A RETROSPECTIVE CLINICAL AUDIT OF THE DURBAN UNIVERSITY OF TECHNOLOGY HOMOEOPATHIC SATELLITE CLINIC IN REDHILL

BY

PRATISHA PRAMLALL

Dissertation submitted in partial compliance with the requirements of the Master's Degree in Technology: Homoeopathy in the Faculty of Health Sciences at the Durban University of Technology

I Pratisha Pramlall do declare that this dissertation is representative of my own work, both in conception and execution.

Signature of Student **Date of signature**

APPROVED FOR FINAL SUBMISSION

Signature of Supervisor
Dr I. Couchman
M. Tech: Hom

Date of signature

Signature of Co-Supervisor
Dr S. Nienaber
M. Tech: Hom

Date of signature

THIS IS DEDICATED TO MY PARENTS
AJEETH AND RENU
FOR THEIR UNCONDITIONAL
LOVE, SUPPORT AND GUIDANCE
THROUGHOUT THE YEARS
OF MY JOURNEY

ACKNOWLEDGEMENTS

I acknowledge the following people for all their assistance and support in making this research possible and I give my heartfelt gratitude to:

The Department of Homoeopathy for all the assistance over the years and for helping me to complete this journey. I consider myself to be extremely fortunate to be taught by such brilliant lecturers. All of you have shown consistent dedication and enthusiasm and I will always be grateful for that.

My supervisor, Dr Ingrid Couchman: Thank you so much for your support, dedication and words of wisdom throughout this research process. You have always been willing to help and guide me whenever I needed you to and you have been prompt in providing me with feedback and I am truly grateful for that.

My co-supervisor, Dr Silvana Nienaber: Thank you for your patience, guidance and support in helping me to complete this research. I really appreciate it.

My editor, Dr Richard Steele: Thank you for your expertise and attention to detail you have shown in my dissertation.

My parents, Ajeeth and Renu and to my brother, Ashen: Thank you very much for the love, kindness, support and guidance that you have shown me throughout my life. You have constantly encouraged me during my studies and I am extremely thankful for that.

My best friend, Raeesa: Thank you for your motivation, advice and for always being there for me. We have shared many moments together over the years that have helped us to get this point and it has contributed to making this journey an enjoyable and memorable one. I will always be grateful for having a best friend like you and I wish you everything of the best in your future endeavours.

Thank you to all the friends that I have made along this journey, it has certainly been a memorable one.

ABSTRACT

Introduction

The Durban University of Technology (DUT) homoeopathic satellite clinic in Redhill was established in 2005. It was started by private homoeopathic practitioners who wanted to provide healthcare services to members of the community. This satellite clinic is very distinct from other DUT homoeopathic satellite clinics as it occupies space in an eThekwini Municipality public health care clinic. The homoeopathic clinic offers free homoeopathic treatment to the local community, as it is a training facility for 5th year homoeopathy students of the DUT. Students consult at this clinic under the direct supervision of a qualified homoeopathic clinician.

This descriptive and retrospective study aimed to determine the patient demographics, the disease prevalence, the forms of homoeopathic treatment modalities utilised and to assess the financial implications of operating the clinic. Data was collected by conducting an audit of new and follow up appointments at the Redhill clinic over a five year period from 2010 to 2014.

Methodology

This descriptive and investigative clinical audit was conducted retrospectively at the Redhill Clinic. A data collection sheet was completed for each patient file which included demographic data such as race, age and gender, the year of the consultation, the date of each visit, the number of visits, the diagnoses and treatment protocols, materials used, prices of medicines and the cost of the clinician.

The researcher captured the relevant data of each patient file at the DUT premises under the direct supervision of the supervisor. Each patient file was examined individually. Any patient file that was found to have missing information was not included on the data collection sheet or entered into the Microsoft Excel® spread sheet. The results were then analysed by using various forms of descriptive statistics such as pivot tables, pivot charts, pie charts and bar-charts.

Results

The Redhill Clinic was open once a week from 2010 to 2012 thereafter it was open every second week until September 2014 due to unavailability of rooms. A total number of 841 patient files which met the inclusion criteria were investigated. There were a total number of 1573 visits over a five year period. The majority of patients who attended the Redhill clinic during the study period were Africans, females and between the age group 21 – 30 years old. The five most prevalent conditions that were seen at the Redhill clinic were respiratory, musculoskeletal, infections, dermatological and gastro-intestinal conditions.

The operational expenditure of a homoeopathic satellite clinic included the cost of medicines and materials used. The total cost was calculated to be less than R130 000 over a five year period.

Conclusion

The patient numbers decreased from 2010 to 2014. The number of follow up visits increased from 2010 to 2012. The number of patient visits has been consistent with more than 50 new and follow up visits each year. This suggests that there has been patient satisfaction with homoeopathic treatment over the years.

The homoeopathic satellite clinic is unique as it is enclosed within the Redhill municipality clinic where allopathic doctors also practice medicine. This setting is advantageous because the nursing sisters at the clinic often refer patients to the homoeopathic satellite clinic on a weekly basis and students are able to refer their patients to the municipal clinic as appropriate. Patients were treated with homoeopathic remedies, herbal tinctures and creams and tissue salts.

The low operational expenditure of the homoeopathic satellite clinic shows that it is very cost effective and inexpensive to maintain such a clinic.

The results that were obtained from this study imply that the inclusion of homoeopathic satellite clinics in disadvantaged communities such as Redhill is beneficial and viable. The practice of homoeopathy is viable especially because of the current challenges that the health system of South Africa is exposed to. One of

the significant concerns is that there is a shortage of health care workers in the public health care system.

This study did not aim to investigate the possibility of incorporating homoeopathy into public health care at present but results can serve as a model for the inclusion of homoeopathy into other public health care facilities. The disease profile and treatment protocols that were obtained from this study can be used in planning the establishment of other homoeopathic satellite clinics in the future.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

DEFINITION OF TERMS

Allied Health Professions Council of South Africa (AHPCSA)

The Allied Health Professions Council of South Africa is a statutory council for Natural Health, responsible for the promotion and protection of the health of the population of South Africa and will affect this by regulating and setting standards for the profession of homoeopathy, under Act 63 of 1982.

Centesimal scale

Centesimal scale is based on the principle that the first potency must contain the one-hundredth part of the original drug and each succeeding potency, one-hundredth part of the preceding one (Homeopathy Community 2008).

Complementary and Alternative medicine (CAM)

A group of diverse medical and health care systems, practices and products that are not generally part of conventional medicine (National Centre of Complementary and Alternative Medicine 2012).

Decimal scale

Decimal scale of potentisation is based on the principle that the first potency should contain one-tenth part of the original drug and each succeeding potency should contain one-tenth part of the potency preceding it (Homeopathy Community 2008).

Law of similars

A remedy for any individual illness is the very substance that can produce a similar symptom picture and pattern of illness (Bloch & Lewis 2003: 24).

Polychrest

These are remedies that have a wide range of action on body systems or organs, thus suitable for a number of illnesses, disorders or symptoms (Geddes & Grosset 1999).

Potency

Potencies are highly diluted, energized substances prepared according to specified and standardized pharmaceutical methods, and made according to worldwide guidelines (Bloch & Lewis 2003: 28).

Potentization

The preparation of a homoeopathic remedy through the process of serial dilutions and succussions (Ullman & Reichenberg-Ullman 1995: 101).

Simillimum

The single remedy that best matches the symptoms of the patient (Leckridge 1997).

Succussion

The systematic and repeated shaking of a homoeopathic medicine after each serial dilution (Ullman & Reichenberg-Ullman 1995: 102).

Tincture

A tincture is a type of herbal preparation in which the alkaloids, glycosides, minerals, and essential oils of a plant are extracted into a solvent. The liquid that is most often used as a solvent is alcohol.

Vital force

The invisible energy present in all living things which creates harmony, balance, and health (Ullman & Reichenberg-Ullman 1995:102).

CHAPTER 1 : OVERVIEW

1.1 INTRODUCTION AND BACKGROUND INFORMATION

According to the Homoeopathic Association of South Africa (HSA) (2012) homoeopathy is a therapeutic medical system. It is based on the observation that substances which are capable of causing diseases in healthy people can be used to treat similar diseases in sick people by preparing remedies of the same substance but in a dilute form.

Successful homoeopathic treatment depends on identifying the similarity between the effects of the original substance in healthy people and the pattern of disease in the individual who is sick. Homoeopathic case taking involves a complete and detailed description of the patient, illness and its evolution. Any medical condition in any individual of any age has the potential to be treated by homoeopathy. It is a safe and effective medical system which is proven not only by the world wide support and interest of patients and health professionals, but also by research and clinical trials in various related fields (HSA 2012).

Getoff (2013: 84) stated that homoeopathy is the science of treating any health condition whether it is emotional or physical by using homoeopathic remedies that is based on the principle of like cures like. Homoeopathy is used to treat all types of diseases. A homoeopath aims to determine the exact homoeopathic remedy or ‘similimum’ for each patient based on their emotional, physical and mental picture. The principle of homoeopathic prescribing is that if the exact remedy is given to the patient and is used correctly then the individual will experience healing on all levels.

At the World Homoeopathy Summit, Das, Shah and Menon (2015: 109-113) stated that homoeopathy has gained popularity in India as well as in many developed countries. There is growing attention among scientists probing the intricate concepts of homoeopathy that remain elusive to conventional science. There is also a demand from health providers including governments to mainstream medical providers for homoeopathy in the treatment of non-communicable diseases, viral infections and

drug resistant diseases which are becoming a challenge in conventional medicine. There is a demand for homoeopathy in health care but it is also criticized due to inadequate clinical evidence (Das, Shah & Menon 2015: 109-113).

According to the World health organisation (WHO) (1978) the essential aspect of primary health care consists of eight elements which are listed in the Declaration of Alma Ata. Any Primary Health Care programme should contain at least three of the following components:

- Education on prevalent health conditions and ways to prevent or control it;
- Promotion of food supply and proper nutrition;
- An adequate supply of safe water and basic sanitation;
- Maternal and child health care;
- Immunization against major infectious diseases;
- Prevention and control of locally endemic diseases;
- Appropriate treatment of common diseases; and
- Provision of essential drugs.

The Department of Homoeopathy at the Durban University of Technology (DUT) has contributed to primary health care by establishing three homoeopathic satellite clinics namely Kenneth Gardens, Ukuba Nesibindi homoeopathic clinic (UNHC) and the Redhill clinic. These clinics provide health care treatment at a primary level and they offer free homoeopathic treatment to patients who are dependent on primary health care facilities.

The (DUT) homoeopathic satellite clinic in Redhill was initially introduced to the community in 2005. The Redhill clinic facility is an eThekwini Municipality public health clinic situated at the corner of Effingham and Tweed Road in Redhill (eThekwini Municipality 2011), an impoverished community on the north side of Durban.

This homoeopathic satellite clinic was established by private homoeopathic practitioners who wanted to provide healthcare services to members of the community. This satellite clinic is very distinct from others as it is part of a public health care clinic. This means that homoeopathy, which is a complementary form of medicine, works alongside with allopathic doctors in this particular clinic. The

homoeopathic clinic operates on a Friday morning within a room of the clinic, and patients are referred to the homoeopaths by the clinic staff. This clinic offers free homoeopathic treatment to the local community, as it is a training facility for 5th year homoeopathy students of the Durban University of Technology. Students consult at this clinic under the direct supervision of a qualified homoeopathic clinician.

This study looked at the demographics, as well as the common diseases and the associated treatment regimens offered by this homoeopathic clinic. A financial audit was included in this study in order to determine the running costs of the clinic for the DUT Department of Homoeopathy. It has to be a sustainable entity as Redhill serves quite a large community and is quite busy. This clinic offers the students a good learning experience as they gain first-hand knowledge of treating patients. In order to maintain this learning experience, it is important to acknowledge the financial implications of operating this clinic.

1.2 AIM OF THE STUDY

This descriptive and retrospective study aimed to determine the patient demographics, the disease prevalence, and the forms of homoeopathic treatment modalities utilised and to assess the financial implications of the Durban University of Technology homoeopathic satellite clinic in Redhill. Data was collected by conducting an audit of new and follow up appointments at the Redhill clinic over a five year period from 2010 to 2014.

1.3 OBJECTIVES

1.3.1 The first objective

To determine a patient demographic profile at the Redhill clinic.

1.3.2 The second objective

To determine a disease profile at the Redhill clinic.

1.3.3 The third objective

To describe various treatment protocols prescribed at the Redhill clinic.

1.3.4 The fourth objective

To audit the operational expenditure of the satellite clinic.

1.4 RATIONALE OF THE STUDY

The importance of this clinical audit is to gain information on the patient demographics, prevalent diseases, common homoeopathic treatments and the financial implications so that the clinic can be managed in the most optimal way. A clinical audit has not been conducted. The last clinical audit, which was conducted in 2011, was a brief synopsis rather than an in depth analysis and was based on positioning this clinic in the context of primary healthcare in South Africa. It showed the viability of the clinic over a one year period. It has now been operating for five years therefore the data would be more valuable in order to predict trends.

This clinic may be seen as a model for the inclusion of homoeopathy into other public health care facilities and thus open the door for homoeopaths to be included within the proposed South African government's National Health Insurance (NHI) initiative. This audit aims to ascertain the standard operating procedures at the homoeopathic satellite clinic in order to identify trends and treatment protocols, as well as the financial aspect. This model can then be used in later research as an example of how implementation into the NHI may be addressed (Couchman 2015).

1.5 LIMITATIONS

1. Any patient files that were found to have missing information such as dates, diagnosis and treatments were discarded.
2. Only the patient files from Redhill homoeopathic satellite clinic were included in this study.
3. Clinical outcomes were not measured.
4. Patient perceptions of the response towards homoeopathic treatment at this clinic have not been included.

CHAPTER 2 : LITERATURE REVIEW

2.1 INTRODUCTION

This chapter aims to provide an overview of the available research on this study topic. Literature surveyed will compare different studies concerning local and international trends in primary healthcare, particularly that pertaining to primary health care in South Africa. This chapter will provide an in depth description of the Redhill clinic and other homoeopathic satellite clinics that are currently operating as well as provide information regarding the patient and staff perceptions of these clinics. Homoeopathic treatment protocols and operational expenditure related to this clinic will also be described.

2.2 PRIMARY HEALTHCARE IN SOUTH AFRICA

The Redhill clinic is part of a primary health care facility whose patients come from low income and poor socioeconomic backgrounds who cannot afford private health care. Shirwaikar, Govindarajan and Rawat (2013) stated that Primary Health Care (PHC) is defined as a set of universally accessible services that is able to promote health, prevent disease and provide diagnostic, curative, rehabilitative, supportive and palliative services. Integrating Complementary and Alternative medicine (CAM) into health services may serve to enhance health care equity wherein all individuals can have access to a full range and combination of health care services which can contribute to reduced sickness and an increased health-related quality of life (Shirwaikar, Govindarajan & Rawat 2013).

According to the World Health Organisation (WHO 2008) the Alma Ata Conference in 1978 introduced primary health care as the key approach for implementation by all countries of the world in order to achieve health for all by the year 2000. Over the last 30 years of implementing the PHC strategy there have been many achievements. Many countries have increased public funding for the delivery of health care services as well as increasing the salaries of health workers to ensure

recruitment and retention. Health care facilities have also become more available to previously underprivileged and rural areas.

Since the Alma Ata conference, there have been challenges in implementing primary health care. A major challenge was having limited public health care funds especially in the African region. The right to health care can only be addressed once health determinants have been realised. Determinants of health include access to clean drinking water and adequate sanitation facilities. Sub-Saharan Africa had the highest levels of poverty especially in the rural areas when compared to other geographical regions. There is an inadequate distribution of health infrastructure, insufficient resources and an increased demand for essential medicines and health supplies. This is due to the fast growing population with an increase in communicable and non-communicable diseases, injuries and trauma (WHO 2008).

There is a critical shortage of trained health personnel within the public health sector. There is also a significant loss of health workers through international emigration (Kautzkyi & Tollman 2008: 17-30). The primary healthcare system is primarily a nurse-driven service that is provided in clinics, district hospitals and community health centres (Coovadia, Jewkes, Barron, Sanders & McIntyre 2009: 817-834). As referral centres, these community health clinics usually require a doctor on site. There are also satellite clinics and mobile clinics which are nurse-based, with occasional sessions by doctors (Daviaud & Chopra 2008: 46-51). The homoeopathic satellite clinic at Redhill offers senior homoeopathic students and a homoeopathic doctor to attend to patients one day in a week. This is beneficial to the clinic, the community and to the students who gain experience from seeing patients at the clinic.

