availability of the resources to implement the developed model and finally the readiness of others to accept the newly suggested practices.

Table 7.3 assessing the decision making to implement the model

Fit for setting: • In the process of writing the findings for the research, the	*Feasibility* • Risk factors: The development of the model should not be against the

world is reviewing the process made regarding the Alma Ata declaration (Walley et al, 2008). • The declaration indicates the need to have an accessible health service to all in terms of planning the individualised care for the PHC patients. • The implementation of the caring practices includes actively involving the patients in the development of the treatment plan	existing service delivery package as that will increase the chances of rejection in the services. • Resources: Model should be implemented within the reasonable resources of the public health sector. • Readiness of others: Active involvement of the nurse who is responsible to implement the model is essential to provide the level of readiness.
Substantiating the evidence • In utilising the substantiated evidence in the critique of the literature against the study findings, the research evaluates the potential value that the research has in the knowledge area.	*Current practice* • Evaluation of the current practice to evaluate what is effective in the current practice to avoid unnecessary change. The current practice leaves both the nurse and the patient vulnerable in the relationship thus requires a change. Escalating exposure to violent behaviours (figure5.8).

7.4.1.2.4 Translation/ Application

The application of the model is presented symbolically, as a formal guiding principle to target the individual person who provides care in the health care setting. The current

practices emphasises that the patient is at the centre of all care. In this model caring is applied at four different levels

Level 1: Individual level/ nurse/ health practitioner

The nurse should possess the necessary skills and knowledge about the different conditions. The knowledge and skill acquired are not effective and relevant until they are unfolded through the demonstration of love, provision of faith and hope. All this should form the basis of the caring philosophy. The demonstration of all these caring practices should start with the nurse as a beneficiary of loving and kindness in order to produce the correct positive energy levels required by the patient.

The realisation of these levels can be done by implementing several caring practices, such as being aware of the patient's personal emotions and feelings before engaging with them, being genuinely present while interacting with the patient, demonstrating respect, empathy, being open to learn and teach from every encounter with the patient and practicing self-healing modalities before, during and after every patient encounter.

Level 2: Patient/ other

Recognise the patient/ other person as the spiritual being, who is living as a physical being. A person is affiliated to social structures such as the family and the community. Allow the expression of the emotions that may manifest as good or bad feelings within the individual. The person experiences healing when the emotional being is in good relation with the spiritual being, irrespective of the state of physical health. Watson (2008) explains the phenomenon as the process of healing even when the person is living with chronic conditions such as chronic pain.

In this study, patients who are living with chronic pain are no longer expecting to obtain a cure as perhaps they did at the initial stage of illness but rather they are now expecting to experience healing. The process of demonstrating caring while providing all other complementary or alternative therapies will provide healing as the patient will feel supported in the process of adapting and adjusting living conditions according to the limitations of their chronic pain.

Level 3: Situational factors of the patient

Every human being is described as the body, mind and soul complex (Watson, 2007:1). As illustrated in the triangle in the model, the pharmaceutical management of chronic

pain relieves the physical pain of the patient. This area was not explored further in this study as it the area, which has been well researched and published in the topic of chronic pain management. The other point of the triangle presents the mind of the patient, which is mostly associated with their belief systems. Lessons learned from this study indicated that the respondents and the participants from both the survey and the focus group discussions perceive this as the barrier to implementing caring practices in the working environment. In this model, the researcher points out that, it is actually the belief system that determines the active participation of the patient in the development and adherence to the treatment plan. It is therefore critical for the nurses to identify the belief systems of the patient, acknowledge the positive aspects of the belief systems, and correct any incorrect information that the patient might have, before developing the treatment plan without hurting the feelings of the patient.

The final point of the triangle depicts the soul of the person. Irrespective of the religious or denominational affiliations of the patient, every human being practices a personal ritual to satisfy the spiritual needs associated with the physical aliment of chronic pain. In the current health system, such practices are not identified during the interaction between the nurse and the patient and often such practices are not encouraged by the health care practitioners to complement the treatment plan developed in the management of chronic pain.

