

**THE PERCEPTION OF PRIMARY HEALTH
CARE NURSES REGARDING THE ROLE OF
CLINICAL ASSOCIATES**

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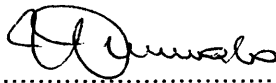
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Nursing Science

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DECLARATION

I, Kekema Joan Khumalo, declare that this report is my own work. It is being submitted for the degree of Masters of Science (Nursing) at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree at any other university.

Signature:



Kekema Joan Khumalo

Date:

05 NOVEMBER 2014

DEDICATION

This research report is dedicated with sincere gratitude to God Almighty through whom all things are possible.

This study is also dedicated to all the beloved members of my family: Lesego and his wife Kgomotso, Mbongeni, Sandile and my dearest sister Ingrid without whom I would have lost my sanity. Thank you all for your love and support; may God Almighty richly bless you.

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I would like to express my earnest appreciation to the following special people:

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- All the Primary Health Care Nurses who took part in this study. Your precious time and willingness to be interviewed are highly appreciated.
- Colleagues at my workplace for your encouragement and assistance offered throughout my period of this study.
- Dr. Anna Temane, thank you for your assistance in co-coding the interview transcripts; your efforts are highly appreciated.

ABSTRACT

Shortage of human resources is a major problem which has become an international emergency that in recent years has caused substantial international attention and concern. Mid-level medical workers were introduced internationally, in Africa and recently in South Africa as a strategy to overcome health workforce challenges and improve access to essential health services, as well as achieve the health related targets of the Millennium Development Goals. Mid-level workers in South Africa are called Clinical Associates.

The aim of the study was to explore and describe the PHC nurses' perception of the Clinical Associate role.

A qualitative, contextual, exploratory and descriptive design was used to explore and describe the PHC nurses' opinions and thoughts concerning the role the clinical associates would play in the health care system; and to obtain an understanding of how the PHCNs see the feasibility of working with these newly introduced health workers. A purposive convenient sampling was used to select participants who were most likely to offer information required in the study.

The study findings show that PHC nurses had insufficient knowledge regarding who Clinical Associates are and what their role is. Although to some extent the PHC nurses acknowledged the important role the Clinical Associates would play, the PHC nurses expressed more concern related to their professional status. The concerns included matters like: who would be senior between the Clinical Associate and the PHC nurses taking into consideration the level of education and training of Clinical Associates versus that of nurses; who would take orders from whom between Clinical Associates and PHC nurses. Another worry was the possibility of clinical associates taking over the PHC nurses roles.

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LIST OF ABBREVIATIONS

ANC	-	African National Congress
ANP	-	Advanced Nurse Practitioner
CA	-	Clinical Associate
CS	-	Community Service
DHS	-	District Health System
EDs	-	Emergency Departments
HPCSA	-	Health Professions Council of South Africa
HEIs	-	Higher Education Institutions
HR	-	Human Resource
HRH	-	Human Resource for Health
LOS	-	Length of stay
MLW	-	Mid-level Worker
MoH	-	Minister of Health
NDoH	-	National Department of Health
NPs	-	National Practitioners
NPDB	-	National Practitioner Data Bank
OSD	-	Occupation Specific Dispensation
PA	-	Physician Assistant
PHC	-	Primary Health Care
PHCNs	-	Primary Health Care Nurses
SA	-	South Africa
SANC	-	South African Nursing Council
SAQA	-	South African Qualification Authority
WHO	-	World Health Organization
WSU	-	Walter Sisulu University

CHAPTER 1

AN OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Every person has the right to optimal health and it is the responsibility of the government to achieve this requirement (ANC, 1994:9). The Bill of Rights enshrines the rights of all people in South Africa (Constitution of South Africa, 1996:8). Section 27(1) (a) stipulates the right to health care services (Constitution of South Africa, 1996:15). However due to the policies that the government inherited post-apartheid, 20 years after democracy, there is still substantial inequities in health and substantial human resource crisis in the health sector especially of the doctors (Coovadia, Jewkes, Barron, Sanders and McIntyre, 2009: 817). Matsoso and Strachan (2011:50) in the Human Resource Strategy for Health Sector 2012/13 – 2016/17 document reported that South Africa is experiencing a quadruple disease burden. This situation indicates an urgent need for service provision and health workforce development.

Over the years a number of strategies were developed and implemented to address the issue of human resource shortage in South Africa. In this study the focus is on efforts implemented by the government to address the shortage of medical doctors in South Africa. One of the most important strategies was the recruitment of Cuban doctors. This strategy was implemented concurrently with the efforts to increase the number of medical doctors' throughput in South Africa. Bilateral government-to-government agreements were negotiated and medical students were sent to Cuba for training in Cuba. In addition, Higher Education Institutions (HEIs) were also encouraged to increase the output of under-graduate health professionals including medical doctors. Rural and scarce skills allowances and Occupation Specific Dispensation (OSD) were also introduced in an attempt to attract and retain medical doctors. Recently a new category of Mid-level medical workers, the Clinical Associate was introduced to address the shortage of medical doctors in South Africa.

The development of human resource and introduction of Clinical Associates is discussed in full in the subsequent sections.

1.2 STUDY BACKGROUND

In South Africa the new government in 1994 inherited policies that were characterized by huge inequalities between the different races in a whole lot of essential sectors. Amongst the lot was a disjointed health system of which the consequence was an unfair and unbalanced access to health care. The government realized that there was a need for transformation of the health sector in South Africa (SA). As a result the proposed National Health Plan based on the Primary Health Care (PHC) approach was adopted (ANC, 1994:9). The National Health Plan is based on the belief that every individual has the right to achieve optimal health. The National Health Plan further stated that the government would be responsible for ensuring that health services are available to all South Africans (ANC, 1994:20). Based on the ANC National Health Plan a District Health System aimed at a continuum provision of health care services throughout the life span was introduced. However, successful implementation of health care service that is equitable, affordable, acceptable and accessible to mention but some of the elements of the PHC strategy seemed virtually impossible with this huge problem of health work-force shortage, facing not only SA but the whole wide world. The shortage of health professionals is a problem that varies from province to province as well as between public and private health sector (Dennill and Rendall-Mkosi, 2012:107).

The White Paper for the transformation of the Health System in South Africa (1997) was developed. The White Paper identifies human resources (HR) as a critical factor needed for the successful implementation of the new health system based on PHC (Dennill and Rendall-Mkosi, 2012:61). Several efforts by the South African government to curb the shortage of medical personnel were initiated.

The first strategy introduced was introduction of Community Service. Community service is a strategy aimed at retention of medical health professional initially; then later was extended to other health professionals. Graduates, post successful

completion of a degree course are expected to complete an additional period of a year in South Africa. This is pre-requisite for recognition of the completed degree leading to registration with the relevant professional body in South Africa and to practice as a professional doctor (HRH Strategy: 2012/13-2016/17:33).

A survey in 2009 exploring medical graduates' response to the community service commitment; showed that 23% of the medical graduates had planned to leave the country immediately after graduating; 17% did not report for community service commitment and a further 6.1% reported that they would emigrate after completing the community service period. The working environment which lacked professional support and career opportunities was the main reason given by the community service students in the public sector for leaving the country (HRH Strategy: 2012/13-2016/17:33).

The introduction of community service is an important strategy towards addressing the shortage of medical health workers; particularly in rural areas. It had a positive impact on staffing in district hospitals a number of which had medical and/or therapy staff for the first time in many years (Couper, de Villiers and Sondzaba, 2005:121).

Recognizing that there was still a huge shortage of medical health professionals in the public sector, the South African government introduced the recruitment of foreign-trained medical health professionals. Cuban doctors were recruited to come and work in South Africa. Furthermore, to try and broaden the countries medical professional base, medical students were sent for training in Cuba, based on a bilateral government-to-government agreement (HRH Strategy: 2012/13 - 2016/17:36). But because of the high mobility of highly skilled professionals, the moving in and out of the country by health professionals needed managing. As much as workforce is needed the recruitment of foreign doctors is limited to a maximum of 6% of the medical workforce by the current National Department of Health policy. Consequently there are 3004 foreign doctors at present in SA according to HRH Strategy (2012/13-2016/17: 36), just about 10% of the medical workforce.

Evidently the use of foreign trained health professionals had shortfalls; hence the introduction of rural and scarce skills allowances. This solution of trying to recruit and retain health workers was implemented in March 2004 with the recommendations of the World Health Report. Differences in the implementation of allowances according to Couper, de Villiers and Sondzaba (2005:121) led to fragmentation, inefficiency and inequity in terms of salaries paid out by different districts and this posed an HR challenge. Regrettably money is not all that provides contentment to workers; job satisfaction, good working conditions, further training and career opportunities are other issues that need attention.

Another strategy that was introduced by the government to try and curb health workforce shortage is Occupation Specific Dispensation (OSD). The aim of the OSD was to make key service occupations attractive in the public service so that it would be easy to retain present personnel and recruit new personnel to posts. However it is reported that in the past five years there has been a significant increase in public sector personnel expenditure budget due to OSD, with associated failure to fill posts for financial reasons; the problem being that OSD was seen as a personnel matter and not an HR development tool (HRH Strategy: 2012/13-2016/17:58).

Further attempts were made to address health workforce shortage. Higher Education Institutions (HEIs) were encouraged to increase the output of under-graduate health professionals. The initiative was driven by the reported observation of the Department of Higher Education. It was noted that for a number of years health professional output from HEIs in relation to population growth and health need has been sluggish in most health sciences programmes. As an increase in output for most of the professions with MBChB was recommended by the National Health Resource Plan for Health of the NDoH of 2006, but proposed expansion from 1300 graduates per annum to 2400 graduates per annum did not take place (HRH Strategy: 2012/13-2016/17:40).

Despite all the means the government introduced in an attempt to address shortage of medical health professionals, human resource remains a serious challenge. This is despite the availability of trained Primary health care nurses (PHC nurses) working

side by side with the medical practitioners providing services within the public primary health care setting. The training of PHC nurses is a post-basic nursing course and nurses recruited for the course must have at least two years of experience as a registered nurse before undertaking this special training. The PHC training programme equips the nurse with the necessary knowledge, skills and attitudes. This enables the PHC nurses to function independently in the public health services, with only minimal and appropriate referrals to a medical practitioner. The PHC nurses' functions entail assessing every patient that reports to the health service through history taking, physical examination, some diagnostic tests, treating and discharging those patients that they are able to treat. Referral to a medical practitioner is for cases beyond the scope of practice of a PHC nurses or for a medical practitioner opinion. Based on this, it is clear that medical practitioners are expected to be available to support the PHC nurses for effective and efficient provision of a service at a primary health care level (DoH, 2001:23).

One of the indicators mentioned by the DoH (2004:17) in improving the clinical management of care is to have PHC services supported by medical doctors at least once a week. This has not been possible despite the fact that rationally enough doctors, 1200 medical students graduate from medical schools annually; because one-third of the doctors trained in SA are reported to be working outside the country (HRH Strategy: 2012/13-2016/17:52).

The Minister of Health (MoH), at the launch of the South African Human Resources for Health (HRH) Strategy for the Health Sector 2012/13 – 2016/17, acknowledged that the health sector has to be staffed by an appropriately skilled workforce that is able to respond to the burden of disease and citizens' expectations of quality service. The MoH admitted that compensation of employees was one of the biggest expenditure in any organization, therefore as the most expensive asset, human resources needed to be managed carefully (Matsoso and Strachan, 2011:50).

Consequently to manage human resources the HRH Strategy a strategic intervention whose activities contributed significantly to improve health outcomes was developed. Its development process is governed by chapter seven of the National Health Act

No. 61 of 2003 (2004:53) which amongst others is to create new categories of health workers ensuring sufficient skills, competencies and expertise (Matsoso and Strachan, 2011:51). Meetings were held with stakeholders, the aim being to identify problems and what should be done to strengthen the human resource capacity of the South African health sector.

The data presented at the stakeholders 'meeting showed stagnation and a decline in public sector clinical posts, which began to change slowly but mainly in the nursing category, so the conclusion was that South Africa has a shortage of doctors and other health professionals, but not necessarily a shortage of nurses. Statistics showed disparity in access to health professionals per 10 000 members of the population between rural and urban areas and between the public and private sectors; Gauteng is shown to have 69.23 health professionals per 10 000, compared to Eastern Cape which has 44.83 per 10 000 (Matsoso and Strachan, 2011:51). Comparison with numerous countries revealed that SA has a much lower ratio of health professionals per 10 000 population; it has 5.43 doctors per 10 000 compared with Brazil which has 17.31 doctors per 10 000. Therefore, for South Africa to have the same doctor to population ratio as Brazil, it would need 60 000 more doctors (Matsoso and Strachan, 2011:51). International and in Africa a category of Mid-level workers have been used to address the issue of shortage of doctors.

Mid-level workers (MLWs) are health workers trained at a higher education institution for at least 2 to 3 years. They are authorized and regulated to work autonomously to diagnose, manage and treat illnesses, diseases and impairments; in addition they are engaged in preventive and promotive care (Brown, Cometto, Cumbi, de Pinto and Kamwendu, 2011:308). In contrast to community or lay health workers, they have a formal certificate and accreditation through their countries' licensing bodies. The mid-level workers have been used in many countries for more than 100 years. Today they are used in high and low-income countries, either to assist professionals or render care independently, particularly in rural health centres and district hospitals making up for the shortage or lack of professionals. It is cited that evidently with appropriate and adequate training, and provided with continued support and supervision; the mid-level workers can indeed provide care comparable to medical

professionals (WHO, 2008:6; Manafa, McAuliffe, Maseko, MacLachlan and Normad, 2009:2).