One of the health challenges in South Africa concerns extreme poverty and that plays a major role regarding the health issues that are faced by the majority of the population as a result of lack of basic necessities such as clean water, sufficient nutrition, effective sanitation, realistic housing conditions, education and access to vaccinations. More availability of jobs can decrease the levels of poverty and thus provide improved access to basic health which will lead to healthier lives (Mayosi & Benatar 2014).

According to Mayosi and Benatar (2014) during the last 20 years there have been many advances such as substantial economic growth and an increase of social grants to the poor and unemployed people of South Africa. Absolute poverty has been decreased by social grants, however the authors stated that "the top 10% of South Africans earn 58% of the total annual national income, whereas the bottom 70% combined earn a mere 17%."

Another major challenge that is encountered in South Africa is the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). Mayosi and Benatar (2014: 1344-1353) state that "the 2003, 2007, and 2011 national plans for HIV, with funding increasingly skewed toward HIV treatment, have implications for a deteriorating national public health system committed to equitably serving all South Africans". Between the periods 1999 to 2005, expenditure on HIV has increased at an average annual rate of 48.2%. It is accepted that the most economical strategy to curb this epidemic is prevention but the planned expenditure for prevention of HIV from 2011 to 2016 is only 11% (Mayosi & Benatar 2014: 1344-1353).

The tuberculosis (TB) epidemic in South Africa is one of the worst in the world. The incidence of TB has increased from the 1990s when 300 per 100 000 people were affected to 2012 when it was 950 per 100 000 people. South Africa has the most extensive drug resistant (XDR) TB cases in the world despite progress in treatment outcomes (Mayosi & Benatar 2014: 1344-1353).

The public health sector in South Africa is staffed by 30% of the doctors in the country. These doctors are the sole providers of health care for more than 40 million people i.e. approximately 84% of the national population who are uninsured. There are 8 million people who have private health insurance that provides access to private healthcare which is where the remaining 70% of doctors work. At least 25% of people who are uninsured pay out of pocket in order to receive private sector care. This means that most of the state hospitals are now in a crisis due to the shortage of doctors who work in the public sector. Another crisis is that public health care infrastructure is dilapidated and dysfunctional due to underfunding, mismanagement and neglect (Mayosi & Benatar 2014: 1344-1353).

It was found that where human resources are concerned such as medical students and graduating doctors, the number of new medical students who enrol each year increased by 34% during the period 2000 – 2012. From a demographic perspective, there were more African and female students. The number of medical students who graduated increased by 18% between 2000 and 2012 with more Africans as compared to whites and Indians (Mayosi & Benatar 2014: 1344-1353).

These challenges will take a long time to overcome but some of the short term goals that will help to alleviate the situation include strengthening public health care services, improving resource allocation policies and training more health care professionals. Nurses and community health workers play an important role in public health care especially in rural areas (Mayosi & Benatar 2014: 1344-1353).

According to Harris, Goudge, Ataguba, McIntyre, Nxumalo, Jikwana and Chersich (2011: 102-103) inequities in health care access remain because of the inappropriate resource allocation in South Africa. Some of the access barriers consist of great distances and expensive travel costs in order to attain health care especially in the rural areas. Long queues and being unable to afford payment for care leave patients feeling disempowered.

Harris *et al.* (2011: 102-103) further suggest that more attention needs to be given to universal health coverage in order to solve the problem of inaccessible and unaffordable health care services. The challenging factors that still remain as remnants from the apartheid era are racial, socioeconomic, rural and urban inequalities and disparities between the public and private sectors. Expenditure in private sector healthcare has been far greater compared to the public sector since 2005. There is still a large gap concerning health care access in the general population of South Africa.

The right to access health care should be available to everyone regardless of who they are, their ability to pay, or whether they live in rural or urban areas. Previous South African studies have found that the majority of patients who suffer from health challenges are poor, uninsured, black Africans who come from rural areas. Many patients are prepared to incur high out of pocket payments for access to the private sector which results in more resources being available to private facilities as compared to the public sector. The quality of public sector services needs to be

improved so that more patients have access to affordable health care thus reducing the use of expensive private care services (Harris *et al.,* 2011:102-103).

At the Universal Health Coverage Day in New York, the WHO (2014) stated that more than 500 health and development organisations all over the world urge governments to accelerate reforms in order to ensure access to quality health services for everyone. Universal health access services play an important role in saving lives, ending extreme poverty, building resilience against effects of climate change and in ending deadly epidemics like Ebola. Unfortunately, 100 million people experience poverty every year because they or a family member become ill and they have to make high out of pocket payments. At least one billion people around the world do not have access to the health care that they need which leads to disease outbreaks of catastrophic epidemics.

According to the WHO (2014) universal health coverage was limited to only a few high income countries during the 20th century. Lower and middle income countries have successfully incorporated certain changes to make quality health care universally available. The WHO (2014) stated that countries as diverse as Brazil, Ghana, Mexico, Rwanda, Turkey and Thailand have made tremendous progress towards universal health coverage in recent years. India and China which are currently the two most populated countries are pursuing universal health coverage options.

2.3 THE PROPOSED NATIONAL HEALTH INSURANCE SCHEME

The National Health Insurance (NHI) scheme was launched in South Africa in 2011. According to the Bill of Rights, access to healthcare is a human right. The state needs to ensure that this right is respected regardless of whether it is in the private or public sector. This right should fulfil the necessary conditions such as assistance, benefits and health care services. The aim of the NHI is to provide a system for financing of health care. This system is expected to bring about changes concerning the quality of health services to citizens. The important factors include financing, service delivery, affordability and infrastructure. All South Africans should have access to quality health care services irrespective of their employment status (Sekhejane 2013).

According to Sekhejane (2013) the implementation of the NHI will be phased in over a 14 year period which began in 2012. The first phase will be over a five year period. This phase aims to incorporate legislative reform, reinforcement of the health system and improved service delivery. The most important objective is to strengthen the public health system.

The NHI scheme is focused on creating an extra ordinary structure due to the fact that the public has lost faith in the health care system and service providers in South Africa. Unfortunately, it does not address the shortage of efficient, skilled and professional health care workers. Most of the community clinics and public hospitals are staffed by health care workers who have no skills or professional code of practice especially in the rural areas (Sekhejane 2013).

Sekhejane (2013) stated that in order for the NHI to succeed, the government needs to make changes concerning the causes of deteriorating conditions. Some of the causes include poor services, high mortality rates, corruption, and mismanagement of government facilities, resources and fiscal funds. Based on past failures of implementing systems like the NHI, it is important for the government to understand that the users and service providers know little about the policy. In order to eliminate inequalities that exist in the health care system, optimal distribution of technological, physical, managerial and financial resources must be ensured. Elements such as housing, water, livelihoods and sanitation of citizens should be taken into consideration relating to a healthy lifestyle.

Given the high unemployment rate, the NHI budget needs to be tightly controlled due to the possibility that it may collapse because of lack of funds. The affordability of this insurance has been a challenge in the past in South Africa. The NHI intends to engage 600 private general practitioners in order to provide services to NHI pilot districts. Private general practitioners will increase their service delivery prices therefore the NHI should also consider using more interns. The NHI is a sustainable method for providing accessible and affordable healthcare however this project needs to be monitored closely to prevent any failures like those in the past (Sekhejane 2013).

According to Mthembu (2010) the core of the NHI is primary health care and it is the first point of entry into the health system. Mthembu (2010) stated that “the NHI will be

in parallel with a health system strengthening plan. The improvement, expansion and revitalisation of public health-care infrastructure and services are critical to realising the principle of universal coverage and reducing inequalities of access."

Mayosi, Lawn, Niekerk, Bradshaw, Karim and Coovadia (2012: 2029-2043) state that "a radical system of national health insurance and re-engineering of primary health care will be phased in over 14 years to enable universal, equitable, and affordable health-care coverage."

National health insurance has become quite popular because it aims to provide access to high quality individual health services, however health economists found that equity in health care delivery that is at the same levels as private sector levels would be unlikely. There are too many inequalities in funding of the private and public sectors and there are currently too few health care professionals therefore it will take a very long time in order to achieve this (Mayosi & Benatar 2014: 1344-1353).

Harris *et al.* (2011: 102-123) state that the NHI can contribute from a financial point of view as it may reduce the affordability barriers however it may not deal with other barriers such as availability and acceptability.

Gower (as cited by Khumalo, 2015: 24) stated that there is currently no plan to cover homoeopathy or homoeopaths under the NHI. The aim of incorporating homoeopathy into primary health care or the national health insurance is not included in this study however it may potentially be used in the future as a model if homoeopathy is considered for inclusion into the NHI. In order to determine the potential for homoeopathy into primary healthcare, further investigations into the clinical effectiveness of homoeopathic treatment as well as the public's acceptance of homoeopathy need to be undertaken.

2.4 HOMOEOPATHY IN PRIMARY HEALTHCARE

Homoeopathy is a system of medicine and an alternative method to treating illness. In some cases, it can be used to complement conventional medicine like surgery, acute trauma and overwhelming infections. Being holistic in concept, it stems from the idea that each individual will experience and display their illness characteristically

and that there will be a specific medicine with a similar pattern to treat that specific person with their specific suffering (Bloch & Lewis 2003: 25).

According to Vithoulkas (1993: 103) the science of homoeopathy is based on three principles; the first is the 'law of similars', which means 'like cures like', the second principle is the 'law of the infinitesimal dose', which encourages the use of the smallest dose possible to produce a stimulatory effect; the third principle is the use of the single remedy, which is the most similar remedy that matches up to the patient at that time.

In South Africa, homoeopathic treatment is mainly available in the private sector. In Durban, South Africa, homoeopathic treatment has been made available free of charge to the public at the eThekwini Redhill clinic, Ukuba Nesibindi homoeopathic clinic (UNHC) and at the Kenneth Gardens clinic. Homoeopathy is being applied as a form of community based primary healthcare within the public sector at these clinics.

According to Pillay (2013) education on homoeopathy plays an important role in it becoming more widely accepted into the public health care sector. More information on the practice of homoeopathy should be made available to the public and to health care nurses in order to prevent any misconceptions. Pillay (2013) found that there was a positive trend of support from the nurses who work in the eThekwini Municipality District. The majority of the nurses had a favourable attitude towards the inclusion of homoeopathy in Primary Health care.

Smillie (2010) found that the practice of homoeopathy in primary health care is feasible especially in impoverished communities according to the patient numbers growth rate and the rate of return patients to the Ukuba Nesibindi homoeopathic satellite clinic. These rates suggest that the inclusion of homoeopathy as a contributing discipline can aid in meeting the high demand for primary health care systems in South Africa. It can also motivate for the establishment of more homoeopathic health care clinics in the public sector. This will provide a valuable health care service and aid in the expansion of knowledge about homoeopathy.

A pilot study was conducted by Botha (2011) at Redhill on homoeopathy in primary health care in South Africa and it showed that homoeopathy was well received. The high rate of return visits indicated that patients had enough confidence to return for

more homoeopathic treatment. Patients were referred to the homoeopathic clinic by other patients and by nurses who work in the eThekwini Municipality District clinic. This showed that homoeopathy is accepted as a viable treatment by the allopathic clinic staff of the municipality clinic (Botha 2011). According to Botha (2011) the results also reinforce the fact that homoeopathy can assist in relieving the pressure placed on staff due to the shortage of medical practitioners.

Botha's (2011) study found that the majority of patients sought homoeopathic treatment for communicable diseases such as ear, nose, throat, genital, dermatological and respiratory conditions. Further, homoeopathic treatment was useful as an adjunct to tuberculosis and antiretroviral medications consequently improving the quality of life for patients. Botha concluded that homoeopathic practitioners can play a major role in the primary health care system in South Africa by alleviating human resource shortages within the system, which in turn will improve the delivery of primary healthcare (Botha, 2011).

Watson (2014) conducted a patient benefit and perception survey of the Durban University of Technology homoeopathic satellite clinic established at Ukuba Nesibindi. The outcomes of the study were encouraging as they support the inclusion of homoeopathy within the public healthcare system in South Africa. This survey provided insight into the patient's perceptions of the clinic as well as the use of homoeopathy as a form of treatment in the primary healthcare sector. It is evident from the results that patients had responded well to the treatment that they had received.

2.5 INTERNATIONAL STUDIES CONCERNING HOMOEOPATHY IN PRIMARY HEALTHCARE

Roddis (2009) completed a study on a homoeopathic medical hospital in India which is part of a Primary Health Care Facility. The success of any institution or clinic depends on its ability to provide adequate health care for a broad spectrum of human illnesses. Many patients sought homoeopathic treatment for diseases that had been unsuccessfully treated by allopathic medication. Conclusive evidence showed that homoeopathy played a curative role in the majority of illnesses that were presented at this hospital.

According to Roberts (2008) the integration of homoeopathy into primary care can improve patient safety and lead to the best possible clinical results. Patient safety can be maintained due to communication between conventional and complementary alternative medicine (CAM) depending on the case. It can either involve conventional drugs, homoeopathic medicine or other interventions. Patients need to be referred to qualified and registered homeopaths that have met the standards of education, are fully insured and have agreed to abide by the code of ethics and practice.

According to Roberts (2008) a report was released in 2000 on complementary and alternative medicine and homoeopathy was listed as a 'group one' therapy. Group one therapies are recognised as having their own diagnostic approach and treatment method. Homoeopathy is well established in the United Kingdom since its inclusion in the National Health Service in 1948. There are homoeopathic hospitals in Bristol, Glasgow, Liverpool, London and Tunbridge Wells. More than 400 general practitioners use homoeopathy in their everyday practices.

According to Manchanda (2012), homoeopathy in very popular in India. Patients are offered many different systems of medicine as a matter of policy in providing primary health care to the masses. Homoeopathic wings have been established in many allopathic hospitals and dispensaries in the public and private sectors. Homoeopathic practitioners have been providing treatment to millions of patients for different illnesses in the public health care system. Patients also tend to rely on homoeopathic medicines for prevention during sporadic and epidemic conditions.

Manchanda and Kulashreshtha (2005) state that homoeopathic clinics can be promoted at a primary care level in order to decrease the costs of health care in developing countries. The government policy of India aims to ensure adequate growth of different systems of medicine which has contributed to the development of homoeopathy in India. India has the largest homoeopathic infrastructure in terms of institutions, personnel and drug manufacturing industries which can be effectively utilized globally.

According to Erwin, Marks and Couchman (2014: 7-14), the Maun Homeopathy Project was established in Botswana in October 2005 for people who were infected with AIDS. This project works in partnership with local community organisations and agencies. A mobile clinic is provided to those most in need. This mobile clinic offers

home visits as well as a point for community members to come and receive treatment. The clinic provides health care services to more than 1500 people.

2.6 HOMOEOPATHIC SCOPE OF PRACTICE

According to the Allied Health Professions Council of South Africa (2010) homoeopathic doctors are certified and licensed primary contact practitioners. The Allied Health Professions Council of South Africa (AHPCSA) states the scope of a homoeopathic doctor to be the following: “diagnose, and treat or prevent physical and mental disease, illness or deficiencies in humans; prescribe or dispense medicine; or provide or prescribe treatment for such disease, illness or deficiencies in humans (South African Government 1982)”.

The training that is recognised by the AHPCSA is a five year full time Master’s degree in Homoeopathy. In South Africa, it is offered at the University of Johannesburg and at the Durban University of Technology. The training programme consists of a five year full time medical-scientific course which focuses on classical, clinical, modern and conventional homoeopathy. It also includes homoeopharmaceutics and a master’s research dissertation. After completing this course, graduates are registered as homoeopathic practitioners (AHPCSA 2010).

According to Durban University of Technology (2015) the first three years of the academic programme creates the foundation from which students gain valuable knowledge from subjects such as anatomy, physiology, biology, general pathology, and pharmacology with emphasis on diagnostics. The latter two years focus more on the practical application of homoeopathic principles, preventative medicine, community health care and nutrition. The student is guided in using a holistic approach when considering a patient. The comprehensive nature of training allows for graduates to work in the private sector, industrial sector or in the public sector within multi-disciplinary environments.

