

https://dspace.org/

The views of professional nurses on attracting and retaining nurses at primary health care clinics in South Africa

Buckson, Esther

2020
https://hdl.handle.net/10539/31625

Downloaded from a DSpace repository. https://dspace.org/

THE VIEWS OF PROFESSIONAL NURSES ON ATTRACTING AND RETAINING NURSES AT PRIMARY HEALTH CARE CLINICS IN SOUTH AFRICA

A research report by

Esther Buckson

Student Number: 1438457

Supervisor: Dr. Pascalia O Munyewende

A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg in partial fulfilment of the requirements for the degree of Masters of Public Health

(Health Systems and Policy)

Johannesburg, South Africa

September, 2020

DECLARATION

I, Esther Buckson sincerely declare that this research report is my own work and all due acknowledgement and references have been made accordingly to the best of my knowledge. This report is submitted to the Faculty of Health Sciences, the University of Witwatersrand, Johannesburg, South Africa in partial fulfilment of the requirements for the degree of Masters of Public Health (Health Systems and Policy). This report to the best of my knowledge has not been submitted to this or any other university for a degree or examination purposes.

Signature:	

Name: Esther Buckson

Signed at: University, Parktown, Johannesburg

On the 24th day of September, 2020

ABSTRACT

Background

Professional nurses are the backbone of the primary health care (PHC) system in South Africa. PHC clinics are the first entry point for the majority of South Africans seeking health services in the community. As such, professional nurses are required in adequate numbers to achieve Universal Healthcare Coverage (UHC) goals under the country's National Health Insurance (NHI) which is based on the PHC system. As the NHI seeks to improve UHC, professional nurses working at the PHC level are critical for these reforms. Globally, shortages of human resources for health at the PHC level have been recorded. These shortages have been more pronounced for professional nurses. The aim of this study was to explore the views of professional nurses on factors for attracting and retaining nurses working at PHC clinics in South Africa.

Method

This was a cross sectional descriptive qualitative study using semi structured interviews. The study was conducted at five PHC clinics in Ekurhuleni Municipality in 2018. Purposive sampling was used to select 30 professional nurses who had been working in the PHC clinic for a year or more. To participate in the interviews the respondents needed to provide informed consent. Interviews were audio recorded and transcribed verbatim using sound organizer software that enables the reader to listen to the audio tape at a preferred rate for easy transcription. Thematic analysis of the semi-structured interviews was done using NVivo software.

Results

Thirty professional nurses working in PHC clinics participated in the study (n=29 female and n=one male). Their ages ranged between 20-60 years and they had been working in the PHC clinics between one and 40 years. The majority (n=18) worked for provincial authority clinics and the remaining 12 for the local government/municipality. The professional nurses from these five clinics shared their experiences on the factors that attract and retain nurses. Seven themes emerged from this qualitative study about the key factors that attract and retain professional nurses in PHC clinics mainly; working hours in the PHC clinic, independence in patient management, career progression, remuneration, unsupportive management environment, community interaction/seeing patient health improve and heavy workload. The convenience of the clinic working hours gave flexibility for nurses to meet other obligations such as family. Furthermore, the independence in decision making concerning patient care as well as the opportunity to interact with the community gave nurses satisfaction which made them want to remain but when they felt unsupported by management it made them want to leave the PHC clinic. It was also important from the study to give nurses study opportunities to progress their career and also to manage the heavy workload in clinics to attract and retain professional nurses in clinics.

Conclusion

The factors that attract and retain nurses in PHC clinics are interrelated and the experiences of the nurses directly influence their decision to stay or leave their jobs. Professional nurses are attracted to PHC clinics by operational working hours, independence in patient clinical management,

opportunities for study and career progression as well as remuneration for the work done. Manageable workloads and a supportive management environment were also influential in retaining professional nurses in PHC clinics. In light of the National Health Insurance scheme being implemented by the South African government for Universal Health Coverage, the study results provides evidence for policymaking decisions with potential to retain professional nurses in PHC clinics.

Keywords: Attraction, Ekurhuleni, PHC clinics, Professional Nurses and Retention, South Africa

DEDICATION

Life is a gift, a gift made more meaningful with the blessings of other precious gifts. To you Albert, Anne- Cecilia, Antoinette and David Anyimadu, my precious gifts, I dedicate this work. You are my source of inspiration to press on to greater heights and to prove to you that if you can think it, then it can be done.

Every day as I am blessed with your smiles and unconditional love I am motivated to go out there and be the best I can be. So my precious gifts be inspired, be motivated and aspire to be the best you can be, ALWAYS. So help you God.

ACKNOWLEDGEMENT

My dear God, for the opportunity, grace and favor to see this project through, I am most grateful. My deepest appreciation goes to you for your faithfulness in finishing the good work that you started. Thank you.

This research journey has been graced with wonderful people whose efforts have been pivotal in bringing it to a successful end. Dr. Pascalia Munyewende my supervisor, your encouragement, clear directives, dedication and support for this project has been immense and my heartfelt appreciation goes out to you.

Mr. Anthony Kobina Baah Anyimadu my dear husband, your unwavering support for me in undertaking this research is unparalleled and I am eternally grateful.

To all my lecturers especially Dr. Daphne Conco and Dr. Nicola Christofides for your patience, support and insightful contributions to this research report I am most grateful.

To the head of department, Ekurhuleni department of health and the heads of all the PHC clinics where this research was conducted a big appreciation to you for allowing this research to take place in your municipality and facilities respectively.

To all the professional nurses that participated in this study, without your selfless contributions this research could not have been undertaken. Thank you very much for your contributions.

My Parents Mr. and Mrs. Joseph Kenneth Buckson for all your sacrifices that have made me what I am today. Thank you.

ACRONYMS

ACRONYM	MEANING
PHC	Primary Health Care
HIV	Human Immunodeficiency Virus
AIDS	Acquired Immunodeficiency Disease Syndrome
NGOs	Non-Governmental Organizations
WHO	World Health Organization
NHI	National Health Insurance
TB	Tuberculosis
PMDS	Performance Management And Development System
HR	Human Resource
MOU	Midwife Obstetric Unit
ARVs	Antiretrovirals
UHC	Universal Health Coverage
HRH	Human Resources for Health
HST	Health Systems Trust

Contents

DECLARATION ii
ABSTRACT iii
DEDICATION v
ACKNOWLEDGEMENT vi
ACRONYMS vii
List of figures xi
List of tables xii
CHAPTER 1: INTRODUCTION 1
1.1 Introduction 1
1.2 Study background 3
1.2.1 Professional nurses in South Africa 4
1.2.2 Primary Health Care in South Africa 4
1.3 Conceptual framework for research study 6
1.4 Literature review 8
1.4.1 Conclusion 11
1.5 Problem statement 11
1.7 Purpose statement 12
1.8 Study rationale 12
Research question 13
1.9 Research aim 13
1.10 Research objective 13
CHAPTER 2: METHODOLOGY 14
2.1 Study design 14
2.2 Study setting 14
2.2.1. Description of clinics and the Primary Health Care services rendered 15
2.3 Study population and sampling 16
2.3.1 Study population 16
Inclusion criteria 16
Exclusion criteria 17
2.3.2 Study sampling 17
2.4 Ethics consideration 18
2.5 The initial semi-structured interview guide 18

2.6 Pilot study 19
2.6.1 Pilot study sample 19
2.6.2 Purpose of the pilot study 19
2.6.3. Results of pilot study 21
2.6.4 Changes made to initial interview guide after pilot study 21
2.7 Data collection 22
2.8 Data management 23
2.9 Data analysis 24
2.9.1 Familiarization 24
2.9.2 Coding 24
2.9.3 Identification of themes 26
2.8.4 Reviewing of themes 26
2.8.5 Defining and naming of themes 27
2.8.6 Writing up 27
2.8.7 Quality assurance of qualitative data analysis 27
CHAPTER 3: RESULTS 30
3.1 Working hours in the PHC clinic 30
3.2 Independence in patient management 31
3.3 Career progression 32
3.4 Remuneration. 33
3.5 Unsupportive management environment 34
3.6 Community interaction/seeing patient health improve 36
3.7 Heavy workload 37
3.7.1 Patient abusing clinic facilities 37
3.7.2 Inadequate equipment increasing Workload 37
3.7.3 Shortage of staff increasing Workload 38
3.7.4 Extra Administrative work increasing Workload 38
3.7.5 Quality versus quantity care as a result of increased workload 39
CHAPTER 4: DISCUSSION AND LIMITATIONS 40
4.1 Discussion 40
4.2 Limitations **47**
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS 48

5.1 Conclusion 48
5.2 Recommendations 48
Short-term recommendations 48
Long-term recommendations 49
REFERENCES: 51
Appendix A: Plagiarism declaration 57
Appendix B: Ethics clearance certificate 58
Appendix C: Ekurhuleni research clearance certificate 59

List of figures

Chapter 1

Figure 1. Adapted WHO 2010 Conceptual Framework for measuring efforts to increase access to health workers in underserved areas (37)..... 7

List of tables

Chapter 1

Table 1 PHC staffing norms and vacancies 2011 (15) 2
Table 2 Summary of demographics of pilot study respondents 21
Table 3 Themes and definitions 28

CHAPTER 1: INTRODUCTION

1.1 Introduction

The World Health Organization (WHO) defines Primary Health Care (PHC) as a whole-of-society approach to comprehensive and interrelated aspects of physical, mental as well as social health and well-being (1). PHC is holistic approach to care that focuses not only on needs but also the preferences of individuals, families and communities (1). Since the foundation of PHC is based on individuals, families and the communities that they live in, the WHO recommends it as the most appropriate means by which universal health for all can be attained (2, 3).

In South Africa, the first point of entry into the public health sector are PHC clinics, which are community-based and therefore accessible to most South Africans (4, 5). The majority of PHC clinics usually operate during the day (from 8:00am to 4:30pm) and provide comprehensive PHC services based on the needs of the communities that they serve. These comprehensive services include basic medical care, women, maternal and child health, HIV/AIDS and Tuberculosis (TB) management, acute and chronic care as well as emergency services (3, 6, 7). Comprehensive PHC services in South Africa are for the majority provided by professional nurses based in the clinic. The success of PHC therefore is dependent on the availability of human resources such as professional nurses (8, 9).

Professional nurses are the backbone and at the frontline of PHC in South Africa (10). It is therefore important to ensure that they are attracted and retained in the clinics that they work in for PHC services to be provided in an efficient manner (9).

However, Pillay and Mokoka in separate studies conducted in 2009 and 2011 noted that there were several challenges with the retention of professional nurses in the public health sector including PHC clinics in South Africa (10, 11). The retention challenges that they observed were in relation to inadequate remuneration, unsupportive working environments that lacked equipment and managerial support and working hours that did not support their family lives outside of their workplaces (10, 11). According to these authors, retention challenges inadvertently lead to shortages of professional workers in PHC settings thus affecting the implementation of government programs such as Universal Health Coverage and National Health Insurance scheme (12, 13). Belaid *et al* also highlights that the shortages of human resources is worsened by poor retention strategies or lack of

it (14). Pillay, Mokoka and Belaid in their separate studies also highlight the importance of having professional nurses in the right numbers to provide efficient health care services (10, 11, 14). The South African PHC strives to achieve this by using staffing norms based on providing the best clinical mix for healthcare (15). Currently, there are two models for staffing PHC clinics in South Africa (15). The first is based on professional nurses which requires that all patients are seen by professional nurses while the second is based on staff nurses and requires that a professional nurse manages the clinic and supervises staff nurses who see the patients (15). The second model allows for a reduced number of professional nurses to efficiently run the clinic (15).

Nonetheless there still exist vacancies for professional nurses under both models (15, 16). The table below highlights the vacancies that existed or were projected to exist under each model from April 2011(15).

Table 1 PHC staffing norms and vacancies 2011 (15)

	Number of professional nurses
Actual number	18 266
Target professional nurse model	28 667
Gap professional nurse model	**-10 401**
Target professional nurse model	43894
Target staff nurse model	26574
Gap staff nurse model	**-8303**

The shortage of professional nurses in PHC clinics poses a hindrance in attaining universal health for all and contributes to inequity in the South African health system (12).

Currently the proposed NHI reforms are structured around PHC as the means to attaining universal health for all (17). Therefore, for the NHI and Universal Health Coverage reforms to be successful, adequate human resources in PHC clinics should be available including professional nurses.

The aim of this study is to understand the views of professional nurses on the factors that attract and retain nurses in PHC clinics.

1.2 Study background

South Africa today is affected in many sectors by its apartheid history and health is no exception (18). As a result of how health was structured within the apartheid era, the new democratic government inherited an imbalanced health system where the public sector has less resources but caters for the majority of people in contrast to a well-resourced private sector catering for the few that can afford it (18-21). The public health sector which includes PHC clinics is said to provide care for 40 million people, approximately 84% of the South African population who are uninsured with just a per capita expenditure of ~$140 (1, 18). In comparison, the private sector which has an annual per capita expenditure of ~$1400 caters for ~16% of the South African public i.e. eight (8) million people (18).

The HIV/AIDS and TB pandemic continues to burden the public health system and increases workloads for professional nurses working in PHC clinics in the midst of human resources for health shortages (1, 18, 19). In 2007, the Health Systems Trust (HST) found that only 44% of professional nurses registered with the South African Nursing Council (SANC) work in the public health sector including PHC clinics which exacerbates the shortages and highlights problems with retention (22).

The South African Human Resources for Health (HRH) strategy emphasizes the importance of adopting strategies of managing the health care workforce (including professional nurses) in ways that motivate them to provide quality health care as well as retain them in the facilities that they are currently working in (22). The HRH strategy noted that there are insufficient professional nurses, trained midwives and PHC trained nurses in the public health service to implement the re-engineered PHC system (22). Hence, this study will attempt to understand the reasons and factors that attract and retain professional nurses in their PHC clinics for the successful implementation of universal health coverage (12).

1.2.1 Professional nurses in South Africa

Currently, the South African health system is serviced by three categories of nurses: professional (registered) nurses with four years of training; enrolled nurses with two year training and the nursing assistants or auxiliary nurses with a year's training (23). In order to practice as a nurse in South Africa, a nurse must be registered with South African Nursing Council (SANC) (24, 25). Nurses in South Africa including professional nurses have a scope of practice which defines their different roles, functions, responsibilities, and activities for which they have been trained and authorized to perform in a clinical or health setting of employment including PHC clinics (26).

1.2.2 Primary Health Care in South Africa

The history of PHC in South Africa can be traced to the 1940's where there were attempts to provide holistic care to the rural community (27). Subsequently, in 1978, South Africa was a signatory to the PHC Alma Ata declaration and committed to health for all by the year 2000 (28). The goals of PHC as spelled out by the WHO include universal coverage, service delivery reforms, public policy reforms, leadership reforms and stakeholder participation (1).

The principles of the PHC are to ensure equity in health service delivery, access to affordable and appropriate services as well as the empowerment of people and the sustainability of service provision (21).

In South Africa, the District Health System (DHS) which forms the heart of PHC, is committed to providing comprehensive health services addressing, women's health, maternal and child health, HIV/AIDS and tuberculosis (TB) management, acute and chronic care as well as emergency services (6). Other available services include dental care, mental health, health promotion, school health, district health, social and referral services (6).