Mid-level health workers have played a significant role in dealing with human resource shortages and improving health care access and equity especially in low- and middle-income countries. A large number of Mid-level workers are found in East Africa in places like Uganda, Tanzania and Kenya. This system of medical assistants and referrals to the few doctors developed in the ANC camps which contributed enormously to health care (Doherty, Conco, Couper and Fonn, 2013:2). Mid-level health workers and played an important role in the health care of South Africans during the armed struggle.

The South African Department of Health (DoH) launched a three-year training programme for Mid-level workers. This programme started in January 2008 and is currently offered at the Walter Sisulu University, University of the Witwatersrand, University of Pretoria and University of Limpopo. It was established as part of the recommendation of the Department of Health Strategy on Health Human Resources, that the mid-level medical worker programme be developed by various health professional groups. This programme was designed to produce a new category of mid-level health professionals in the country who would address the shortage of doctors particularly in rural areas (Tshivhidzo, 2008:1). The intention was to facilitate the implementation of the primary health care (PHC) package within the country by increasing accessibility to quality health for all. The intention is not to draw these people from existing professional health care workers though but rather for the community to be involved in identifying those people who after training will plough back into their communities (OCP News, 2007:1).

This programme does not replace any existing medical training offered at SA's universities, but aims to enable universities to increase the number of health workers they produce and thus add to the pool and diversity of the country's health workforce. It started as part of a recommendation of the DOH of Health Strategy on Human Resources for Health, that the mid-level medical workers programme be developed by various health professional groups to facilitate the implementation of

the PHC package within the country of SA. This also sought to address the shortage of doctors particularly in rural areas (SA Govt. Info, 2009).

This new category of mid-level healthcare workers known as Clinical Associates (CAs) in SA will initially work in district hospitals to strengthen health care services in the district and to address the shortage of doctors at district hospital and community health centre level. The CAs' training Programme was launched in 2004 but the training started four years later in January 2008, with a first intake of 23 cadres at the Walter Sisulu University and currently being trained at Witwatersrand, Pretoria and Walter Sisulu Facilities of Health Sciences (Doherty, Couper and Fonn, 2012:833). The registration of the qualified CAs will rest with the Medical and Dental Board of the Health Professions Council of SA, while their training will be conducted in the district hospitals and their affiliate facilities (SA Govt. Info, 2009); their regulation with the Health Professions Council of South Africa (HPCSA) (HRH Strategy: 2012/13-2016/17:69).

The Clinical Associates' scope of practice would be defined by the context and requirements of district hospitals with particular focus on emergency care, skilled clinical procedures and in-patient care. Medical services to be provided by the Clinical Associate may include, but not limited to obtaining patient histories and performing physical examinations; ordering and/or performing diagnostic and therapeutic procedures; as well as interpreting findings and formulating a diagnosis for common and emergency conditions. In addition to that they will develop and implement a treatment plan; monitoring the effectiveness of therapeutic interventions; assisting at surgery; offering counseling and education to meet patient needs and making appropriate referrals (Doherty, Conco, Couper and Fonn, 2013: 149).

According to the South African Human Resources for Health Strategy, about 1350 Clinical Associates are required for district hospitals, five per district hospital. But at current output rates it will take fourteen years, until 2028, to train this quota to staff all district hospitals. This may be an indication of the need for a sharp increase in Clinical Associates (HRH Strategy for the Health Sector: 2012/13-2016/17:69).

The District Health System (DHS) has been adopted as a vehicle to deliver Comprehensive Primary Health Care Services in South Africa. District hospitals together with community-based services, services at mobile/fixed clinics and community health centers; form part of the district health system in the new policy. This means that services provided in district hospitals will be fully integrated with services provided in primary care. The implication is that the governance, management and functions of the district hospitals should relate to the governance, management and functions of the district health system as a whole. The district management teams have the task of finding ways in which the hospital-based resources can be harnessed to strengthen the delivery of all primary care services. The district hospital plays a pivotal role in supporting primary health care on the one hand and being a gateway to more specialist care on the other hand (DoH, 2002:3).

The district hospital provides level one (generalist) services to in-patients and out-patients, ideally on referral from a community health center or clinic. Although the concept of Clinical Associates is relatively new in South Africa, their training and scope of practice show that they are being prepared to be generalists (Doherty, Conco, Couper *et al.*, 2013:149). Because of their newness in South Africa it is important to develop an understanding of how the first graduates of Clinical Associates have been received by the wider health force, especially the PHCN since their entry into the job market in 2011 (Doherty, Conco, Couper *et al.*, 2013:149). The researcher has observed that in one of the primary health care clinics based in Soweto, the Clinical Associates performs the same clinical functions as the PHCN nurses.

1.3 LITERATURE REVIEW

The aim of the literature review is to provide a foundation on which new evidence can be based and is usually conducted before data are collected (Polit and Beck, 2012:58); furthermore identify results that support the literature and indicate new findings from the study.

It is almost a cliché that human resources determine the success or failure of health sector transformation. While there is recognition that successful health sector reform pivots on its human resources (HR), the concern raised indicates that HR practices continue to lag behind (Lenmann and Sanders 2002:120 in South African Health Review 2002).

WHO (2008:1) in a literature review conducted outlined that a severe and growing shortage of health workers has become an international emergency that in recent years generated considerable international attention and concern. In many African and some Asian countries the crisis is aggravated by a raging HIV/AIDs pandemic that has driven fragile health systems to the brink of collapse. HIV/AIDs is having devastating effects on the health sector, and health workers are feeling the effects of the epidemic in their own ranks as well. It poses the greatest challenge to human resource development in the health sector. An issue of concern is the health workers leaving the public health services in large numbers either to work in the private sector or to migrate to other countries. There is an estimated shortage of about four million health workers reported by WHO (2006:12) the largest relative need being in sub-Saharan Africa where an increase of almost 140% is necessary. In these areas human resource density, namely, density of all health workers per 1000 population lies between 2.9 in Africa and 5.8 in south-east Asia, compared to 40.3 in Europe and 14.9 in South and North America (WHO, 2008:1).

The government launched a 'Human Resource Strategy for South Africa' under the heading: A Nation at work for a Better Life for All, which addresses human resources development (HRD) needs throughout the country. Within the strategy enhancing the skills and capacity of employees in the public sector has been identified as a crucial component, with specific emphasis on management capacity, monitoring and evaluation, human resource management and leadership development.

The Minister of Health (MoH) in 2011 launched the South African Human Resources for Health (HRH) Strategy for the Health Sector 2012/13 – 2016/17 at the Faculty of Health Sciences of the University of the Witwatersrand. The vision to implement re-engineered PHC, improve access to health care for all and health outcomes made it

necessary to develop and employ new professionals and cadres to meet policy and health needs, increase workforce flexibility, improve ways of working and productivity of the existing workforce and revitalize aspects of education, training and research (Matsoso and Strachan 2011:50).

The strategy identified to alleviate health worker shortages and improve access to and quality of health services has been the accelerated use of mid-level workers. Mid-level workers are often defined as those who have received less training than doctors but who perform aspects of doctors' tasks. There are many mid-level workers either already in other health professions or planned for the future. The term is often used quite loosely and has a number of different meanings (WHO, 2008¹, 6) such as physician assistants, medex, medical assistants, dental therapists, occupational therapy assistants, physiotherapy assistants, nurse practitioners, clinical officers, health auxiliaries/technicians etc. These titles do not always reflect the entry requirements, level of training or levels of practice. Some mid-level practitioners with equivalent training are given different titles in different countries.

South Africa adopted the policy of health care delivery system based on the primary health care approach. The introduction of MLW would increase access to quality health care for all by strengthening primary health care delivery. This new cadre of workers is meant to bridge the gap between the urban and rural divide, the well-resourced and under-serviced areas. The main objective is to improve access to health care to all sectors irrespective of geographical location. The training of MLWs varies in terms of entry qualifications, training content and duration of training as determined by each professional council (OCP News, 2007:1).

Shortages of primary care doctors are occurring globally; and one way of meeting this demand has been the use of mid-level workers. According to several authors, in order to address doctor shortages and uneven distribution of doctors in the United States, mid-level workers known as Physician Assistants were introduced in the late 1960s. The Physician Assistant movement has grown to over 75 000 providers in 2011 and spread to Australia, Canada, Great Britain, the Netherlands, Germany, Ghana and South Africa. These mid-level health professionals are qualified to provide medical care in conjunction with a physician. They have also proved their

competence, skills and usefulness over 30 years in the USA (Steward and Catanzaro, 2005:345; Hooker and Everett, 2011:1 and Smith, Tevis and Murali, 2005:322).

A purposeful literature review was undertaken by Hooker and Everett (2011:1) to assess the contribution of Physician Assistants to primary care systems. The study conducted suggested that Physician Assistants could contribute to the successful realization of primary care functions, particularly the provision of comprehensive care, accessibility and accountability. In addition Hooker and Everett (2011:27) in a literature conducted regarding Physician Assistants in team-based primary care, spanning 1990 through 2010, findings demonstrated that these providers have improved certain aspects of the delivery of primary care. Therefore employing Physician Assistants seemed a reasonable strategy for providing primary care for varied populations (Hooker and Everett, 2011:28).

One of the attributes mentioned about the Physician Assistants is that they have significant role flexibility, allowing healthcare systems multiple options for incorporating them into primary care provider teams. Literature suggests that Physician Assistants (PAs) can make significant contributions to selected functions of primary care. These clinicians have also demonstrated preference to provide care to under-served populations, thereby improving access to primary care. Available evidence suggests that the care provided by Physician Assistants is safe, effective and satisfying to patients insofar as it is comparable to doctors. They have demonstrated clinical effectiveness both in terms of quality of care and patient acceptance (Steward and Catanzaro, 2005:345).

Provision of care by Physician Assistants has a favorable cost benefit, thereby improving efficiency. The strength of this undertaking is that it identifies work where Physician Assistants are both cost-effective and complementary with primary care doctors in attaining the functions of primary care (Hooker and Everett, 2011:28).

Physician Assistants in countries such as the United State of America (USA) perform many of the tasks previously done solely by their physician partners. Physician

Assistants are not independent practitioners but practice in association with physicians. According to Mittman, Cawley and Fenn (2002:485) studies have shown that the quality of care given by Physician Assistants is at the level of that given by physicians in comparable situations, with high levels of satisfaction by patients. Actuarial data do not show any increased liability as a result of using physician Assistants. They are accepted by both patients and doctors and their performance in terms of quality care, improved access to health care for populations in rural and other underserved areas; and cost effectiveness is satisfactory. It is also indicated that physicians who work with Physician Assistants state that the advantages of engaging Physician Assistants overshadow the disadvantages (Mittman, Cawley and Fenn, 2002:487). Here below are some of those studies:

Cawley, Rohrs and Hooker (1998:242) conducted a study regarding the impact of employing Physician Assistant in relation to medical malpractice risks. Working with physicians, PAs have been shown to be well accepted by patients and other health providers, to be cost-effective and to deliver medical services at a level of quality indistinguishable from physician care. Since PAs are recognized as health care practitioners authorized to perform physician-delegated medical diagnostic and therapeutic tasks, medical and occupations boards regulate their practice. The record of studies that have been conducted are reported to the National Practitioner Data Bank (NPDB). The NPDB is a computerized repository of malpractice-related payments made by insurers for a variety of clinicians licensed by the state. The intent of the NPDB is to identify and alert health plans, regulatory agencies, law enforcement officials and employers regarding medical incompetence or adverse incidents involving physicians, dentists and other health practitioners including nurses, physician assistants etc.(Cawley, Rohrs and Hooker, 1998:243).

Medical malpractice payment reports the greatest proportion of all reports in the NPDB. During 1997, the NPDB received 18, 929 such reports. From 1990 through December 1997 it produced information on more than 176, 000 actions, malpractice payments and exclusions involving 118, 142 individual practitioners. PAs were responsible for a total of only four payments, representing 0.03% of the total for 1997. The NPDB data suggests the rate and amount of malpractice payments for

PAs is relatively low. The data reveal one claim per eight practicing physicians vs one claim per 107 PAs. These findings support previously held perceptions that PAs pose a low risk of malpractice liability for employing practices (Cawley, Rohrs and Hooker, 1998:244).

Another study that was conducted was to assess the impact of the integration of the new roles of primary health care nurse practitioners (NPs) and physician assistants (PAs) on patient flow, waiting times and proportions of patients who left without being seen in 6 Ontario emergency departments (EDs). The integration of these health care roles was associated with reductions in waiting times, length of stay (LOS) in the ED and proportions of patients who left without being seen. Additionally, a recent Canadian study found that patients are very satisfied with the care they receive from providers other than physicians (Ducharme, Alder, Pelletier, Murray, and Tepper, 2009:459).