According to the AHPCSA (2010) homoeopathy is the most well-known, widely used and most sought after alternative medicine for almost 200 years especially in South Africa. It is fast becoming the preferred mode of treatment as an effective approach to maintaining health and wellbeing. Homoeopathy is a primary healthcare profession. Homoeopaths are trained to diagnose and to treat disease however their

holistic approach allows them to listen and to understand their patients and illnesses on a mental, emotional and physical level.

Homoeopathy is a complete medical science where any medical illness can be treated. In South Africa, homoeopathic practitioners receive privileges and rights similar to those of medical practitioners. Homoeopathic practitioners are trained diagnosticians who are recognised as primary contact doctors. Homoeopathic training in South Africa offers professional training at a level that is required for the practising of homoeopathy as a primary contact health care provider (AHPCSA 2010).

The homoeopathy students at DUT gain practical experience from the clinic that is situated on the DUT campus as well as from the satellite homoeopathic community clinics in Durban. There are many benefits of community clinic based learning for students. According to Diab and Flack (2013) these benefits include that students gain first-hand practical exposure, have better developed skills, gain a more positive attitude towards their patients and colleagues and become more confident in treating patients. Exposure in the real-world context allows them to understand the relevance of their training. They learn more about different health systems and pathologies, and learn more about the inequities to health and the barriers to health care that many people in South Africa experience. The students also become exposed to different patient populations and this allows them to develop improved cultural awareness (Diab & Flack 2013). Thus, maintaining community clinics not only benefits the people being served but also the students in many ways.

2.7 HEALTH CONCERNS IN SOUTH AFRICA

The eThekwini municipal Redhill clinic is located in an impoverished community in Durban, South Africa. According to Botha (2011), some of the most common conditions that were treated at Redhill clinic in 2010 included dermatological, musculoskeletal, respiratory, gastrointestinal and genital diseases.

According to Wright and Diab (2011: 1-18) the eThekwini municipality includes the Durban Metropolitan Area. Durban is the second largest industrial hub in South Africa. A harbour, oil refineries, a paper mill, a sewerage treatment plant, heavy traffic roads, many landfill sites, and manufacturing and processing plants are all

situated in Durban. Results from several studies indicate that certain air pollutants have been linked to reduced lung function in asthmatic children. It was found that some of the urban wards in the eThekwini municipality region were most vulnerable to risks from air pollution. There is a lack of air quality monitoring in these areas therefore certain interventions that target healthcare provisions should be put in place (Wright & Diab 2011: 1-18).

According to Mayosi *et al.* (2012: 2029 - 2043) changes have been evident regarding the epidemics in South Africa which include HIV and tuberculosis; chronic illness and mental health; injury and violence; and maternal, neonatal and child health. Mayosi *et al.* (2012: 2029 - 2043) state that “South Africa now has the world's largest programme of antiretroviral therapy, and some advances have been made in implementation of new tuberculosis diagnostics and treatment scale-up and integration. HIV prevention has received increased attention. Child mortality has benefited from progress in addressing HIV. However, more attention to postnatal feeding support is needed”.

According to Naidoo (2014: 223-228) South Africa is currently experiencing the largest HIV/AIDS epidemic in the world. At least 25% of South African children who are younger than 15 years old have lost a parent to AIDS. The infection rate is growing rapidly at about 2000 people per day. KwaZulu Natal carries the heaviest burden because a devastating high number of children and adults are being affected by HIV/AIDS. People from all cultures have become exposed and it is a major concern due to the high costs that the economy will face in the future.

The South African government has encouraged people living with HIV to make use of the various treatment options that are available. Some of these options include antiretroviral therapy (ART), nutritional supplements as well as traditional, complementary and alternative medicines. Traditional medicines, herbal medicines and homoeopathy are based on the holistic management of a patient (Naidoo 2014: 223-228).

There are many risk factors which have increased the incidence of chronic diseases over the years however the government policy aims to address lifestyle risks concerning the consumption of salt and alcohol. The mortality rate due to injuries has decreased however the rates of violence and accidents have increased. Strategies

are currently in place in order to bring about change but it still requires support, commitment, improved human resources and management capacities (Mayosi *et al.,* 2012).

According to Marten, McIntyre, Travassos, Shishkin, Longde, Reddy and Vega (2014: 2164-2171), most of the South African population live in urban areas. Disparities in health status across race groups still remain due to apartheids legacy. The richest people are covered by private insurance while everyone else relies on poorly resourced public sector services. Low income and middle income formal sector workers face many financial protection challenges. The health system fails to provide equitable access to effective health care. Poor communities have reduced access to health care services despite the burden of ill health being greater for them.

There is a great shortage of health care workers and an uneven distribution of them between public and private sectors. The government aims to achieve universal health coverage over a period of 15 years. There is a particular emphasis on primary health care so that community health workers and community based nurses can be introduced to promoting services to households. Government efforts are also focusing on improving management within hospitals and health districts (Marten *et al.,* 2014: 2164-2171).

According to Morrone (2007: 1-9) poverty is linked to poor education, poor health, vulnerability, and exposure to environmental and occupational risks. It also deprives individuals of sufficient nutrition in order to live a healthy lifestyle, to obtain medicines or to enjoy clean water and sanitary facilities. More areas are becoming urbanised but at least one third of urban households in the world live in poverty. These urban households are more exposed to diseases due to poor living conditions, lack of sanitation, poor diet and occupational hazards. Many studies have shown that homeless people in urban areas have a higher prevalence of chronic chest and respiratory problems, tuberculosis and alcohol and drug dependence.

According to the World Health Organisation (WHO), the most common causes of death in South Africa between 2000 and 2012 are due to the human immunodeficiency virus (HIV), acquired immune deficiency syndrome (AIDS) and Tuberculosis (TB) as well as non-communicable diseases such as diabetes, injuries, cardiovascular diseases, cancers and chronic respiratory disease.

2.8 THE RED HILL CLINIC

Redhill clinic is a public health clinic that is situated at the corner of Effingham and Tweed Road in Redhill, Durban. This clinic is unique in that it is already established within a public health facility. The Redhill clinic is part of the eThekwini Municipality and falls under the North sub-district (eThekwini Municipality 2011). According to Wright and Diab (2011: 1-18) the eThekwini municipality is part of the Durban Metropolitan Area. Durban is the second largest industrial hub in South Africa which contributes to many of the health concerns that are present in Durban, South Africa.

A map of the surrounding areas of the Redhill clinic is shown in Appendix G. The Redhill clinic is adjacent to a busy main road where there is heavy traffic which contributes to the air pollution in the area. The Redhill Industrial Park is located nearby to the clinic which is also a source of pollution in the area. The air pollution potentially leads to many diseases that are especially linked to respiratory conditions. The location of the clinic is important in determining environmental causes that can lead to certain diseases.

Khumalo (2015: 27) reports that a nursing sister at the Redhill clinic had said that this particular clinic is unique in that it serves an impoverished community where most of the people live in shack houses and some in reconstruction and development programme houses (RDP) and are reliant on public healthcare .

According to Khumalo (2015: 27) the municipal clinic offers a range of services such as maternal women's health, youth services, child health services, curative services, and treats communicable and non-communicable diseases which makes it different as compared to other clinics. The clinic is open six days a week from 7:30am until 4pm Monday to Friday while Saturdays are open for half a day mainly for emergencies. Chronic cases are seen on Mondays and Fridays by a doctor. Different services are offered on specific days such as immunisations are done on Mondays, Social workers attend to children on the first and last Tuesday of the month, Wednesdays are for pregnant women, Thursdays are for the elderly patients and for patients who have Human immune virus (HIV) and need to collect their antiretroviral treatment (ARV's) and Fridays are for patients who need to see an optometrist or a homoeopath.

2.9 THE RED HILL HOMOEOPATHIC SATELLITE CLINIC

The Redhill homoeopathic clinic was first opened by homoeopaths who wanted to give back to the community. Nienaber (2014) stated that the clinic was initially established by one of the homoeopaths present at that time who charged a minimum fee of R60 for both consultation and medication. Another homoeopath later took charge of the clinic and offered free homoeopathic consultations and medication. Different homoeopaths used to alternate every week and see patients every Tuesday from the year 2005.

The Department of Homoeopathy at the Durban University of Technology (DUT) took charge of the homoeopathic section of the clinic in 2010 (Botha 2011). According to Nienaber (2015) the main Redhill clinic does not have psychologists and psychiatrists therefore the homoeopaths filled the gap where patients needed emotional treatment. Some of the most common conditions treated include upper respiratory tract infections, skin conditions, digestive complaints, secondary infections due to HIV and depression.

The clinic is now open on Friday mornings every week from 8am until 12pm and is staffed by 5th year homoeopathy students under the direct supervision of the designated homoeopathic clinician.

According to Khumalo (2015: 55) some of the patients at Redhill were attending the homoeopathic clinic because of disappointment with other streams of medicine and also because they found satisfaction with the homoeopathic treatment. Patients had shown confidence towards homoeopathy and were very happy that they found improvement of their ailments since the use of homoeopathic treatment.

2.10 HOMOEOPATHIC TREATMENT

According to Getoff (2013: 84) any substance such as a plant, animal, vegetable or mineral can be made into a homoeopathic remedy. Proving’s are carried out in order to understand what each remedy can be used for. A proving is conducted to determine the symptom picture of a particular homoeopathic remedy. A certain number of healthy people are given a particular remedy and are then required to record any symptoms that they experience which is not normal to them over a period

of time. All the symptoms from the group of ‘provers’ are recorded and are then cross referenced to form a symptom picture of that particular remedy.

Homoeopathic remedy preparations are produced from plants, minerals and animals. The homoeopathic remedies are highly diluted, energized substances that are prepared according to specified and standardized pharmaceutical methods that are found in the homoeopathic pharmacopoeia (Bloch & Lewis 2003: 28).

According to Bloch and Lewis (2003: 29) insoluble substances are ‘triturated’ in lactose. Trituration involves the process of mixing the original substance with lactose according to the required ratios. This is achieved by grinding it together for many hours using a mortar and pestle.

Soluble substances are extracted in an alcohol and water mixture. The substance that is extracted is the source material from which the homoeopathic remedy will be made. Soluble homoeopathic remedies are manufactured by a process called potentisation (Bloch & Lewis 2003: 29).

Lewith (as cited by Louw 2005) states that potentisation of homoeopathic remedies is a two-part process of dilution and succussion. Homoeopathy treats disease by administering highly diluted remedies prepared from plants, animals and minerals.

Vithoulkas (1993: 103) states that dilution involves the process of diluting the crude substance according to different potency scales. The centesimal scale means that the remedy is diluted 100 times where the original substance is mixed with ninety nine parts of alcohol. The decimal scale means that the remedy is diluted 10 times where the substance is mixed with nine parts of alcohol (Bloch & Lewis 2003: 29). Succussion involves the process of shaking during ‘dynamization’ where kinetic energy is added to the remedy after each dilution (Vithoulkas 1993: 103). Skinner (2001) stated that the resulting solution is vigorously pounded by striking the vial against a book at least ten times during the process of succussion.

Remedies are grouped together in classes according to their range of action or the method by which they are prepared. The following groups of remedies are relevant for the purpose of this study and are often prescribed:

- Polychrests are remedies with a wide range of action on body systems or organs, thus suitable for a number of illnesses, disorders or symptoms (Geddes & Grosset 1999).
- Smaller or minor homoeopathic remedies are homoeopathic remedies with a more limited or specific action on the body (Geddes & Grosset 1999).
- Nosodes are remedies prepared from pathological secretions or tissues (Geddes & Grosset 1999).
- Tissue salts (TS) are minute but essential amounts of minerals needed to assist the body during disease (Geddes & Grosset 1999).

The choice of the potency and dose depends on the 'vital force' of the patient which is described as the ability of the human body to maintain health and fitness as well as fighting off illnesses (Geddes & Grosset 1999).

2.11 OPERATIONAL EXPENDITURE OF THE REDHILL CLINIC

The operational expenditure of a homoeopathic satellite clinic involves the costs of the medicines prescribed and the cost of the clinician. The main purpose of running a homoeopathic satellite clinic is for the 5th year students to gain valuable experience by treating patients. The other purpose is that it is part of a primary health care facility and helps to alleviate the demand for public health care. The patients at the Redhill clinic are not charged for their prescribed medication or the consultation. The cost of this is carried out by the Homoeopathic Day Clinic at DUT.

The medicines that are prescribed at the homoeopathic satellite clinic include herbal tinctures and creams, tissue salts, and homoeopathic remedies. According to Nienaber (2014), many of the herbal tinctures have been sponsored for the clinic as herbal tinctures are very expensive. A variety of homoeopathic remedies are available at the clinic and are dispensed in a powder or liquid form depending on what is suitable for the patient. The medicine costs comprise the price of the medicating granules, the vehicles used for dispensing (vials, powders, bottles), labels, envelopes, alcohol and distilled water.

The cost of the clinician is also included in the expenditure of the clinic. The clinician plays an important role in supervising the students and assisting them during case taking and prescribing of medicines. According to Nienaber (2014) the clinician

receives an amount of R150 per hour from the Durban University of Technology. Patients are seen on Friday mornings between 08H30 to 12H00. All the expenses for the period covered in this study were calculated as an annual expense rather than per patient and that amount was then extrapolated over a five year period excluding inflation rates.

2.12 SUMMARY

The above literature has revealed that there are many challenges that need to be overcome especially in the public health care sector. Information has been extracted from many sources and there appears to be common trends regarding public health care. There are insufficient funds for public health care and inadequate resources. There is a shortage of health care workers (Marten *et al.,* 2014: 2164-2171) yet an increase in the population and an increase in communicable and non-communicable diseases (WHO 2008).

The major health determinants that were found include extreme poverty especially in rural areas where people have limited access to public health care. Most people do not have access to clean drinking water and adequate sanitation facilities which leads to an increase in health care concerns (Mayosi & Benatar 2014: 1344-1353).

Epidemiological statistics show that HIV and AIDS and TB are the most commonly occurring diseases especially in the African region (Mayosi & Benatar 2014: 1344-1353).

Many studies have shown that homoeopathy can play a role in alleviating the high demand of public health care services. The three homoeopathic satellite clinics that are situated in Durban, South Africa already offer primary health care to the public sector.

The demographics, diseases and treatment protocols of this study will be identified in order to compare trends that concern primary health care and homoeopathy. The importance of investigating the most common diseases in different areas is so that the necessary treatment protocols will be readily available when needed.

CHAPTER 3 : METHODOLOGY

3.1 INTRODUCTION

This chapter describes and explains the methods and materials that were used in this research study. It includes information on the study design, the location of the clinic, the selection sample, the data collection tool, the data collection process, the calculation of the operational expenses, statistical methods that were used to analyse the resultant data as well as any ethical considerations.

3.2 AIM

This descriptive and retrospective study aims to determine the patient demographics, the disease prevalence, and the forms of homoeopathic treatment modalities utilised and to assess the financial implications of the Durban University of Technology homoeopathic satellite clinic in Redhill. Data was collected by conducting an audit of new and follow up appointments at the Redhill clinic over a five year period from 2010 to 2014.

3.3 OBJECTIVES

1. To determine a patient demographic profile at the Redhill clinic.
2. To determine a disease profile at the Redhill clinic.
3. To describe various treatment protocols prescribed at the Redhill clinic.
4. To audit the operational expenditure of the satellite clinic.

3.4 STUDY DESIGN

According to the handbook of research for educational communications and technology (2001) descriptive research involves gathering data that describes events and then organizes, tabulates, depicts, and describes the data collection. It often uses visual aids such as graphs and charts to help the reader to understand the data

distribution. This is a descriptive and investigative clinical audit that was conducted retrospectively at the Redhill clinic.

3.5 LOCATION

The homoeopathic satellite clinic is situated at the corner of Effingham and Tweed Road in Redhill (eThekwini Municipality 2011). Permission for this study was requested from the Head Clinician at the clinic and from the Manager of the Redhill clinic (Appendix A and Appendix B).

Once permission was granted, the researcher was able to capture the relevant data from patient files at the Durban University of Technology (DUT) premises under the direct supervision of the supervisor.