The role of the nurse/ health practitioner in the above mentioned points of the triangle is to integrate them in the development of the treatment plan of the patient and thus allowing an individualised plan within the broader generic principles/guidelines of the management of patients with chronic pain.

Level four: Working environment

In acknowledgement of the fact that caring practices happen within context, the bigger circle illustrates the working environment of the nurse. The inclusion of the systems issues illustrate that each health care context will present in different challenges and the pentagon on the other side of the context of the working environment provides the opportunities that are available in the working environment. Figure 8.2 below summarises the model as explained above.

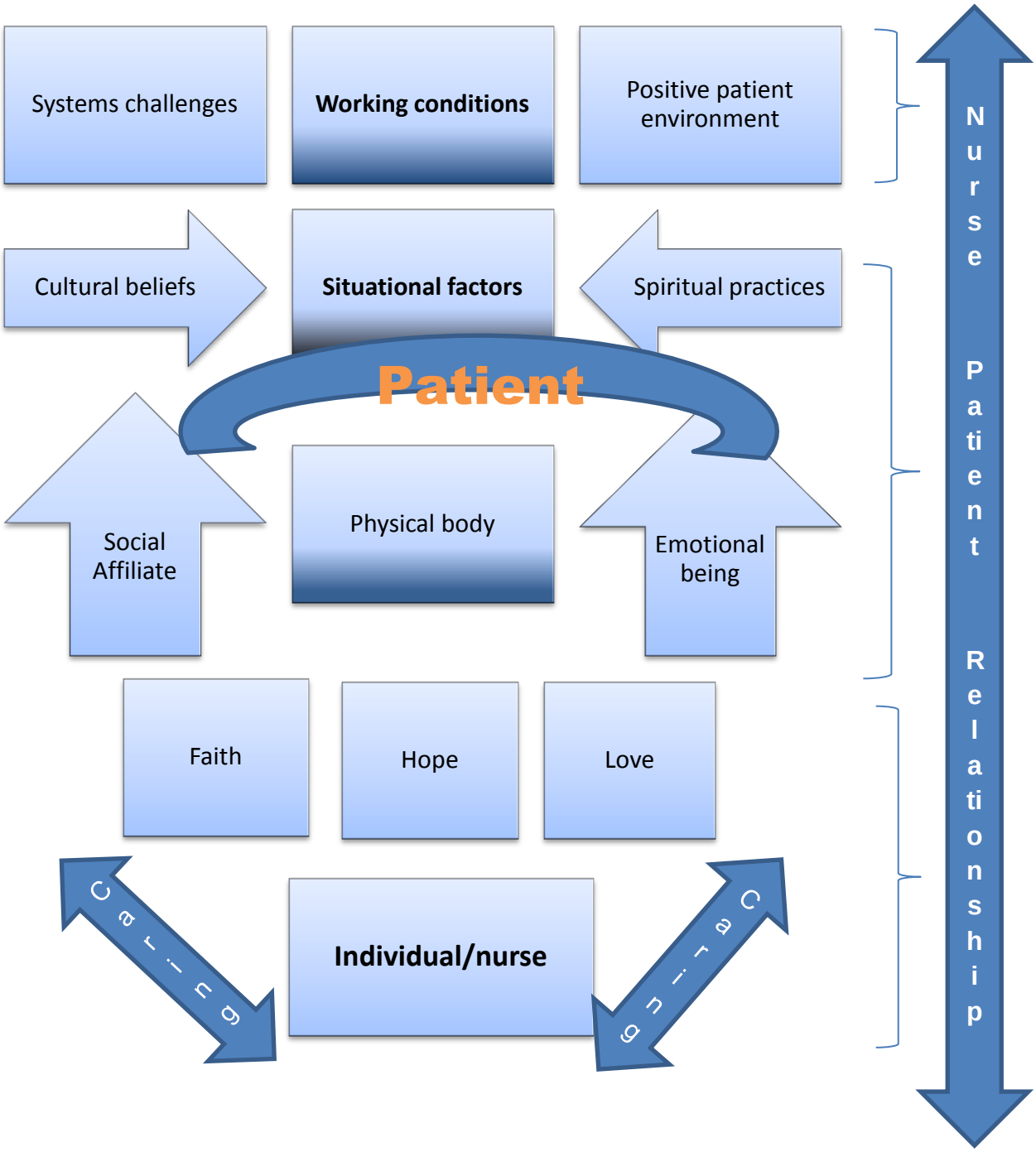


Figure 8.2 Individual application of caring practices model

7.4.2 The strengths and weakness of the proposed model

The suggested model is based on both the qualitative and quantitative phases of the study thus providing a complex understanding of the gaps in the caring practices within nursing practice. It is also acknowledged that due to the complexity of the phenomenon, the model does not provide the exclusive variables that are essential in the development of the therapeutic nurse patient relationship.

The model however, illustrated the most critical and often neglected elements in the development of the NPR. The researcher also acknowledges that the implementation of this model depends on the communication and counselling skills level of the health practitioner. The notable strength of the model is the identification of the nurses' internal readiness to create a caring environment by experiencing love, faith and hope before engaging with the patient.

The Individual application of caring practices model as illustrated in figure 7.2 above indicated that caring develops from the individual base then radiates to the next person who is the patient and, finally considers the working environment. The strength of the model is therefore to re-emphasise to each nurse in the working environment that they have an obligation as an individual first to demonstrate love to the self before blaming other factors on the failure to provide care to other people.

The researcher acknowledges that in this study, the Watson Human Caring Science theory provided the theoretical framework, but there is an element of the theory, which was not incorporated in the study. The transpersonal caring moment aspect of the theory which includes the Chakra system explains the different points of focus for the nurse in order to protect the self from the negative energies that may destroy her efforts to practice love, hope and faith. The exclusion of part of the theory allowed the researcher to maintain the focus of the study, but however limited the development of the model to incorporate the symbols and the colours that illustrate the Chakra system. The incorporation of this element in the study would influence the development of the model.