A direct effect on patient flow was seen, presumably because the addition of primary health care providers increases the number of workers able to assess and treat patients. Flow of patients was thus improved within the ED without establishing a separate fast-track area. An additional indirect effect was likely that physicians could focus on the more ill and injured, knowing that those of lesser acuity would, at least initially, be seen by the PA or NP. Lengths of stay were 30.3% and 48.8% lower when PAs and NPs, respectively, were involved. When PAs and NPs were not on duty; the proportion of patients who left without being seen were 44% and 71% respectively (Ducharme, Alder, Pelletier *et.al.*, 2009:459).

One other study conducted was to assess if the employment and utilization of PAs and Advanced Nurse Practitioners (ANPs) increased liability. According to Hooker, Nicholson and Le (2009:15) seventeen years of observation suggest that if anything PAs and ANPs may decrease liability as viewed through the lens of a national reporting system. From the policy standpoint it appears that incorporation of PAs and APNs into the society has been a beneficial undertaking and liability has not increased compared to doctors (Hooker, Nicholson and Le, 2009:15).

Dovlo's study indicated that Kenya, Malawi, Mozambique, Tanzania, Uganda and Zambia have such cadres who are doing essential medical tasks especially in rural areas (Dovlo, 2004:3). Few detailed papers were encountered that compared quality indicators between professionals and these cadres. Several positive comparisons of quality were reported without substantive data. None of the information reviewed indicated clearly negative results from the practice by MLWs. Some key informants however expressed reservations about the lack of support and supervision for the cadres. It is possible therefore that where regulation does not exist quality of care given may be affected.

Dovlo (2004:8) furthermore conducted a comparative study between medical assistants and doctors, evaluating quality of child care in Malawi. The results revealed that there is no significant difference between the level of care between doctors and medical assistants. In the same article the results of an assessment of interventions by "surgical technicians" showed that the quality of care was effectively identical to interventions of doctors in terms of complication rates.

In Tanzania only a very small proportion of health workers are professionals, the majority are mid-level health workers. Like all the other mid-level workers they have received less training and have a more restricted scope of practice than professionals (Kwesigabo, Mwangi, Kakoko *et al.*, 2012:39). Information from other countries including the USA and Tanzania was used to develop the South African programme. The subject regarding the introduction of midlevel workers in South Africa has been discussed since the early 1990s. The new mid-level medical workers in South Africa are known as Clinical Associates (Hugo, 2004:5).

Pharmacy was the first discipline to introduce midlevel workers and has now been training pharmacy assistants for the past five years. Other disciplines that introduced midlevel workers in South Africa are physiotherapy, occupational therapy, nutrition as well as speech and hearing therapy discipline (White, 2007:16).

The new type of mid-level medical professionals is called a 'clinical associate'. Clinical Associates undergo a three year Bachelor's degree presently offered by

three medical schools, namely, Walter Sisulu University, University of Pretoria and Witwatersrand. The training programme began in 2008 and the first graduates entered the job market in 2011. Once graduated, Clinical Associates are able to conduct history-taking and physical examinations, dealing with emergencies and conduct routine diagnostic and therapeutic procedures. Ideally, as pointed out by Hugo (2004:5), clinical associates should have the knowledge and skills to help the doctor with less complicated clinical tasks and procedures in the emergency unit, theatre and wards. Unlike clinically-trained Primary Health Care nurses who practice independently, Clinical Associates are required to work under the direct supervision of a doctor. The intention is that they perform many of the routine tasks that usually consume doctor's time, allowing doctors to focus on more complex tasks. They will also relieve the nurses of some of the tasks that they are forced to do often outside their official scope of practice because of staff shortage (Doherty, Conco, Couper *et al.*, 2013:149). This will hopefully give the doctor more time to support the important work in the community and the clinics, especially to PHC nurses. Clinical Associates can contribute to the quality of district hospital care and address human resource shortage. In conclusion by performing the duties that are normally done by doctors, Clinical associates would allow doctors to do more complex duties, give support to PHC nurses in the community health centers and clinics.

1.4 PROBLEM STATEMENT

A number of strategies were introduced in South Africa to address the issue of shortage of health care workers. Indeed shortage of human resources is a major problem which has become an international emergency that in recent years has caused substantial international attention and concern. Mid-level medical workers were introduced internationally, in Africa and recently in South Africa. Mid-level medical workers who in South Africa are called Clinical Associates, are recruited and trained at university level. The Clinical Associate is conceptualized as a health professional that will be part of a district health team. It is envisaged that the inclusion of Clinical Associates in the district will strengthen the district-level health services. Doctors would be relieved of some of the duty pressures by re-allotting

some of their time-consuming tasks to the Clinical Associates (Doherty, Congo, Couper *et al.*, 2013:148).

Some of their patient management tasks, health assessment and diagnostic procedures overlap with those of the PHC nurses who have been working side by side with the doctors. It was because of this reason that the Pick report of 2001 according to Hugo (2005:149) recommended that the scope of practice be defined for each professional group to reduce overlap between these groups. The researchers' study emanates from the concern related to the working relations between the PHC nurses and the new cadre of health workers, the Clinical Associates; as good working relations are dependent on or made possible through the knowledge and understanding of each professional team member's role.

Currently no studies have been conducted in South Africa to explore other health professionals' knowledge and perceived role of the Clinical Associates in South Africa. There are however circumstantial accounts that health professionals in training facilities appreciated the contribution made by Clinical Associates students in relieving their workload, and there appears to be a demand for new graduates. Therefore this study will attempt to answer the question **“What are the perceptions of primary health care nurses regarding the role clinical associates”?**

1.5 RESEARCH PURPOSE

The purpose of this study was to explore and describe the perceptions of primary health care nurses regarding the role of clinical associates.

1.6 RESEARCH OBJECTIVES

The objectives of this study were:

- To explore and describe the perceptions of PHC nurses regarding the role of the Clinical Associates.

1.7 SIGNIFICANCE OF RESEARCH STUDY

No other studies have been found exploring the PHC nurses perceptions regarding the role of the Clinical Associates. Therefore, the researcher anticipates that the findings will assist to bring light about the PHC nurses' perceptions regarding the Clinical Associates' role in the health care sector. The findings could possibly be used to design strategies to avert potential tensions between the PHC nurses and the Clinical Associates; also help to improve teamwork and relationships between Clinical Associates and other professionals.

1.8 RESEARCHER'S ASSUMPTIONS

In general terms, an assumption is a principle that is accepted as being true based on logic or custom, without proof (Polit and Beck, 2012:720). On the other hand the researcher's assumptions are based on philosophical beliefs about the world, also called a world view or paradigm (LoBoindo-Wood and Haber 2006:133).

Polit and Beck (2012:736) describe a paradigmatic perspective as an internalized way of looking at reality. It is also a set of philosophical assumptions that guides one's approach to inquiry. Researchers select assumptions related to the paradigm perspective believed to be relevant for describing what reality is (meta-theoretical or ontological), the position of the researcher in relation to those being researched (theoretical or epistemological) and finally how the evidence will be archived (methodological) (Polit and Beck, 2012:13). A naturalistic (qualitative) research paradigm was adopted for the purpose of exploring the perceptions of PHCNs regarding the role of the Clinical Associates.

1.8.1 Meta-Theoretical Assumptions

For the purpose of this study the researcher reviewed the Human Resources for Health strategy document for the Health Sector 2012/2013 – 2016.17 (Matsoso and Strachan, 2011:49). Matsoso and Strachan (2011:49) presents eight priorities which form the framework for the HRH strategy. The HRH strategy document is used as a guide to direct the researchers' thought with regards to the four main concepts related to the meta-theoretical assumptions which are defined as follows:

- **Person**

In this research, the word person refers to PHC Nurses and the Clinical Associates. PHC Nurses are the primary health care nurses employed in the Soweto clinics in Region D, Gauteng Province. PHCNs are a specialized group of registered nurses who function as independent frontline providers of health care. Clinical Associates are new mid-level workers introduced in South Africa, aimed at strengthening primary health care services in the country

- **Environment**

The term environment in general refers to the surroundings or natural conditions. In this study environment is the space where comprehensive primary health care services are provided. Clinics, community health centers and district hospitals form part of the space within the District Health System (DHS). This is the space wherein service providers carry out their activities; interacting with service users and other service providers. Environment also refers to internal factors that affect an individual such as emotions, expectations, fears etc.

- **Health**

It is a state wherein through optimum use of resources the individual is able to achieve maximum potential daily living. In this study achieving health of the people was viewed in relation to the availability of human resource.

- **Nursing**

Nursing is seen as assisting an individual to preserve or restore the balance between the external and internal environment. The service is aimed at delivering comprehensive primary health care that is equitable, affordable, acceptable and accessible to all South Africans.

1.8.2 Theoretical assumptions

Theoretical assumptions contain statements about the researcher in relation to those being researched as well as definition of terms consistently used in this study.

- **Definition of concepts**

Primary Health Care Nurse : A professional nurse who has acquired an additional post-basic qualification of Diploma in Clinical Nursing Science, Health Assessment, Treatment and Care according to regulation R48 as recognized by SANC (1997); trained to provide a health service of assessment, diagnosis, treatment and care to clients/patients presenting at the PHC facility with health problems (DoH, 2000:14). In this study a primary health care nurse is a qualified nurse clinician who was present on duty at the day/time of study and had agreed to take part.

Clinical Associates: New mid-level medical workers in South Africa, who completed the three-year Bachelor of Clinical Medical Practice, introduced to address the shortage of doctors within the district health system and community health centre level (HRH Strategy: 2012/13-2016/17:69).

Perception: According to Collins Students' Dictionary (2006) perception is the way one notices things especially with the senses. For the purpose of this study perceptions are feelings, views and opinions of the PHC nurses in the Soweto health services.

Provincial clinic: A fixed clinic rendering comprehensive primary health care services to both children and adults, who are regularly seen for assessment and treatment of minor medical and surgical problems. Family planning, maternal and obstetric services are also provided as well as IMCI (Integrated Management of Childhood Illnesses).

Local authority clinic – It is a fixed or mobile health service situated within the community it serves, rendering a comprehensive health care service including treatment of common health problems with a referral system.

1.8.3 Methodological assumptions

Methodological assumptions refer to how the researcher envisages the entire process of evidence gathering unfolding. In this study the researcher used a

qualitative, exploratory and descriptive design to explore and describe the perception of PHC nurses regarding the role of Clinical associates.

1.9 OVERVIEW OF THE METHODOLOGY

In this section an overview of the research methodology is presented. An in-depth description is presented in Chapter 2.

Burns and Grove (2009:218) describe the research design as a researcher's guide towards planning and implementing a research study in a manner that will assist the researcher to achieve the intended goal of the study. A qualitative, exploratory and descriptive design was used to explore and describe the perception of PHC nurses regarding the role of Clinical associates.

The study was conducted in Region D of the Gauteng Province, which mainly consists of Soweto where four provincial clinics were selected. These provincial clinics provide comprehensive primary health care, as compared to local authority clinics which provide only promotive and preventive services. The target population in this study consisted of registered nurses (N=12) who have acquired a Diploma in Clinical Nursing Science, Health assessment, treatment and Care (primary health care) and had to be currently working at the four provincial clinics in Soweto for a minimum of two years.

The researcher conducted interviews to explore and describe the perceptions of the primary health care nurses regarding the role of Clinical Associates in the clinical health setting, using an interview guide. Interviews are a method of data collection in which an interviewer obtains responses from a subject in a face to face encounter (Brink, 2008:151). Data collection was conducted at the work site without interruption of the services.

Data analysis was done concurrently with the data collection process, that is both at the research site during data collection and away from the site (De Vos, Strydom, Fouche *et. al.*, 2008: 333-335). Data was coded for categories and sub-categories.

1.10 ETHICAL CONSIDERATIONS

Ethical clearance (Annexure B) to conduct the study was sought from the Health Sciences Post Graduate Committee and Human Research Ethics Committee (Medical) of the University of the Witwatersrand. Permission was also granted by the Gauteng Health Directorate to conduct the study at the four Soweto Health Centres as well as from the managers of the respective Clinics.

Verbal and written information was given to prospective participants, explaining who the researchers are and what the purpose of the study is. After an invitation was extended to them to participate in the study, an informed consent was obtained from them as well as permission to use an audio-tape (Annexure D, E & F).

The participants were informed of their right to refuse to participate in the study; withdraw from the study at any time without penalty and even refuse to answer any question if not comfortable to do so. Confidentiality and anonymity was assured through the use of pseudo names and were used throughout the analysis and reporting of research findings process. Interviews were conducted in a private and convenient area to the participant. Recorded information was kept under secure lock and key for safe keeping and accessible only to the researcher and supervisor. The recorded interviews data is stored on a password protected USB disk. The transcripts are stored in the supervisor's office and will be kept for five years.

1.11 ORGANIZATION OF CHAPTERS

The chapters in this study are organized as follows:

Chapter 1: Introduction and Background

Chapter 2: Research design and Methodology

Chapter 3: Results of the study and Literature control

Chapter 4: Conclusions and Recommendations

1.12 CONCLUSION

In this chapter an overview of the study; the research design, data collection and data analysis process, as well as ethical considerations were presented. An attempt was made to integrate the theoretical basis of the methodology; with the significance of the study, the research question as well as the aim and objectives. Relevant operational definitions were given as well. The following chapter describes the research design and methodology.