3.6 SELECTION OF SAMPLE

To be included in this study, the files had to meet the following criteria:

1. The patient files were from the Redhill clinic site.
2. Each file had all the pertinent information such as the dates of the consultation, the diagnosis and treatment protocols.
3. Only consultation data that was recorded during the period 2010 – 2014 was included.

The sample size consisted of 841 patient files which met the inclusion criteria.

Patient confidentiality was maintained as patient names or any other data that could identify patients was not captured. A file number was allocated to each patient file.

3.7 DATA COLLECTION TOOL

A data collection sheet (Appendix E) was adapted from Smillie (2010) after permission had been granted. The data collection sheet was used in a clinical audit of the DUT homoeopathic satellite clinic established at Ukuba Nesibindi. It was used to capture data such as patient demographics which included gender; employment; age; marital status and race. It was also used to capture the number of consultations, the diagnoses, any diagnostic tools that were applied or requested, referrals and details of medicines prescribed and dispensed.

A similar data collection sheet was used at the Redhill clinic however certain data such as employment status, marital status, diagnostic tools that were applied or requested and any referrals were not recorded on the patient files therefore it was not used in this study. The only demographic data that was captured included race, age and gender. The number of new and follow up consultations, the date of each visit, the number of visits, the diagnoses and treatment protocols was also included in the data collection sheet. This study also aimed to determine the cost implications therefore the data collection sheet was adapted to include information such materials used, prices of medicines and the cost of the clinician.

3.8 DATA COLLECTION PROCESS

The researcher captured the relevant data of each patient file at the DUT premises under the direct supervision of the supervisor. On commencement of the research, it was found that capturing data on site was disruptive to patients. It was decided by the head clinician and supervisor that in order to maintain anonymity as well as to not hinder the patients, the researcher should conduct data collection at the DUT premises. The head clinician left the files with the supervisor in a secured room and the supervisor was present whilst the researcher collated data.

Each patient file was examined individually. Any patient file that was found to have missing information was not included into the MSExcel spreadsheet or on the data collection tool.

The data that was captured in this study included new and follow up consultations which took place during the period of 2010 – 2014. Only 10 of the most recent follow up visits were recorded for each patient as it is on the data collection sheet (Appendix E).

The data collection tool was used to capture the following forms of data:

1. Patient demographics such as race, age and gender;
2. Year of the first consultation;
3. Date of each consultation;
4. Number of follow up visits;
5. Diagnosis for each visit;

6. Treatment protocols with details such as the remedy name, potency, dosage, frequency, quantity, form of the remedy and materials used; and
7. Cost of the medicines prescribed and the cost of the clinician.

3.9 OPERATIONAL EXPENSES

The operational expenses of the Redhill clinic include the cost of medicines which consist of homoeopathic remedies, tissue salts, herbal creams and tinctures, the dispensing vehicle (vial, powder or bottle) that is dispensed to each patient and the cost of the clinician.

The most common mode of dispensing medicines at this clinic are homoeopathic remedies in 30CH + (plussed) potency in a 25ml bottle as well as medicated powders.

A 30CH + potency involves the use of ten granules of the homoeopathic remedy which is dissolved in distilled water and 96% ROH in a 25ml glass or plastic bottle.

The powders involve the use of 10 medicated granules into a lactose powder, which is then dispensed in a small envelope.

The price of medication was calculated at cost price according to price lists that are used by the Durban University of Technology (Appendix F). The final prices were calculated for each individual patient as shown in Appendix D. The prices were calculated at cost price because the medicines are dispensed to patients free of charge.

The clinician receives an amount of R150 per hour from Durban University of Technology (Nienaber, 2014). Patients are seen on Friday mornings between 8am to 12pm. This expense was calculated as an annual expense rather than per patient and this amount was then extrapolated over the five year period excluding inflation rates.

STATISTICAL ANALYSIS

The data was evaluated and analysed using Microsoft's Excel® programme. No specialised statistical tests were required. The data was captured onto the data collection sheets (Appendix E) and was then extrapolated directly and placed into an

excel spread sheet for interpretation. The results were then analysed by using various forms of descriptive statistics such as pivot tables, pivot charts, pie charts and bar-charts.

3.10 ETHICAL CONSIDERATIONS

Permission was granted from the Head Clinician at the Redhill clinic and from the Manager of the Redhill clinic. Permission was also granted from the Faculty of Health Sciences Ethics committee of DUT. Strict patient confidentiality was maintained throughout the data collection process. Each patient had a file number beginning from number one. Patient names or any other data which could identify the patient was not recorded. As mentioned above, data capturing took place at the DUT premises over a period of three weeks. The researcher was under the direct supervision of the supervisor during data capturing. Only the researcher, the head clinician and the supervisor had access to the patient files. All data captured will be stored in a secured room for 5 years before being destroyed.

CHAPTER 4 : RESULTS

4.1 INTRODUCTION

This chapter presents the results that were obtained from this study. The raw data was captured onto data collection sheets (Appendix E). The data captured was only extracted from patient files that belong to the Redhill homoeopathic satellite clinic.

The raw data that was captured was entered onto a spread sheet using Microsoft Excel® 2010. The data was analysed by using pivot tables and bar graphs.

The objectives of the data analysis were as follows:

1. To determine a patient demographic profile at the Redhill clinic.
2. To determine a disease profile at the Redhill clinic.
3. To describe various treatment protocols prescribed at the Redhill clinic.
4. To audit the operational expenditure of the satellite clinic.

4.2 THE RESULTS

4.2.1 Consultations

The number of patients that were seen in each year is shown in Table 1 and Figure 1. The data ranges from 70 – 353 patients with the year 2010 having the highest number.

Table 1: Number of patients per year

YEARS	NUMBER OF PATIENTS
2010	353
2011	199
2012	143
2013	70
2014	76
Total	**841**

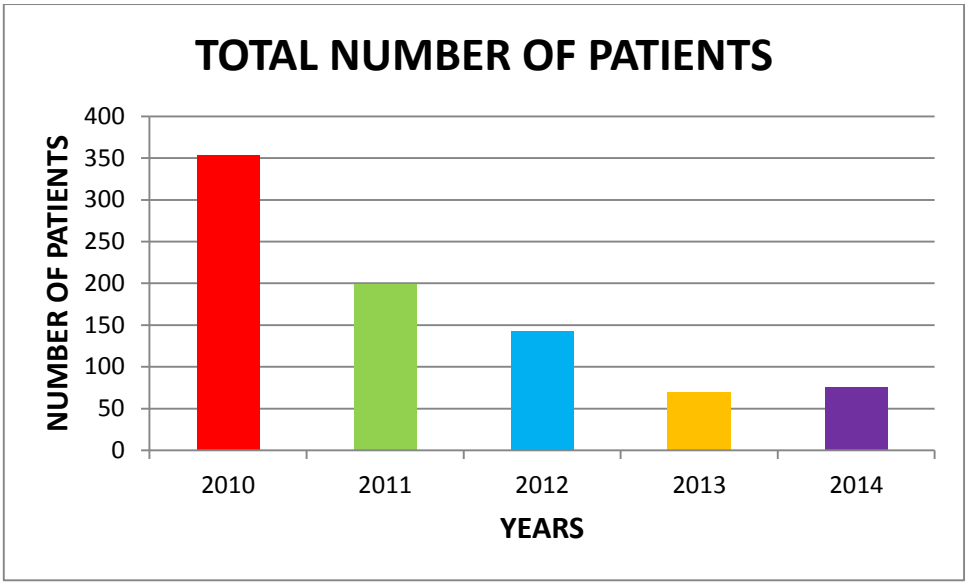


Figure 1: Number of patients who attended the Redhill homoeopathic satellite clinic during the period 2010 – 2014

The clinic was open every week on a Tuesday morning from January 2010 to July 2012.

After July 2012, it began operating on Friday mornings. It was still open every week until August 2012 where it began to operate every second week due to unavailability of rooms.

During the year 2014, the clinic was open every second week on a Friday morning until the beginning of September 2014 where it was open every week until December 2014.

Table 2 and Figure 2 show the number of new and follow up visits in each year.

Table 2: Number of new and follow up visits each year

Years	New Visits	Percentage	Follow up visits	Percentage	Total
2010	349	82 %	77	18 %	426
2011	194	59 %	137	41 %	331
2012	131	45 %	161	55 %	292
2013	68	39 %	105	61 %	173
2014	76	53 %	67	47 %	143
Total	**818**	**-**	**547**	**-**	**1365**

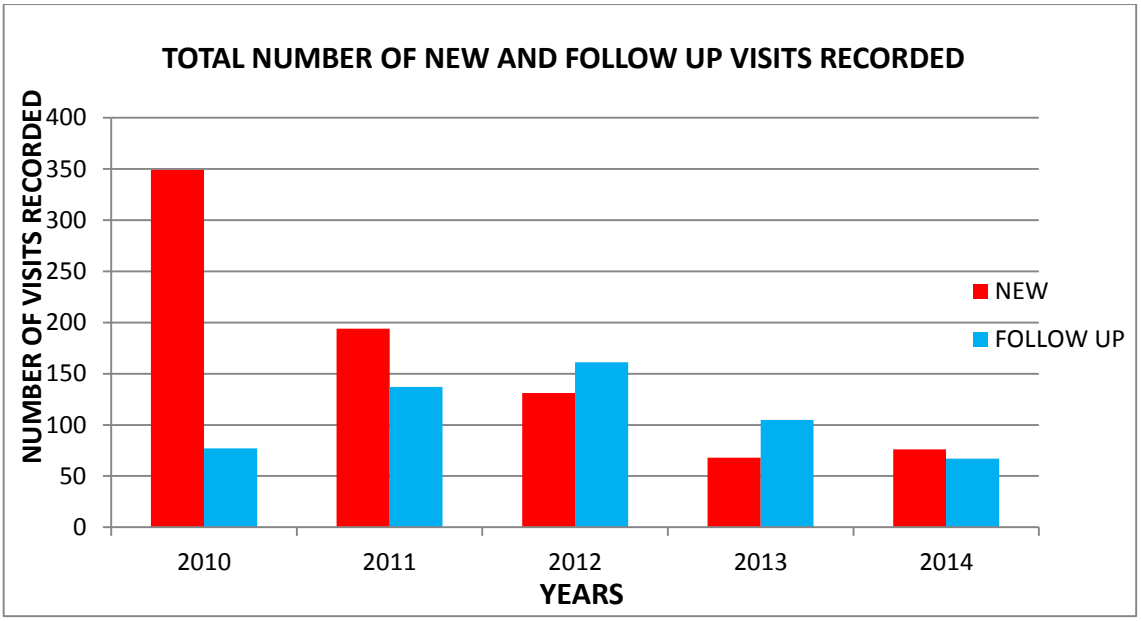


Figure 2: Number of new and follow up visits each year

Table 3 and Figure 3 show the total number of patients that attended the Redhill homoeopathic satellite clinic as well as the total number of visits over a five year period.

Table 3: Number of visits and patient files

	Number of patients
Total number of patient files	841
Total number of visits	1573
Total number of visits recorded	1365

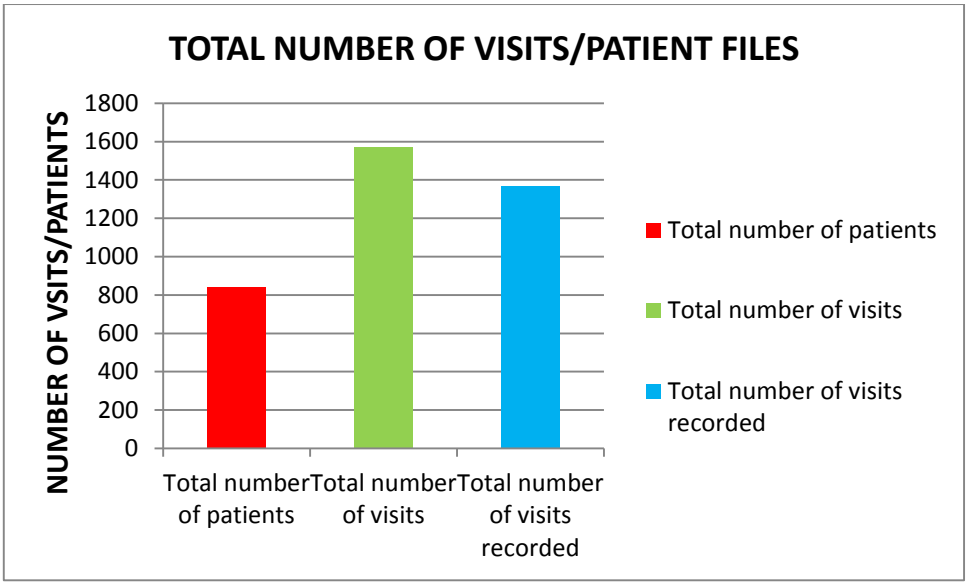


Figure 3: Number of visits and patient files per year

The total number of patients who attended the clinic during 2010 to 2014 amounted to 841 patients. The total number of visits during 2010 to 2014 amounted to a sum of 1573 visits. Files which had missing information such as dates, diagnosis and treatments were discarded and were not used in this study.

The patients files showed that some of the patients had been for more than 20 visits however the number of visits recorded were only the 10 most recent visits as shown on the data collection sheet (Appendix E). The total number of visits recorded was 1365.

4.2.2 Demographic data

4.2.2.1 Gender

The data represented in Table 4 and Figure 4 shows the total number of females and males who attended the clinic over a five year period. It was found that 50 files did not have the gender of patients recorded.

It can be seen that the number of females which is 594 is far greater than that of males which is only 197 while the files that did not have the gender recorded was 50.

Table 4: Number of females and males 2010 – 2014

Gender	Number of patients	Percentage
FEMALE	594	71 %
MALE	197	23 %
NOT RECORDED	50	6 %

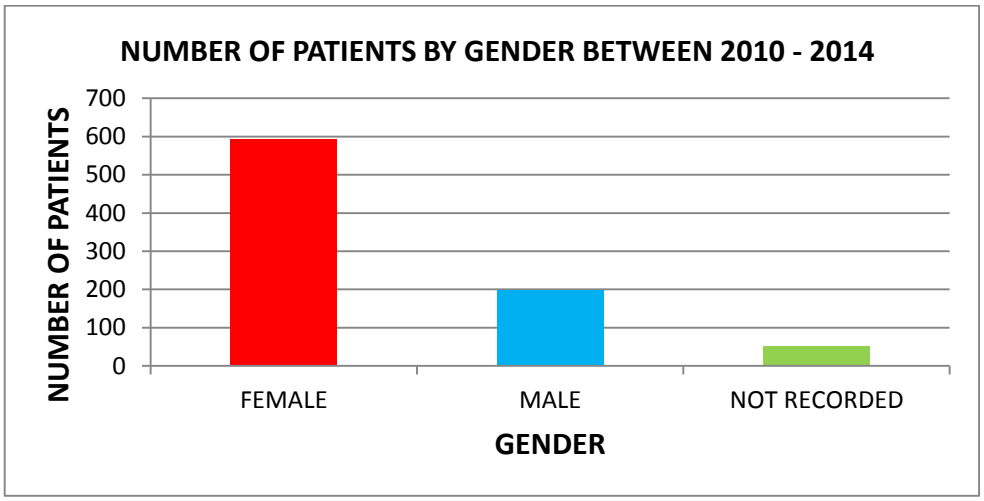


Figure 4: Number of females and males 2010 – 2014

Figure 5 shows the gender distribution during 2010 – 2014. It can be seen that 2010 had the highest number of females and males. After 2010 the numbers had decreased where 2014 had the lowest values which were below 60.