However, efforts to achieve health for all at the PHC level in South Africa were impeded by apartheid. (4, 27). From 1994, the post-apartheid democratic South African government made attempts to improve health care for all its citizens by implementing a myriad of policies for Human Resources for Health. The most notable of these policies are the: 2001 Human Resource Strategy, 2003 Scarce Skills Allowance, 2002 Policy on Remunerative Work outside Public Service, 2006

Human Resources for Health Planning Framework, 2007 Policy on Remuneration of Health Professionals Working in Public Health Service, 2008 Nursing Strategy, 2008 Policy on Employment of Foreign Health Professionals in the Public Health Sector and the 2011 Human Resources for Health Strategy South Africa (29-33). These HRH policies were meant to address health issues that can be addressed at the PHC level such as life expectancy and chronic diseases, HIV/AIDS and TB, child health, nutrition and vaccination, mental health, maternal and child healthcare and other infectious diseases. It is also important to note that many of these HRH policies have also been revised many times in response to the ever-changing profile of the South African Health System (27). HRH policy reforms targeting the provision of comprehensive primary health services to all South Africans brought to light the challenges with attracting and retaining the key personnel required in clinics which are the professional nurses. (27). Additional reforms at the PHC level were also aimed at increasing the number of health facilities at the district level. However, the increase in number of facilities was not matched with adequate numbers of health care providers required to work in them which created tensions in the public health system. Further, the majority of health care services were offered free of charge at the PHC level and the lack of clear catchment areas for community members meant that they could walk around and choose clinics randomly thus burdening clinics with more numbers than anticipated (4, 27). Thus, the lack of adequate number of health care professionals especially nurses in PHC clinics continues to be a barrier to health care access (4, 28).

Despite the identified challenges above, PHC is lauded as a major tenet of the South African health system given it being the first point of contact for the individual as well as being community oriented. It is also longitudinal; it concentrates on both the curative and preventive care of an individual over time (28). Another attribute is its comprehensive patient-oriented nature and the opportunity it affords for the proper referral to the secondary and tertiary levels of care (28). It also uses a multi-sectoral approach which makes it efficient for disease prevention and early management of health problems and as such reduces the incidences of early onset of complications (28). Therefore, the effective management of attraction and retention factors for professional nurses and other healthcare professionals working at the PHC level contributes positively to public health and health sector reforms such as UHC and NHI in South Africa (34).

The focus on health workforce strategies key to attracting and retaining professional nurses in PHC clinics is crucial to the public health sector's goal of increasing access to healthcare (35, 36).

1.3 Conceptual framework for research study

The WHO's 2010 conceptual framework on increasing access to health workers in underserved areas: a conceptual framework for measuring results recognizes the need to understand the factors that attract and retain health workers in underserved areas, such as rural, remote or poor areas (37). This framework applies to this study as it recognizes that systemic issues are important to consider as they influence attraction and retention strategies of professional nurses that may impede equitable access to health services at the PHC level (37). The framework acknowledged that there are many dimensions to attracting and retaining qualified health workers in health facilities (37). These include the labor market, health system interventions, individual perceptions about the job that influence intentions to come, stay and leave as well as engagement and issues related to deployment (37). The other issues to consider are effective contracting and posting, expected outcomes and impact of the health system (see Figure 1 below) (37).

However, the main goal of the framework is to measure the successes or failures of such attraction and retention strategies which is not the aim of this study (37). The aim of this study is to use the dimensions in this framework on a sample of professional nurses in PHC clinics and to understand the factors that attract and allow them to be retained in their current health facilities of employment.

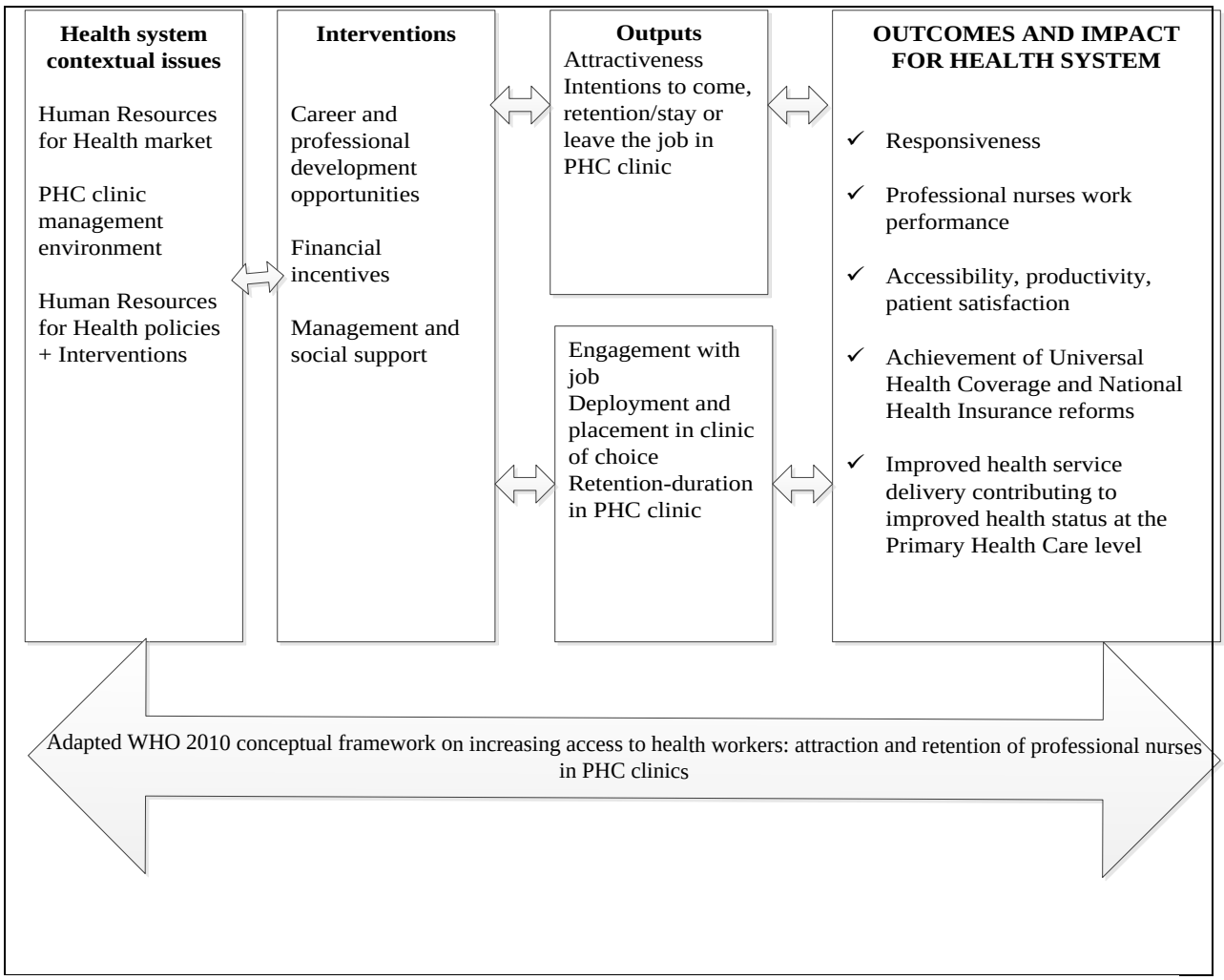


Figure 1. Adapted WHO 2010 Conceptual Framework for measuring efforts to increase access to health workers in underserved areas (37).

The WHO 2010 adapted conceptual framework above emphasizes the importance of attracting and retaining competent and experienced Human Resources for Health especially professional nurses, as they are the main drivers of the health system and for achieving reforms (37). Similarly, the South African HRH strategy recognizes that strategic planning of the health workforce is a key element in identifying the nature of work required and the specific skills required in the facility. As a result, the South African health system has over the years considered various ways to attract professional nurses to health care facilities, including remuneration strategies such as PDMS, setting clear scopes of practice for different categories of nurses, focusing on career and development opportunities, revising operational working hours of clinics and attempts to improve the working environment.

Numerous research studies have pointed out that recruitment plans for professional nurses need to take into consideration their experience and expectations in order to attract them to the job and PHC clinic (38). Professional nurses have different needs when it comes to employment, for example, they are not only looking for higher remuneration only, but need healthy work environments that provide them balance between work and private life and ability to progress in career and professional development opportunities (39). Therefore, health systems especially at the PHC level should know professional nurses 'needs' and adopt attraction and retention strategies that are applicable to the context and geographical location of their clinics accordingly. The aim of this study is to understand what kind of work environments and other factors attract and retain professional nurses in their clinics to advance the current UHC and NHI reforms.

1.4 Literature review

There is global recognition that the success of health system reforms i.e. UHC, NHI and PHC require an adequate and effective professional nurse workforce. This includes the provision of quality of health services, based on effective retention and attraction strategies for nurses to be available in all geographic areas (38). When health systems fail to retain health care professionals or when they leave their facilities for "greener pastures" it creates a negative impact on health care outcomes especially if they are not replaced. This has led to extensive research aimed at finding causes of poor retention and the attraction factors needed to keep professional nurses working in PHC clinics (38). Globally, the challenges faced by professional nurses in terms of attraction are centered around four pertinent areas; firstly, inadequate remuneration compared to financial benefit packages offered by either the private or public health sector resulting in high job turnover. Secondly, inadequate professional development opportunities or lack of transparency about who should benefit from such opportunities. Thirdly, unclear promotion strategies that allows the professional nurse to know their future in the clinics as well work place and lastly the imbalance between work and private life, which causes uncertainty and psychological stress for the professional nurse (10, 38).

Globally as well as in South Africa, it is reported that rural, remote and underdeveloped areas are the worst affected by nursing shortages (40-43). It is also documented that rural post are less desirable in comparison to urban post (41, 43, 44). The literature on retention of nurses is therefore

skewed towards retention in these areas. However even in urban or metropolitan areas there are factors such as career development , remuneration etc. that result in high turnover rate for nurses (45). A study by Drennan *et al* suggested that to retain nurses in urban areas it was necessary to address issues on strategy and leadership, remuneration, the type of nursing work ,career development as well as the nurses' immediate work environment.(45). Mokoka *et al* also made similar findings that finances, safety and security, equipment and/or supplies, management, staff and patients are essential for nurses' retention in the urban area (11).

The existing literature therefore supports a need to devise retention strategies even in the urban PHC.

In South Africa, at the PHC level different authorities employ professional nurses and this may require targeted interventions for attracting and retaining them based on contextual issues.

There is a plethora of literature documenting the shortage of professional nurses globally that is linked to inadequacies in attraction and retention strategies in various health systems (41, 46-48). As highlighted above documented causative factors for the shortages of professional nurses at PHC level include poor working conditions and lack of safety in the facility, non-competitive salaries, poor management, individual factors and poor professional development opportunities for example (41, 49-51).

Mbemba *et al* in a literature review examining effective interventions for supporting nurse retention noted that financial-incentive programs improve the distribution of human resources for health (40). However, the review cautioned that even though financial incentives were the most pursued intervention by health systems, their long-term success was limited. An example where financial incentives did not work as a long term solution for the South African health system is the Occupation Specific Dispensation (OSD) that was introduced in 2007 to deal with the migration of health workers including professional nurses in South Africa (52). Therefore, a combination of strategies to deal with attraction and retention factors is needed. Combining financial incentives with supportive managerial relationships in nursing was found to be effective for nurse retention in rural and remote settings (40).

Willis-Shattuck *et al's* systematic review of qualitative and quantitative studies focusing on retention in 2008 found that financial rewards, career development, continuing education, resource availability, management and recognition/appreciation were essential requisites that encourage

nurses to stay in their jobs (42). Professional nurses aged between 30-49 years old in South Africa and with children under 18 were more likely to leave their jobs compared to younger or much older nurses (42). The authors concluded that in light of the results, country specific research was very important on account of the different factors affecting retention (42). This is because the context varies and this influences their perception on what is necessary to attract and retain professional nurses. Professional nurses may also be at different points in their career and may want different things which may influence retention (38).

Wiskow *et al* suggest that the work environment plays an important factor in attracting and retaining professional nurses in their facilities especially instituting policies that promote a healthy balance between family life and work and the enhancement of the protection of workers' health (53).

Chenoweth *et al* conducted a systematic review in Australia focusing on attraction and retention of professional nurses. The study highlighted that providing chronic and specialized care to patients was satisfying to nurses, the location where the nurse worked was also important as was ongoing supervision and opportunities for education and training, leadership, teamwork increased staffing levels and remuneration (54).

Washeya also wrote a thesis in 2018 on "*Factors influencing retention of professional nurses in a public health care facility in Windhoek, Namibia."* She adopted a qualitative methodology using one–on-one in-depth interviews. The study identified poor working conditions including workload, poor remuneration system, lack of professional autonomy, limited career development opportunities and the respective lack of management and leadership styles as factors hindering retention of professional nurses (55).

In South Africa, Mokoka *et al* conducted a study in 2010. They employed an exploratory, descriptive, contextual and qualitative design to study nurse managers' views on factors which could influence professional nurse retention (56). The study identified poor working conditions, long and inconvenient working hours, uncompetitive salaries and professional development of nurses, unsafe working environments and a lack of resources as barriers to retention of professional nurses in agreement with most of the literature reviewed (56). Furthermore, the nursing manager also had a critical role to play in the retention of professional nurses. This involved addressing shortcomings in their managerial and leadership skills as well as implementing changes within a multigenerational nursing workforce and the challenging working environment (56). A follow up study by the same

author highlighted important factors informing the professional nurses' decisions to stay with their current employers as being finance, safety and security related, availability of equipment and/or supplies, management support, adequate staff and deriving satisfaction from seeing patient health improve (11).

Another study on professional nurses retention in South Africa by Rubin Pillay in 2009 identified that majority of professional nurses in the public sector intended to change from their current position within the next five years citing employment security, workplace organization and the working environment as reasons (10). This study was a cross sectional survey using questionnaires throughout South Africa (10).

As spotlighted in the literature review above, different study methodologies can be used to examine the factors that influence attraction and retention factors for professional nurses by various authors. From the literature review semi structured interviews can be used to gather information on the factors that attract and retain professional nurses in PHC settings (38). This qualitative study seeks to understand the views that influence attraction and retention of professional nurses in PHC. The results from this study may lead to the development of recommendations of attraction and retention factors that fit PHC clinics based in urban areas in South Africa or similar contexts.

1.4.1 Conclusion

Human resources specifically professional nurses are critical in ensuring that PHC is successful in achieving universal health for all. Gathering evidence on attraction and retention factors for professional nurses in PHC is important. This will inform appropriate interventions for keeping professional nurses in their PHC clinics and enjoying their jobs to prevent a negative impact on the health system.

1.5 Problem statement

Human resources for health are an essential component of the health system and professional nurses are at the frontline of the provision of PHC services in South Africa (5, 57). As highlighted in the literature review above the South African health care system has challenges attracting and retaining professional nurses at the PHC level which affects service delivery (5, 57). The service delivery

challenges caused by attraction and retention issues are poor patient care (58), overburdening remaining staff with high workloads, burn out and intention to leave the health facility (24, 27, 59). Intention to leave and high turnover of nurses contributes to job dissatisfaction and poor quality of care (60).

At the PHC level the movement of skilled personnel including professional nurses to private and government hospitals has become a barrier to provision, implementation as well as sustainability of health services (21) and this affects the proper implementation and success of PHC (42, 59, 61).

Professional nurses have confirmed that they "*love their work but hate their job"* (62) highlighting that if factors influencing attraction and retention are identified, they may solve the problems bedeviling the PHC system in South Africa. Hence, this study aims to understand the views of professional nurses on factors that attract and retain them in South Africa PHC clinics.

1.7 Purpose statement

- ✓ To understand the views of professional nurses on the factors that attract and retain them in the PHC clinic.

1.8 Study rationale

The South African health system depends on human resources for health i.e. professional nurses that are sufficiently motivated to remain working in their current PHC clinics for the achievement of UHC and NHI reforms (12, 63). Therefore for NHI to be successful, professional nurses who are the driving force of PHC need to be attracted and retained in the health system (19).