CHAPTER 2

RESEARCH DESIGN AND METHODOLOGY

2.1 INTRODUCTION

This chapter was to properly demonstrate the whole systematic process followed in carrying out the study of exploring the PHC nurses' perceptions regarding the role of Clinical Associates.

The components that have an influence in the progress of the study are described; components such as research design, setting, population and sampling as well as data collection and data analysis procedures. The measures used to defend the rights of the participants and a brief discussion of the ways used to get required documented permission from relevant authorities to conduct the study are specified as well as an overview of the evaluation of the trustworthiness of the study.

2.2 RESEARCH DESIGN

Research design is the outline of carrying out a study which helps the researcher to have control over factors that could interfere with the legitimacy of the findings. It guides the researcher in planning and implementing the study in such a way that the intended goal is almost certainly achieved (Creswell, 2013:49). A qualitative, contextual, exploratory and descriptive design was used in this study in view of the fact that it had the ability to extract more information naturally from participants about the perception of PHC nurses regarding the role of clinical associates. This approach facilitated the intensity in which the researcher went into when exploring and allowed the researcher to understand the underlying opinions and thoughts of the PHC nurses about the roles of clinical associates.

2.2.1 Qualitative Design

A qualitative method is used in order to gain insight into the occurrence under study through discovery of meanings. The method is particularly useful when the purpose

is to describe a phenomenon, in order to gain a specific person or group's insight about an experience. The participants' experiences are the findings of qualitative research; therefore it is essential that the findings be reported from the perspective of those who have lived them. The qualitative method involves broadly stated questions about human experiences and realities. Data is continually examined and interpreted and decisions made on to proceed based on what has already been discovered (Polit and Beck, 2012:60). The same opinion that this method allows for examination of deepness, richness and complexity built in the experience is shared by Burns and Grove (2009:51). Hence in order to achieve the aim and objectives of this study, information was obtained by means of semi-structured one-on-one interviews from participants.

2.2.2 Contextual Design

Collins Students' Dictionary (2006) refers to a 'context' as the 'specific circumstances relevant to something under consideration'. The context of an idea or event is the general situation that relates to it and that contributes to it being understood. Contextual variables are those factors that could influence the implementation of an intervention and thus the outcomes of the study. They include the social and environmental settings and could have an influence on the execution and results of the study (Burns and Grove, 2009:178).

Likewise, the natural setting in which the people under study live, learn and play is characteristic of qualitative research; in the understanding that the data is best understood in the context in which it occurs. This study is contextual since it pertains to a specific group of professional nurses within the boundaries of specialist Clinical Nursing Science, Health Assessment, Treatment and Care (SANC Reg. 48); and limited to only one Region within the Gauteng province.

2.2.3 Exploratory and Descriptive Design

Exploratory design observes and describes a phenomenon of interest and investigates its full nature; the manner it manifests and factors related to it (Polit and Beck, 2012:18). This design allowed the researcher to gain insight into a

phenomenon of interest that is new and somewhat unknown. It also allowed examining of ideas and suggestions by following an open and flexible strategy, and lead to insight and comprehension of a research area according to De Vos, Strydom, Fouche et al, (2008:106).

A descriptive design on the other hand presents a picture of the specific details of a situation or relationship (Brink, 2008:102) and centers on 'how' and 'why' questions. This approach helped the researcher to explore and describe deeper insight and gain richer understanding of the PHC nurses' perceptions regarding the role of the clinical associates.

2.3 POPULATION AND SAMPLING

2.3.1 Population

In research the population refers to the people who are the focus of the study conducted. Target population is the whole set of individuals who meet the sampling criteria whereas accessible population is the portion of the target population to which the researcher has reasonable access (Burns and Grove, 2009:344).

The target population (N=12) in this study consisted of registered nurses who have acquired a Diploma in Clinical Nursing Science, Health assessment, treatment and Care (primary health care) and currently working at the four provincial clinics in Soweto Region D in the city of Johannesburg, Gauteng Province for a minimum of two years. The only PHC nurses who were excluded were those who were on leave during the period of study.

2.3.2 Sample and Sampling

Sample represents the selected group of people or elements included in the study obtained from the accessible population. Sampling on the other hand involves selecting a group of people, events, behaviours or other elements with which to conduct a study whereas sampling plan defines the process of making the sample selections (Burns and Grove, 2009:343).

A purposive convenient sampling was used in this study to select participants who were most likely to offer information required in the study, namely, perception of the PHC nurses regarding the role of clinical associates. In purposive sampling, which sometimes is referred to as judgmental or selective sampling, the researcher consciously selects certain participants, elements, events or incidents to include in the study. In purposive sampling, qualitative researchers select information-rich cases, or those cases that can teach them a great deal about the central focus or purpose of the study (Burns and Grove, 2009:355).

2.3.3 The Recruitment Process

The recruitment process started with the researcher asking for and getting permission to conduct the study at the four Gauteng provincial clinics in Soweto, Region D. A letter was written to the Gauteng health Directorate (Annexure C) in that regard, followed by telephone calls and personal visits to the clinic managers. The clinic managers were informed of the study process by the researcher, and arrangements were made for researcher and participants to meet in the afternoon when the bulk of work was done.

The prospective participants were met, the study process was explained and requests made to participate in the study. An outline of the study and relevant documents were given. After agreeing to participate, consent was obtained by asking participants to sign two consent forms for agreeing to be in the study and being tape-recorded. Appointments were scheduled for dates convenient for both the researcher and participants.

2.4 DATA COLLECTION

Data collection according to Burns and Grove (2009:441) is the process of selecting subjects and gathering data relevant to the research purpose or the specific objectives or questions of the study from these subjects. Data was collected from the subjects by observing, questioning and recording. The data collection steps included locating an individual, gaining access and making rapport, purposeful sampling,

exploring field issues; collecting, recording and storing data (Creswell, 2013:145). The researcher was actively involved in this process by collecting data.

2.4.1 Data collection tool

The data collection tool has two components. The initial part of the study was the demographic aspect. Participants were supplied with a separate sheet having personal information questions (Table 3.1). Here they had to make ticks on the appropriate spaces provided for the information required. The personal information consisted of age, gender, marital status and clinical experience as a primary health care nurse (PHC nurse). The second part was qualitative in nature.

2.4.2 Data Collection Process

A small scale trial run study was conducted prior to the main study on a limited number of subjects from the population at hand. Its purpose was to investigate the feasibility of the proposed study and to detect possible flaws in the data-collection process and instrument (Creswell, 2013:165). Furthermore, trial run study helps in gaining clarity and making amendments to the data collection interview guide used. In this research study trial run interviews were conducted on two PHC nurses working in the same environment. The recorded data was transcribed, coded and analyzed. However, the results obtained from the pilot study were not included in the main study as these were mainly for the researcher to get acquainted to using an interview guide.

The main data collection part was conducted using through semi-structured in-depth interview since this is the most direct ways of obtaining data from the respondents (Brink, 2008:151). In-depth interviews according to De Vos, Strydom, Fouche *et al*, (2008:296) are useful ways of getting large amounts of data quickly and are an especially effective way of obtaining depth in data and to gain a detailed picture of participants' beliefs, opinions and perceptions of a particular topic. English was a medium of communication since both the researcher and the participants were comfortable with it. Participants were encouraged to respond as much as they needed to; however, from observation most interviews lasted approximately 45 minutes to one hour. One-on-one interviews using interview guides (Annexure A)

were conducted until data saturation was reached (de Vos, Strydom, Fouche et al, 2008:202).

An individual in-depth interviews were conducted in a private setting with limited distractions. The question posed to the participants was “***What comes to your mind when the name 'clinical associates' is mentioned***”. The main question was then followed by probing questions, as a means of exploring and gaining a richer and deeper understanding of the participants’ perceptions and opinions on the clinical associates’ roles, but with reasonable guidance to avoid the participant feeling that he or she was being cross-questioned (Burns and Grove, 2009:520). As a technique for data collection, data was recorded by use of an audiotape with permission from the participants (Annexure F), and taking of notes. Participants were allowed to talk without too many interruptions. The process was facilitated by listening and probing.

2.5 DATA ANALYSIS PROCESS

Data analysis is described by Burns and Grove (2009:44) as a process of reducing, organizing and giving meaning to data. De Vos, Strydom, Fouche *et al*, (2008:333) describes it as a process of bringing order, structure and meaning of data collected in a qualitative study.

In this study qualitative data analysis was done by the use of thematic content analysis outlined by LeCompte (2000:148). Thematic analysis involves the search for and identification of common recurring significant or relevant threads that extend throughout the entire interview or interviews (Van Zyl, 2010:1). The process was verified by the co-supervisor through reading of transcripts and listening to the tapes. Confirmation of the emerging results was validated through comparing the initial findings with the co-coders report.

Data was collected, simultaneously coded and analyzed in order to obtain a sense of emerging concepts for content analysis. The process of data analysis continued with constant listening of audio tapes and verbatim transcription of interviews from audio recordings. The researcher read through each transcript to get a sense of the

phenomenon as perceived by the participants. Transcripts were then repeatedly read through to identify significant items which are relevant to the research question.

Data were sifted by reading through the field notes, interviews and text repeatedly to identify items relevant to research questions. Information from the participants were summarized, sorted, and extracted in a systematic processes looking for frequency, omission and declarations in the initial process. According to LeCompte (2000:148) this method of sifting and sorting help in finding data that will lead to research results. The process furthermore resulted in reduction of data. Then the researcher read through, interpreted to derive meaning from the responses. Different colour pens were used to label similar responses and those that were unique or different. Then a descriptive code was decided on and assigned to each colour code. This process resulted in a list of identified non-repetitive, non-overlapping units.

Thereafter the data was organized into clusters and categories; an undertaking which was accomplished by comparing and contrasting or mixing and matching them.

Each developed category was then compared to every category to ensure that they were mutually exclusive in order to conceptualize data. As the process continued, categorization yielded groups of categories.

The combination of constant comparative method, clustering and coding process culminated in assembling taxonomy of items, the relevance of which originates from the study proposal.

The process of constant comparing thematic analysis was used to investigate the PHC nurses views and thoughts regarding the role of Clinical Associates. The process helped to identify data that gave meaning to the views and thoughts pertaining to ***“the perceptions of primary health care nurses regarding the role of clinical associates”***. One broad theme was discovered and three categories emerged from this process. The findings are discussed in detail in Chapter 3.

2.6 LITERATURE CONTROL

A literature review is an organized written presentation of what has been published on a topic by scholars and includes a presentation of research conducted in one's field of study. The purpose of the review is to convey to the reader what is currently known regarding the topic of interest (Burns and Grove, 2009:92). In this study a literature control was done to determine what is already known about perception of other health workers regarding the role of the mid-level health workers; and where the research results of the study fit into the broad research studies on this topic.

2.7 TRUSTWORTHINESS

One of the requirements for acceptable scientific research findings is the epistemological criterion, referred to as truthfulness (trustworthiness) or valid knowledge that is well substantiated and thus provides an accurate representation of reality. The term trustworthiness is used to measure the validity (truthfulness) and reliability (consistency) of the qualitative study findings. Trustworthiness was ensured throughout the study. Four criteria were suggested by Lincoln and Guba in Polit and Beck, for developing the trustworthiness of qualitative inquiry; credibility, transferability, dependability and conformability (Polit and Beck, 2012:584-5). These criteria will be described in detail within the context of this research study below:

- **Credibility**

Credibility refers to the degree of confidence in the truth of the research findings. The aim is to show that the analysis was conducted in such a way as to make certain that the subject matter was correctly described and interpreted (Polit and Beck, 2012:585; de Vos, Strydom, Fouche *et al.*, 2008:346). The researcher ensured truth of the perceptions of participants regarding the role of clinical associates through prolonged engagements with participants, and such engagements allowed the researcher to identify inconsistencies in the participants' responses. The credibility of the findings was further ensured by capturing of data through a tape recorder, triangulation of data methods; and transcribing and analyzing of interviews while they were still fresh. Engaging a co-coder who validated the script compiled by the

researcher through listening to all interviews audio-tapes also ensured the truth of the data collected.

- **Transferability**

Lincoln and Guba in Polit and Beck (2012:585) refers to **transferability** as the extent to which findings can be transferred to or have applicability in other settings or groups. As such the transferability of qualitative findings to other settings or populations is seen as a weakness in the approach. Findings may not necessarily be applicable from one context to the other.

- **Dependability**

Dependability is synonymous with stability and consistency of findings in qualitative studies and can be equated to reliability in quantitative studies (Polit and Beck, 2012:585; de Vos, Strydom, Fouche *et al*, 2008:346). It applies to the overall evaluation of the research study by the external examiner to ensure stability over time. The underlying issue here is whether the process of the study is consistent, reasonably stable over time and across researchers.

In this study a purposive sampling technique was used for the selection of participants, and all interviews were conducted by the same researcher using the same interview guide having the same main question.