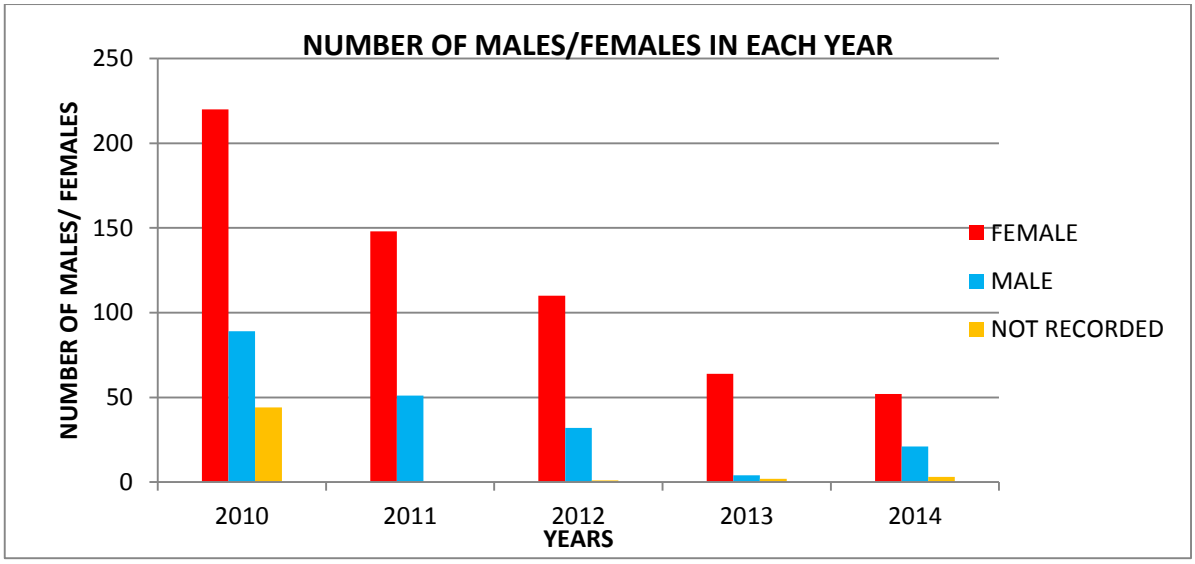


Figure 5: Gender distribution of patients 2010 – 2014

4.2.2.2 Age

The data that is represented in Table 5 and Figure 6 show that during 2010 – 2014, the most prevalent age group was 21 – 30 years old and the next most prevalent age group was 0 – 10 years old.

The number of files that did not have the age of patients recorded was 51 files.

Table 5: Number of patients in age groups ranging from 0 – 10 years to 91 – 100 years

Age groups	Number of patients	Percentage
0 - 10 years	146	17 %
11 - 20 years	43	5 %
21 - 30 years	154	18 %
31 - 40 years	126	15 %
41 - 50 years	127	15 %
51 - 60 years	109	13 %
61 - 70 years	53	6 %
71 - 80 years	24	3 %
81 - 90 years	7	1 %
91 - 100 years	1	0.1 %
NOT RECORDED	51	6 %

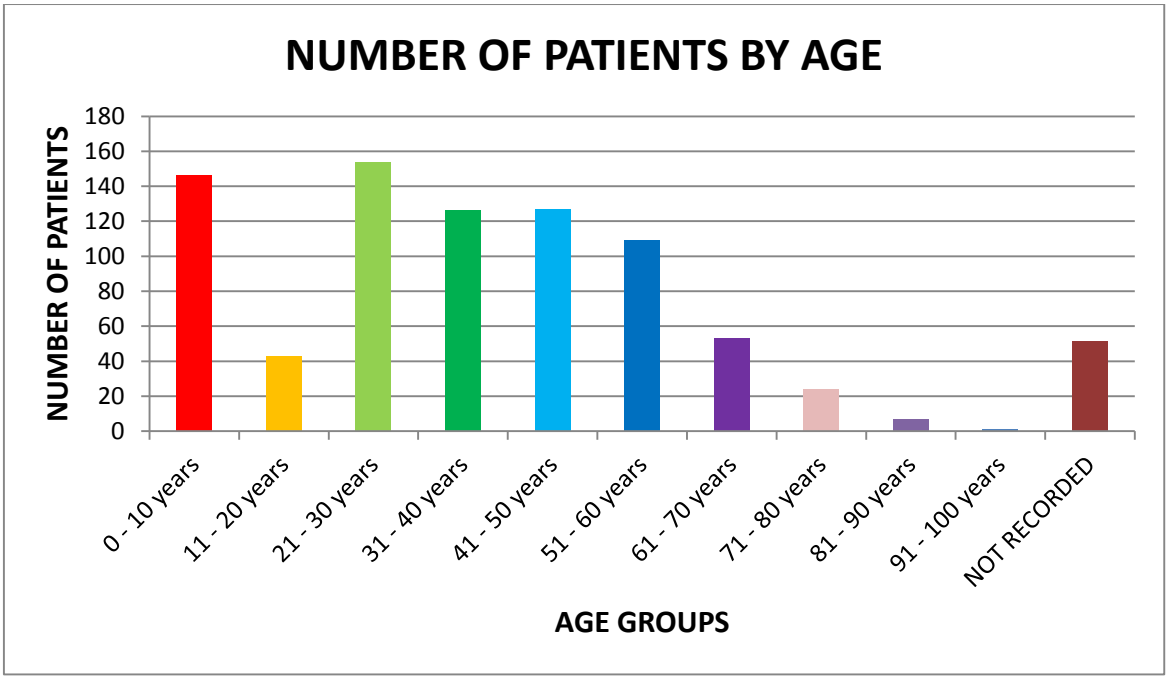


Figure 6: Number of patients in age groups ranging from 0 – 10 years to 91 – 100 years

4.2.2.3 Ethnicity

The data represented in Table 6 and Figure 7 show that the most prevalent race group were Africans being 692 patients while the second highest were Indians being 71 patients (the clinic is situated in an Indian area).

Table 6: Ethnic distribution of patients 2010 – 2014

Race Groups	Number of patients	Percentage
African	692	82 %
Coloured	47	6 %
Indian	71	8 %
White	31	4 %

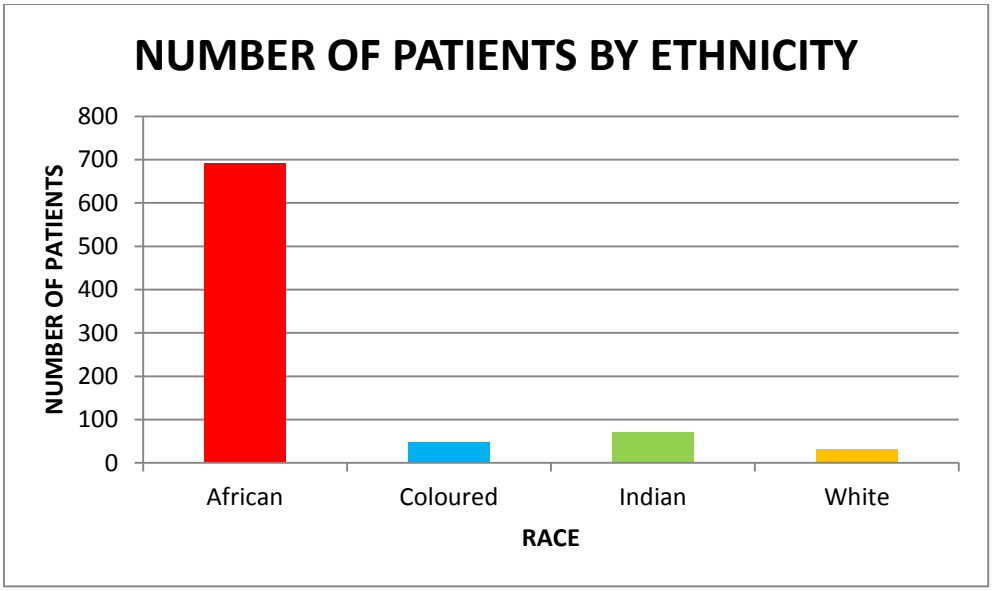


Figure 7: Ethnic distribution of patients during 2010 – 2014

4.2.3 Diagnosis

The data that is shown on Table 7 and Figure 8 show that the most commonly seen diseases at the Redhill clinic are arthritis, headaches and cough.

Table 7: Most prevalent diseases 2010 – 2014

DISEASES	NUMBER
Arthritis	84
Cough	71
Headaches	71
Back Pain	45
Influenza	42
Asthma	37
Dermatitis	32
Sinusitis	28
Upper respiratory tract infection	27
Depression	27

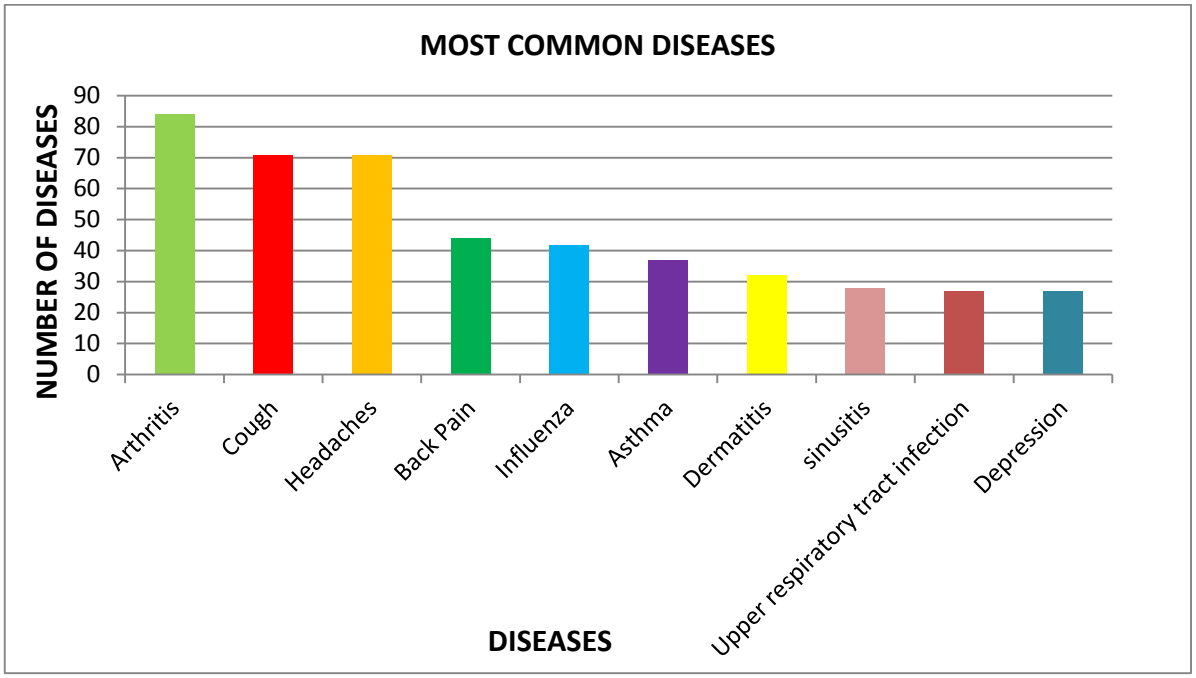


Figure 8: Most prevalent diseases 2010 – 2014

The table below represents the most prevalent diseases for females and males during the study period 2010 – 2014. The most prevalent disease in females is x and the most prevalent disease in males is x.

Table 8: Most prevalent disease according to gender

Gender	Prevalent disease
Females	Headaches
Males	Cough

The data below shows that headaches are the most prevalent disease that is found among patients at the Redhill clinic who are between the ages of 21 and 50 years old. The second most prevalent disease is arthritis in the elderly patients.

Table 9: Most prevalent diseases in each age group

Age group	Prevalent diseases
0 – 10	Cough
11 – 20	Sinusitis, asthma
21 – 30	Headaches
31 – 40	Headaches
41 – 50	Headaches
51 – 60	Arthritis
61 – 70	Asthma
71 – 80	Arthritis
81 – 90	Arthritis
91 - 100	Congestive cardiac failure

Figure 9 shows the most prevalent conditions that are seen at the Redhill clinic. The most prevalent condition is respiratory followed by musculoskeletal, infections, dermatological, gastro-intestinal and neurological.

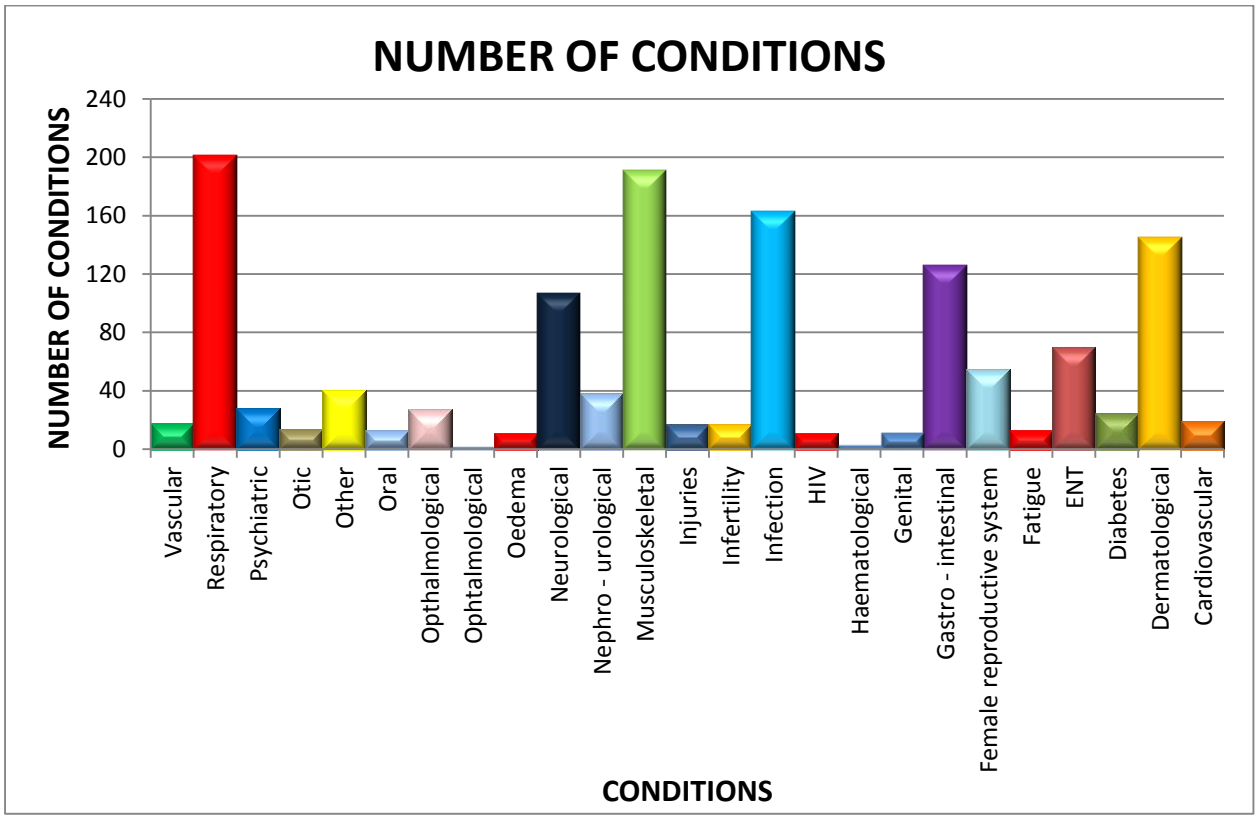


Figure 9: Diagnostic distribution per system during 2010 – 2014

Table 10 shows the most prevalent diagnosis per most prevalent pathology. The most prevalent respiratory diseases included cough (71), asthma (38) and upper respiratory tract infections (27). Musculoskeletal diseases mostly comprised arthritis (84). Infectious diseases included influenza (42), fungal infections (18) and boils (10). With regards to dermatological conditions, the most prevalent diseases found were different categories of dermatitis and eczema. Lastly, gastro-intestinal conditions comprising diarrhoea, gastric ulcers, constipation, abdominal pain and indigestion.

Table 10: The most prevalent diagnosis per most prevalent pathology

System	Number	Prevalent diagnosis per system	Number
Respiratory	201	Cough	71
		Asthma	38
		Upper respiratory tract infection	27
		Pharyngitis	18
		Tuberculosis	13
		Tonsilitis	12
Musculoskeletal	191	Arthritis	84
		Back Pain	45
		Joint Pain	14
Infection	163	Influenza	42
		Tinea Pedis	18
		Boils	10
		Ringworm	9
		Sexually transmitted infection	8
		Tinea crura	8
Dermatological	145	Dermatitis	32
		Allergic Dermatitis	21
		Eczema	21
		Atopic Dermatitis	18
		Heat rash	10
		Stasis Dermatitis	10
Gastro - intestinal	126	Diarrhoea	24
		Gastric ulcers	21
		Constipation	12
		Abdominal pain	11
		Indigestion	11
		Gastroenteritis	10

4.2.4 Treatment protocols

The data represented in Table 11 and Figure 10 show the most frequently prescribed remedies at Redhill clinic during 2010 to 2014. A range of 127 different remedies were prescribed; of these the most frequently prescribed remedies were *Pulsatilla* (78), *Arsenicum album* (75), *Rhus toxicodendron* (72), *Natrum muriaticum* (59) and *Bryonia alba* (54). They are all polycrest remedies.