There have been various strategies by the South African government including community service, financial incentives amongst others aimed at addressing the problem of recruitment, redistribution and retention of health workers including professional nurses with varying effectiveness and sustainability (64). The South African health system has still not devised effective retention and attraction strategies for professional nurses working in PHC clinics (64).

It is important to understand the factors responsible for attracting and retaining professional nurses at the PHC level. This study will add to the existing body of knowledge and inform health system policy strategies necessary to attract and retain professional nurses in PHC clinics.

Research question

- ✓ What are the views of professional nurses on the factors that attract and retain nurses working in PHC clinics?

1.9 Research aim

- ✓ To understand the views of professional nurses on the factors that attract and retain nurses working in PHC clinics.

1.10 Research objective

- ✓ To understand the views of professional nurses on the factors that attract and retain them in the PHC clinics based in Ekurhuleni district.
- ✓ To understand the factors that negatively affect retention of professional nurses in the PHC clinics based in the Ekurhuleni district.
- ✓ To make health system recommendations based on study results.

In the next chapter (methodology), the researcher describes the study setting, study participants and how they were selected. The development of the semi structured interview guide, how it was pilot tested on a few participants, finalized as well as adapted for the overall study is also discussed. The chapter then describes the data collection processes, how the semi-structured interviews were conducted, recorded and stored. Ethical procedures and the data analysis processes are also discussed.

CHAPTER 2: METHODOLOGY

2.1 Study design

This was a qualitative exploratory study to understand the factors that attract and retain professional nurses working in PHC clinics. A qualitative research design allows the researcher to get the views of the participant (65) by allowing the participant to express themselves, as such the researcher gets to understand participants impression on a matter which is what this research seeks to do. The design was therefore chosen because it gives the opportunity to fill in the gaps in knowledge about factors that attract and retain professional nurses in PHC clinics from the nurses' perspective (65, 66).

2.2 Study setting

The study was conducted during 2018 at five (5) clinics in Ekurhuleni metropolitan municipality, Johannesburg, South Africa. Three of the clinics fall under the local authority (LA) and these are Elsburg, Edenvale and Dukathole. The other two Northmead and Mary Moodley clinics are controlled by the provincial government. LA clinics in South Africa, are supported by the municipality but paid for by the provincial government according to an agreement between the province and the municipality (67) while a provincial government clinic is supported by the provincial government. There are three tiers of government in South Africa according to the 1996 constitution: national, provincial and local (68). The three are distinctive, interrelated and interdependent and are all employing authorities (68).This is why the PHC clinics in this study fall under different governments.

All five clinics have the ideal clinic status. The ideal clinic uses clinical policies, protocols and guidelines with the support of partners and stakeholders to ensure that the community receives quality health services (49). An ideal clinic must also have adequate staff, infrastructure as well as supplies with good administrative processes (49). The rationale for targeting these ideal clinics for the research study was to explore if there were any lessons to be learnt about the factors that attract and retain professional nurses in PHC clinics from the views of the nurses working in those particular clinics and to make recommendations for the NHI program.

Ekurhuleni was chosen using purposive sampling as the study setting because it has the highest percentage of ideal clinics in Gauteng (69) with four of its PHC clinics listed by the ideal clinic monitoring system in the top ten (10) PHC clinics in the country in 2016 (70). The metro is therefore well on its way to achieving the government's target of all clinics achieving ideal status, which is vital to the proper implementation of the NHI. As such clinics were also selected using purposive sampling. Purposive sampling refers to a non-probability sampling technique that involves identifying individuals or groups with in depth knowledge and experience about the phenomenon of interest (71) Ekurhuleni metropolitan municipality is in the Gauteng province (72). It spans Germiston in the west to springs and Nigel in the east. The Ekurhuleni municipality has 71 fixed PHC clinics (25). Five (5) of these facilities are under the Gauteng provincial government and the rest are under the authority of the local government (25).

Geographical proximity to my home in Edenvale, as well as the University of Witwatersrand, Johannesburg where I am studying for my Masters in Public Health degree, also influenced my decision to select these five clinics as they made field work and data collection relatively easier.

2.2.1. Description of clinics and the Primary Health Care services rendered

The operating hours for the clinics were from 8.00 am to 4.30pm, with the exception of Mary Moodley and Dukathole clinic. Mary Moodley clinic operated from 7.00 am to 7.00 pm, seven days a week. Due to the extended working hours, Mary Moodley operated a shift system from 4.00pm to 7.00pm on weekdays as well as on weekends. During these extended working hours, two professional nurses work and provide services in the clinic. Dukathole clinic also operated on Saturdays from 8.00 am to 2.00 pm; however, the Saturday shift was not compulsory and was considered as overtime.

These extended hours are not typical of PHC clinics as the comprehensive integrated PHC services package developed by the South African Department of Health in September, 2001 (73) recommends using a one-stop approach for at least eight hours a day, five days a week (73) as seen in Elsburg, Edenvale and Northmead clinics. However, these two clinics (Mary Moodley and Dukathole) with extended working hours were included in the study to explore if these extended working hours will affect the attraction, retention and experiences of the professional nurses as that is one of the changes to the clinics proposed by the NHI white paper (13).

The PHC services provided in these selected provincial and local government clinics are referred to as the comprehensive integrated PHC services package as described above. Under this package all the essential health services can be assessed in one facility at any given time (one-stop approach). The services offered in these clinics include immunization, mother and child care services, dentistry, antenatal and postnatal care services. Reproductive health services such as family planning and the management of sexually transmitted diseases are also part of the package. Curative services and the treatment of minor ailments are also provided in these clinics. In addition, clinics managed chronic diseases such as diabetes, asthma, epilepsy and, hypertension among others. Mental health and rehabilitative services and services for the treatment of communicable diseases such as tuberculosis and HIV/AIDS are all provided (73). In both provincial and local government clinics, there were both nurses with formal PHC training and those without it. However, all nurses provided these PHC services in all the clinics studied because their scope of work covers PHC services.

All the clinics with the exception of Elsburg employed ten (10) professional nurses including the clinic manager. Elsburg employed seven (7) professional nurses, clinic manager included. However, not all nurses were present daily as some were on leave, others gone for professional development and others were on a clinic errand. On average six professional nurses excluding the clinic manager were likely to be at post at any given time in most of the clinics. All the clinics except Mary Moodley, reported seeing between 200-250 patients weekly while Mary Moodley saw between 300-350 patients weekly.

2.3 Study population and sampling

2.3.1 Study population

The study population consisted of professional nurses. Professional nurses, their scope of work and their role in the PHC clinic has been discussed in the literature review in section 1.2.1. For a professional nurse to work in the PHC clinic, he/she is not required to have PHC training as the scope of practice covers the services to be rendered in the PHC clinic.

Inclusion criteria

1. A professional nurse who has been working in PHC clinic for at least a year and currently working in a clinic in Ekurhuleni. It included both professional nurses hired by the local government and those hired by the provincial government.

2. Willingness to participate in the study. This was a key factor as a qualitative study such as this largely depends on data from a conversation.

3. The clinics included in the study were all fixed clinics. This is because they typically see a larger number of people and employ more professional nurses (about seven professional nurses on average) in comparison to satellite clinics, dental clinics, Mobile Obstetric Units (MOU'S) or health posts which usually have one or two professional nurses.

Exclusion criteria

1. Professional nurses with less than a years' experience in the clinic were not included in the study. It was assumed by the researcher for the purposes of this study that participants with more than a year's experience will have been in the system long enough to have formed an opinion about what will attract and retain nurses in the PHC clinic. This is because it was reported in 2014 by the New York University in the Science Daily, that turnover rates for nurses was highest in the second year (74) and Flinkman *et al* also reported that the decision to leave is actually taken a year before the actual action (75). Therefore, within a year, nurses would likely have had reflections on these factors.

2.3.2 Study sampling

Purposive sampling was used to sample professional nurses. They were selected to participate in the study provided they met the inclusion criteria described above. Considering the time, budget and relative ease of finding participants the mean target of 30 as advised in the review paper by Baker and Edwards was used while aiming to achieve saturation (71). Bearing in mind that not all targeted nurses may participate in the study all the nurses in the clinics (n=43) were invited to participate in the study. Saturation was reached after 28 interviews but a further two were done to ensure that saturation had indeed been reached. Saturation refers to the point where no new information develops from the interview and it usually marks the end of data collection (76). The remaining 13 were unable to participate in the study for various reasons. Some were on leave, others on clinic errands at the time of the study and others declined the offer to participate in the study for personal reasons.

2.4 Ethics consideration

The study obtained ethics approval from the University of the Witwatersrand, Johannesburg, Human Research Ethics Committee (HREC). The Ethics clearance number is M171192 and is attached as appendix B. Research clearance for the study attached as appendix c was also obtained from the National Health Research Department (NHRD) and the NHRD number is GP_201801_015. This was applied for through the Ekurhuleni Health District Research Committee (EHDRC). The facility managers of the clinics where interviews were to be held, were then subsequently approached for individual consent for the study. Participants were informed that their involvement with the study is entirely voluntary, they will be kept anonymous and they also had a right to pull out of the study at any point in time.

2.5 The initial semi-structured interview guide

The guide was developed based on the information gathered from literature review by the researcher and validated using the pilot study as discussed below to test that the instrument measures what it set out to measure (77). The guide set out to answer the research question: "What are the views of professional nurses on the factors that attract and retain nurses working in PHC clinics?" Therefore the guide focused on issues of attraction, retention and the experiences of professional nurses in PHC clinics. The interview guide was updated with knowledge obtained from the pilot study as discussed below.

The questions were asked under nine main broad questions and the guide had fifteen open ended questions in total. These questions were centered on what attracted them, what was retaining them as well as their experiences in the clinic. It went on further to ask about how their experiences influenced their decision to stay or leave and indeed if the left where they will be going. The guide also discussed what the participants believed will attract more professional nurses as well as how they believed they could be retained. The final interview guide is attached as appendix D.

2.6 Pilot study

The pilot study was done in Germiston city clinic in April 2018. Germiston city clinic is a local government authority clinic situated in Ekurhuleni. It has similar characteristics to the clinics that were included in the study. It was chosen for the pilot because of the responsiveness of the clinic manager in providing study permission compared to Bedfordview and Kempton park civic clinics that was approached for the same reason. The clinic operates during the week from 8.00am to 4.30pm.The clinic has ten (10) professional nurses including the clinic manager, some of whom have PHC training while others do not. These nurses are employed by both the LA and Provincial Government authorities.

2.6.1 Pilot study sample

Three professional nurses that met the inclusion criteria were interviewed in their consulting rooms after they had finished with the batch of patients they had been allocated for that period. Two of the nurses interviewed were female while the third participant was male. The male and one female participant were hired by the Ekurhuleni municipality, were within the 40-50 years age band and had been in PHC clinic for more than five years. The other female participant was hired by the Gauteng province, in the 30-40 years age band and had been in the PHC clinic for two years.

All participants gave verbal consent to be part of the study and the researcher was invited to their individual consulting room at their convenience. They were given the study information sheet (attached as appendix E) which informed them of its voluntary nature and that they were free to opt out of the study at any point .Willing participants were then asked to read both consent forms (for the interview and audio recording) and if they agreed to go ahead and sign both. The consent forms for interview and audio recording are attached as appendices F and G respectively.

2.6.2 Purpose of the pilot study

The pilot study was done to determine the validity and reliability of the semi structured interview guide. According to Maryam Dikko in her 2016 report on "*Establishing Construct Validity and Reliability: Pilot Testing of a Qualitative Interview for Research in Takaful (Islamic Insurance)"* a pilot study was useful in the research study as it could (77):

• Help identify ambiguous as well as unnecessary questions to help refine the questionnaire (77). This was true in this pilot study as some questions had to be refined to convey the actual meaning intended. Initially, participants were asked to describe their typical workday in the hope that their experiences in the clinic will be discussed, but this was not the case, rather the routine of their day was discussed. The question was therefore rephrased as "In summary what is your typical workload like?" This generated the desired discussion on their experiences in the clinic.

• Aid in having a time frame for the interview (77). The time frame for the interview was determined after pilot study to be between 45 minutes to one hour and fifteen minutes from the time the researcher met with the participant till when the participant left. This relied on how fast the participant spoke and more importantly on how much they had to say concerning the subject.

• Establish that the data generated from the interviews can be properly interpreted in relation to the information required (77) and this was the case in this pilot study. The data generated was enough to answer the research question in the study to the satisfaction of the researcher.

• Determine whether the interview guide had all the necessary questions that could help appreciate and understand all the concepts (77). The concepts on attraction, retention, experiences and challenges were all appreciated and understood adequately to the researcher's satisfaction from the pilot study.

• Allow the researcher to practice and perfect interviewing skills (77). The pilot study was also a good experience for the researcher to appreciate the concept of reflexivity which is described as the ongoing process of mutual shaping between researcher and the research (78). The researcher being a clinician with experience in the PHC setting could relate and had opinions on what the participants spoke about. This could easily lead to empathizing and may even cause questions to be asked in a leading manner with preconceived ideas on what the answers should be. For instance, one participant talked about the workload being hectic and instead of just asking her to elaborate the researcher said 'I can imagine the patient workload alone!' This skewed the conversation to the patient workload and how daunting it could be. The pilot study therefore helped the researcher to be conscious of this potential source of bias in the actual interviews conducted and to eliminate this source of bias to the best of her ability. The data from the pilot study were not included in the actual study.

2.6.3. Results of pilot study

At the end of the pilot study the researcher was satisfied that the objectives of the study will be met from the data generated. This meant the semi structured interview guide was valid and reliable. This was because the data generated in the pilot study answered the questions adequately when refinements were made. The semi-structured interview guide was revised based on the results and outcome from the pilot study. The refinements are discussed below.

2.6.4 Changes made to initial interview guide after pilot study

The questions on demography of participants were refined to include current employer (provincial or local government). This was a very important addition as the experiences of the professional nurses in the PHC clinic were influenced significantly in their opinion by who their employer was. This therefore meant that in trying to understand the experiences of the professional nurses in the PHC clinic this factor could not be overlooked in the broader study.

The interview time was initially pegged at half an hour but later refined to a time duration between 45 minutes and one hour and fifteen minutes. This helped both the researcher and the participants to plan towards a convenient time where both parties could engage without rushing through the interview process in the broader study.

In addition, questions that turned out to be ambiguous were rephrased as discussed in Section 2.5.3 to help relay the exact message intended and to get an appropriate answer. This was essential as the success of a qualitative data is to generate rich relevant data and ambiguous questions are unlikely to generate such results.

Table 2 Summary of demographics of pilot study respondents

Person	**Duration As A Professional Nurse**	**Employer**	**Gender**	**Other Work Experience**	**Age**
Pilot 1	>5 Years	Local	Female	Hospital	40-50
Pilot 2	>5 Years	Local	Male	Hospital	50-60
Pilot 3	>5 Years	Province	Female	Hospital	30-40

Two themes emerged from the pilot study: the organizational structure of the PHC clinic and employer factors affecting the experiences of professional nurses in PHC clinics.

2.7 Data collection

Validity of the semi-structured interview guide was established as it appreciated and adequately brought out the understanding around the concepts it set out to explore. Therefore, the researcher proceeded to conduct the study with it. Firstly, consent was sought from the clinic mangers and the nurses were subsequently made aware of the study by the clinic manager. The nurses and the clinic managers then decided on a convenient time for the study and this was communicated to the researcher by phone.

On the days arranged for interviews, the researcher arrived at least half an hour earlier to observe the normal routine in the clinic. The time in between interviews was also used to continue these observations. This was the researcher's way of becoming familiar with the clinic and to have a better understanding of the context in which the interviews were being held. The individual participants were interviewed in their consulting rooms in two of the facilities and in the other three, the researcher was given a place in the board room and the nurses came in for the interviews individually. This was usually done in the afternoons when most of the nurses were almost through with their days work and had come back from lunch. The nurses were interviewed when they had no patients assigned to them. At that time of day the patient load had decreased and the remaining nurses who were not being interviewed yet saw the patients. Once the interview with the nurse was done, he/she went to relieve another nurse who will in turn be interviewed. This ensured that interviews were not rushed and nurses gave their full attention to ensure that a good conversation was held. On average three interviews were conducted per day and the data was collected over 13 nonconsecutive days.