- **Confirmability**

Confirmability is a strategy for ensuring trustworthiness, and it refers to the neutrality of the meaning of data, namely, the degree to which findings are the results of the participants in their context, and not of their biases, motivation and perspectives (Polit and Beck, 2012:585; de Vos, Strydom, Fouche *et al.*, 2008:347). Confirmability captures the traditional concept of objectivity. It guarantees that the findings, conclusions and recommendations are supported by the data and that there is internal agreement between the investigator's interpretation and the actual evidence (Brink, 2008:119). In this study confirmability was enhanced by analyzing

of data by the researcher and the supervisor; as well as participants at the end of data collection, to confirm accuracy of the data collected and transcribed.

2.8 ETHICAL CONSIDERATION

Human rights are claims and demands that have been justified in the eyes of an individual or by the consensus of a group of individuals. Having rights is necessary for the self-respect, dignity and health of an individual. Researchers have an ethical responsibility to recognize and protect the rights of human research subjects. The human rights that require protection in research are: the right to self-determination, the right to privacy and the right to anonymity and confidentiality, the right to fair treatment and the right to protection from discomfort and harm (Burns and Grove, 2009:189). Participants were assured of the safety of their rights.

- **Right to self-determination**

The right to self-determination is based on the ethical principle of respect for persons (Burns and Grove, 2009:189). In this study the subjects' rights were not violated in that they were informed about the proposed study and allowed to voluntarily choose to participate or not. Verbal and written information was given to prospective participants, explaining who the researcher was, as well as the purpose of the study. They were not coerced in any way, since they were not deliberately presented with an obvious threat of harm or tempted with excessive reward to obtain their compliance. Withdrawal from the study at any time without penalty and even refusal to answer any question if not comfortable to do so was assured and guaranteed. After an invitation was extended to them to participate in the study, an informed consent (Annexure E) was obtained from them.

- **Right to Privacy**

Privacy is an individual's right to determine the time, extent and general circumstances under which personal information will be shared with or withheld from others (Burns and Grove, 2009:194). The place and time for the conducting of the interviews was arranged and agreed upon by both the researcher and the

participants. Interviews were conducted in a private and convenient area to the participants. Data collection methods were explained to the participants and no data was gathered from them without their knowledge. Permission to use an audio-tape (Annexure F) to capture data was given by participants. They were assured that all data will be kept in a cupboard that is securely lockable and will only be available to the researcher and the supervisor. Participants were also assured of their right to access their records and to prevent access by others.

- **Rights to confidentiality and anonymity**

Based on the right to privacy, the participants have the right to anonymity and the right to assume that the data collected will be kept confidential. Anonymity exists if the subject's identity cannot be linked, even by the researcher, with his or her individual responses (Burns and Grove, 2009:196). Participants were assured of their rights to anonymity hence they did not have to use names on the response documents as well as during interviews in the study. In addition no unauthorized person was ever allowed to gain access to the study raw material.

Ethical clearance to conduct the study was sought from the Health Sciences Post Graduate Committee and Human Research Ethics Committee (Medical) of the University of the Witwatersrand (Annexure B). Permission was also sought from the Gauteng Health Directorate to conduct the study at the four Soweto Health Centres as well as from the managers of the respective Clinics (Annexure C).

2.9 CONCLUSION

In this chapter the research design, data collection and data analysis process were discussed, as well as ethical considerations. An attempt was made to integrate the theoretical basis of the methodology; with the significance of the study, research question, aim and objectives.

CHAPTER 3

DISCUSSION OF RESULTS

3.1 INTRODUCTION

In chapter 2 the qualitative research method used in this research was described. Methods of sampling, data gathering and the data analysis strategy were also presented. This chapter deals with the analysis and discussion of the results obtained from the transcriptions of primary health care nurses' perceptions regarding the role of the Clinical Associate. The findings are evidenced by the quotations of direct translations from participants' discussions. Literature control form part of the discussion. The discussion also includes the field notes of the researcher.

3.2 DEMOGRAPHIC DATA OF PARTICIPANTS

The participants were all registered PHC nurses who are in the permanent employment of Region D provincial clinics in Johannesburg. All the participants (n=8; 100%) were female and the majority (n=6; 75%) were above the age 45. Five participants (62.5%) had more than 10 years' experience in the primary health care field, while (n=2; 25%) experience ranged between six to nine years and one participant had only year experience as a PHC nurse. Six participants (75%) had diploma in general nursing science and two participants had completed a Bachelor in Nursing Science degree. Participants' demographic data is summarized in Table 3.1.

3.3 QUALITATIVE DATA ANALYSIS PROCESS

Qualitative data analysis was conducted using constant comparison thematic qualitative data management process as outlined by LeCompte (2000:148). This process has been described in detail in Chapter 2. A central theme, 3 categories and 4 sub-categories were identified and will be presented, discussed and supported by relevant quotations from the interviews (Table 3.2). The literature control was conducted in order to compare the findings of this study with other similar studies conducted. The literature control process also serves the purpose of discovering how the current findings fit into what is already known (Jackson and Verberg, 2007:8).

Literature control furthermore, serves the purpose of identifying researchable aspects within the PHC nurses and the Clinical Associates interface process.

Table 3.1: Demographic data of participants

Criterion	Characteristics	Frequency (n=8)	Percentage
Gender	Male	0	0%
	Female	8	100%
Age	25-35yrs	0	0%
	35-45yrs	2	25%
	45-55yrs	2	25%
	>55yrs	4	50%
Ethnicity	Black	8	100%
	White	0	0%
	Coloured	0	0%
	Indian	0	0%
Highest level of Education	Diploma in General Nursing	6	75%
	Degree in Nursing Science	2	25%
	Masters	0	0%
	Others	6	75%
Clinical experience as PHCN	<2yrs	0	0%
	2-5yrs	1	12.5%
	6-9yrs	2	25%
	≥10yrs	5	62.5%

3.4 FINDINGS FROM THE INTERVIEWS

The one central theme that emerged was that *“PHC nurses are concerned about how the role of Clinical Associates will affect their professional status”*. The overarching central theme emanates from the categories developed from the content analysis process. Three categories were identified, the first being, role clarity of the Clinical Associate in the health care system. The second related to the perceived challenges while the third concerned participants’ recommendations to the government.

Table 3.2: Theme and categories identified during data analysis phase

Central Theme	Categories	Sub-categories
1. PHC nurses are concerned about how the role of Clinical Associates will affect their professional status	1.1 Role clarity of the CA in the health care system	Clarity of role of the CA in the health care system in relation to: 1.1.1 Level of seniority 1.1.2 Designated name for CA
	1.2 Perceived challenges about CA's role in health care system	1.2.1 Education and training of CAs versus that of nurses
	1.3 Recommendations from the PHC nurses	1.3.1 Suggestions for health care system

Category 1: Role clarity of the Clinical Associate in the health care system

The first identified category concerns clarity about the role of the Clinical Associate, the hierarchical position and the related power and authority.

According to Doherty, Conco, Couper and Fonn (2013:151) the Clinical Associate is part of the collaborative district-level clinical team. So Clinical Associates are meant to help the doctors by relieving their workload; allowing them to focus on more complex cases, making it possible for patients to be treated sooner and closer to their homes.

For many years doctors have been working in close association with nurses. Van Niekerk (2006:1209) in an article titled “Mid-level workers: high level bungling”, states that the relationships between the existing professions were reasonably stable and comfortable. The concern is that although the Clinical Associate is allocated at a specific setting the district hospital, there is a possibility of confrontations around professional boundaries, status and salaries

Sub-category 1.1: Level of seniority

The first sub-category identified is in relation to professional hierarchical status of the Clinical Associates compared with the PHC nurses. Most of the study participants expressed concern regarding the Clinical Associates professional status as evidenced by the following quotes:

“...my problem is who’s gonna work under them, are they gonna be delegating tasks to nurses or are they gonna be working with a group of doctors...”

Another participant stated that the reason why the Clinical Associates might be senior than the PHC nurses, could be related to the fact that they perform procedures that are usually performed by doctors. The question posed by one of the participants is:

“What will make them senior... because they’re doing incision and drainage?”

However, the same participant mentioned that:

“As long as I work independently so there won’t be confusion...”

More than sixty percent of the participants have more than ten years’ experience practicing as primary health care nurses. Hence, the concern of who is more senior than the other.

Role status and position in the health care hierarchical structure are important aspect as they are associated with power and delegation of authority furthermore, with remuneration. Hugo (2004:8) in a discussion paper on implementation of Mid-level workers in South Africa mentioned the importance of the Clinical Associate “fitting into this team as a functional member” for the success of the project.

Doherty, Conco, Couper *et al.*, (2013:148) conducted a rapid assessment to evaluate the Clinical Associate project in South Africa. The results revealed that one of the areas that needs to be “actively managed” is tensions between the different members of the health teams (Doherty, Conco, Couper *et al.*, 2013:152). Tensions were likely to occur especially in the areas that were not involved in training of Clinical Associates.

As stated before, the majority of the PHC nurses from the population sample interviewed were not well informed about this “new cadre” of Mid-level medical workers. The results in this study confirmed Doherty, Conco, Couper *et al.*, (2013: 154) postulation that in an area where other health workers are not well informed, then the Clinical Associates are likely to be received with suspicion. This is expressed in statements like:

“...I am not totally against them...but as a nurse clinician at the same time I feel threatened”

Another participant expressed feelings of rejection. This is reflected in this statement:

“We cannot orientate them because they are going to take over...”

The same participant furthermore said:

“...because it’s not nice to see somebody taking over and then you’ve been working in hospital for years...”

Brown, Cometto, Cumbi *et al.*, (2011: 309) reported that from the limited studies conducted on the perceptions of Mid-level workers, mid-level workers have often been met with resistance from other policy makers and health workers. Fonn, Ray and Blaauw (2010: 1) stated, that the medical mid-level workers are the backbone of many health systems in Africa but they are often de-motivated and they often operate in circumstances in which providing high quality care is challenging.

The findings in this section revealed that the PHC nurses were not well informed about the introduction of the Clinical Associate into the health care system. Hence, they expressed mixed feelings about the role of Clinical Associate in the health care team. Feelings of uncertainty about the functional boundaries, being not recognized and the possibility of their contribution in health care being undermined. The above feelings are expressed in this statement:

Sub-category 1.2: Designated name for Clinical Associates

The concept of addressing the shortage of doctors using Mid-level workers in South Africa developed based on the international experience (Doherty, Couper and Fonn 2012:833). According to findings from a review conducted by Hooker and Everett (2011:20), the training of Clinical Associates programme commenced in the United States in the late 1960s. The movement has grown and spread international to Australia, Canada, Great Britain, Netherlands and Germany. Similar programmes have developed in Africa; in Kenya, Malawi, Mozambique, and Tanzania and recently in South Africa. The introduction of Mid-level workers in South Africa was met with resistance. Hugo (2005:149) states that in stakeholders’ consultative

meetings the mention of Mid-level medical workers was followed by “What is this animal”. In Brown, Cometto, Cumbi *et al.*, (2011: 28) stated that many attempts aimed at defining Mid-level workers ended up using “negative” definitions. In South Africa there was also a feeling that the introduction of this category of health workers came as an instruction from the government a “decree” as stated by van Niekerk (2006:1209).

There is no standard name used for the Mid-level medical workers. Different names are used in different countries. In some countries in Africa they are called Clinical officers; Physician Assistants in the USA; Assistant Doctors in China and Assistant Medical Officers in Malaysia (Doherty, Couper and Fonn 2012:833; Hooker and Everett 2011:20). Here in South Africa the initial suggested name was Clinical Assistant and more recently the Clinical Associates.

In this study participants expressed concern in having to call Clinical Associates doctors as evidenced by one of them citing their views as follows:

“when they work what do we call them, do we call them doctors or what, I have a problem with that...”

The other respondent echoed the same sentiments with regards to the title of Clinical Associates. It is not clear what to call them. In addition, mention was made of not knowing what their rank is.

“...do we call them doctors or...I have a problem with that specifically, I don't know what to call ...I don't know their rank...”

The quotes that follow reveal the difficulties participants have regarding how to address them in the practical setting. This is an important aspect as it also determines the lines of authority and accountability as reflected in the following three quotes:

“...I think it’s a problem...I want to take orders straight from the doctor...because to me I think they are my juniors...that’s how I feel...even though they are classified under doctors...it’s gonna be difficult honestly...to take their orders”

“...am I their subordinate, are we equals who is going to take orders from whom...”

“...my problem is who’s gonna work under them, are they gonna be delegating the nurses or are they gonna be working with a group of doctors”

It is evident that the success of an effective health team as stated by Hugo (2005: 150) is dependent on the cooperation between professional relations and team work. However, results from this study indicate that whilst efforts were made to widely consult all stakeholders, there still remains a risk of confrontations among different members of the health team (Doherty, Conco, Couper *et al.*, 2013:5).

Category 2: Perceived challenges about Clinical Associates role in health care system

Sub-category 2.1 Education and training of Clinical Associates versus that of nurses

Many studies on Mid-level medical workers shown that they function at the forefront of health care provision and have proved to be effective in reducing the workload of the doctors (Brown, Cometto, Cumbi *et al.*, 2011:308) . According to the Minister of Health in South Africa, the introduction of Medical Associates will increase access to quality health care for all by strengthening primary health care delivery. The trainees will not be recruited from existing professional health care workers but rather for the community to be involved in identifying those who after training will plough back into their communities (Couper, de Villiers and Sondzaba, 2005:121).