Table 11: Frequent homoeopathic remedies prescribed 2010 – 2014

Homoeopathic Remedies	Number Prescribed
Pulsatilla	78
Arsenicum album	75
Rhus toxicodendron	72
Natrum muriaticum	59
Bryonia alba	54
Kalium carbonicum	47
Lachesis	45
Phosphorus	44
Sulphur	39
Mercurius solubilis	32

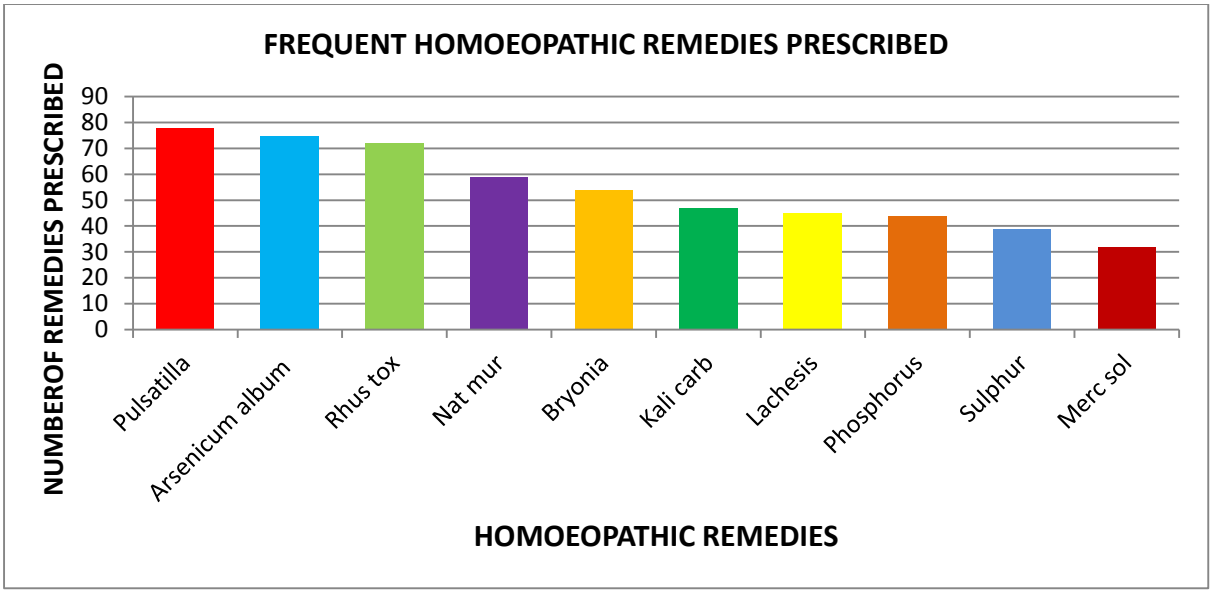


Figure 4: Frequent homoeopathic remedies prescribed 2010 – 2014

Table 12 and Figure 11 show the most most frequent creams and tinctures that were prescribed. *Hypercal* tincture was prescribed the most due to its use in dermatological conditions. It is used to apply to the skin for any infections or dermatitis etc. it can also be used as a gargle as it is an anti septic.

Table 12: Creams and tinctures that were prescribed 2010 – 2014

Creams & Tinctures	Number Prescribed
Hypercal tincture	129
Arnica cream	83
Cough syrup	66

Crataegus 3X	20
Hypercal cream	11

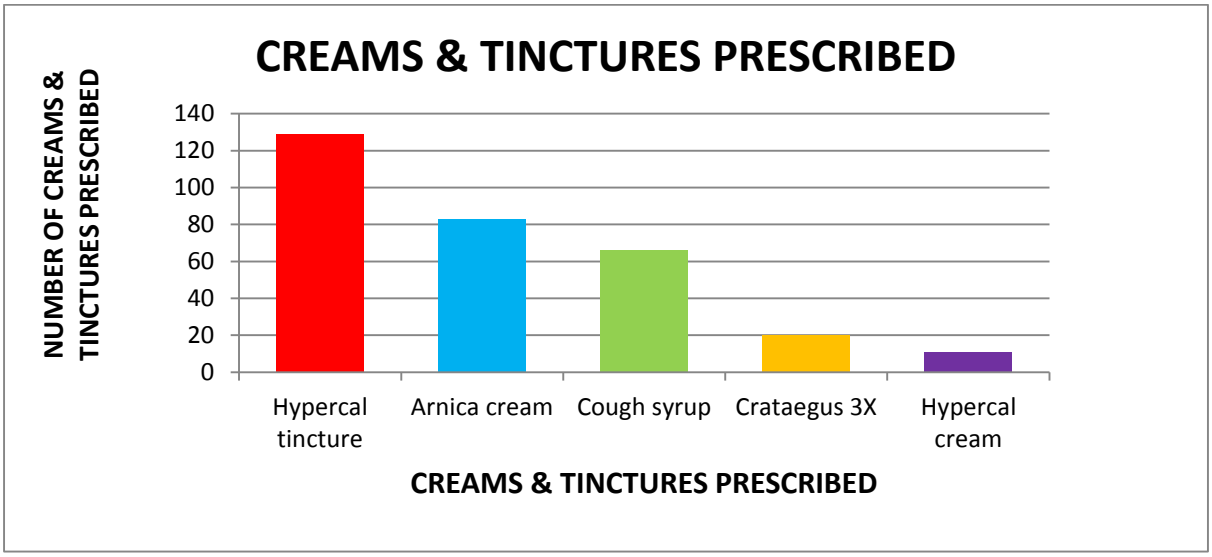


Figure 11: Creams & tinctures that were prescribed 2010 – 2014

Table 13 and Figure 12 show the most frequently prescribed tissue salts at Redhill clinic. There were very few tissue salts that were prescribed. The most common used one was headache combin as headaches are the most common disease that is seen at this clinic.

Table 13: Most frequently prescribed tissue salts that were prescribed 2010 – 2014

Tissue salts	Number Prescribed
Headache combin	15
Circulation combin	6
Kali mur D6	5
Constipation combin	4
Exhaustion combin	2
Mag phos tissue salts	2
Silicea D6	1
Nat mur combin	1

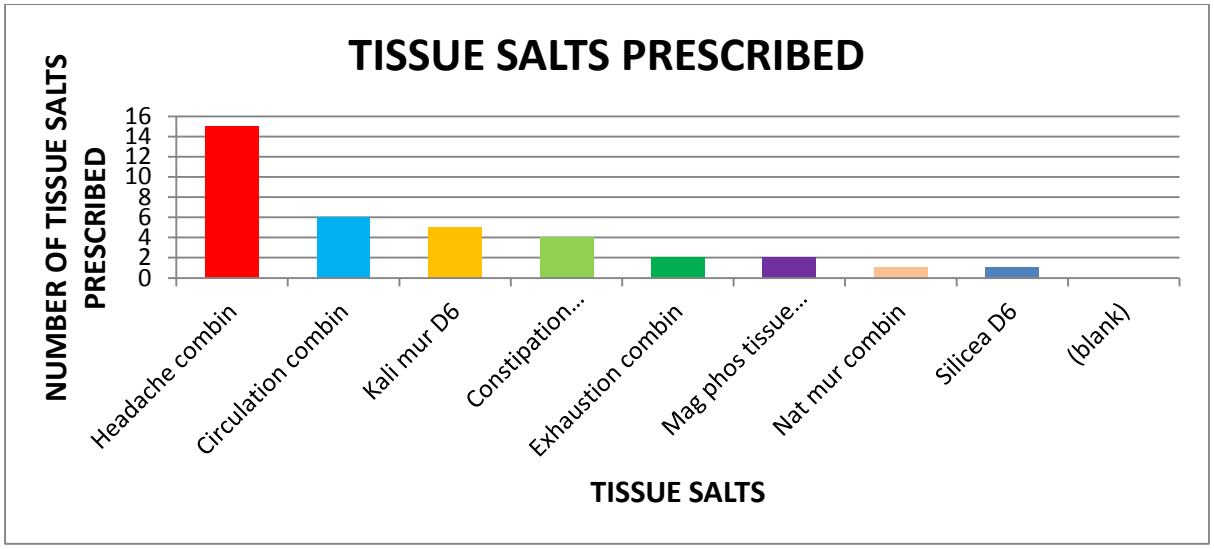


Figure 12: Most frequently prescribed tissue salts that were prescribed 2010 – 2014

Table 14: Most frequently prescribed potencies 2010 – 2014

Potencies	Number prescribed
6 CH	1
6CH +	1
9 CH	4
9 CH +	12
30 CH	129
30CH +	1039
200 CH	122
200CH +	31
M	28
10M	1
POTENCY NOT RECORDED	8

Table 14 shows the most frequently prescribed potencies at the Redhill clinic. The most common potency prescribed was 30CH + (plussed potency). It is in a liquid form that is most commonly given in a 25ml bottle with distilled water and 96% ROH. More than 1000 30CH + potencies were precribed, the next common potency prescribed was 30CH and 200CH in a powder form. Eight of the patient files did not have the potencies recorded.

Table 15: Most frequently used materials 2010 – 2014

Materials used	Number Prescribed
1 powder	10
3 powders	50
4 powders	9
5 powders	19
6 powders	63
7 powders	11
8 powders	11
9 powders	5
10 powders	5
12 powders	2
14 powders	1
25 ml bottle	1080
90 tissue salts	8
No 1 vial	40

The most commonly prescribed materials used are the 25 ml bottles as 1080 were used to dispense the 30CH + potency which is the most commonly prescribed potency.

4.2.5 Operational expenditure

Table 16 shows the cost of a clinician over a five year period.

Table 16: Operational expenditure over a five year period

YEARS	PERIOD CLINIC WAS OPEN	1 DAY PER WEEK	COST
2010	19/01/2010 – 21/12/2010	49 DAYS	R29 400
2011	04/01/2011 – 20/12/2011	51 DAYS	R30 600
2012	03/01/2012 – 07/12/2012	42 DAYS	R25 200
2013	04/01/2013 – 22/11/2013	24 DAYS	R14 400
2014	24/01/2014 – 05/12/2014	30 DAYS	R18 000
TOTAL COST OF CLINICIAN		**R117 600.00**	
TOTAL COST OF MEDICINE AND MATERIALS USED		**R11 122.85**	
TOTAL		**R128 722. 85**	

Initially, the clinic was open every week on a Tuesday morning from January 2010 to July 2012. The clinic was operating from 8am to 12pm every Tuesday. The clinician's fee was R150 an hour. In that year the clinic was open for 49 days, which was 1 day a week. The clinician's fee amounted to R29 400.

After July 2012, the day of the week changed from a Tuesday to a Friday morning. In August 2012 the clinic began to operate every second week due to unavailability of rooms. The clinician's fee amounted to R25 200 for 42 days. In 2013 the clinic was only open every second week, which reduced the cost of the clinician to R14 400. During the year 2014, there was another change where the clinic was open every second week on a Friday morning until the beginning of September 2014 where it was open every week until December 2014. The clinician' fee was R18000.

The total operational expenditure includes the cost of having a clinician which amounted to R117 600, the cost of medication (homoeopathic remedies, creams & tinctures, tissue salts) and the cost of materials used to dispense the medication which amounted to R11 111.15. The total cost over a five year period was calculated to be R128 711.15. On average, one patient costs the department approximately R30 per year all inclusive, which is very sustainable.

Any files which had missing information such as dates, diagnosis and treatments were discarded and excluded from this study. The costs of medication, materials used and the cost of the clinician were calculated only from the files that were included in this study.

CHAPTER 5 : DISCUSSION

5.1 INTRODUCTION

This chapter will discuss the results that were obtained in Chapter 4. The outline of the chapter is as follows:

- Consultations;
- Demographics;
- Diagnoses;
- Treatment protocols; and
- Operational expenditure.

These will be described in relation to the study and all relevant factors will be explored.

5.2 CONSULATIONS

The population that this research study aimed to describe included all patient files of those patients who attended the Redhill homoeopathic satellite clinic over a five year period from January 2010 to December 2014. There were 841 patient files that were investigated from 2010 to 2014. There were a total number of 1573 patient visits that were seen at the Redhill clinic during the five year period. One can assume that the data is valid as it is a representative of clinical activity at the clinic over a five year period.

The number of days the clinic was open for each year ranged from 49 days in 2010, 51 days in 2011, 42 days in 2012, 24 days in 2013 and 30 days in 2014. There are fluctuations in the number of days due to unavailability of rooms, public holidays and exam periods.

The clinic was open every week on a Tuesday morning from January 2010 to July 2012. After July 2012, it began operating on Friday mornings. It was still open every week until August 2012 where it began to operate every second week due to unavailability of rooms. During the year 2014, the clinic was still open every second

week on a Friday morning until the beginning of September 2014 when it was open every week until December 2014.

The number of patients that were seen at the clinic ranges from 353 – 76 during 2010 to 2014. Figure 1 shows that there has been a decrease in the number of patients from 353 patients in 2010 to 70 patients in 2013 with a slight increase from 70 patients in 2013 to 76 patients in 2014. This could be due to the clinic being open every week for the first two and a half years thereafter being open only every second week due to unavailability of rooms. The slight increase from 2013 to 2014 could be due to the clinic resuming opening every week from September 2014.

Figure 2 shows that 2010 had the highest number of new patient visits which were 349 and only 77 follow up visits. This is when the homoeopathic satellite clinic was taken over by the Durban University of Technology. The 5th year homoeopathic students were first exposed to treating patients at this clinic in 2010 and it was relatively new.

Figure 2 also shows that there was an increase in the number of follow up visits from 2010 to 2012. There were 77 follow up visits in 2010 and 161 follow up visits in 2012. The number of follow up visits then decreased from 161 visits in 2012 to 67 follow up visits in 2014 when the clinic started operating every second week.

The number of new patients was high in 2010 because the clinic was new therefore the majority were new patients. It can be seen that the number of patient visits has been consistent over the years as not many new patient files were made. This concludes that the first year the clinic was open, the numbers will be high because almost every patient is new whereas there are more follow ups in the subsequent years. Still, after five years of practice, there are more than 50 new patient and follow up visits every year which indicates patient satisfaction with homoeopathic treatment and that patients have enough confidence to return. It also shows that the clinic is maintainable and beneficial for the community.

Chapter 4, Figure 3 shows that the total number of patients who attended the clinic during 2010 to 2014 amounted to 841 patients. The total number of visits during 2010 to 2014 amounted to a sum of 1573 visits. The patients files showed that some of the patients had been for more than 20 visits however the number of visits

recorded were only the 10 most recent visits as shown on the data collection sheet. Thus, the total number of visits recorded was 1365.

As mentioned in Chapter 3, files that had any missing information such as dates were not accounted for. The total number of 1573 visits is a true representation of all the files that had complete information from 2010 – 2014. Another reason for the decrease in the number of patient visits from 2010 – 2014 is that the number of files with missing information had increased over the years therefore more of the files had to be discarded and were not included in this study.

These results contrast with those of Smillie (2010) who found that the number of patients at Ukuba Nesibindi Homoeopathic Clinic steadily increased over a four year period. There were, on average more new patients than follow up visits every year. The clinic was open for three hours a day two to three times a week and the Redhill clinic was only open once a week. Ukuba Nesibindi is not part of a municipality clinic as Redhill is.

5.3 GENDER

As seen in Chapter 4, Figure 4, the number of females was greater than the number of males. There were 841 patient files, of which 594 were of female patients, 197 of male patients and 50 where gender was unspecified. Figure 5 shows the gender distribution of patients over a five year period. It can be seen that there has been a decrease in the number of female and male patients since 2010.

These findings are supported by Smillie (2010) who found that more than 60% of the patients at Ukuba Nesibindi homoeopathic clinic were females. Erwin *et al.* (2014: 7-14) found that the Kenneth Gardens homoeopathic clinic was visited mostly by females. Louw (2005) also found that majority of the patients who attended the Technikon Witwatersrand Homoeopathic Health Clinic were females. This is a common trend that can be seen in most public health care clinics.