The study begun with the participants reading the information sheet. This was done to avoid discussions among participants that may influence responses to questions and affect reliability of the data. Thereafter consent for both participation in the study and audio recording were obtained from the participants both verbally and by the signing of the consent forms. All these processes were within the time frame for the interview. The semi structured interview guide as described above helped to probe participants as we went through the guide and this helped participants to focus on

the main points of the study. Summaries of what participants said were intermittently relayed to them for confirmation to ensure that the researcher had not misunderstood what participants intended to say. This was also a way of ensuring credibility in that the participants view was reported without the researcher's assumptions. During the interview observational notes were taken to analyze the nonverbal communication. The observational notes helped to analyze the responses in the context within which they were made during the data analysis stage.

2.8 Data management

The interview was confidential and was not shared with other participants, the participant's managers nor their supervisors if they had any. The interviews were all audio-recorded and after each batch day of interviews the audio recordings were listened to by just the researcher and were transcribed verbatim. The transcriptions for each day were completed before going back into the field to conduct more interviews. Due to this the interviews were not conducted on consecutive days. Transcription was done using the sound organizer software. The sound organizer software enabled the researcher to listen to the audio recorded interview at a preferred speed while transcribing. During the transcription de-identification of data was done referencing participants individually. This was done to ensure confidentiality and anonymity.

These verbatim transcribed data were then imported into the qualitative data analysis software NVivo for analysis.

The transcribed notes were stored in a folder with a password known to just the researcher on the researcher's personal laptop. The audio recordings from the qualitative interview together with field notes are being kept in a secure locker in an undisclosed office in Gauteng. This will be kept for five years after publication and thereafter destroyed. Consent forms will be kept (for two years after the research has been published in a secure cupboard) in a locked office different from where the data is kept also to ensure confidentiality.

The results of the research will be shared with the university, the national and Ekurhuleni departments of health and facility managers from whom ethical approval and permissions were sought as stated in the protocol submitted for ethics approval. The clinical managers and participants were also duly informed of this intention and verbal consent was given.

2.9 Data analysis

Thematic analysis which is the process of identifying patterns or themes within qualitative data (79) was used in analyzing the data generated from the semi structured interviews. The data analysis was done simultaneously with data collection meaning the transcription of audio recordings of interviews and attempts at initial analysis were done after each batch of interviews were transcribed as stated in section 2.7. This informed the researcher of the emerging themes and also helped determine saturation of the qualitative research. The themes emerging were constantly being reviewed in this manner and therefore it ensured coherent interpretation of the data.

The Braun &Clarke's (2006) six-step framework for conducting thematic data analysis was followed in this study and will be described below (80).

2.9.1 Familiarization

This is the process of getting familiar with your data and this is done by reading and re-reading transcripts (79).The transcription of interviews in this study was done by the researcher. Transcripts were read and re-read as well as intermittently crosschecked with the audio which was listened to severally to ensure accuracy and data immersion. This process allowed the researcher to be very familiar with the data. In addition transcription was also done as soon as possible after the interview making it easier to remember the context of the interview and this helped to imbibe the data.

The process of familiarization was done looking at the data simply in the way the respondent put them without any preconceived ideas to the best of the researcher's ability to reduce researcher bias.

2.9.2 Coding

After familiarization, the next step according to Braun & Clarke is to generate initial codes. To ensure credibility of the study intercoder agreement was conducted with a fellow colleague with experience in qualitative research. The procedure for conducting intercoder agreement was followed at this point. The researcher used NVivo to generate the first version of data driven codes from the first transcript. These were defined and discussed with the intercoder explaining how they were developed and what each one meant. At this stage clarifications of the code as well as their definitions were made so that both coders were in agreement with the updated codebook that was generated. The agreement was that any new code could be added if necessary and discussed after

the independent coding process to reach an agreement or otherwise. The coders then went on to independently code three of the same transcripts out of the 30 transcripts using the updated code book. When this reliability check was done the researcher proceeded to code the rest of the transcripts with the final codebook generated from the process.

In this study the inductive approach to coding was used because it allows the significant, frequent or dominant findings to emerge from the data (81). This was an exploratory study seeking answers from a specific group of health workers (professional nurses in PHC clinics) who have previously not been directly studied on the research topic. Therefore, little is known about this research topic making this approach useful in generating insightful finding (81).

The data was analyzed using first cycle as well as second cycle coding methods. This was done with the aid of the NVivo software which helped to organize the data generated from the study. Initial coding was the first cycle method used in this study. Initial coding also known as open coding is an iterative process which involves the researcher reading and coding only data that is relevant to the purpose of the research (82).The initial coding process begun with describing the significant demographic characteristics using another first cycle coding method known as attribute coding. Attribute coding is the notation usually at the beginning of a data which has descriptive information such as: the fieldwork setting, participant characteristics or demographics, data format or time frame (83). For example the participant was coded as 'provincial' if hired by the provincial government or 'municipal' if hired by the local government. This was done to ascertain if people with the same attribute codes had similar opinions or otherwise. For example did participants with the provincial attribute code experience the PHC clinic in the same way as those with the municipal attribute codes?

After the demography was described in this manner the rest of the transcript was also analyzed to generate initial codes. The transcripts were read line by line and coded, bearing in mind what the research question (which focused on the concepts of attraction, retention and experiences of the professional nurses in the PHC clinic) sought to answer. To achieve this aim structural coding was used to identify and group similar segments of the data under these concepts. These concepts were used to name and form broad topics or initial categories under which the structural codes generated were grouped. These structural codes were worded in the exact expressions of participants (in vivo coding) to help the 'voice' of the participants be heard. At the end of the structural coding the

different responses by participants on a particular concept as well as the frequency of any particular answer given could also be appreciated.

The first cycle was followed by focused coding as the second cycle coding method of choice in this study. Focused coding allowed for in depth analysis as pattern coding was employed within as well as across these broad categories generated during the first cycle of coding. In using pattern coding the structural codes were studied for similarities and differences. The codes with similar meanings were combined to ensure that there were no repeated codes. The transcripts were then reread to ensure that no relevant codes had been missed. To ensure rigor inter coder agreement was done with a colleague who has experience in qualitative research.

2.9.3 Identification of themes

Following coding Braun & Clarke advocates for identification of themes as the next step in thematic analysis. They define a theme as a pattern that captures something significant or interesting about the data and/or research question (82). In this study this was done looking at the relationship between codes and how they fit. The codes were organized into broader themes that could speak to the different concepts around which the research question was formulated. Some themes had subthemes while others did not. Themes that did not have enough data were removed and those that were similar were combined in the process of refinement of the themes as agreed on by the two coders during the intercoder reliability process. The disparities between the themes identified by the coders were centered on the factors that attracted the nurses themselves and what they believed will attract other nurses as well as the challenges they experienced. The resolution of these disparities was achieved and these themes were refined in the best way that explained the factors presented in the data to the agreement of both coders.

2.8.4 Reviewing of themes

When themes are created the next step is to review and as such refine them (82). This refinement of the themes is done on two levels i.e. at the level of the coded data and at the level of the themes (82). At the level of the coded data the data extracts were re-read to ensure that it had a coherent pattern and at the level of the themes a thematic map was used to visualize the relationship between the themes. Also at this level each theme was considered in relation to the overall data generated from the study. This ensured that the themes reflected the evidence from the whole data set (82).

2.8.5 Defining and naming of themes

After the themes had been refined to the satisfaction of the researcher definition and naming of themes was done. This was done to capture the essence of what each theme was about.

2.8.6 Writing up

The last step in this six step approach is to write up which involved choosing verbatim transcripts that best illustrated the elements of the themes to buttress points being made by the theme.

2.8.7 Quality assurance of qualitative data analysis

According to Korstjens *et al* the trustworthiness of the qualitative research can be determined through credibility, transferability, confirmability, and dependability(78).

Credibility is concerned with aspects of truth value (78). There are various strategies that a qualitative researcher may use to establish credibility. These strategies include peer examination, interview technique, establishing authority of researcher, structural coherence prolonged and varied field experience, time sampling, reflexivity (field journal), triangulation and member checking (78). In this study peer examination/debriefing and participant triangulation was used to establish credibility.(84). Peer debriefing gives the opportunity for the researcher to test their growing insights and to be questioned to improve the quality of findings (84). Throughout the research support was sought from supervisor and the University of Witwatersrand department of public health for scholarly guidance (84). Firstly intercoder agreement was used to reduce researcher bias and improve credibility. Findings were also discussed with peers during seminars organized by the department to provide scholarly guidance and perceptions of peers was considered in making conclusions from the findings of the study (84). The participants included professional nurses that had been hired by the provincial government to work in the municipal clinics, professional nurses hired directly by the municipal clinics and provincial nurses working in provincial clinics. The participants also had different work schedules with some working extended hours while some did not. This participant triangulation helped the researcher to get data from different perspectives and to explore consistencies or otherwise from different backgrounds to establish credibility.

Transferability is concerned with how applicable a study is to another (78). Transferability judgment by a potential user may be facilitated through 'thick description' and purposeful sampling"(84) which were both used in this study. To ensure transferability the researcher provided a 'thick description' of who the participants were in both the literature review and methodology and gave a clear step by step account on how the research was conducted (78). The researcher described thoroughly the setting of the research, the sample and sampling method, the demographics of participants as well as the inclusion and exclusion criteria. The semi-structured interview guide was also provided as an appendix. This means that another researcher will be able to assess properly if this guide is adequate in another setting. At the end of the data analysis, seven themes emerged. The table below gives a summary on the themes.

Table 3 Themes and definitions

Theme	Description
1.Working hours in PHC clinics	This theme occurs when professional nurses emphasize how they like the working hours in the PHC clinic and how it positively impacts their personal lives and needs.
2. Independence in patient management.	This theme occurs when respondents highlight that managing patients independently based on their professional assessment and not following routine is more rewarding.
3. Career progression	This theme arises when respondents talk about how they moved to the PHC clinic to access the opportunities for further studies and how they think this should impact their professional pay scale grading.
4. Remuneration	This theme occurs when respondents indicate that money was the reason why they chose to work in the PHC clinic and how this influences their decisions on retention.
5. Unsupportive management environment	This theme reflects the pervasive unsupportive management environment in clinics and how it affects work life of professional nurses.
6. Community interaction/seeing patient health improve	This theme occurs when respondents state that being able to care for patients over a period of time, interacting with them and watching them improve gives them great professional satisfaction.

7. Heavy workload	This theme occurs when respondents highlight how they feel overwhelmed by the ever increasing duties assigned to them, the unrealistic targets they have to meet and how this negatively affects their work life. This theme had subthemes which talked about the contributing factors to increased workload. ✓ Patients abusing the facility ✓ Lack of equipment ✓ Shortage of staff ✓ Extra administrative work The last subtheme looks at the consequence of the increased workload on the work life of the professional nurses ✓ Quality versus quantity care

CHAPTER 3: RESULTS

Thirty professional nurses took part in the semi-structured interviews highlighting a response rate of 69.76 %. The remaining 13 were unable to participate in this study for various reasons; some were on leave (n=six), others on clinic errands during study period (n=four) and others declined the offer to participate in this study (n=three) because they were not interested.

The majority of the semi-structured interview participants were female, only one out of the 30 was male. The majority of professional nurses (10) were 40-50 years, (nine) 20-30 years, (six) were 50-60 years and (five) 30-40 years old. The working experience of these professional nurses ranged from one -13 years. Most reported having worked in other PHCs, public hospitals, mobile obstetric units (MOU) and the private health sector. Eighteen professional nurses were currently employed by the Ekurhuleni municipality and 12 by the Gauteng provincial government authority.

Overall, professional nurses were deliberative during the semi-structured interviews. Although connected and not stand alone, the seven themes that emerged from the semi structured interviews were: working hours, independence in patient management, career progression, remuneration, unsupportive management environment, community interaction/seeing patient health improve and heavy workload.

All the themes are described in Table 2 in the methodology chapter and will be summarized one by one for clarity and additional information.

3.1 Working hours in the PHC clinic

Working hours in the PHC clinic was a common feature in the semi-structured interviews. Majority of professional nurses mentioned how the opening hours of the PHC clinic (08h00-16h00) during the week positively influences their personal life and needs. The convenience of the working hours to professional nurses who were mothers to young children was very pronounced in the interviews. Working from 08h00-16h00 also increased the sense of safety for nurses as they managed to get home during the day and not at night. Professional nurses found these working hours very attractive as they could spend more time with their families and attend to other personal needs such as church activities and domestic duties like cooking as highlighted below:

"*… I have two small children and if I come home from the clinic after 16h00 I will be able to help them with the homework. When I worked in the hospital I will knock off at 7pm and by the time I get home they would have already slept."* (Respondent 17, Municipal Clinic, Ekurhuleni 2018)

"*... I am a Christian so when I work here in the clinic, I get time to go to church service in the evening."* (Respondent 11, Municipal Clinic, Ekurhuleni 2018)

"*... I did not want to work night shift and weekends in the hospital that is why I came to work here in the clinic."* (Respondent 20, Municipal Clinic, Ekurhuleni 2018)

Other professional nurses preferred PHC clinic working hours because they felt safe, as they did not work at night.

"At least here there is no working and walking at night in the clinic. Previously, in the hospital where I worked, I would walk and work at night. It was dark and I was scared." (Respondent 6, Municipal Clinic, Ekurhuleni 2018)

In general and as highlighted in this theme, the working hours for the majority of clinics in Ekurhuleni were described as convenient for the professional nurses as they were able to offer a comprehensive package of PHC services to communities as highlighted below:

"...I just like seeing the patients get much better… especially the sick ones with HIV who look so much better when I have managed them and initiated them on antiretroviral treatment…the progress and appreciation of the patients make me happy and satisfied working here."(Respondent 11, Municipal clinic, Ekurhuleni 2018).

She goes on to add*: "...I bond with the patients over time…they meet you in the area and show you a child saying this is the baby that I came in pregnant with…you did all her immunizations…it's really nice to see them through the various phases."* (Respondent 11, Municipal clinic, Ekurhuleni 2018).