Brown, Cometto, Cumbi *et al* (2011:308) stated that where Mid-level workers are adequately trained, supported and integrated coherently in the health system; they have a potential to improve distribution of health workers and enhance the quality of care. The issue of quality of care of Mid-level Brown, Cometto, Cumbi *et al*

(2011:311) is inextricably linked to that of their education, regulation and management.

Currently there are no studies in South Africa evaluating the impact of introduction of Clinical Associates in the District Hospitals. However, Doherty, Conco, Couper *et al.*, (2013:9) conducted a rapid review assessment in 2010, describing the processes in which the scope of practice and course design was formulated and negotiated with the stake holders. The research results revealed that there are a number of potential challenges for the Clinical Associates. Some of the challenges are; poor working conditions and management systems in the public sector, contributing to poor staff retention. There is also a possibility of confrontations and tensions between Clinical Associates and the existing health professionals around scopes of practice and competencies (Doherty, Conco, Couper *et al.*, 2013:9).

In this study, the participants raised concerns regarding the period of training of the Clinical Associates and the core competencies achieved. The period of the training programme of Clinical Associates is of a shorter duration compared to that of doctors as well as PHC nurses. It has been shown in other areas that their mid-level workers' programmes required applicants to have previous health care experience and a college degree. A typical applicant in the UK already has a bachelor's degree in science and some health experience (Smith, Tevis and Murali, 2004:322). Something that PHC nurses complained about, and their disgruntlements were observed in the following three quotes:

"I don't know how I can put this...three years for me, is not enough...you know we did nursing...we've got diplomas in nursing...we did PHC as post basic...if you can count the years they're so many...to have a person who studies for three years to come back..."

Another participant added that:

“But they don’t go to school for years as doctors are going...their period of training is too short...that’s why it’s my problem...three years...I go for four years...and I also did another course like PHC...”

The third participant emphasized:

“...if there’s any advanced nurse that’s us PHC nurses, we have so much to offer, some of us have a three years diploma in general nursing, one year diploma in midwifery, community, and psych...some of us even have degrees in BCur...”

Noted in the three statements is that the PHC nurses feel that they are better suited to perform functions designed for the Clinical Associates.

Another participant backs up what the others have said:

“I think so...the government should have upgraded the present people who are in the health facilities already...because I think there would be other nurses who would be interested...”

“...that’s a difficult one, it won’t be fair to nurses...because we are also trained and our years are more than them”

The PHC course is a one year programme. There are no other higher courses designed for further training and development of the PHC nurses. The only option available is course that are aimed at developing nurses as specialists in some of the vertical programmes such as managing patients with TB and HIV/AIDS.

The PHC nurses insecurities could be related to the desire for further education and training in the clinical field and perhaps the status of working with doctors in a district hospital.

It has been revealed that although the majority of the participants felt that the Clinical associates were not adequately trained, the verbatim quotes that follow indicate that the PHC nurses acknowledge the importance of Clinical Associates. The participants acknowledged the fact that there is a grave shortage of doctors and much workload on the practicing health workers, and therefore the Clinical Associates would be of great help in South Africa.

This sentiment was expressed in statements like:

“...I think they are going to be of great help...there is too much shortage of doctors in our facilities”

A second responded emphasized:

“I think they are a good idea because doctors are overworked”

Category 3: Recommendations from the Primary Health Care Nurses

The role of mid-level medical workers as stated by Brown, Cometto, Cumbi *et al* (2011:308) has been progressively expanding and receiving attention. The interest in this new cadre of mid-level medical workers is due to the fact they have been identified as one of the key strategies towards addressing human resource shortages and improving access to essential health care services (Hooker and Everett, 2011:28).

In the South African context, one of the perceived benefit as stated by Doherty, Couper and Fonn (2012:835) is that the Clinical Associates will take over some of the tasks, allowing different professionals to provide better quality care within their own scopes of practice, improving access for marginalized and reducing the need for referral.

There are some similarities in the scope of practice of Clinical Associates and the PHC nurses. The similarities in the scope of practice is the “patient consultation and physical examination” aspect. The PHC nurses perceive this aspect as a possible overlap in a clinical functional area. Furthermore, expressed a concern related to the possibility of the Clinical Associates, later due to human resource shortage being allocated to community primary health care settings. Based on this assumption, suggestions were that the government should establish clear guidelines with regards to the role and functions of Clinical Associates in relation to the PHC nurses scope of practice.

The recommendations were expressed in this statement:

“...there should be guidelines...I should know as a PHC what is expected of me when it comes to this person...we don’t clash...we don’t argue about patients, about orders...who should do what...”

Dolvo (2004:11) in an article published on “Using mid-level cadres as substitutes”, emphasizes the importance of understanding and appreciating the roles that these workers are suitable for. Furthermore, the quality issues that need to be addressed. Dovlo (2004:10) further highlighted the fact that the Government incentives tend to target doctors but often leave out other staff members.

The participants in this study expressed the same sentiment that the government is not doing enough in term appreciating the current health workers as expressed in this quote:

“We want recognition, the salary that we earn must fit the type and amount work we do it’s only fair”

Another participant emphasized:

“what I would like to see government doing...in conclusion...is recognizing and appreciating their employees for what they are worth...be they PHCs or Clinical Associates ...”.

What participants expressed was that upgrading of workers by government should happen reckon it to be long overdue:

“...if we could now and then be upgraded in terms of education or do short courses and salaries as well...”

The recommendation discussions by participants revealed concerns about themselves more than giving information on how they perceived the role of the Clinical Associates to be.

3.5 FIELD NOTES

Polit and Beck (2012:548) defines field notes as the researcher's efforts to record information in the form of unstructured observations made in the field. After gaining first-hand knowledge of the situation the researcher record the information and interpret those observations. Field notes are furthermore, described as descriptive or observational.

- **Observational Notes**

Observational notes or descriptive notes are objective descriptions of observed events and conversations, experienced through watching and listening (Polit and Beck, 2012:548). In this study a designated consulting room was assigned for the interviews, with a “do not disturb sign” pasted on the door. The room allocated for research interviews was further from the busy noisy clinical area. The consulting room was clean and well ventilated. Cell phones were switched off for the period of interview. The interviews took place between 13h00 and 16h00 when the bulk of the patients had left and very were still left to be seen by clinic doctors and PHCNs.

- **Methodological Notes**

The recruitment process was manageable as some of participants were people PHC nurses known to the researcher. Most of the participants were willing to take part, but surprisingly on the scheduled days some took half-day and others took a leave of absence thus unavailable to be interviewed. The primary health care setting is very busy especially in the morning, so arrangements were made based on the fact that the clinical areas are quiet in the afternoons and there is no space available.

Individual interviews were conducted. The researcher and participant were sitting on comfortable chairs at the table facing each other. The researcher had a pen and paper as well as a tape recorder for capturing data.

Initially some of the participants appeared to be anxious and cautious. On probing they offered answers in one word or short sentences but as the interview proceeded they opened up. Most participants looked apprehensive when the question “what comes to your mind when the name clinical associate is mentioned” was posed to them. There was hesitance to give an answer, and a little anger was depicted in the tone of their voices as well as their facial expression. Participants expressed concern about the possibility of losing their jobs or their role and contribution in the health sector being overlooked.

- **Personal notes**

The researcher felt privileged to have engaged with the PHC nurses and hear what they had to say about the role of clinical associates. Initially the researcher felt a little discouraged by the PHC nurses who had agreed to partake in the study, but not available on the day of the study. This was disruptive since the researcher and participants had to reschedule some of the commitments for the interviews. But at the end, the researcher gained a lot from the interview discussions.

Clinical associates will be working closely with doctors a relationship nurses enjoyed for many years. It was therefore interesting to know what they thought of them. The

researcher's interest was also aroused to know more about the future working relations between Clinical Associates and other health professionals.

3.6 CONCLUSION

This chapter presented the information related to the demographic data and results of the in-depth interviews conducted with participants. The chapter also dealt with the literature control applied was drawn mainly from literature dealing with Clinical Associates, Mid-level workers and Medical Assistance. The results and discussion focused on the one central theme "PHC nurses are concerned about how the role of clinical associates will affect their professional status". The discussion also focused on the identified categories, namely role clarity of Clinical associates, perceived challenges as well as the recommendation from the participants. The findings will be summarized in chapter four in order to develop recommendation for the Clinical associates and PHC nurses practice and research.

CHAPTER 4

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

In the previous chapter the study findings and literature control were presented. In this concluding chapter a summary of the research report, main findings and the conclusion drawn from the study are presented.

4.2 SUMMARY OF THE STUDY

The purpose of the study was to explore and describe the PHC nurses' perception regarding the role of the Clinical Associates. To achieve the purpose of the study, a qualitative, exploratory, descriptive and contextual design was used. In-depth one on one interviews were conducted and data saturation was reached after 8 interviews.

4.3 SUMMARY OF THE FINDINGS

4.3.1 Role clarity of the Clinical Associates in the health care system (Government)

4.3.1.1 Level of seniority

The PHC nurses uncertainties regarding the Clinical Associates were especially related to the hierarchical structure as well as the related power and authority. Having to take orders from Clinical Associates appeared to be a huge problem for PHC nurses since they considered themselves seniors in view of Clinical Associates' short training period and lack of experience. They believe that having undergone training for more than five years before being considered a professional gave them the right to be seniors of Clinical Associates who only have three years of training and no experience at all. The training duration of mid-level workers as stated by Brown, Cometto, Cumbi, *et al.*, (2011:311) is shorter than the courses admitting nurses and definitely that of doctors.

Other PHC nurses however acknowledged that Clinical Associates might be their seniors by virtue of being trained in Medical schools and being regulated by the Dental and Medical Board conferring status on them and giving them synergy with doctors. The other factor being that Clinical Associates would be allowed to perform certain duties that were usually performed by doctors which PHC nurses were not allowed to perform. Although there was such acceptance of the Clinical Associates by the PHC nurses, a feeling of helplessness was expressed; due to fear that their worth is going to be compromised.

The clinical associate health professional is a relatively new concept in South Africa. Hence, it is understandable that there is lack of understanding and clarity regarding the hierarchical position of Clinical associates.

Lassi and Bhutta (2012:2) states that although the deployment of mid-level workers have been taking place in South East Asia and Sub-Saharan African countries for some time now, this does not essentially reflect people's existing understanding of this group of health workers.

4.3.1.2 Designated name for Clinical Associates

The results findings further revealed that there was apprehension regarding the designated name for Clinical Associates. Most participants expressed concern of how they would be expected to address Clinical Associates in the practical setting; clearly they had a problem in having to call them doctors. Since they considered Clinical Associates to be their subordinates PHC nurses did not see how they could call them doctors.

There is evidence from literature confirming challenges regarding how the mid-level workers should be addressed in a clinical setting. In Lassi and Bhutta (2012:2) the Dovlo (2004) study defined them as the "health cadres trained for a shorter period"; the Lehman (2008) study described them non-professional health care providers.

Lassi and Bhutta (2012:2) stated that although there is some debate about the definition and naming of the medical mid-level health workers; many countries rely

heavily on them to improve the quality of health care delivered as they perform some of the doctors' tasks.

4.3.2 Perceived challenges about the Clinical Associates role in the health care System

4.3.2.1 Education and training

Most participants acknowledged the fact that there is a grave shortage of doctors with much workload on the practicing health workers, and that Clinical Associates would be of great help in SA in that regard. According to Ducharme, Alder, Pelletier *et al.*, (2009:459) lengths of stay were lower when PAs and NPs were involved. When Physician Assistants and Nurse Practitioners were not on duty; the proportion of patients who left without being seen was 44% and 71% respectively.

Studies show that the quality of care given by 'physician assistants' is at the level of that given by physicians in comparable situations (Mittman, Cawley and Fenn, 2002:327). A direct effect on patient flow was seen, because the addition of primary health care providers increases the number of workers able to assess and treat patients.

Participants raised concerns regarding the period the Clinical Associates take to complete their training and achieve the core competencies. They protested that the three year training period the Clinical Associates take to acquire their degree to be qualified practitioners is a duration far shorter than that spend by doctors and PHC nurses. PHCNs concern may be appreciated considering the requirements for entry to the course. In the USA PA students are required to have 45months of healthcare experience in addition to their first degree before commencing training (Stewart and Cantazaro, 2005:345), while in SA the requirement is only matric. PHCNs believed CAs are not even fit to be called advanced nurses; but if anyone was to be called an advanced nurse CAs did not stand a chance but them. They were confident that they were better suited to perform functions designed for the Clinical Associates because of their years of training and experience. Participants also believed that the Government could have trained and upgraded people currently working in the health

facilities instead of individuals who have no health background whatsoever. As mentioned above, in the USA PA students are required to have 45 months of healthcare experience in addition to their first degree before commencing training (Stewart and Cantazaro, 2005:345).

Other PHC nurses however acknowledged that Clinical Associates might be their seniors by virtue of being trained in Medical schools and being regulated by the Dental and Medical Board conferring status on them and giving them synergy with doctors. The other factor being that Clinical Associates would be allowed to perform certain duties that were usually performed by doctors which PHC nurses were not allowed doing. Literature has revealed that in other countries the medical mid-level professionals' training programme required applicants to have previous health care experience and a college degree. A typical applicant in the UK already has a bachelor's degree in science and some health experience (Smith, Tevis and Murali, 2004:322). Something that the PHC nurses complained about.