The majority of females can be explained based on the results seen in Figure 9 where there were more than 50 diagnoses of female specific conditions such as menstrual irregularities, cysts, vaginal thrush and breast abscesses.

According to the South African Government (2015) women are more likely to have a higher burden of disease as compared to men therefore they will need more services. The South African Government has certain interventions for women's health which include family planning and contraceptive services; they also need treatment after sexual assault and sexually transmitted infections as well as any female diseases such as cervical cancer.

Table 5 and Figure 6 in Chapter 4 show that the age group 0 – 10 years old are the second highest age group who attend the clinic. It is assumed that these children usually attend the clinic with their mothers and in most cases the mothers receive treatment for themselves as well. This is another reason for the high number of females who attend the clinic.

5.4 AGE

As shown in Chapter 4, Figure 6 the most prevalent age group was between 21 – 30 years old. There were 154 patients in this age group and 146 patients were babies and children who were younger than 10 years old. It is interesting that the prevalent age group to attend the clinic is between 21 – 30 years old because the clinic is open during working hours on a Friday morning. This may be related to Redhill clinic being situated in an impoverished community.

According to Lehohla (2015) the unemployment rate of the youth in the 15 – 34 year age group in South Africa has increased from 32% in 2008 to 35% in 2015. The level of education has improved over the period 2008 to 2015 but at least 43% of the employed youth and 50% of the employed adults do not have matric. This unemployment rate could be a reason for the high number of 21 – 30 year olds attending the clinic during working hours. Morrone (2007: 1-9) states that the high unemployment rate amongst youth is often associated with social and health problems such as violence, suicide, alcohol and drug abuse, and crime.

According to Statistics South Africa (2011) the unemployment rate is 30, 2% and the youth unemployment rate is 39% in the eThekwini municipality. The working age is between 15 – 64 years old which is the age group covering 70% of the patient files in the current study.

There were 146 babies and children under the age of 10 years old who received homoeopathic treatment. The children go to the municipality clinic for vaccinations and then often get referred to the homoeopathic section of the clinic if they are sick. Children are usually treated for complaints that are related to ear, nose and throat or if they have contracted infectious diseases such as measles and chickenpox.

The most common age group in Smillie's (2010) studies was 40 – 64 years old followed by the younger age group of 25 – 39 years old. Ukuba Nesibindi clinic is situated in a commuter zone where there are many small businesses and markets nearby and this could explain the high number of patients who are in the working age group (Smillie 2010).

Erwin *et al.* (2014: 7-14) found that the majority of patients who attended the Kenneth Gardens clinic were in the 50 – 59 year old age groups. This is due to the clinic being situated in a municipal housing estate in Durban where there are many geriatric patients.

5.5 ETHNICITY

According to South African History Online (2015) Chatsworth was a neighbourhood that was built to act as a buffer between the White and African areas and was the main Indian township located in Durban in the 1960s. It consisted mainly of poor, working class Indian people as a result of the Group Areas act. This act forced the separation of the different races to specific areas. It meant that only Whites could own or occupy land. In 1950, there were adverts for an exclusively Indian suburb. Redhill and other areas were then developed for Indians who could afford to build their own homes.

As mentioned above, Redhill is predominantly an Indian area however there were 692 patients who were African, 71 Indians, 47 Coloureds and 37 Whites as shown in Chapter 4, Figure 7 who attended the homoeopathic clinic.

According to Day, Gray and Budgell (2011: 148), the demographic indicators by ethnic group in South Africa showed that in 2011 there were 79.5% Africans, 9% Coloureds, 9% Whites and 2.5 % Indians. This supports the high number of African patients who attend public health care clinics.

Smillie (2010) found similar results where 80% of the patients who attended the Ukuba Nesibindi clinic were Africans and only 20% of the patients were Coloured and Indian. The clinic was not visited by any White patients. The majority of African patients at Ukuba were due to the specific location and history of the area. This was supported by the official provincial population demographics which showed that there were 69% African people, 20% Indian people, 8% Whites and 3% Coloured people in Kwa Zulu Natal.

5.6 DIAGNOSIS

According to Chapter 4, Table 10, the five most frequent conditions that were seen at the Redhill clinic which is part of the eThekwini municipality were respiratory, musculoskeletal, infections, dermatological and gastro-intestinal.

The most common diseases that were treated which are included in the above conditions were arthritis, headaches, cough, back pain and influenza as shown in Chapter 4, Table 7.

Each clinic will have different prevalent diseases depending on the location of the area. It depends on the infrastructure of the area, the quality of food, water and sanitation facilities. Environmental hazards such as pollution play an important role in the type of diseases that affects a community.

The most common complaint that patients presented with at the clinic were coughs and headaches. A cough is one of the common symptoms which patients seek medical attention for. It is the most frequent reason for a visit to the doctor. It is usually due to an upper respiratory tract infection that is sometimes related to influenza or the common cold. It could be an acute cough that lasts for less than 3 weeks or a chronic cough that lasts for more than 8 weeks (Dicpinigaitis, Colice, Goolsby, Rogg, Spector & Winther 2009: 1-8). The incidence of coughs or upper respiratory tract infections could be higher in informal settings where people are exposed to poor living conditions and overcrowding. They also have poor food and water quality which can lead to malnutrition. This leads to a lowered immunity which makes them more susceptible to contracting diseases and infections.

Air pollution is one of the leading causes for respiratory infections. As shown in Chapter 4, Figure 9, the highest number of diseases seen at the Redhill clinic are related to respiratory conditions. The Redhill clinic which is part of the eThekwini municipality is situated in an industrial area where there are many factories which poses a health risk for the local community.

According to Olaniyan, Dalvie and Jeebhay (2015) air pollution is a key environmental health issue globally. The population in highly industrialised and developing countries are affected the most. At least 23% of all deaths are due to environmental factors with air pollution being responsible for 3.2 million deaths per year. The WHO reported that 3.7 million premature deaths in urban and rural areas are caused by air pollution. Air pollution is one of the major causes for respiratory diseases especially in South Africa. Other studies have shown that exposure to air pollution that is related to traffic on the roads can contribute to asthma in children and infant mortality. Industrial air pollutants such as emissions from refineries are also associated with asthma. Exposure to sulphur dioxide or high levels of ozone can cause harmful effects such as breathing problems and reduced lung function.

An environmental health study was conducted by Wright and Diab (2011: 1-18) that focused on air pollution in the eThekwini municipality region in Durban. Air pollution is a major health threat to humans and exposure to certain pollutants in the air can lead to acute and chronic respiratory infections. The main sources of air pollution include industrial sources, mobile sources which are vehicle emissions from any mode of transport and from agricultural burning. A population in low income or impoverished communities become vulnerable due to poverty, disease, lack of education and poor living conditions (Wright & Diab 2011: 1-18).

Tuberculosis (TB) causes more than 2 million deaths annually. In 2011, the eThekwini Municipality, Durban, reported a defaulter rate of 24.3% while the WHO guideline is 5%. This is of concern as the risk of multiple drug resistant tuberculosis increases. This also causes a negative impact on vulnerable populations and on the overburdened health system (Rajagopaul, Kistnasamy & Reddy 2014: 27-32).

According to the results of a study conducted by Rajagopaul, Kistnasamy and Reddy (2014: 27-32) at least 89% of the patients who defaulted on TB treatment were African which implies that race was a predictor for defaulting. It was found that most

patients lived in overcrowded informal settings with a higher risk of spreading infections. Most of them also used wood for cooking which causes respiratory infections and exacerbates tuberculosis. Smoking, alcohol use and having a family member with TB is a significant risk factor. Malnutrition and lowered immunity are also risk factors that contribute to contracting TB, exacerbated by lack of money to buy nutritional food. People living in overcrowded informal settings also have other chronic diseases such as diabetes, asthma and hypertension causing them to have lowered immunity levels. People who live in informal settings face many challenges on a daily basis due to poor socioeconomic conditions, unemployment, limited access to health care and poor quality of food and water (Rajagopaul, Kistnasamy & Reddy 2014: 27-32).

Erwin *et al.* (2014: 7-14) found that respiratory conditions such as sinusitis, asthma and influenza were the most prevalent as well as non-communicable diseases such as diabetes, hypertension and arthritis. The incidence of these conditions is higher in low-income communities globally.

Headaches are another common symptom that many patients present with to their doctors or clinics. There were 71 new and follow up visits that presented with headaches at the Redhill clinic. According to Mateen, Dua, Steiner and Saxena (2008) a headache is a painful symptom and can be characterized as different types of headaches. Primary headache disorders have a lifetime prevalence of 90% and can occur as secondary headaches adding to the burden of ill health and disability. People in low income countries have a lack of resources and that can contribute to ill health.

According to the data collection sheet where the patient information was recorded, there were 84 new and follow up visits that presented with arthritis. There was 1 visit within the age group 21 – 30 years old, 6 visits within the age group of 31 – 40 years old, 6 within the 41 – 50 year old age group and 17 within the 51 – 60 year old age group and there were 10 between the ages of 61 – 90 years old. There were 44 patient visits with arthritis but no age was recorded. Back pain included 45 patient visits and it was common among the 41 – 60 year old age group. There were 33 females and only 4 males who were treated for arthritis and 33 patient visits did not have their gender recorded.

Osteoarthritis is the most common form of arthritis and is a major cause of pain. This condition can occur after the age of 45 but it is more common after the age of 60. It is more prevalent in women and more symptomatic in women but arthritis of the hip equally affects men and women. Rheumatoid arthritis is the most common persistent inflammatory form of arthritis and can occur in all ethnic groups but is most prevalent in Indians. It is also more common in females and can occur at any age (Colledge, Walker & Ralston 2010: 1083-1088). This is consistent with the findings of this research study regarding arthritis.

Many women are employed as domestic workers especially those who are from poor, impoverished communities. This is common in South Africa and other parts of the world where domestic workers try to survive and provide for their families by doing household chores for others. Some of the domestic chores involve cleaning floors on their hands and knees, sweeping and hand washing of clothes which could cause strain on their backs leading to back pain. A study by Alfers (2011: 10-13) found that a group of Tanzanian and Brazil domestic workers suffered from many health problems due to domestic work. Some of the health problems included chest pains, respiratory problems, backache, stomach problems, fungal infections, repetitive strain injury, leg pain and influenza. The occupation of patients at the Redhill clinic has not been recorded on the patient files therefore it is difficult to determine whether there is a relationship between the type of work that these patients do and their health conditions.

Smillie (2010) found that rheumatoid arthritis, osteoarthritis and lumbar pain were the most common musculoskeletal conditions seen at Ukuba Nesibindi. The highest percentage of patients were between the ages of 40 – 64 years old and it can be considered as a contributing factor to the high incidence of musculoskeletal conditions that were diagnosed at Ukuba Nesibindi.

The most common dermatological diseases that were treated at Redhill were dermatitis and eczema. Many forms of dermatitis were diagnosed and treated at Redhill such as allergic dermatitis, stasis dermatitis and atopic dermatitis. Eczema was common amongst babies and children. Poor socioeconomic standards and lack of hygiene causes an increase in the incidence of dermatological diseases.

According to Morrone (2007: 1-9) skin problems are the most common diseases that are seen in primary care settings. Skin conditions are the most common cause of illness in rural and urban areas and accounts for a high number of visits to primary health care centres. The number of cases of dermatological diseases are increasing due to climate changes which can favour the spread of pathogenic organisms, the high levels of poverty, the lack of personal and public hygiene, lack of clean water, poor housing and malnutrition.

The above factors can be a contribution to the high number of infectious skin diseases seen in the clinic including fungal infections, boils, ringworm and sexually transmitted infections. It is related to lack of cleanliness, lack of clean water and sanitation facilities as mentioned above.

According to Smillie (2010), the rate of crime, rape and domestic abuse is very high in South Africa. These conditions can force women from a young age onto the streets to become sex workers. This can lead to the increasing rate of sexually transmitted infections and HIV/AIDS.

Many patients go to the Redhill municipality clinic for ARV's and are also referred to the homoeopaths for additional treatment. These patients have a low immune system and are more susceptible to infections which cause them to be sicker. According to Naidoo (2014: 223-228) AIDS is a critical public health problem especially in developing countries. Recent studies have shown that at least 79% of people who are living with HIV make use of traditional, complementary and alternative medicines in conjunction with ARV's. Researchers have found that the use of traditional, complementary and alternative medicines by patients who have HIV is higher than any other disease. Women are more likely to resort to alternative therapies than men. Traditional medicines are utilised more in African communities particularly because there is no waiting list or screening for eligibility (Naidoo 2014: 223-228).

According to Naidoo (2014: 223-228) a randomised clinical trial was conducted with patients who had stage 3 AIDS and stage 1 lymphadenopathy. These patients were given single remedy homoeopathic treatment and they experienced a statistically significant change in their CD4 T lymphocyte counts. Patients who were given placebo showed no results. Another study showed that 63.5% of patients had used

herbal medicines after being diagnosed with HIV to treat ailments. There is mounting evidence proving the benefit of traditional, complementary and alternative medicines in the management of HIV/AIDS.

Naidoo (2014: 223-228) stated that “HIV positive patients who visited private sector doctors in the eThekwini Metropolitan Municipality of KwaZulu-Natal also visited other healthcare practitioners and utilised traditional, complementary and alternative medicines for their health condition, but also consumed alcohol and other illicit drugs which could have had a negative effect on the outcome of their health”.

Smillie (2010) found that the most common diseases that were seen at Ukuba Nesibindi was related to infectious, cardiovascular, dermatological, psychological and musculoskeletal conditions. The clinic is located in Warwick junction where there is a ‘tavern’ next door. It is a poverty stricken area where most traders work long hours in hazardous conditions such as cooking on open fires and inhaling exhaust fumes. They have to endure flare ups of crime and violence and avoid harassment from security workers or customers (Smillie 2010). These living conditions could lead to the increase in infectious and respiratory diseases in the area.

Erwin *et al.* (2014: 7-14) found that the most prevalent diseases seen at Kenneth Gardens were related to respiratory conditions, arthritis, hypertension, gastro-intestinal conditions and diabetes. Kenneth Gardens is situated in a housing estate where there are many elderly patients who attend the clinic therefore there is an increase in chronic conditions such as arthritis, diabetes and hypertension.

This shows that it is important to take the location of the clinic into consideration as each community exhibits different needs. The prevalence of diseases in different areas depends on the location and on the surrounding environment of that area.

As mentioned in Chapter 2, these community clinics are also beneficial to students as it allows them to learn more about health systems and the different pathologies that have been discussed above. They gain practical experience of different diseases which is more valuable than the theoretical knowledge which they gain from textbooks.

5.7 TREATMENT PROTOCOLS

As shown in Chapter 4, Table 11, the five most frequently prescribed remedies at the Redhill clinic were *Pulsatilla pratensis*, *Arsenicum album, Rhus toxicodendron, Natrum muriaticum* and *Bryonia alba.*

According to Morrison (1993), *Pulsatilla* is more of a feminine remedy that has a soft and gentle nature. The patient who needs *Pulsatilla* is often emotional, sympathetic, and shy and they feel better after consolation but can also be quite irritable. It is often prescribed for a wide range of conditions such as migraines, headaches, hay fever, conjunctivitis, acute and chronic otitis media, dysmenorrhea and endometriosis. According to the results from the data collection sheets, more than 50 females and only 7 males were prescribed *Pulsatilla*. It was also often prescribed for infertility, measles and stasis dermatitis.

Arsenicum album was the second most frequently prescribed remedy and it can be used for many disorders. A patient who needs this remedy is described as insecure, irritable, and anxious about their health and is very restless. It can be used to treat many gastro-intestinal conditions such as gastritis, peptic ulcers and vomiting and diarrhoea (Morrison 1993). It was mostly used at this clinic for gastritis, ulcers and diarrhoea.

The above remedies are used to treat a variety of conditions and similar findings was reported by Smillie (2010) who found that the most frequently prescribed remedies at the Ukuba Nesibindi clinic were *Natrum muriaticum,* followed by *Sepia officinalis, Aconitum napellus, Staphysagria delphinium* and *Pulsatilla nigricans.*

A retrospective study of prescribing trends for 4 years at the Glasgow Homoeopathic Hospital (Kayne & Beattie 1998: 190-194) showed that in all four years *Natrum muriaticum* was the most frequently prescribed medicine. *Pulsatilla pratensis*, *Sulphur* and *Sepia officinalis* also fell consistently into the top ten medicines prescribed.