3.2 Independence in patient management

Independence in patient management at the PHC clinic emerged as another common theme from the semi structured interviews with professional nurses. Over and above the convenient clinic working hours professional nurses' experienced independence in patient management and

highlighted that they were able to take history from patients, examine them, make diagnosis and prescribe medication according to their scope of practice without assistance from doctors. A significant number of professional nurses in the semi structured interviews enjoyed working in the PHC clinic because of their independence in patient management. This is expressed in the quotes below:

"*I feel that in this PHC clinic I am able to independently manage my patient. Before, I worked in the hospital and the doctor used to control how I managed my patients. Here I am able to manage my patients by telling them how to take care of their heath before they become sick. I enjoy my independence here"* (Respondent 22, Provincial clinic, Ekurhuleni 2018)

"…I make my own decision about my patients and I am able to consult with the doctors in the clinic at any time."(Respondent 15, Municipal clinic, Ekurhuleni 2018)

3.3 Career progression

Another important theme that reflected the opinion of the participant in the semi-structured interviews and was emphasized by the professional nurses was career progression through opportunities for further studies. When the nurses upgraded their career profile through further studies they were able to get a promotion and a pay rise depending on who the employing authority is. Therefore nurses were attracted to facilities where they felt they were likely to be given these study opportunities:

"…for nurses to remain in the PHC clinic they must be motivated and one of the sure ways is by taking them to school to acquire further training for career progression."(Respondent 19, Municipal clinic, Ekurhuleni 2018)

"…when I was working in the hospital, they will not grant me study leave to pursue PHC training because it did not benefit them so I moved to this PHC clinic because I know I am definitely going to be granted the study leave for the PHC training."(Respondent 17, Municipal clinic, Ekurhuleni 2018)

Professional nurses highlighted that a sense of progressing in their careers through further studies made them feel confident in providing healthcare with their work as indicated below:

"...I think it is important that nurses in the PHC clinic are sent for further training to acquire skills and knowledge because it boost our confidence and makes as more independent in patient management" (Respondent 22, Provincial clinic, Ekurhuleni 2018).c

One challenge emerging from this theme was the difference in study opportunities that nurses had based on their employing authority. Some provincial government employed nurses felt nurses hired by the municipal government authority had many advantages including career progression through further studies as highlighted below:

"…..*The municipal nurses have more money and resources. They have more learning opportunities and more information."*(Respondent 12, Municipal clinic, Ekurhuleni 2018)

Though provincial nurses allegedly had fewer opportunities for studies they also had the advantage of a pay scale upgrade after PHC training which the municipal nurses do not receive. This also caused dissatisfaction to some municipal nurses as expressed below:

"…*Actually now I don't feel motivated enough to remain in this particular PHC clinic because I am PHC trained, I am also finishing my B Cur but the salary in Ekurhuleni does not take the specialty training into account when structuring the pay. The province does. They even do PMDs in the province."* (Respondent 17, Municipal Clinic, Ekurhuleni 2018)

3.4 Remuneration.

Remuneration was highlighted as a factor influencing nurses' decision to move or remain in the PHC clinic. Professional nurses in municipal and provincial government clinics essentially provide the same PHC services to patients. However municipal nurses are paid more than provincial nurses for the same role. The different pay scales for professional nurses doing the same job in the clinic based on employing authority made the provincial nurses unhappy and dissatisfied. This was a significant factor in their decision to stay or leave the PHC clinic. Respondents 17 and 19 were both attracted by the salary offered in the Ekurhuleni municipality PHC clinics. These were nurses who were initially working for the provincial government hospitals. They outlined this as:

"*The salary is much better in the municipal PHC clinics. I used to work in the provincial hospital but I moved to this PHC clinic because the municipal government pays better."* (Respondent 17, Municipal clinic, Ekurhuleni 2018)

"…I moved to this municipal clinic because the salary is better compared to what I received working previously in the provincial hospital" (Respondent 19, Municipal clinic, Ekurhuleni 2018)

Salary differences between the two employing authorities in the same municipal clinic was in itself a challenge. Respondents employed by the Gauteng provincial authority expressed their dissatisfaction and views on this matter as:

"…to make nurses stay in the PHC clinic changes need to made and it has to start with the pay especially with the provincial government. The municipal pays the nurses they hire more than the province does though we are all doing the same job…" (Respondent 28, Municipal clinic, Ekurhuleni 2018)

"…. on the matter of attracting other nurses to work in the PHC clinic it is important that the hiring structures are made equal. Currently there are two different pay scales for nurses with the same qualification depending on who is hiring you. This generates negative attitude. The difference is a lot. A proper structure of salary is very important." (Respondent 20, Municipal clinic, Ekurhuleni 2018)

"*...the two different cadre of nurses is a problem. If you are a provincial nurse working in the municipality you receive a lower salary...there is about one hundred thousand rand (R 100 000) difference in salary."* (Respondent 23, municipal clinic, 2018)

3.5 Unsupportive management environment

Differences in salaries by the two authorities also trickled down to reports of an unsupportive management environment. Provincial government nurses expressed frustration at their clinic managers whom they perceived as unsupportive:

"*…you see, my manager works for the municipality while I work for the provincial government so I miss a lot of stuff because she does not bother to tell me… In general the relationship between the managers and the municipality nurses is so much better. My provincial HR is also so far from where*

I work ... The two bodies and the managers make my work life hectic" (Respondent 12, Municipal clinic, Ekurhuleni 2018).

"... The manager will do anything just to keep you working. I look at the data verification and I realize I am working so much more than others. No one sees the effort I put in." (Respondent 11, Municipal clinic, Ekurhuleni 2018).

The lack of support was not just limited to clinic managers but to senior management as well:

"*It will be nice to be acknowledged for our good work. The manager here does but acknowledgement especially from senior managers who always hit on us for errors will be nice"* (Respondent 8, Municipal clinic, Ekurhuleni 2018)

"*It will be so nice if managers acknowledge us now and then."*(Respondent 8, Municipal clinic, Ekurhuleni 2018)

"You know you are doing your best one day senior management must just appreciate you." (Respondent 20, Municipal clinic, Ekurhuleni 2018)

When probed further on the matter on what could be done to make her professional life more satisfying in the clinic, she said*: "Appreciation would be nice. Acknowledgement will be nice. To be on my side. Just thank you I saw you really worked hard today"* (Respondent 11, Municipal clinic, Ekurhuleni 2018)

In addition to this issue of not being appreciated, majority of respondents also felt their efforts were being undermined as they are always being lashed out at in the media by management. Case in point was the comment from the then minister of health about nurses' being *"devils in white clothing."* They believe this constant negative criticism gives clients the urge to verbally abuse them and this makes them demotivated as highlighted below:

"*When you work with someone who refers to you as devils in white dresses it is very demotivating and the patients have become even more abusive since that comment. They keep saying that is why they say you are devils in white dresses"* (Respondent 3, Municipal clinic, Ekurhuleni 2018)

"...when they come to do the inspection they do not ask the nurses how patients are treating us ...but they go on to ask the patients how the nurses are treating them…they could simply ask how are you

finding the service instead of asking such a leading question…in all of this they come and assess while they have not provided enough resources" (Respondent 9, Municipal clinic, Ekurhuleni 2018)

3.6 Community interaction/seeing patient health improve

Six respondents were attracted to the clinic because of this close interaction with patients and the community at large as outlined below:

I knew all about the community service field. So after training I did community health nursing as a diploma for one year. I found my feet there. I enjoy the patient contact…." (Respondent 24, Municipal clinic, Ekurhuleni 2018)

"…I wanted to interact with the community and working in the PHC clinic gave me that opportunity…" (Respondent 1, Municipal clinic, Ekurhuleni 2018)

This prolonged contact does not only help nurses interact with patients but also presents them with the opportunity to practice health promotion that is tailored to individual patient needs. This gives the nurses a sense of satisfaction as they contribute meaningfully to the health of the patient:

"…I like the health promotion we do, as we educate our patients and help them to prevent disease and keep them healthy" (Respondent 13, Municipal clinic, Ekurhuleni 2018)

The nurses also derived satisfaction and encouragement from seeing their patients get better as highlighted below:

"… I like it when I walk into a shop and I see a grateful patient expressing her gratitude…" (Respondent 29, Provincial clinic, Ekurhuleni 2018)

In as much as nurses derive joy and satisfaction from their interaction with patients it is also a challenge when the numbers are overwhelming as highlighted below:

"*.... The clinics are now trying to accommodate everyone and this makes the workload very heavy. It's too much! We are not coping, we are trying to see all the patients in this limited time so we often make mistakes."* (Respondent 1, Municipal clinic, Ekurhuleni 2018)

3.7 Heavy workload

Another theme that came out in the semi structured interviews was heavy workload. Professional nurses highlighted that increased patient numbers, staff shortages inadequate equipment and too much paper work contributed to heavy workload.

3.7.1 Patient abusing clinic facilities

From observation by the researcher, facilities around townships had a lot of complaints about patient's verbal abuse as well as increased workload from people outside their catchment area seeking services in their clinics as highlighted below:

"*…because this clinic has lots of patients from the squatter camp close by ,we get a large number of different patients all the time…You know they are very mobile and their movement increases the workload in the clinic and it also makes it very difficult to follow their treatment schedule…"* (Respondent 3, Municipal clinic, Ekurhuleni 2018))

"I feel like the workload is too much and clients are abusive. The number of professional nurses is not enough and clients do not stick their catchment area further increasing the workload" (Respondent 7, Municipal clinic, Ekurhuleni 2018))

"*Patients abuse this facility too much...many patients just want sick notes even though they are not sick. They also like to collect medication especially ARVs from different clinics to keep in bulk"* (Respondent 8, Municipal clinic, Ekurhuleni 2018)

3.7.2 Inadequate equipment increasing Workload

Many facilities visited during the semi structured interviews did not have enough equipment to aid in the smooth flow of work. This meant that staff had to keep moving around to share equipment adding unnecessary labor to the already heavy workload as described below:

"*It will help to lighten our workload if the clinic had more equipment and was more organized because running around for stuff like results and BP machines from other nurses just makes the work more hectic…"*(Respondent 16, Municipal clinic, Ekurhuleni 2018)

"*…it will really help to lessen the workload if we have enough stock and equipment."*(Respondent 30, Provincial clinic, Ekurhuleni 2018))

3.7.3 Shortage of staff increasing Workload

Increase in workload as a result of shortage of staff was the most reported challenge in the study. This is emphasized below:

"…hiring more staff to tackle the shortage of staff is very important to keep nurses in the clinic because the workload becomes too much when there are only a few of us to do the work" (Respondent 8, Municipal clinic, Ekurhuleni 2018)

"*The shortage of staff affects the working conditions. ….you are tired but lunch is only 30 minutes. You cannot take a proper lunch break because the workload is increased due to shortage of staff. It leaves you feeling so burnt out"* (Respondent 12, Municipal clinic, Ekurhuleni 2018)

On probing to find out if the shortage of staff was relative or absolute this question was posed to participants: *"If all the staff employed are working is the workload still too high?"* The responses varied as outlined below:

"On *the issue of shortage of staff, there needs to be* a*ppropriate planning by management and not just planning among colleagues. Management must look at the issue on the ground before sending people out for courses etc. or granting leave requests while leaving just a few people to do the work."*(Respondent 29, Provincial clinic, Ekurhuleni 2018)

"In my opinion even if everyone is here working the workload is still too much….and also people are entitled to leave so one can't just stop them because we have a lot of patients. The solution is just to hire more staff…" (Respondent 3, Municipal clinic, Ekurhuleni 2018)

3.7.4 Extra Administrative work increasing Workload

The workload is also increased by extra administrative work that nurses have to do in connection with patient care leaving less time for the actual management of the patient as outlined below:

"*The administrative work we now have to do is a lot and it is taking our attention from our patients …I wish our government didn't throw so many policies down our throat. We have been doing nurse*

initiation of ARVs, we are doing three day initiation and now they want to add TB treatment…" (Respondent 8, Municipal clinic, Ekurhuleni 2018)

"We already have so much that we are expected to do as professional nurses in the clinics and we are already overworked. Now management wants us to cover medical male circumcision (MMC), initiating second line ARVs etc. All they do is to add to the workload without adding any more staff."(Respondent 9, Municipal clinic, Ekurhuleni 2018)

3.7.5 Quality versus quantity care as a result of increased workload

In the nurses opinion, the issue of increased workload does not only contribute to burn out but also adversely affects the quality of care they are able to render patients as a result of limited time they have to see the patients. They expressed this as giving quantity care instead of quality care. Nurses explained quality care as spending enough time with patients based on their needs and giving thorough care to the patient while quantity care involved seeing more patients and doing the barest minimum acceptable in order to have extra time to see more patients. Having to render quantity care instead of quality care frustrated the nurses a lot as highlighted below:

"The number of patients I have to see in a day is overwhelming... I realize that it's more about quantity and not quality care and this makes me feel so bad..." (Respondent 1, Municipal clinic, Ekurhuleni 2018)

"When I went for PHC training I was told nurses must not see more than ten patients a day so that we could see the patients properly. However this is not the case at all in this clinic, I have to see about four times that number. To do this I must do the best I can in the shortest possible time…" (Respondent 7, Municipal clinic, Ekurhuleni 2018)

"When I look at the number of patients I have to rush to see in a day, I feel like going to work in the private health sector. At least the work there is different, though it is business driven the care is quality" (Respondent 15, Municipal clinic, Ekurhuleni 2018)

"The workload means I have to rush and see patients, I don't like it at all so I am thinking of moving to the private health sector so I can provide quality care" (Respondent 29, Provincial clinic, Ekurhuleni 2018)

CHAPTER 4: DISCUSSION AND LIMITATIONS

4.1 Discussion

The aim of this study was to understand the views of professional nurses on factors that attract and retain nurses working in PHC settings in Ekurhuleni. This study was conducted in an urban area which sets it apart from similar studies whose focus have been on retention in rural areas. The key findings from the study were; working hours in PHC clinics, independence in patient management, career progression, remuneration, unsupportive management environment in the PHC clinic, community interaction/seeing patient health improve and heavy workload. These seven themes are interrelated and highlight the critical factors that make professional nurses remain attracted to their workplaces as well as retain them in their jobs. The study's focus on only professional nurses in PHC clinics sets it apart from similar studies in South Africa that have explored professional nurses or clinic managers working in public or private health sectors. The qualitative study therefore gives a new perspective to understanding what attracts and retains professional nurses working in PHC settings.

Mokoka *et al's* 2010 study in Gauteng, South Africa noted that factors pertaining to individual nurses, the organization and nurse managers may influence the retention of professional nurses (56). For individual factors these included: poor working conditions, long and inconvenient working hours, uncompetitive salaries and professional development of nurses while organizational factors that needed to be addressed to promote retention included unsafe working environments and a lack of resources (56). Nurse Managers' role in promoting retention from Mokoka's study requires them to address shortcomings in their managerial and leadership skills as well as implement changes within a multigenerational nursing workforce and challenging working environment (56). The qualitative methods that were used in this study are similar to Mokoka's study in that they used face to face interviews. However, they sampled professional nurses from both the public and private health sectors and looked at retention exclusively (56). Their findings are similar to this qualitative study conducted in Ekurhuleni; convenient working hours, career progression, remuneration and heavy workload influenced the retention of professional nurses in health facilities (56). A follow up study using a quantitative method this time by these authors also found that the majority of registered nurses in their Gauteng study emphasized that adequate remuneration and convenient working hours were the reasons they remained in their job (11).

In Kenya, Ojakaa *et al* using mixed methods found that health care workers in PHC facilities were most likely to remain attracted to the facilities they were working in if challenges with the work environment, remuneration, adequate training, job security, salary, supervisor support, and manageable workload were addressed [50].Their results are similar to this study.

Other international studies have also confirmed that convenient working hours attract nurses to remain in their jobs and is a major retention factor in the United States of America, Saudi Arabia and South Africa (85-87). Convenient working hours for professional nurses, usually day time hours from 8am-4pm during the week allow for contact with family and friends and attending to household duties (55, 56, 85, 87).

It is important to note that South Africa's UHC reforms indicate that clinic working hours will be extended (13). In light of this study's findings with professional nurses, policy makers need to take into consideration extended clinic hours may cause attrition in many PHC clinics unless if they are accompanied by financial or non-financial incentives for overtime work as found in Saudi Arabia by Amalki *et al* (88). Nurses working longer or extended hours received 20% extra in their salaries (85). Professional nurses interviewed for this study whose clinics were already implementing UHC reforms and were working extended hours were provided with non-financial incentives by the provincial authority. Study findings noted that professional nurses working extended hours at Mary Moodley and Dukathole i.e. 7am -7pm daily including weekends were given the option to leave work earlier (half day) on the preceding Friday. However, for the rest of the clinics implementing NHI reforms it is important for South African policy makers to consult professional nurses on their preferences regarding financial or non-financial incentives for extended hours or overtime work in PHC clinics. Not consulting professional nurses about what kind of working hours suit them may cause them to leave their jobs as was found in 2007 by Kekana *et al* in Limpopo. Their descriptive quantitative study found that registered nurses were unhappy about having to work mandatory overtime they were not paid for (89). They were not happy with the incentive of being given time back instead of money (89). Being satisfied with working hours allows professional nurses to be in control of their work and allows for independence in patient management and practice in general something which they considered very important.