4.3.3 Recommendations from the Primary Health Care Nurses

The apparent similarities in the scope of practice of the Clinical Associates and the PHC nurses were a cause for concern on the part of PHC nurses. The PHC nurses stated that due to human resource shortage as well as the fact that the Clinical Associates are trained as generalist health care professionals, they are well suited to provide health service at a hospital and a community based setting. Therefore, there is a possibility that the PHC nurses could be recalled back to the hospital for bedside nursing.

Finally, based on this assumption, the study participants brought forward suggestions for the government to establish clear policy guidelines regarding the role and functions of Clinical Associates in relation to the PHC nurses' scope of practice so as there are no clashes between them. The participants felt that not enough was being done in terms of appreciating the current health workers, therefore they emphasized the importance of recognition and appreciation of employees, befitting salaries and upgrading in terms of education by government. Doherty, Conco, Couper *et al.*, (2013:149), highlighted the need for continuous engagement and

consultation with a range of stakeholders to curb or avert possible clashes and opposition from some professionals,

4.4 LIMITATIONS OF THE STUDY

The following limitations of the study were identified:

- The first limitation is that there were constraints related to scheduling of one on one in-depth interview with the PHC nurses due to the demanding clinical work setting. An attempt was made to schedule after hours' appointment.
- The second limitation was that the majority of the PHC nurses interviewed were not well informed about whom the Clinical Associates are and their role in the health care system. Instead, the PHC nurse reflected on their professional status and role in relation to the doctors and the Clinical Associates.
- It is a known fact that qualitative interviews and the data transcription process yield huge volumes of thick rich data. However, in this study not much data was generated both from the interview process and transcription process. This is due to the fact that majority of the participants focused on PHC nurses working conditions and career pathway related issues. In addition, the Clinical Associate concept is relatively new in South Africa.
- The fourth limitation in this study is related to the fact that this study was limited to a specific region of the City of Johannesburg. Therefore the results cannot be generalized to other regions or provinces. However, the findings from the study provided an insight into the level of knowledge and the perceived status and role of the Clinical Associates. Furthermore, it serves as a benchmark for development of further studies exploring perception on Mid-level workers.

- Very few studies have been published on Clinical Associates in South Africa therefore limited information was available for literature control.

4.5 RECOMMENDATIONS

The recommendations for further research studies emanate from the researcher's analysis and interpretation of the PHC nurses perceptions regarding the role of Clinical Associates. The recommendations will be made with specific reference to: Clinical Associates and primary health care nurses' practice.

4.5.1 Practice

The Clinical associate is a relatively new member of the health professional's team. The results from the analysis of the interview transcripts in this study revealed that the PHC nurses responses among other things expressed emotions that could be described as anger, resentment as well as some feeling intimidated. The observed emotions from the study emanates from lack of knowledge of this category of health professionals, their role and function in the health system. Another factor is related to the suspicion that the Clinical Associates, hierarchically they might be ranked senior than the PHC nurses. Hierarchical structures are usually associated with power and authority. These feelings could lead to negative relationships, affecting team work and collaboration among the PHC nurses and other health professionals. Therefore: There is an urgent need for the Clinical Associates position and role in relation to the PHC nurses and other health professionals to be clarified.

4.5.2 Education

The majority of the PHC nurses interviewed raised a concern regarding the education and training of the Clinical Associates. The general feeling was that the Clinical Associates are not adequately prepared for the clinical setting challenges. Another concern raised is related to the career path of the PHC nurses. The general feeling is that the PHC nurses could have been trained and upskilled to the level of

the Clinical Associates as part of their career path. The recommendation emanating from the concerns raised is that:

- Career path must be developed, implemented and monitored for both the PHC nurses and the Clinical Associates. Working in an environment wherein there is no career path and career development opportunity could predispose one to unhappiness leading to stress and brain drain.

4.5.3 Management

The policy makers, Clinical Associates programme planners as well as the nurse managers have an important role to play regarding the introduction and acceptance of Clinical Associates in the health sector. Therefore:

- There should be an ongoing programme of action aimed at the introduction and acceptance of the concept of clinical associates. An attempt should be made to use all available health professionals meetings and education and training platforms to introduce the concept of clinical associates.

4.5.4 Further Research

Based on the literature review and conclusions drawn from the research findings, it is obvious that there is need for further research concerning the introduction of the Clinical Associates. The findings of this study have clearly indicated the gap that exists regarding the PHC nurses knowledge of the Clinical Associates related roles and functions. Therefore:

- Studies involving a bigger population of the PHC nurses should be conducted exploring their knowledge and understanding of the Clinical Associates role and functioning in the health care sector. It is important that the perceptions of other health care professionals be explored as well.
- Further studies should be conducted to assess the relationship of the Clinical Associates and the district hospital nurses as this is a new cadre of health

professionals. Studies should also be conducted in the setting whereby the Clinical associates will be working side by side with the PHC nurses.

- Studies have shown that Clinical Associates as a health professional group have a potential of improving and strengthening the human resource capacity therefore contributing towards improved quality care. Therefore, studies should be conducted to assess the impact of the new Clinical Associates in the health care system to monitor the quality of care provided and for future planning.

4.6 CONCLUSION

This chapter concludes the research journey undertaken to explore and describe the perceptions of PHCN's regarding the role of the Clinical Associates. The objectives of this study were achieved. The study findings revealed that PHCNs did not have sufficient knowledge regarding Clinical Associates.

Although there was acknowledgment by majority of the PHC nurses that the role the Clinical Associates will play was important, PHC nurses were concerned about a lot of issues related to the introduction of Clinical Associates. They were more concerned about the possibility of Clinical Associates being regarded as more senior and therefore more important than them. PHC nurses were worried that Clinical Associates would be given higher status and remuneration package. The other concern was concerning the training of Clinical Associates as opposed to the PHC nurses. PHC nurses expressed concern that they had a longer period of study and experience as compared to Clinical Associates. So with the knowledge they possess they believe they are a better option for Mid-level medical workers' category. Hence, they expressed that the government could have considered the possibility of upgrading the PHC nurses to do additional skills that the Clinical Associates will be performing than bringing in a totally new group.

The international experience suggests that mid-level health workers have played an important role in addressing human resource shortages and improving health care

access and equity, especially in low- and middle-income countries. The creation and introduction of Clinical Associates in South Africa forms part of a broader strategy to strengthen district health systems, and extend health care coverage by dealing with its own human resource shortages. The aim of the government is not to replace doctors or nurses, but to recruit young people who completed matric. This is an opportunity for young people who would otherwise find it difficult to get into tertiary training. Candidates especially those from rural communities, are to be trained in a specific province and community to serve that community. The local recruitment is significant for the sake of sharing common language and culture which are important for the well-being of a person.

Finally, it is therefore imperative that the process of orientating others about the Clinical Associates continue so that there is buy-in from other health professionals. This activity will assist in the acceptance and supported of the Clinical Associates as part of the health care team. Concerns of the PHC nurses should be addressed as well to avert potential tensions; also to help improve teamwork and relationships among all the role players in health care. Health care service provision is highly dependent on good working relations of all the team members.

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ANNEXURE A

THE PERCEPTIONS OF PRIMARY HEALTH CARE NURSES REGARDING THE ROLE OF CLINICAL ASSOCIATES.

INTERVIEW GUIDE

What comes to your mind when you hear the name Clinical Associates mentioned?

1. Knowledge

What do you know about Clinical Associates?

(Who are they? Are they doctors?)

Where do they fit within the Health care services structure?

- Training
- Qualifications

2. Role /Job (What do you think the role of the Clinical Associate is)

- In relation to your role as a Primary Health Care Nurse (PHCN)
- Are your roles the same? Is there an overlap?
- What do you think are the implications of the overlap of roles between the Clinical Associates and the PHCNs?

3. Relationship

What do you think your relationship is going to be with the Clinical Associates?

What do you think your relationship is going to be with the Doctor now that Clinical Associates have been introduced?

How do you think your relationship with the doctor will be affected by the presence of the Clinical Associates?

4. Concerns

Are there any concerns that you have regarding the introduction of the Clinical Associates or emotions you still have?

**ETHICS CLEARANCE CERTIFICATE: HUMAN RESEARCH ETHICS
COMMITTEE (MEDICAL)**

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
R14/49 Ms Kekema J Khumalo

CLEARANCE CERTIFICATE

M10106

PROJECT

The Perceptions of Primary Health Care Nurses
Regarding the Role of Clinical Associates

INVESTIGATORS

Ms Kekema J Khumalo.

DEPARTMENT

Department of Nursing Education

DATE CONSIDERED

29/01/2010

DECISION OF THE COMMITTEE*

Approved unconditionally

Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.

DATE 11/06/2010

CHAIRPERSON
(Professor PE Cleaton-Jones)

*Guidelines for written 'informed consent' attached where applicable
cc: Supervisor : Ms AM Tshabalala

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. I agree to a completion of a yearly progress report.

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES...

ANNEXURE C

University of the Witwatersrand
Department of Nursing Education
No. 7 York Road
Parktown, 2193
16 August 2009

The Deputy Director
Gauteng Health Department
37 Marshall Town
Cnr. Market & Sauer Streets.
Johannesburg
2001

Dear Sir

Request for permission to conduct a study at the Soweto Provincial PHC Clinics

I hereby request to be granted permission to conduct research study at the Soweto Provincial Clinics for fulfilling the requirements to obtain a Master's Degree at the University of the Witwatersrand. The purpose of the study is to explore and describe the perception of the PHC nurses regarding the role of the Clinical Associates in the health team.

Permission will be sought from PHC nurses who are willing to participate to be interviewed describing their perception regarding the roles of the clinical associates. Participation is absolutely voluntary and participants will not be coerced to take part in the study. Refusal to participate or withdrawal from the study at any time is assured. Participants will not be forced to give information they are not comfortable to share with others and there are no risks involved.

A qualitative study involving in-depth semi-structured interviews using interview guides will be used. This will take approximately one hour. Permission to record the interview the interview will be obtained and data collected will remain strictly confidential. Anonymity is guaranteed as neither names nor identifying data will be recorded. Findings of the study will be made available to the senior management of the facility.

For more information or queries please contact me at 011 983 3125/073 1379 543 or my supervisor Ms. M Tshabalala at 011 488 4267.

Yours sincerely,

Joan Khumalo.

ANNEXURE D

THE PERCEPTIONS OF PRIMARY HEALTH CARE NURSES REGARDING THE ROLE OF CLINICAL ASSOCIATES.

PHC NURSES INFORMATION LETTER

Dear Colleague

My name is Joan Khumalo and I am a PHC Nurse Educator at Chris Hani Baragwanath Nursing College. I am currently studying for a Master's Degree in Nursing Education at the Faculty of Health sciences of the University of the Witwatersrand. As part of the Degree, I am required to complete a study under the guidance of an experienced researcher. As a PHC nurse working in Soweto where PHC training started your opinion would be valued.

May I invite you to consider participating in a study to explore how you as a PHC nurse perceive the role of the newly introduced Clinical Associates in the health team? Participation is entirely voluntary and there are no risks involved. Refusal to participate or withdrawal from the study at any time is assured. Your responses will be kept confidential. Should you agree to take part in the study you will be asked to please sign the attached form.

A qualitative study involving in-depth semi-structured interviews using interview guides will be used. The researcher or assistant will conduct the interview and clarify matters of concern. This will take approximately one hour. Data collected will remain strictly confidential. Anonymity is guaranteed as neither names nor identifying data will be recorded. Should you feel uncomfortable you may decline to answer any question presented to you.

Findings of the study will be made available to the senior management of the facility. Please feel free to contact me at these numbers should you need more information 011 983 3125 or 073 1379 543.

Thank you for taking the time to read this letter and

Yours sincerely,

Joan Khumalo.

ANNEXURE E

PARTICIPANT CONSENT LETTER

TITLE: THE PERCEPTIONS OF PRIMARY HEALTH CARE NURSES REGARDING THE ROLE OF CLINICAL ASSOCIATES.

INVESTIGATOR: JOAN KHUMALO
PHC NURSE EDUCATOR

I hereby invite you to consider participating in a study to explore how PHC nurses perceive the role of the newly introduced Clinical Associates in the health team. Participation is entirely voluntary and there are no risks involved. Refusal to participate or withdrawal from the study at any time is assured. Your responses will be kept confidential. Should you agree to take part in the study you will be asked to please sign the attached form.

A qualitative study involving in-depth semi-structured interviews using interview guides will be used. The researcher or assistant will conduct the interview and clarify matters of concern. This will take approximately one hour. Data collected will remain strictly confidential. Anonymity is guaranteed as neither names nor identifying data will be recorded. Should you feel uncomfortable you may decline to answer any question presented to you.

Findings of the study will be made available to the senior management of the facility. Please feel free to contact me at these numbers should you need more information 011 983 3125 or 073 1379 543 or my supervisor Ms. M Tshabalala at 011 488 4267. The Human Research Ethics Committee of the University and the Gauteng Department of Health approved the study and its procedures.

The above points were discussed with the participants and in my opinion; the participant understands the risks, benefits and obligations involved in participating in this study.