The use of the model with the inclusion of the Chakra system provides the opportunity for the scope for future researchers to test the model as an integrated theory for the Human Caring Science and the caring and healing modalities.

7.4.3 The Unique contribution made to the research area

The ability of the researcher to demonstrate the doctrateness of the study is based on the unique contributions of the study to the body of knowledge. This section presents the unique contributions made by the current study in the management of chronic pain in the PHC setting. Chronic pain management and caring practices are both complex phenomena's in the health care setting.

Although chronic pain management is a topic that has been extensively explored in the literature, the emphasis is on the pharmacological and non-pharmacological management of chronic pain. Even with the extensive knowledge that chronic pain is not curable, the physicians remain the primary custodians of the management of chronic pain and other health care workers serve as the complementary, or alternative, health care service providers. The current study demonstrated that:

1. The use of mixed method that has been the recommendations from previous researchers in the field of both caring practices and the management of chronic pain have created a potential to predict the patterns of caring practices when managing patients with chronic pain. The traditional use of qualitative method in the study of caring and the chronic pain management, by its nature of the methodology only provided the understanding of the phenomenon, which cannot be generalised, to the larger population. The additional use of the quantitative phase in the study provides the opportunity to generalise the findings to the larger community. The use of mixed methods maximised the strengths of each research methodology while minimising the weaknesses of the other methodologies, such as the observations.

2. The process of utilising the study participants from the same areas, allows direct comparisons of the results from the different phases of the study. The participants in the study from the survey, participative observation and the focus group discussions were selected from the same working conditions and patient population. The consistency in the study setting minimised the dynamics of the health care situations diversities that can be predicted when the study is conducted in different cultural settings.

3. Unlike the other studies, which measured the caring practices by utilising the patients as the study population, the current study utilised nurses who are the providers of care, to share their understanding of caring practices in the management of patients with chronic pain. The use of focus groups further clarified differences in perspectives amongst the nurses who are working in the PHC setting. The sharing of both negative and positive experiences of the NPR, allowed the nurses an opportunity to share with their colleagues how the relationship with patients affected their level of job satisfaction, daily.