Mixed methods studies in the Netherlands, Namibia and also in South Africa with similar topics found that autonomy in patient management was associated with happy nurses who remained in

their jobs (55, 86, 90). Independent patient management free from doctor's interruptions and orders made nurses want to stay in the work place because they felt they could work within their professional scope of practice rather than under the micro management of PHC doctors (55, 86, 90). Studies by Menezes *et al*, Skar *et al* and Labrague *et al* found that nurses who independently manage their patients reported spending more time with the patient, getting to know them and identifying opportunities for effective disease management especially for chronic illness thus improving quality of care (91-93). During 2014, Kieft *et al* noted in the Netherlands that independent patient management made nurses enjoy and stay in their jobs as they believed that the patient was experiencing better quality of nursing care (90). Professional nurses felt that independent patient management enabled them to provide a nurse-led comprehensive integrated PHC service that uses a one-stop approach for at least eight hours a day, five days a week and usually see chronic patients over a period of time (90). This prolonged and frequent interaction between nurse and patient fosters a professional relationship with the community where the nurse gets to know their patients and walk with them through the various stages of their health journey (85, 91-93). The results from these studies are similar to the findings of the Ekurhuleni study with professional nurses where they highlighted that independent patient management was an important aspect they valued in their jobs. Independence in patient management gave them the opportunity to practice health promotion that was meaningful as it was tailored towards a particular patient's needs. Independent patient management was strongly connected to community interaction and seeing patient health improve which was a significant retention factor for the professional nurses that took part in the semi structured interviews. These findings were also observed in studies carried out in Brazil, Chile and the United Kingdom with professional nurses working in community settings (94-96).

A 2017 qualitative study in Iran by AllahBakhshian *et al* found that nurses who could not independently manage their patients were at risk of leaving their jobs for health facilities where they had autonomy in nursing practice (97). Two main barriers to independent patient management were identified by the authors; professionally-related and organizational barriers (97). Inability to exercise professional autonomy in the workplace, role ambiguity and unsupportive work environments were barriers that made professional nurses unable to independently manage patients in PHC settings (97). Professional nurses found themselves being limited in their professions and this affected their career progression.

Career progression was an important finding in this study with professional nurses working in PHC clinic in Ekurhuleni. Being able to progress through their careers and assessing opportunities for further studies was considered an important factor that attracted them to the PHC clinics they were working in and it made them want to stay in their jobs. Other studies conducted globally and in South Africa identified career progression and study opportunities as attractive retention factors for professional nurses working at health facilities (40, 42, 43, 55, 86, 98). A systematic review by Willis-Shattuck *et al* in 2008 found that financial rewards, career development, continuing education, hospital infrastructure, resource availability, hospital management and recognition/appreciation were key motivational factors that aided in retention (42).

Mbemba *et al* found that nurses in the USA, Canada, Japan, New Zealand and South Africa remained in their jobs if they perceived that they could progress in their careers (40). Although not a finding from this study, the opportunity for career advancement was found to be attractive for nurses going to work in rural areas and it made them stay longer in their jobs (40).

Other South African and Namibian (55, 86) studies also found that career progression and study opportunities made nurses stay in their jobs and this was similar to this study's findings. Opportunities for further study equip nurses with the necessary skills and knowledge for confident and effective patient management which is important for career progression and staying in their jobs. When nurses are able to do their job with confidence it makes them enjoy the work and are therefore more likely to stay in the work place (55). However, this study found that the lack of a standardized and transparent system governing how nurses are chosen for study opportunities created tension and suspicion amongst professional nurses. Study opportunities for career progression varied according to the employing authority. Professional nurses were not sure about how one qualified for study opportunities and most believed it was based on favoritism by nursing management. This finding is also supported by South African and Namibian studies that found professional nurses in both private and public sectors, were haphazardly selected for study opportunities (55, 86). The study concluded that inadequate leadership and management skills were to blame for unclear methods to identify study opportunities meant to promote the career progression of professional nurses (55, 86). The study opportunities leading to career progression fulfills an esteem need according to Vogt's *et al's* theory (86).

During the semi-structured interviews professional nurses indicated that adequate remuneration was an important factor that influenced their retention in the PHC clinics that they were based in. This finding is consistent with studies by Moser *et al*, Willis Shattuck *et al*, Mbemba *et al*, Mokoka *et al* and Washeya (40, 42, 55, 59, 86). These studies using various methods (mixed methods, cross sectional surveys, systematic reviews, documentary analysis and concept mapping) noted that remuneration was a key factor in the retention of professional nurses in various health care facilities in different countries (14, 40, 42, 55, 59, 86). Discontentment with or inadequate remuneration was a key determinant of professional nurses' resignation in rural or urban settings (14, 40, 42, 59). Professional nurses working at PHC clinics in Ekurhuleni emphasized that they require adequate remuneration commensurate with their work experience and educational skills and qualifications irrespective of employing authority. A 2009 study in South Africa also found that adequate remuneration was cited as an important attractive factor for professional nurses working in public and private hospital settings (10). The study recommends that policy makers should link portions of remuneration to performance objectives such as quality of care, resource conservation and patient-centric care, as well as to consider non-financial (e.g. career development opportunities) and psychological rewards (e.g. gratitude and recognition) (10). In light of the current NHI reforms it is important for policy makers, in consultation with nursing managers and professional nurses to discuss remuneration strategies that work for nurses working in PHC settings. Professional nurses in this study felt that remuneration needed to be standardized for both local and provincial authority employees. Studies on differences in remuneration based by employing authority were not identified in the literature.

Tied to remuneration another aspect that was considered important by professional nurses was recognition and appreciation at work. Professional nurses felt that Performance Management and Development System (PMDS) are a sign of recognition and appreciation or "thank you" for hard work accorded to those working for provincial authority in PHC clinics. They emphasized that PMDS need to be standardized for all professional nurses regardless of employing authority.

The lack of recognition, appreciation and an unsupportive management environment in the PHC clinics was mentioned by professional nurses as a factor that made them want to leave their jobs. Other studies by Mokoka *et al*, Gullatte and Jirasakhiran, Willis-Shattuck *et al* and Mbemba *et al* all concur that an unsupportive management environment negatively affects retention (42, 86, 98-

100). A supportive work environment is essential in retaining nurses in their jobs (99). The issue of lack of recognition, appreciation and an unsupportive management environment in health care facilities amongst professional nurses is rampant in literature. The literature indicates that senior managers are not in tune with matters on the ground and left professional nurses feeling invisible and this was exacerbated by lack of communication and poor feedback mechanisms (42, 86, 98-100).

During the semi-structured interviews professional nurses indicated that they require acknowledgement for their hard work from all levels of management as it gave them a sense of appreciation and belonging. This is an important factor that they find attractive and would retain them in their current PHC clinics. These findings are similar to other studies confirming that appreciating and acknowledging the nurses' role in health care assists in the retention of professional nurses (86, 99, 100). Negative criticism and a punitive approach by senior managers was cited as an existing problem in PHC clinics by professional nurses recruited for this study. Negative criticism made professional nurses in Ekurhuleni feel that they were unsupported by their clinic managers. In contrast, nurses who feel cared for by their managers want to perform better and stay in their jobs (99, 100). It has been reported elsewhere that nurses do not leave health facilities they leave managers (101). In light of this finding, it is important for South Africa's policy makers to support clinic managers in creating a supportive management environment for professional nurses working in PHC clinics.

Despite all the positives highlighted by professional nurses working in PHC clinics in Ekurhuleni, they bemoaned the heavy workloads that were part of their everyday experience. During the semi-structured interviews professional nurses indicated that their clinics were situated in catchment areas that had high patients volumes. High patient volumes were a challenge in a health system characterized by shortages of nurses and other human resources for health. These findings are similar to studies conducted in South Africa and in the region (94, 96) highlighting that too many patients increase the workload for professional nurses. However, some studies have pointed out that the nurse-patient imbalances in the health system are a result of shortage of nurses and not an influx of patients (43, 86, 94, 102). The vacancy and turnover rates of professional nurses as discussed in chapter 1 also supports this finding (15, 103).On the day of semi structured interviews, clinics were supposed to have nine (9) professional nurses excluding the clinic manager but most were short

staffed having on average six (6) at a time. This was as a result of some professional nurses being on leave, others had gone for training or were running clinic errands. Adding to the burden of heavy workloads was the lack of equipment and resources needed for quality patient care. Professional nurses indicated that sphynomanometers, scales, gloves and other important equipment to facilitate patient care were often in short supply in the clinics. This made professional nurses have to hunt and gather alternatives to enable patient care which increased their workload in terms of additional time spent looking for resources. Inadequate equipment in PHC clinics affects retention strategies for professional nurses. These findings have been confirmed by other researchers who have recommended that supportive work environments with functional and working equipment are needed for nurses in health facilities as they enable quality of care (42, 102, 104).

Professional nurses emphasized during the semi structured interviews that hiring more staff is key to retention in the PHC clinics. The extra staff will also share in the workload of seeing patients and handling administrative work which will lessen the collective burden the heavy workload brings. Professional nurses do not only perform clinical work but also have administrative work consisting mostly of paperwork such as filling forms and populating checklists (94). It was noted that extra administrative work increases the workload for professional nurses. Therefore, hiring more nursing staff to reduce workload and as an effective retention strategy has been recorded in local and international literature (11, 14, 55, 94, 102, 105, 106). Given that the NHI is imminent in South Africa it is important for policy makers to address the HRH shortages, real or imagined that were mentioned by these professional nurses in Ekurhuleni PHC clinics. The availability of adequate HRH in order to address heavy workloads is a key retention factor for professional nurses.

This study has highlighted that the adapted WHO 2010 conceptual framework for measuring efforts to increase access to health workers in underserved areas is a useful framework to understand the factors that are needed to attract and retain professional nurses in PHC clinics based in urban areas. This study also found that the factors affecting retention and attraction of professional nurses to PHC in South Africa are systemic and require various interventions to deal with them. The results from the study identified issues concerning labor market (remuneration), health system interventions (dealing with heavy workload and unsupportive management environment) and individual perceptions about the job (independence in clinical management of patients, career

progression, working hours ,community interaction/seeing patient health improve) as key to the attraction and retention of professional nurses in PHC.

4.2 Limitations

The qualitative study design using face-to-face semi structured interviews could have biased the responses from professional nurses and concerns about confidentially. Participants were assured of their rights, the voluntary and confidential nature of the study. Future studies could use mixed methods that involve quantitative questions also to encourage triangulation of the results.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This qualitative research found that working hours in PHC clinics, independence in patient management, career progression, remuneration, unsupportive management environment in the PHC clinic, community interaction/seeing patient health improve and heavy workload influenced professional nurses' retention in their jobs. As South Africa is making significant milestones for UHC it is important for policy makers to take into account the key findings from this research. Short-term and long recommendations arising from this study are listed below as they can have implications for the successful implementation of these reforms:

5.2 Recommendations

Short-term recommendations

i. The working hours of the PHC clinic, independence in patient management, opportunity for community interaction as well as the career progression are favorable for attraction and retention of professional nurses. These factors are all in existence due to the way clinics are run. Therefore these factors should be preserved in operating PHC clinics where possible.

ii. The opportunity given to nurses to study in the clinic and subsequent career progression must follow a clear transparent criteria regardless of employing authority to avoid a toxic environment among professional nurses in the PHC clinics. This will aid in retention of professional nurses in PHC clinics.

iii. The extra remuneration associated with working in Ekurhuleni PHC clinics attracts and retains professional nurses. This should be sustained and may also be implemented in other clinics to aid in attraction and retention of professional nurses.

iv. Management must endeavor to create a supportive environment for all professional nurses in the clinic through acknowledgement, being impartial and giving constructive criticism.

v. Heavy workload must be tackled as a matter of urgency by hiring more staff subject to staffing norms, providing enough equipment, reducing administrative work and curbing patient abuse.

Long-term recommendations

i. As the implementation of NHI may need the clinic hours to be extended, it is highly recommended that professional nurses be involved in the negotiations of these changes to ensure smooth transition and compliance.

ii. Government must consider increasing funding towards further studies which aid in career progression. This will boost the confidence of nurses and help them render more efficient care independently to patients. This will also ensure that patients have a better outcome which also positively impacts retention of nurses. This will in the long run encourage nurses' retention in the PHC clinic.

iii. It will be worthwhile to explore the option of factoring the professional experiences and specialties attained through further training of professional nurses in their salary scale regardless of employing authority. Retention of nurses in PHC clinics may be achieved through this initiative.

iv. Senior management should also support professional nurses in the PHC clinic by positively interacting with them often. For example, there should be regular informal meetings to allow the professional nurses express their grievances and also hear from senior management personally on issues concerning them. When all meetings with senior management are not about negative criticism it will enable a supportive environment. This will positively affect retention of nurses in the PHC clinic.

v. There are many factors that contribute to the heavy workload of professional nurses in the PHC clinic. It will be worthwhile to develop a workload management protocol to ensure manageable workload in all PHC clinics. This will aid in retention of professional nurses in PHC clinics.

vi. Further exploration into the challenges faced by professional nurses based on employing authority may be worthwhile to help with attraction and retention of professional nurses in PHC clinics.

REFERENCES:

1. WHO. Primary Health Care. In: WHO, editor. Fact sheets. Geneva: WHO; 2019. p. 1.
2. Pillay Y. Alma-Ata Declaration on Primary Health Care: 30th anniversary. S Afr Med J. 2008;98(9):702.
3. Muthathi IS, Levin J, Rispel LC. Decision space and participation of primary healthcare facility managers in the Ideal Clinic Realisation and Maintenance programme in two South African provinces. Health Policy Plan. 2020;35(3):302.
4. McIntyre D, Ataguba J. Access to quality health care in South Africa: Is the health sector contributing to addressing the inequality challenge? In: Unit HE, editor. University of Cape Town: RESYST; 2014. p. 86.
5. Nesengani TV, Downing C, Poggenpoel M, Stein C. Professional nurses' experiences of caring for patients in public health clinics in Ekurhuleni, South Africa. 2019. 2019;11(1).
6. Nkomazana O, Mash R, Shaibu S, Phaladze N. Stakeholders' Perceptions on Shortage of Healthcare Workers in Primary Healthcare in Botswana: Focus Group Discussions. PLoS One. 2015;10(8):e0135846.
7. Department of Health. Definitions of Health Facilities. In: Health, editor. KwaZulu-Natal: Government printers 2001.
8. Willcox ML, Peersman W, Daou P, Diakité C, Bajunirwe F, Mubangizi V, et al. Human resources for primary health care in sub-Saharan Africa: progress or stagnation? Hum Resour Health. 2015;13(1):76.
9. Mahlathi P, Dlamini J. From brain drain to gain :Nursing and midwifery migration trends in the South African health system. Pretoria, South Africa: African Institute of Health & Leadership Development; 2017.
10. Pillay R. Retention strategies for professional nurses in South Africa. Leadersh Health Serv. 2009;22(1):39-57.
11. Mokoka KE, Ehlers VJ, Oosthuizen MJ. Factors influencing the retention of registered nurses in the Gauteng province of South Africa. Curationis. 2011;34(1).
12. Rispel LC, Barron P. Valuing human resources: key to the success of a national health insurance system. Dev South Afr. 2012;29(5):616-35.
13. Department of Health. National Health Insurance for South Africa. Towards universal health coverage. In: Health, editor. South Africa 2015. p. 97.
14. Belaid L, Dagenais C, Moha M, Ridde V. Understanding the factors affecting the attraction and retention of health professionals in rural and remote areas: a mixed-method study in Niger. Hum Resour for Health. 2017;15(1):60.
15. Daviaud E, Subedar H. Staffing Norms for Primary Health Care in the context of PHC Re-engineering. In: Health, editor. Cape Town: Department of Health; 2012. p. 29.
16. Mofolo N, Heunis C, Kigozi GN. Towards national health insurance: alignment of strategic human resources in South Africa. Afr J Prim Health Care & Fam Med. 2019;11(1):1-7.
17. Department of Health. National health insurance for South Africa towards universal health coverage. In: Health, editor. Pretoria: Government printers; 2015. p. 97.
18. Bongani M. Mayosi MB, Ch.B., D.Phil., , Solomon R. Benatar MB, Ch.B., D.Sc.(Med.). Health and Health Care in South Africa — 20 Years after Mandela. N Engl J Med 2014;371:1344-53.
19. Khuzwayo PB. The views of primary health care nurses towards the national health insurance. . Johannesburg: University Of Witwatersrand; 2015.
20. Coovadia H, Jewkes R, Barron P, Sanders D, McIntyre D. The health and health system of South Africa: historical roots of current public health challenges. Lancet. 2009;374(9692):817-34.
21. Dookie S, Singh S. Primary health services at district level in South Africa: a critique of the primary health care approach. BMC Fam Pract. 2012;13(1):67.