.....
Investigator

.....
Date

I understand that my participation is voluntary and that I may refuse to participate, or withdraw my consent and stop taking part at any time without penalty.
I hereby freely consent to take part in this study project.

.....
Signature of witness

.....
Signature of subject

.....
Date

ANNEXURE F**CONSENT LETTER FOR AUDIO-RECORDING**

TITLE: THE PERCEPTIONS OF PRIMARY HEALTH CARE NURSES REGARDING THE ROLE OF CLINICAL ASSOCIATES.

INVESTIGATOR: JOAN KHUMALO
PHC NURSE EDUCATOR

The study to explore how PHC nurses perceive the role of the newly introduced Clinical Associates in the health team will be conducted as a qualitative study. The study will involve in-depth semi-structured interviews. Interviews will be conducted by the researcher with the aid of an audio-tape recorder. Your permission is therefore requested to use an audio tape recorder for the purpose of capturing data during interviews.

Recordings and transcripts will be stored securely and accessible only to the researcher and the supervisor. Please feel free to contact me at these numbers should you need more information 011 983 3125 or 073 1379 543 or my supervisor Ms. M Tshabalala at 011 488 4267.

The Human Research Ethics Committee of the University and the Gauteng Department of Health approved the study and its procedures.

The above points were discussed with the participants and in my opinion; the participant understands the risks, benefits and obligations involved in participating in this study.

.....
Investigator

.....
Date

I understand that my participation is voluntary and that I may refuse to participate, or withdraw my consent and stop taking part at any time without penalty.

I hereby freely consent to being tape-recorded in this study project.

.....
Signature of witness

.....
Signature of subject

.....
Date

TRANSCRIPT 2**ANNEXURE G**

Researcher: What comes to your mind when you hear the name clinical associates mentioned?

Participant: Well I think they are going to be of great help maybe because they are going to be working in a hospital and as we all know the hospitals. They have so much of shortage, they are running short of nurses, doctors so maybe in that situation they will help a lot and then in as far as clinics are concerned I don't see them working here because it's been said they are doing minor ops which we are not doing as primary health care nurses. And then they are tackling those problems that are being tackled by doctors so in the clinics I don't think they'll be very helpful I think in the hospital maybe but provided they won't take over nurses' duties because it means now nurses are going to have problems. Maybe they won't be training nurses because of these people, we don't know. So and moneywise we don't know if maybe their salaries are going to be more than nurses'. And then another thing maybe if we had the experience before of what they are going to do maybe if we can see them, like working in the hospital and see how far they go or how they work maybe we can comment further but because we don't know how they will do. It's so difficult to comment further because you won't know how are they going to work and if other people are going to be happy having them around because it's not nice to see somebody taking over and then you have been working in the hospital maybe for years and then somebody comes and then you've been trained and then is above you it's not a nice thing. So at least if they can take nurses who are already working and then train them to be that thing. Maybe it's going to be something else but now if they just take school children and then they make them ... That clinical what ...associates what ... I ... Don't think it's going to be nice for nurses. Because it will be like they are taking over their jobs or something.

Researcher: So when you say they should take nurses and train them

Specifically which nurses are you talking about, are you talking about primary health care nurses or general nurses?

Participant: Hai primary health care nurses, I don't think it's going to be feasible because primary health care nurses are working in the clinics and they are dealing with first care ... First level of care so they will be referring to those people. So I was thinking in terms of maybe staff nurses because they are already there and they need more training apparently because I don't think they want to be staff nurses forever. Others they don't have the opportunity to go further because of ... nursing they want this and that but maybe if they go that route maybe the others can go even further than that. If they can be given a chance, I don't know ... Unlike taking kids from school.

Researcher: So you are worried about staff nurses

Participant: I'm worried about staff nurses

Researcher: Are you not worried about primary health care nurses?

Participant: Primary health care nurses, these people as long as they don't come in the clinics then I don't think we will have a problem with them. But the problem is money, maybe if they are saying they are going to be paid more than us because they are being trained as mini doctors apparently then it's going to be a problem because we also want to be paid like that, we also want better salaries but if they're always training, training people and we are trained self then it's going to be a problem if they're not going to give us more money and train us to do that thing. We also want to be paid like that; we want better salaries as well. If they are not going to give us more money and train us to do that because we can do that the problem is we don't want to go to the hospitals to go and work in the hospitals so I think that's going to be a problem.

Researcher: But if you were going to be developed and be given the extra skills that those professional people are given will you be happy with it?

Participant: Think I myself will gladly appreciate that, if I get money also because it's extra gain for me so then I'll be happy. They give me extra skill and because I will be having primary health care and that extra skill I put on those drips those IC drains and things then I don't have a problem as long as I'm being paid nicely.

Researcher: And then the overwork ... As soon as you are developed you'll be expected to do extra things, will it not be too much for you...?

Participant: You know because right now we are having a problem that they say we are too many in the clinic right now and we cannot be transferred outside so we don't think it's gonna create much of a problem if maybe I'm gonna be doing specifically that particular job like for instance I'm putting IC drains I don't think it would be extra work for as so long as I don't lose my skills as a primary health care nurse because maybe we can rotate and develop ourselves, do more things either than just checking patients in the rooms I think it would be like expanding.

Researcher: They say primary health nurses are many?

Participant: I know in this clinic they say we are many, I cannot talk of other clinics because they told us here in the clinic today but we asked them to address us because we wanted to know how are they going to solve the problem so apparently no one came to address us properly. What are they going to do because we have a burning problem and the rooms are few so maybe if they bring along some more skills maybe we can branch and do some other things maybe though we don't have 'bare keng', though we are not trauma trained. If we have the skill it will be PHC and something else with money involved I don't think it's not going to be a problem.

Researcher: But these people were introduced to relieve doctor shortage.

Participant: In other words they are doctor assistants.

Researcher: Yah.

Participant: So government is going to just take out money for doctor assistants but they can't pay us they say they don't have money to pay us but they have money to train, pay doctor assistants, why is that?

Researcher: Well in every profession there are assistants so do you think it's a problem for doctors to have assistants?

Participant: Because we're already there, we're doing almost everything for doctors. I mean really what's making a difference now because before it's been done nurses have been helping doctors what makes the difference now?

Researcher: So do you consider yourself doctor assistant?

Participant: No definitely not because what I've learned is the knowledge I have only for the patient, well I'm helping a doctor in a way but not that I'm an assistant I'm helping a patient because if I can see myself as that and then give them treatment then I don't see myself as helping a doctor I see myself as helping the patient.

Researcher: what is your problem then when the government introduces these people?

Participant: it's because the doctors are taking nurses as assistants ... We have nursing assistants working before; they are no longer doing things that they used to do before you understand so that's why I say that's why i say if they train those nurses that are there and those nurses will be doctors' assistants so even if we remain without the nursing assistants

we're ok because already we are working without them. We always do almost everything for ourselves when i want to take BP I can do it in my room so I don't understand ... So how about they train nurses to become doctors assistants and then they pay them?

Researcher: General nurses ... not primary health care nurses?

Participant: Not primary health care nurses maybe general nurses maybe if they can talk for themselves but if they are not given a chance on the nursing side then maybe ... Maybe if you say doctor it is saying something, it can mean something for them

Researcher: So if general nurses are being trained to be doctors' assistants what ... Who is going to do the duties of the general nurses?

Participant: Eh you know because right now we have general nurses that are trained to be sisters and we have staff nurses isn't it staff nurses are going to be suitable and the general nurses will continue to be general nurses ... You understand

Researcher: I do. Is it not going to be a problem now for general nurses to be saying I ... Were we not developed to be staff nurses, don't you think it's going to create a problem?

Participant: You know why because the general nurses are sisters already it's easier for them to upgrade themselves to become maybe or what midwives or PHC nurses or whatever the opportunities are there for them. But the staff nurses they've got to go a long way in order to reach the general nursing thing it's a long-long way for them to reach there so at least if they do that it maybe it's going to be beneficial to them I'm just thinking I don't know if it's going to work or not

Researcher: Do you think the nursing assistants will meet the requirements?

Participant: Well I think they can meet the requirements you know why right now they are taking them to be trained as sisters isn't it so why they are taking them and they are making it

Researcher: But in the line of nursing they are training them?

Participant: Well maybe it might create a problem but who knows maybe they can mix them then maybe take these good ones, try to look for other things that are good and train them because there are good general nurses who can be trained

Researcher: And then what about those students who have passed grade twelve who the government is trying to give them something because if now they are not going to be taken and staff nurses from other places are taken what's going to happen to them?

Participant: You know what the children from school now lately i think they are so clever that's why they are taken so that they become proper nurses you see so they don't need to be assistants they want to stand on their own like becoming sisters and work like we are doing like become proper nurses because they are clever than old nurses, they are very clever

Researcher: They want to become this type of medical professionals they don't want to become nurses they want to be associated with doctors, yes

Participant: So the name changes so why can't we change from PHCNs because we're already doctors

Researcher: You are already doctors?

Participant: Yes ... Why are we taken like as if we didn't study something that is so vital in the clinics we are supposed to be called like something-

something doctor also ... We really appreciate their being there ...
Clinical associates

Researcher: So what are you saying are you not for them these clinical associates are you for them or are you not for them?

Participant: Clinical associates ... Well the name suits them very nicely but i can't call them doctors

Researcher: But you as a primary health care nurse how do you feel about them?

Participant: I'm glad you know ... I'm glad, why I'm glad because eh there's a lot of unemployment and I would want to see my child taken if maybe I have a daughter or son who want to do that I will be happy to see her employed if maybe she can't find the job and wants to do the course, then I will be happy as a parent if she is taken to train as clinical associate whatever because something will happening in the country and then maybe it will at least it will minimize unemployment in the country and it's like job creation so I'm not against job creation I'm 100% for that

Researcher: But as for alleviating shortage of doctors, do you see them alleviating it?

Participant: I don't know if they are going to alleviate per se because if for instance I'm referring a patient to the hospital i don't know if I'm referring to them or if I'm referring to doctor-doctor. So I don't know if they are going to tackle the problem that we have in the clinic or doctors are going to tackle problems that we are referring to the hospitals so that's why I say if we can see them working and see what is it exactly that they are doing maybe we can have an overview of what is happening

Researcher: what I know is that these clinical associates are going to be working with and under the supervision of doctors they will be taking

instructions from doctors then you may be referring to doctor but in the end if doctor gives instructions to the clinical associate do you have a problem taking orders from them?

Participant: I don't have a problem taking orders from them as long as patients get help it doesn't matter who takes orders from whom

Researcher: alright ... I hear you ... Is there anything else you would like to say?

Participant: what can I say because we always complain of money-money-money as long as the government pays us then we don't have any problems with people they are taking in because we'll be happy that at least government is thinking for us. I mean we've been working for more than 20 years and we are trying to work as hard as we can ... But then if we're not paid it's not nice and then they employ and employ old nurses are not paid properly then it's a problem. And it looks like their curriculum, there is a role overlap

Researcher: Is their job description similar to yours?

Participant: so are they going to maybe see patients' on one-to-one basis like we're doing or maybe they can be three in a room maybe if a doctor is working there's one so that he can take orders from the doctor

Researcher: they will be trained and they will be competent in whatever they are doing so much as I said they will be working with and under doctor supervision they will be but what I was asking was in connection with the role overlap there will be overlap between your roles and their roles, so are you not worried that one day they'll be saying now we have enough clinical associates, thank you nurses go back to bedside nursing because that's where you belong we are enough now?

Participant: that's another problem because you know government they change all the time you can never be 100% sure with government because they

can say they are introducing this category meanwhile they want to cut us or get rid of primary health care nurses taking people and making them to be above us that's going to be a problem because I don't know if they are above primary health care nurses or what.

Researcher: don't you think that they are already above primary health care nurses because they are between primary health care nurses and doctors?

Participant: If I had to be trained for more than three years then my training is better than theirs ... Things that they do for three years i do for six months nobody can take your knowledge a person is going to be trained for three years and they are not even sure of what they are doing and nurses have so much experience and we have nurses of ten years twenty they won't take away that experience the experience goes a long way.

Researcher: Then if you were to orientate them in the working environment?

Participant: We cannot orientate them because they are going to take over that one is going to be a problem I cannot be studying and be expected to orientate somebody at the end they take over just like doctors how do i do this, how do I do this ... We show them at the end they take over ... You orientate them the next thing they are sitting on your chair and I'm being told go do bed - side nursing because they are going to be doctor assistants let doctors orientate them not us

Researcher: Ok finally what is it that would make you happy what is it that you want to see happening or being done that will make you happy?

Participant: You know what as long as doctors' duties are alleviated of stress I'll be more than pleased because I know that they have so much to do and there is so much shortage I don't want to see them overwork.

ANNEXURE H**DEMOGRAPHIC INFORMATION OF THE SAMPLE****Please tick the relevant box with an X.**

Gender	Male	
	Female	
Age	25 – 35 years	
	35 – 45 years	
	45 – 55 years	
	> 55years	
Marital status	Single	
	Married	
	Divorced	
	Widowed	
Ethnicity	Black	
	White	
	Coloured	
	Indian	
	Others	
Highest level of education	Diploma	
	Degree	
	Masters	
	Others (specify)	