4. Nurses as the providers of care, do equally need to benefit from the relationship that they develop in the process of caring for the patients. As the nurses shared the experiences of patients' hostile behaviour towards them in the working environment, they created awareness amongst themselves to work towards creating a positive working environment.

5. Chronic pain management in the African context is managed within the broader spectrum of the PHC services that are nurses-driven. Nurses in the PHC services are responsible for the provision of care to the patients with chronic pain with or without limited support of other multi-disciplinary team members. Unlike most international countries where chronic pain is managed by specialised units, the study demonstrated the unique situation in the South African context.

6. The use of the proposed model derived from the results of the study can empower the nurses to manage patients more comprehensively while they are also not overburdened by the complexity of chronic pain management. The model has the potential to be integrated into the process of addressing the challenges relating to the decreasing levels of quality of care as experienced by most health care institutions and not specifically to the management of chronic pain only.

7. The detailed presentation of the dissemination of the study results plan as discussed earlier provides an additional unique contribution made by the study findings to the broader context of health care delivery in the South African context.

7.4.3 Implications for the future research

Despite the benefits of the study design and the methodology of the study, the researcher acknowledges that the relationship study should include both partners in the relationship. The significant areas of note that required further exploration in the future include but are not limited to the following:

(i) The testing of the proposed model at the larger scale of the population of both the nurses and the patients over the longitudinal study.

(ii) The exploration of the details of the cultural and spiritual practices as the barriers of the implementation of the caring practices within the working environment.

(iii) In the nursing education section, the exploration of the teaching methods relating to the caring behaviours within the working environment in order to allow the integration of theory and practice when managing patients with chronic pain

(iv) Chronic pain management as it is not only the nurses who are involved, the extension of the individual applications of the caring model to all other multi-disciplinary team members in order to allow the continuity of care and an inclusive treatment plan as it is developed on admission of the patient in any health care facility.

7.5 CONCLUSIONS

The study explored the caring practices of the nurses in the management of patients with chronic pain in Tshwane district in South Africa. Through a survey, participative observation and nurses focus group discussions, knowledge, practices and discussions of the caring practices elicited the professional perspective of caring. As the study was a sequential mixed method, the survey provided the foundation for the identification of the

areas of focus in the process of exploring the caring practices in the management of patients with chronic pain.

During the survey, participants were asked to rate their knowledge levels of caring practices through the use of the Likert scale. Additional to the caring practices, participants were asked to rate their exposure to the non-therapeutic relationship in the working environment while managing patients with chronic pain and finally to rate in the order of agreement what represents caring behaviour in the working environment. Generally, the results of the survey indicated that nurses are confident that they are aware of the essential caring practices that will enhance the development of the therapeutic nurse-patient relationship. From the survey it was also noted that there were areas of disagreement from what the nurses presume to be essential in the caring behaviours as compared to what the literature is generally saying. The key area of disagreement was the cultural and religious beliefs seen by participants as the barriers to the development of a caring attitude, while literature indicates that they are essential to the development of the caring attitude.

Secondly from the survey, the findings indicated that the nurses did not rate emotional self-awareness and the emotions of the patients as critical elements in the development of the therapeutic NPR.

The qualitative data collection instrument was developed based on the findings from the quantitative phase of the study. Participative observation and the focus group discussions were both used in order to allow the triangulation of the study results from the qualitative phase of the study. The results from the qualitative phase of the study further demonstrated that cultural beliefs and the religious practices are not generally accepted within the nursing practice as the foundation for the development of the caring behaviour. The involvement of the patient in the development of the treatment plan was also discovered as a gap in the daily practices of the nurses who are managing patients with chronic pain. Importantly, the study demonstrated that if the above-mentioned issues are not recognised as the essential elements in the management of patients with chronic pain, then the burden of chronic pain as the debilitating condition will not reduce in the near future.

Ideally, future research with focus on the inclusion of both patients and nurses as the research participants will continue to clarify the need for the caring practices in the nursing profession. As the study was contextual, (Tshwane district) the replication of the

study in a different setting will contribute to the generalizability of the results to the nursing population in general.

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ANNEXURES