22. Wadee H, Khan F. Human resources for health : health care delivery. S Afr Health Rev. 2007;2007(1):141-9.
23. Rispel LC. Special Issue: transforming Nursing in South Africa. Glob Health Action. 2015;8(0):28205.10.3402/gha.v8.
24. Noluthando Mkhize. Nursing as a first career of choice. Vuk'enzenzele. 2011 18th April, 2017;Sect. March 2011 (col. 2017).
25. Alwiena Johanna Blignaut. The relationship between the qualifications of professional nurses and their perception of patient safety and quality of care in medical and surgical units in South Africa. South Africa: North-West University; 2012.
26. Department of health. Regulations regardng the scope of practice of nurses and midwives. In: Health, editor. South Africa: Department of health; 2013. p. 18.
27. Maillacheruvu P, McDuff E. South Africa's Return to Primary Care: The Struggles and Strides of the Primary Health Care System. J Glob Health. 2014;online.
28. De Maeseneer J, Willems S, De Sutter A, Van de Geuchte I, Billings M. Primary health care as a strategy for achieving equitable care: a literature review commissioned by the Health Systems Knowledge Network. Health Systems Knowledge Network. 2007.
29. South African Government. Human Resource Development Strategy for South Africa: A nation at work for a better life. In: labour, editor. Pretoria: Government Printers: Pretoria.; 2001. p. 62.
30. Mahlathi P, Dlamini J. Minimum data sets for human resources for health and surgical workforce in South Africa. A rapid analysis of stock and migration. In: Development AIfHaL, editor. Pretoria: WHO,; 2015. p. 16.
31. Department of health. Human Resources for Health South Africa.HRH Strategy for the Health Sector: 2012/13 – 2016/17. In: Health, editor. Pretoria: Government printers; 2011.
32. Department of health. Nursing strategy for South Africa 2008. In: Health, editor. Pretoria: Government printers; 2008. p. 33.
33. South African Government. Remuneration Policy for Health Professionals Employed in the Public Health Sector. In: Health, editor. Pretoria2010. p. 46.
34. Macinko J, Starfield B, Erinosho T. The impact of primary healthcare on population health in low- and middle-income countries. J Ambul Care Manage. 2009;32(2):150-71.
35. Dr. Marjorie Jobson. Structure of the health system in South Africa. South Africa: Khulumani Support Group; 2015.
36. Reynolds J, Wisaijohn T, Pudpong N, Watthayu N, Dalliston A, Suphanchaimat R, et al. A literature review: the role of the private sector in the production of nurses in India, Kenya, South Africa and Thailand. Hum Resour Health. 2013;11(1):14.
37. Huicho L, Dieleman M, Campbell J, Codjia L, Balabanova D, Dussault G. Increasing access to health workers in underserved areas: a conceptual framework for measuring results. Bull World Health Organ. 2010;88:357-63.
38. Professor James Buchan, Franklin A. Shaffer, Howard Catton. Policy Brief: Nurse Retention. Philadelphia: International Centre on Nurse Migration; 2018 July, 2018.
39. Dolea C, Stormont L, Braichet J-M. Evaluated strategies to increase attraction and retention of health workers in remote and rural areas. Bull World Health Organ. 2010;88:379-85.
40. Mbemba G, Gagnon M-P, Paré G, Côté J. Interventions for supporting nurse retention in rural and remote areas: an umbrella review. Hum Resour Health. 2013;11(1):44-.
41. Mullei K, Mudhune S, Wafula J, Masamo E, English M, Goodman C, et al. Attracting and retaining health workers in rural areas: investigating nurses' views on rural posts and policy interventions. BioMed Central Health Services Research. 2010;10.
42. Willis-Shattuck M, Bidwell P, Thomas S, Wyness L, Blaauw D, Ditlopo P. Motivation and retention of health workers in developing countries: a systematic review. BMC Serv Res 2008;8(1):247.

43. Ojakaa D, Olango S, Jarvis J. Factors affecting motivation and retention of primary health care workers in three disparate regions in Kenya. Hum Resour Health 2014;12(1):33.
44. Haskins JL, Phakathi SA, Grant M, Horwood CM. Factors influencing recruitment and retention of professional nurses, doctors and allied health professionals in rural hospitals in KwaZulu Natal. Journal of interdisciplinary health sciences. 2017;22(0):174-83.
45. Drennan VM, Halter M, Gale J, Harris R. Retaining nurses in metropolitan areas: insights from senior nurse and human resource managers. J Nurs Manag. 2016;24(8):1041-8.
46. El-Jardali F, Alameddine M, Jamal D, Dimassi H, Dumit NY, McEwen MK, et al. A national study on nurses' retention in healthcare facilities in underserved areas in Lebanon. Hum Resour for Health. 2013;11(1):49.
47. Daviaud E, Chopra M. How much is not enough? Human resources requirements for primary health care: a case study from South Africa. Bull World Health Organ. 2008;86:46-51.
48. WHO. Nursing and midwifery - WHO Global Strategic Directions for Strengthening Nursing and Midwifery 2016–2020. Geneva: WHO; 2020 9th January,2020.
49. Gray A, Vawda Y. Health Policy and Legislation. In: 2017 SAHR, editor. 20th ed. Durban: Health Systems Trust; 2017. p. 362.
50. Lehmann U. Strengthening human resources for primary health care. In: Barron P, Roma-Reardon J, editors. South African Health Review 2008. Durban: Health Systems Trust; 2008.
51. Jayasuriya R, Whittaker M, Halim G, Matineau T. Rural health workers and their work environment: the role of inter-personal factors on job satisfaction of nurses in rural Papua New Guinea. BioMedical Center Health Services Research. 2012;12.
52. George G, Rhodes B. Is there really a pot of gold at the end of the rainbow? Has the Occupational Specific Dispensation, as a mechanism to attract and retain health workers in South Africa, leveled the playing field? BMC Public Health. 2012;12(1):613.
53. Wiskow C, Tit Albreht, Carlo de Pietro. How to create an attractive and supportive working environment for health professionals. WHO, regional office for Europe: European Observatory on Health Systems and Policies; 2010.
54. Chenoweth L, Jeon Y-H, Merlyn T, Brodaty H. A systematic review of what factors attract and retain nurses in aged and dementia care. J Clin Nurs. 2010;19(1-2):156-67.
55. Washeya FN. Factors Influencing Retention of Professional Nurses in a Public Health Care Facility in Windhoek, Namibia. Stellenbosch: Stellenbosch University; 2018.
56. Mokoka E, Oosthuizen MJ, Ehlers VJ. Retaining professional nurses in South Africa: nurse managers' perspectives. Health SA 2010;15(1).
57. Global Health Workforce Alliance W. A universal truth: no health without a workforce. Geneva: WHO; 2013.
58. Mmamma ML, Mothiba TM, Nancy MR. Turnover of professional nurses at Mokopane Hospital in the Limpopo Province, South Africa: experiences of nursing unit managers. Curationis. 2015;38(2):1566.
59. Japie Greyling, Stanz Karel. Turnover of nursing employees in a Gauteng hospital group. SA J Ind Psychol. 2010;36(1).
60. Dr. Abhinanda Gautam, Tuswa I. Factors Affecting Voluntary Staff Turnover: A Case Study Of Springs Parklands Hospital, South Africa. Eur Sci J 2016;12(10):14.
61. van Rensburg HC. South Africa's protracted struggle for equal distribution and equitable access – still not there. Hum Resour Health. 2014;12(1):26.
62. Fletcher CE. Hospital RNs' job satisfactions and dissatisfactions. J Nurs Adm. 2001;31(6):7.
63. Matsoso MP, Fryatt R. National Health Insurance: the first 16 months. S Afr Med J. 2013;103(3):156.
64. Marije Versteeg , Dr. Wendy Hall , Annette May, Minah Maredi, Prof Jaap de Visser Position Paper on the Provincialisation of Personal Primary Health Care Services. South African Local Government Association (SALGA); 2009 June 2009

65. Family Health International. Qualitative Research Methods Overview. Qualitative Research Methods: A Data Collector's Field Guide

2012.
66. Al-Busaidi ZQ. Qualitative research and its uses in health care. Sultan Qaboos Univ Med J. 2008;8(1):11-9.
67. Nicholson J. Bringing Health Closer to people, Local Government and District Health System. In: Health, editor. Durban: The Health Systems Trust; 2011. p. 50.
68. Murray C, Simeon R. Promises unmet: Multi-level government in South Africa. 2011:232-61.
69. Department of Health. Final list of the Ideal Clinics: 2017-2018. In: Health, editor. South Africa2018.
70. Jimmy Makhumbila. Primary healthcare facilities ranked amongst the best. Ekurhuleni Press release. 2016.
71. How many qualitative interviews is enough? Expert voices and early career reflections on sampling and cases in qualitative research [Internet]. 2012. Available from: http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf.
72. Ekurhuleni Metropolitan Municipality. City of Ekhuruleni South Africa2017 [Available from: http://www.ekurhuleni.gov.za/.
73. Western Cape Depatment of Health. Comprehensive service plan for the implementation of healthcare 2010. In: Western Cape Department of Health, editor. Cape Town2007. p. 197.
74. New York University. Estimated 17.5 percent of new nurses leave first job within a year, according to survey of newly-licensed registered nurses. ScienceDAILY. 2014.
75. Flinkman M, Isopahkala-Bouret U, Salanterä S. Young registered nurses' intention to leave the profession and professional turnover in early career: a qualitative case study. ISRN Nurs 2013;2013:916061-.
76. Saunders B, Sim J, Kingstone T, Baker S, Waterfield J, Bartlam B, et al. Saturation in qualitative research: exploring its conceptualization and operationalization. Qual Quant. 2018;52(4):1893-907.
77. Dikko M. Establishing Construct Validity and Reliability: Pilot Testing of a Qualitative Interview for Research in Takaful (Islamic Insurance). Qual Rep. 2016;21(3):8.
78. Korstjens I, Moser A. Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. Eur J Gen Pract 2018;24(1):120-4.
79. Maguire M, Delahunt B. Doing a Thematic Analysis: A Practical, Step-by-Step Guide for Learning and Teaching Scholars. All Ireland Journal of Higher Education. 2017;8(3):14.
80. V. B, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):24.
81. Bailey C. A Guide to Qualitative Field Research. 2 ed. Thousand Oaks, California: SAGE Publications, Inc.; 2007 2020/02/14.
82. Anderson C. Presenting and evaluating qualitative research. Am J Pharm Educ. 2010;74(8):141.
83. Lewis-Beck M, Bryman A, Liao T. The Sage Encyclopaedia Social Science Research Methods. 2004.
84. Anney VN. Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS). 2014;5(2):9.
85. Almalki MJ, Fitzgerald G, Clark M. Quality of work life among primary health care nurses in the Jazan region, Saudi Arabia: a cross-sectional study. Hum Resour Health. 2012;10(1):30.
86. Kgaogelo Elizabeth Mokoka. Factors affecting the retention of professional; nurses in the Gauteng province [PhD]. South Africa: University of South Africa

2007.
87. Rajapaksa S, Rothstein W. Factors that influence the decisions of men and women nurses to leave nursing. . Nurs Forum. 2009;44(3):195-206.

88. Anney VN, editor Ensuring the Quality of the Findings of Qualitative Research: Looking at Trustworthiness Criteria2014.
89. Kekana HPP, du Rand EA, van Wyk NC. Job satisfaction of registered nurses in a community hospital in the Limpopo Province in South Africa. 2007. 2007;30(2):12.
90. Kieft RA, de Brouwer BB, Francke AL, Delnoij DM. How nurses and their work environment affect patient experiences of the quality of care: a qualitative study. BMC Health Serv Res. 2014;14(1):249.
91. Menezes SRT, Priel MR, Pereira LL. Nurses' autonomy and vulnerabilityin the practice of Systematization of Assistance Nursing. The University of São Paulo Nursing School Journal. 2011;45:953-8.
92. R S. The meaning of autonomy in nursing practice. J Clin Nurs. 2010;19(15-16):2226-34.
93. Labrague LJ, McEnroe-Petitte DM, Tsaras K. Predictors and outcomes of nurse professional autonomy: A cross-sectional study. Int J Nurs Pract. 2019;25(1):e12711.
94. Vera MG, Merighi MAB, Conz CA, Silva MHd, Jesus MCPd, González LAM. Primary health care: the experience of nurses. Revista Brasileira de Enfermagem. 2018;71:531-7.
95. Newman K. Empirical evidence for “the nurse satisfaction, quality of care and patient satisfaction chain”. Int J Health Care Qual Assur. 2002;15(2):80-8.
96. Reichert APdS, Rodrigues PF, Albuquerque TM, Collet N, Minayo MCdS. Link between nurses and mothers of children under two years old: nurses' perception. Collective Health Sciences. 2016;21:2375-82.
97. AllahBakhshian M, Alimohammadi N, Taleghani F, Nik AY, Abbasi S, Gholizadeh L. Barriers to intensive care unit nurses' autonomy in Iran: A qualitative study. Nursing outlook. 2017;65(4):392-9.
98. Mbemba GIC, Gagnon M-P, Hamelin-Brabant L. Factors influencing recruitment and retention of healthcare workers in rural and remote areas in developed and developing countries: an overview. 2016. 2016;7(2).
99. Gullatte M, Jirasakhiran E. Retention and recruitment: reversing the order. Clin J Oncol Nurs. 2005;9:597-604.
100. Feather RA, Ebright P, Bakas T. Nurse Manager Behaviors That RNs Perceive to Affect Their Job Satisfaction. Nurs Forum. 2015;50(2):125-36.
101. Ribelin P Retention reflects leadership style. . Nurs Manage. 2003;34(8):2.
102. Munyewende PO, Rispel LC, Chirwa T. Positive practice environments influence job satisfaction of primary health care clinic nursing managers in two South African provinces. Hum Resour Health. 2014;12(1):27.
103. Zwane S. Gauteng Health Department recruits more health professionals. In: Health, editor. South Africa: Department of Health; 2013. p. 1.
104. Pillay R. Work satisfaction of professional nurses in South Africa: a comparative analysis of the public and private sectors. Hum Resour Health. 2009;7:15-.
105. Westbrook JI, Duffield C, Li L, Creswick NJ. How much time do nurses have for patients? A longitudinal study quantifying hospital nurses' patterns of task time distribution and interactions with health professionals. BMC Health Serv Res. 2011;11:319-.
106. Oshodi TO, Bruneau B, Crockett R, Kinchington F, Nayar S, West E. The nursing work environment and quality of care: content analysis of comments made by registered nurses responding to the Essentials of Magnetism II scale. Nurs Open. 2019;6(3):878-88.

Appendix A: Plagiarism declaration

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG | FACULTY OF HEALTH SCIENCES

PLAGIARISM DECLARATION TO BE SIGNED BY ALL HIGHER DEGREE STUDENTS

SENATE PLAGIARISM POLICY: APPENDIX ONE

I Esther Burkson (Student number: 1438457) am a student registered for the degree of Masters of Public Health in the academic year 2020

I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
- I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.

Signature: Burkson Date: 11th February, 2020

26/04/2015
1

Appendix B: Ethics clearance certificate

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

R14/49 Dr Esther Buckson

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

CLEARANCE CERTIFICATE NO. M171192

NAME: (Principal Investigator)	Dr Esther Buckson
DEPARTMENT:	School of Public Health Ekurhuleni Health District, Gauteng Province
PROJECT TITLE:	The views of professional nurses on attracting and retaining nurses at primary health care clinics in South Africa
DATE CONSIDERED:	24/11/2017
DECISION:	Approved
CONDITIONS:	The PI must obtain written permission prior to data collection for each study site
SUPERVISOR:	Dr Pascalia Munyewende
APPROVED BY:	Professor CB Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

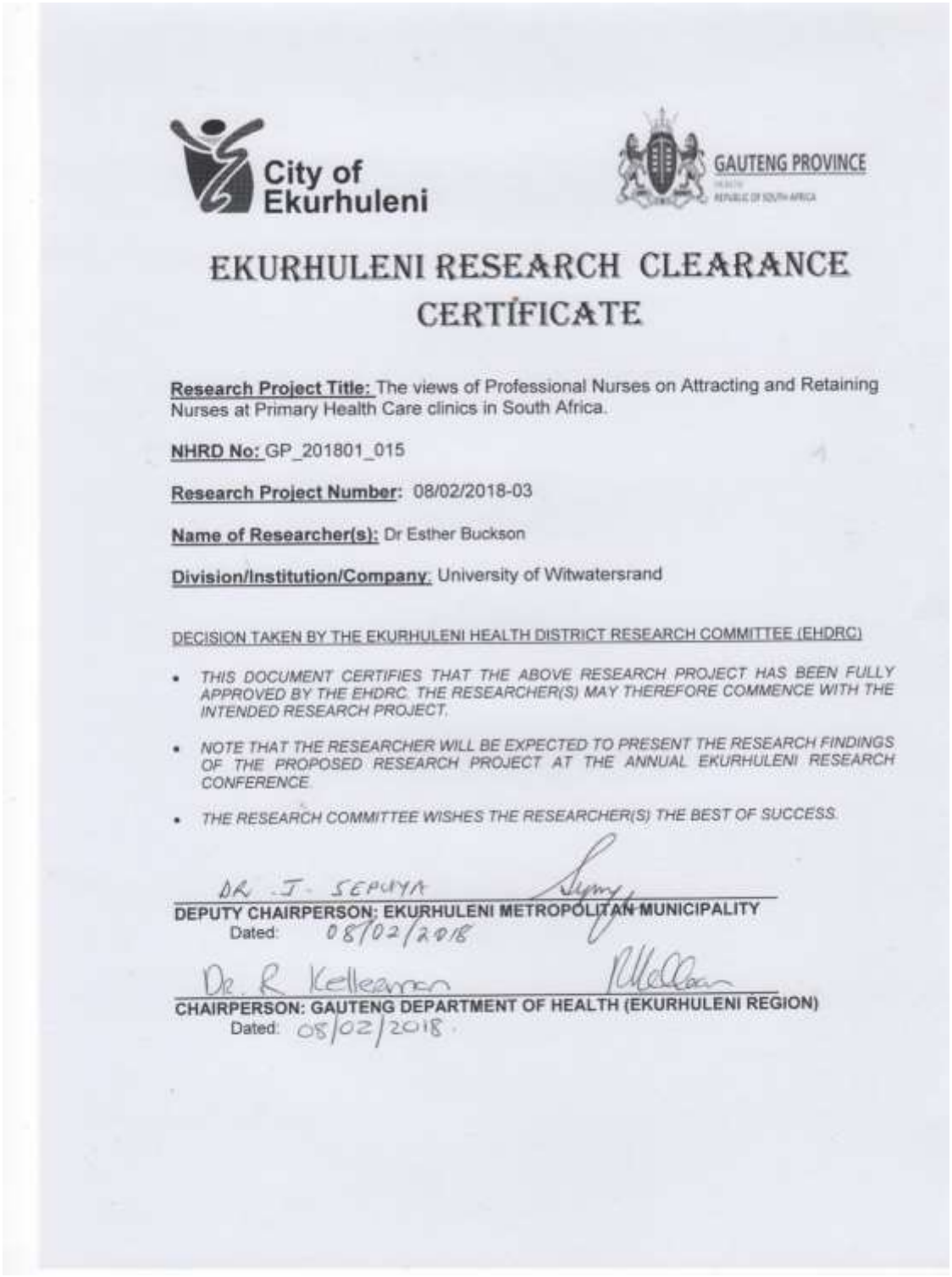
DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary, Third Floor, Faculty of Health Sciences, Phillip Tobias Building, 29 Princess of Wales Terrace, Parktown, 2193, University of the Witwatersrand. I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. **I agree to submit a yearly progress report**. The date for annual re-certification will be one year after the date of convened meeting where the study was initially reviewed. In this case, the study was initially reviewed in **November** and will therefore be due in the month of **November** each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical).

Principal Investigator Signature Date

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Appendix C: Ekurhuleni research clearance certificate



City of Ekurhuleni

GAUTENG PROVINCE

EKURHULENI RESEARCH CLEARANCE CERTIFICATE

Research Project Title: The views of Professional Nurses on Attracting and Retaining Nurses at Primary Health Care clinics in South Africa.

NHRD No: GP_201801_015

Research Project Number: 08/02/2018-03

Name of Researcher(s): Dr Esther Buckson

Division/Institution/Company: University of Witwatersrand

DECISION TAKEN BY THE EKURHULENI HEALTH DISTRICT RESEARCH COMMITTEE (EHDRC)

- *THIS DOCUMENT CERTIFIES THAT THE ABOVE RESEARCH PROJECT HAS BEEN FULLY APPROVED BY THE EHDRC. THE RESEARCHER(S) MAY THEREFORE COMMENCE WITH THE INTENDED RESEARCH PROJECT.*
- *NOTE THAT THE RESEARCHER WILL BE EXPECTED TO PRESENT THE RESEARCH FINDINGS OF THE PROPOSED RESEARCH PROJECT AT THE ANNUAL EKURHULENI RESEARCH CONFERENCE.*
- *THE RESEARCH COMMITTEE WISHES THE RESEARCHER(S) THE BEST OF SUCCESS.*

DR. J. SEPUYA

DEPUTY CHAIRPERSON: EKURHULENI METROPOLITAN MUNICIPALITY
Dated: 08/02/2018

Dr. R Kellerman

CHAIRPERSON: GAUTENG DEPARTMENT OF HEALTH (EKURHULENI REGION)
Dated: 05/02/2018

Appendix D: Semi-structured interview guide

The views of professional nurses on attracting and retaining nurses at primary health care clinics in South Africa.

Demography

Gender -M / F

Facility……

Working hours of facility……

Age of participant ……

1. **Introduction**

Estimated Time: 45-60 minutes

This is a conversation meant to understand what you believe are the reasons why professional nurses are attracted to work in PHC clinics as well as what makes them stay. We will also focus on your experiences in the PHC clinics and how it may affect your decisions for the future.

2. **Verbal consent**

Would you like to participate in this interview?

Verbal Consent was obtained from the study participant

- **Yes**
- **No**

3. **Background Information**

   - ✓ **How long have you been a professional nurse?**

……

   - ✓ **Have you worked anywhere else apart from the PHC clinics in the last five years?**

……

   - ✓ **How long have you worked as a professional nurse in PHC clinics. (not just this particular clinic)**

……

4. **Factors that attracted the participant to PHC clinic**

   - ✓ **Tell me about what attracted you to work in the PHC clinics?**

……

- ✓ **Probe what other alternatives were available to the participant other than the PHC clinic.**
- ✓ **How did you arrive at the decision to work in the PHC clinic?**

5. **Factors that are retaining the participant in PHC clinic.**
   - ✓ **Tell me about what is still keeping you in the PHC clinic?**

……

- ✓ **Describe your typical workday to me.**
- ✓ **Probe with the following questions**
  - ✓ **Do the factors that initially attracted you to PHC clinics still give you satisfaction or if you were posted here are you satisfied?**
  - ✓ **What could make your working day even better?**

6. **To understand the experience of professional nurses in PHC clinics and how this affects their decision to stay or leave.**
   - ✓ **Describe your overall working experience in PHC clinics to me.**
   - ✓ **Probe with the following questions:**
     - ✓ **What factors have made your experience worthwhile?**
     - ✓ **What have been your main challenges with this experience?**
     - ✓ **How close have you come to leaving the PHC clinic and what were the reasons?**
     - ✓ **What changed your mind?**
   - ✓ **What will you consider strong reasons for you to leave the PHC clinic**
   - ✓ **Probe with the following questions:**
     - **If you left where will you go**

7. **Factors that attract professional nurses to PHC clinics.**
   - ✓ **In your opinion what are the factors that attract other professional nurses to work in PHC clinics**
   - ✓ **Probe with questions:**
     - **How did you arrive at this opinion**
   - ✓ **What do you think can be done to attract more professional nurses to the PHC clinics?**
   - ✓ **Probe why the participant thinks this will work**

8. **Factors that retain professional nurses in PHC clinics**

    - **What do you think can be done to retain more professional nurses in the PHC clinics?**

        - ✓ **Probe why the participant thinks this will work**

9. **Is there anything else concerning this topic you will like to tell me?**

APPENDIX E

THE VIEWS OF PROFESSIONAL NURSES ON ATTRACTING AND RETAINING NURSES AT PRIMARY HEALTH CARE CLINICS IN SOUTH AFRICA.

Dear Professional Nurse,

I invite you to take part in this research study which seeks the view of professional nurses on attracting and retaining nurses at primary health care clinics in South Africa. I would like to interview you on what you think attracts and retains nurses in Primary Healthcare (PHC) clinics. This research is part of a thesis for a Masters of Public Health Degree from the University of Witwatersrand.

It is imperative that before you make a decision regarding participation in this study that you understand exactly the goals of this research and what is requested of you. On account of this please carefully read the following information sheet and you may take further measures such as further correspondence or consultation before arriving at a decision.

Participation must be voluntary and you are allowed at any time to change your mind without any reasons given and no repercussions. There will be no remuneration for taking part in the study. Should you willingly agree to take part in this study you will be given this information sheet to keep and you will also be asked to sign two informed consent forms. The first one will be to state that you freely agree to take part in this study and the second is to state that you agree for the interview to be audio recorded.

You are welcome to phone me if you would like any further information.

The aim of the research study is to understand the views of professional nurses on the factors that attract and retain nurses working in primary healthcare clinic. I would like to understand your views on what attracts and retains nurses in Primary Healthcare facilities. I would like to also ask about your experience in Primary Healthcare clinics.

You have been chosen because you have been working in primary healthcare clinic for at least a year and you are also currently working in a primary health care clinic in Ekurhuleni. The study will involve about 30 participants but they will all be interviewed separately and information gathered will not be shared with participants. The interview is estimated to take between 45-60 minutes at a location convenient for you

The information generated from this research will be very useful in trying to fill in the gap in knowledge on strengthening human resources for health in South Africa pertaining especially to Professional nurses. This is essential for the successes of programs like the National Health Insurance. It may also form the basis for further research all in the bid to strengthen human resources for health.

The interview will be recorded on audio tape this is to help me listen to you attentively without distraction during the interview and also to help me verify and get your idea in just the way you expressed it. This recording will be then transcribed onto a computer and analysed using a qualitative software called Nvivo by me. I will also be taking notes sometimes during the interview and all this helps me in analysing the data received correctly. The audio tapes will be stored in a locked secure place at all times and the computer data will be protected from intrusion also. The audio tapes will be destroyed at the end of five years. Participants will be anonymous and will be identified by codes. Be

rest assured that your responses are confidential and cannot be linked to you. You have the right to request the transcript if you so wish. Part of the research will involve me writing a report and the results may be published in peer review journals but these cannot be linked to participants This study has been reviewed and approved by the Human Research Ethics Committee (Medical Research Ethics Committee, the Gauteng Department of Health as well as your facility manager. Should you have any concerns please find attached the contact details for the Human Research Ethics Committee for correspondence.

I am available to assist with any further information required so do not hesitate to contact me. Thanking you in anticipation,

Yours sincerely,

Name: Esther Buckson
Contact Details

072 116 8538

estherbuckson@live.co.uk

HREC Chairperson

Professor Clement Penny

011 717 2301

Clement.Penny@wits.ac.za.

HREC Committee secretariat

011 717 2700/1234

Zanele.Ndlovu@wits.ac.za

Rhulani.Mukansi@wits.ac.za

Appendix F: Informed consent form for participation

Thank you for agreeing to participate in this study. The study will take place from 24th January to 31st December, 2018. When you sign this form it means you understand the purpose of the study and what is required of you as explained in the participant information sheet.

Participant's understanding

- I hereby confirm that I have been informed by the researcher about the nature, conduct, benefits and risks of the study.
- I have also received, read and understood the Participant Information sheet regarding the study
- I agree to participate in this study and I have had sufficient time and opportunity to ask questions.
- I understand that the research will be submitted as part of the requirements for a degree from the University of Witwatersrand.
- I understand that my participation is voluntary.
- I understand that I have the right to withdraw from this study at any point in time without any repercussions.
- I understand that the data collected will be used for the purposes related to this research.
- I am aware that all records will be kept confidential in the secure possession of the

Researcher.

- I understand that the final results cannot be traced to me
- I acknowledge that the contact information of the researcher is available to me.
- I understand that the contributions I make will not be used to evaluate my performance as a professional nurse.

Subject's Full Name: _____

Subject's Signature: _____ Date signed: _____

Researcher:

By signing this consent form I certify that I _____ agree to the terms of this agreement.

(Print full name here)

_____ _____ (Signature) (Date)

Appendix G: Informed consent for audio recording

Thank you for agreeing to participate in this study. The study will take place from 24th January to 31st December, 2018.When you sign this form it means you understand the purpose of the study and why it needs to be recorded and you are willing for the interview to be recorded.

Participant's understanding

•I hereby confirm that I have been informed by the researcher about the nature, conduct, benefits and risks of the study.

- I have also received, read and understood the Participant Information sheet regarding the study
- I agree to participate in this study and I have had sufficient time and opportunity to ask questions
- I agree to participate in this study and have it recorded.
- I understand that it will be submitted as part of the requirements for a degree from the University of Witwatersrand.
- I understand that my participation is voluntary and I can ask for the recorder to be turned off at any point in time.
- I understand that I have the right to withdraw from this study at any point in time without any repercussions.
- I understand that the data collected will be used for the purposes related to this research.
- I am aware that all records will be kept confidential in the secure possession of the

Researcher.

- I understand that the final results cannot be traced to me
- I acknowledge that the contact information of the researcher is available to me.
- I understand that the contributions I make will not be used to evaluate my performance as a professional nurse.

Subject's Full Name: _____

Subject's Signature: _____ Date signed: _____

Researcher:

By signing this consent form I certify that I _____agree to the terms of this agreement.

(Print full name here)

_____ _____ (Signature) (Date)

Appendix D: Information sheet