The common remedies that were prescribed at the above mentioned clinics are known as Polychrests. As mentioned in Chapter 2, Polychrests are remedies with a wide range of action on body systems or organs, thus suitable for a number of illnesses, disorders or symptoms (Geddes & Grosset 1999).

There is no specific remedy for a specific disease or condition. Homoeopathy is used to treat a patient in a holistic manner. A remedy that is specific for a patient will be prescribed once their physical, mental and emotional state is taken into account. The way in which homoeopathy works is that every remedy is capable of treating a variety of conditions however the approach is individualistic therefore the patient does not have to have all the symptoms of a disease or remedy for it to be prescribed. Two patients who present with the same symptoms of a disease will not necessarily have the same remedy prescribed.

As shown in Chapter 4, Table 12, certain creams and tinctures were also prescribed at the Redhill clinic. The most frequently used tincture was *Hypercal* which was prescribed 129 times. According to Hoffman (2006: 40-47) *Hypercal* is made from equal parts of the homoeopathic mother tinctures *Hypericum perforatum* and *Calendula officinalis* and is available as a lotion or cream. *Hypercal* is used for the wound healing properties of *Calendula officinalis* and the pain relieving properties of *Hypericum perforatum*.

According to Smillie (2010) *Calendula officinalis* which is part of *Hypercal* is commonly used by homoeopaths topically and orally as a mild bactericide, antiseptic and anti-inflammatory. It was frequently used in Ukuba Nesibindi to treat incidences of infectious and dermatological disorders.

Many of the patients who present with dermatological conditions and infectious diseases are often prescribed *Hypercal* tincture to apply to their skin. It is used as a disinfectant and an antibacterial in many skin conditions that are treated at Redhill clinic which include fungal and ringworm infections, boils, sexually transmitted diseases, dermatitis and eczema.

Arnica cream was prescribed 83 times at the clinic. It is usually prescribed to patients who suffer from arthritis or joint pain. It is also prescribed if patients have any pain from injuries or sprains and it is always given in a cream form to patients who have any musculoskeletal pain.

Cough syrup was prescribed 66 times. This correlates with Table 7 that shows the high number of coughs that were diagnosed at Redhill. It is often prescribed as an adjunct to any homoeopathic remedy that is given to the patient. Many of the herbal

tinctures are sponsored for the clinic but are not always available. It will be beneficial to the patients of the clinic if more respiratory tinctures were sponsored as respiratory conditions were the most prevalent.

As shown in Chapter 4, Table 11, tissue salts were rarely prescribed at the Redhill clinic. The most frequently prescribed tissue salts were Headache Combin and Circulation Combin. This correlates with Table 7 that shows the high number of headaches that were seen at the clinic. Tissue salts are also prescribed as an adjunct to homoeopathic remedies. These tissue salts were also commonly prescribed at Ukuba Nesibindi (Smillie 2010).

According to Chapter 4, Table 14, the most frequently prescribed potency was a 30CH 'plussed' potency which was given in a liquid form. There were 1039 30CH 'plussed' potencies that were prescribed at Redhill clinic. A liquid potency enhances the effectiveness of the remedy. Patients are also used to taking allopathic medicines on a daily basis therefore it was decided to give the homoeopathic remedy on a daily basis as well (de Schepper, 2001). According to O'Reilly (1996), 'plussed' potencies are prescribed to patients with instructions to succuss the bottle ten times as stated in Chapter 2. The purpose of succussing 'plussed' potencies is to strengthen the dose each time before taking the remedy. It means that the patient is not receiving the same dose every day and that the dynamic action of the remedy continues to stimulate the vital force.

The 30CH plussed potency is always prescribed in a liquid form in bottles therefore the most frequently used materials were 25ml bottles as 1080 of these were used as seen in Chapter 4, Table 15. The *Hypercal* tinctures are also prescribed in 25 ml bottles as it is a liquid. Patients were often prescribed 6 powders at a visit but it depends on how often they would need to take a remedy. The use of 3 powders was prescribed 50 times and number 1 vials of a remedy were prescribed 40 times.

5.8 OPERATIONAL EXPENDITURE

The operational expenditure of a public homoeopathic satellite clinic includes the cost of having a clinician, the cost of medication which comprises homoeopathic remedies, creams and tinctures, tissue salts as well as the cost of materials used to dispense the medication. Chapter 4, Table 16 shows the combined costs over a five

year period from January 2010 to December 2014. The clinician's fee was R150 per hour excluding inflation rates.

Initially, the clinic was open every week on a Tuesday morning from January 2010 to July 2012. The clinic was operating from 8am to 12pm every Tuesday. In 2010, the clinic was open for 49 days, which was 1 day a week. The clinician's fee amounted to R29 400.

After July 2012, it began operating on Friday mornings however it was still open every week until August 2012 where it began to operate every second week due to unavailability of rooms. The clinician's fee amounted to R25 200 for 42 days.

In 2013 the clinic was open only every second week because there were no rooms available. The cost of the clinician significantly decreased to R14 400. During the year 2014, there the clinic was open every second week on a Friday morning until the beginning of September 2014 when it was open every week until December 2014. The clinician' fee was R18000.

Over a five year period, the clinician's fee amounted to R117 600 and the total cost of medicines and materials used amounted to R11 122.85. That is very cost effective. Also, it is a worthwhile opportunity for students to get first hand clinical experience and that is the most significant reason.

The total cost over a five year period was calculated to be R128 722.85. This shows that it is very cost effective and inexpensive to maintain a homoeopathic satellite clinic. On average, one patient costs the department approximately R30 per year all inclusive, which is very sustainable.

According to Marten *et al.* (2014: 2164-2171) the health system faces many challenges in trying to achieve universal health coverage. The National Treasury has financial feasibility concerns due to the current global economic crisis. The resource requirements for universal health coverage indicate that total expenditure on health care will increase. The spending from public funds would also need to increase. Human resources still remain as a major challenge in the health care system. Strategies such as increasing training capacity of health workers and accessing resources from the private sector are being explored.

Large amounts of money gets spent on health care however the government still faces many challenges and burdens concerning financial feasibility. As stated in Chapter 2, there is a critical shortage of health care workers in South Africa which is a challenge to the healthcare system. The government should consider allowing homeopaths to play a role in the public health care system. It could be beneficial in alleviating the demand for health care workers and it is very cost effective and inexpensive to maintain as mentioned above.

CHAPTER 6 : CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The number of new patients have decreased from 2010 to 2014 and the numbers of follow up visits have increased from 2010 to 2012. The clinic was open every week from 2010 and then after 2012 the number of visits decreased because the clinic was only open twice a month due to unavailability of rooms. The numbers of patient visits has been consistent with more than 50 new and follow up visits each year. This suggests that there has been patient satisfaction with homoeopathic treatment over the years.

From a demographic perspective, the study has shown that there were a greater number of females than males and that majority of the patients were African. This is a common trend that appears in other similar studies. The most common age groups that visited the clinic were babies and children who were younger than 10 years old and patients between the ages of 21 – 30 years old.

The most common conditions that presented at the Redhill clinic were respiratory, musculoskeletal, infectious and dermatological. The most prevalent diseases that were treated at the clinic related to the above conditions were coughs, headaches and arthritis.

The homoeopathic satellite clinic is unique as it is enclosed within the Redhill municipal clinic where allopathic doctors also practice medicine. This setting is advantageous because the nursing sisters at the clinic often refer patients to the homoeopathic satellite clinic. Patients were treated with homoeopathic remedies, herbal tinctures and creams and tissue salts.

The operational expenditure of a homoeopathic satellite clinic included the cost of the clinician and the costs of medicines and materials used. The total costs was calculated to be less than R130 000 over a five year period. This shows that it is very cost effective and inexpensive to maintain a homoeopathic satellite clinic.

The results that were obtained from this study imply that the inclusion of homoeopathic satellite clinics in disadvantaged communities such as Redhill is beneficial and viable. The practice of homoeopathy is viable especially because of the current challenges that the health system of South Africa is exposed to. One of the significant concerns is that there is a shortage of health care workers in the public health care system. Homoeopathy is not included in the public health care system at present but it can assist with the shortage of health care workers. Homoeopaths can attend to the large number of patients who live in impoverished areas with the use of homoeopathic satellite clinics.

This study also shows that community learning is valuable to students as it provides them with many benefits. They become better equipped with practical knowledge, skills and training. They gain first-hand exposure in treating patients with different diseases. They learn more about the different remedies that are used. It also allows them to become more confident in treating patients, which is beneficial for the community as well as for the students.

This study did not aim to investigate the possibility of incorporating homoeopathy into public health care at present but it can be used as a model for the inclusion of homoeopathy into other public health care facilities. The common diseases and treatment protocols that were obtained from this study can be used to assist in planning for more homoeopathic satellite clinics in the future.

6.2 RECOMMENDATIONS

- The information that is recorded on the patient files needs to be completed in full or patient forms can be drawn up where all the patient details and dates can be included. This can be useful should another clinical audit be conducted in future studies.

- The data collection tool should allow for more than 10 follow up visits so that the results will present a real count of the number of visits. This will be beneficial for future studies.

- Demographic data such as gender, age, race and occupation should be consistently recorded as some of the patient files had missing information and could not be included in the study. Including the occupation of patients would enable the researcher to determine the rate of unemployment of the catchment area.

- An evaluation study should be conducted that focuses on the environmental hazards of impoverished areas where there are existing health clinics as this could be a contributing factor for the majority of diseases. Environmental factors such as air pollution could increase the rate of airborne diseases. The socioeconomic standards of surrounding areas also need to be explored.

- An environmental health study should be conducted in the Redhill area to determine the causes of high numbers of respiratory diseases as it is situated in an industrial area.

- It was found that headaches, coughs and arthritis are the most prevalent diseases therefore sponsorships should be requested for more herbal tinctures for the above mentioned conditions for the benefit of patients.

- The establishment of more homoeopathic clinics should be explored or considered as they can relieve the growing demand for public health care. Such clinics operate at a fraction of the cost compared to mainstream clinics.

- In order to determine the potential for homoeopathy into primary healthcare, further investigations into the clinical effectiveness of homoeopathic treatment as well as the public's acceptance of homoeopathy needs to be undertaken.

REFERENCES

Alfers, L. 2011. *Occupational health and safety & domestic work* (online). Available at: http://wiego.org/sites/wiego.org/files/resources/files/OHS_DW_Eng_2012.pdf (Accessed 15 September 2015).

Allied Health Professions Council of South Africa (AHPCSA). 2010. (online). Available: http://www.ahpcsa.co.za/ (Accessed 6 February 2015).

Bloch, R., & Lewis, B. 2003. *Homoeopathy for the home.* Cape Town: Struik Publishers.

Botha, I. 2011. *Homoeopathy in primary health care in South Africa*: *a pilot study*. 66th LMHI Congress. New Delhi, India, 1 – 4 December.

Colledge, N., Walker, & B., Ralston, S. eds. 2010. *Davidson's principles & practice of medicine*. 21st ed. Churchill Livingston: Elsevier, 1083 – 1088.

Coovadia, H., Jewkes, R., Barron, P., Sanders, D., & McIntyre, D. 2009. The health and health system of South Africa: historical roots of current public health challenges. *The lancet*, 374(9692): 817-834.

Couchman, I. 2015. Interviewed by P. Pramlall. Durban University of Technology. Durban, 03 March 12:30.

Das, E. Shah, R., & Menon, S. 2015. *Report on World Homoeopathy Summit organized by Global Homoeopathy Foundation* (online), 9(2): 109-113. Available at: http://ijrh.org/temp/IndianJResHomoeopathy92109-1260887_033008.pdf (Accessed 19 August 2015).

Daviaud, E. & M. Chopra. 2008. How much is not enough? Human resources requirements for primary health care: a case study from South Africa. *Bulletin of the World Health Organization*, 86: 46-51.

Day, C., Gray, E., & Budgell, E. 2011. *Health and related indicators* (online). Available at:

http://reference.sabinet.co.za/webx/access/electronic_journals/healthr/healthr_2011_a13.pdf (Accessed 11 September 2015).

De Schepper, L. 2001. *Hahnemann revisited*. Santa Fé NM: Full of Life Publications

Diab, P., & Flack, P. 2013. Benefits of community-based education to the community in South African health sciences facilities. *African journal of primary health care & family medicine* (online), 5(1). Available at: http://www.phcfm.org/index.php/phcfm/article/view/474/585 (Accessed 27 September 2015).

Dicpinigaitis, P., Colice, G., Goolsby, M., Rogg, G., Spector, S., & Winther, B. 2009. Acute cough: a diagnostic and therapeutic challenge. *Cough journal* (online), 5(11): 1-8. Available at: http://www.coughjournal.com/content/pdf/1745-9974-5-11.pdf (Accessed 14 September 2015).

Durban University of Technology. 2015. Homoeopathy Handbook (online). Available at: http://www.dut.ac.za/faculty/health_sciences/homoeopathy#entry (Accessed 12 August 2015).

Erwin, K., Marks, M., & Couchman, I. 2014. Homeopathic health care in a low-income housing estate in Durban: possibilities for a plural health care model in South Africa. *The international journal of health, wellness and society*, Volume 3.

EThekwini Municipality. 2011. *Clinical services* (online) Available at: http://www.durban.gov.za/City_Services/health/Pages/Clinical_Services.aspx (Accessed 17 September 2014).

Geddes & Grosset (corporate author). 1999. *Gedew & Grosset guide to homeopathy*. New Lanark, Scotland: Geddes & Grosset.

Getoff, D. 2013. *Homeopathy a misunderstood science* (online). Available: http://www.clintpublications.com/documents/June_OI_2013.pdf (Accessed 19 August 2015).

Google maps. 2015. *Redhill clinic, Effingham Road, Durban*. AfriGIS (Pty) Ltd, Google.

Harris, B., Goudge, J., Ataguba, J., McIntyre, D., Nxumalo, N., Jikwana, S., & Chersich, M. 2011. Inequities in access to health care in South Africa. *Journal of public health policy* (online), 32: S102-S123. Available at: http://www.palgrave-journals.com/jphp/journal/v32/n1s/abs/jphp201135a.html (Accessed 11 August 2015).

Hoffman, D. 2006. The relative and combined efficacy of the homoeopathic similimum (taken orally) and the topical application of a lotion (prepared from the homoeopathic mother tinctures of *Hypericum perforatum* and *Calendula officinalis*) in the treatment of venous leg ulcers. M. Tech: Homoeopathic dissertation, Durban University of Technology, Durban.

Homoeopathic Association of South Africa (HSA). 2012. (Online.) Available: http://www.hsa.org.za/homoeopathy-explained (Accessed 19 August 2015).

Homoeopathy Community. 2008. Scales of potentisation (online). Available at: http://www.homoeopathycommunity.com/CentisimalandDecimalScale.asp (Accessed 23 September 2015).

Kayne, S., & Beattie N. 1998. A study of remedies prescribed at Glasgow Homoeopathic Hospital. *British homoeopathic journal*, 87: 190-194.

Kautzkyi, K. & Tollman, S. M. 2008. *A perspective on primary health care in South Africa.* In: Barron, P. & Roma-Reardon, J. eds. *South African health review.* Durban: Health Systems Trust: Durban. 17-30.

Khumalo, P. 2015. Patients' experiences of homoeopathic care rendered at a primary health care facility in the eThekwini district. M. Tech: Homoeopathic dissertation, Durban University of Technology, Durban.

Leckridge, B. 1997. *Homoeopathy in primary care*. New York: Pearson Professional Limited.

Lehohla, P. 2015. Quarterly labour force survey (online). Available at http://www.statssa.gov.za/ (Accessed 11 September 2015).

Louw, M. 2005. Analysis of Patient Profiles at the Technikon Witwatersrand Homoeopathic Health Clinic in 2003. M. Tech: Homoeopathic dissertation, University of Johannesburg.

Manchanda, R. 2012. *Homoeopathy in public health care in India* (online). Available at: http://www.informationen-zur-homoeopathie.de/?p=575 (Accessed 12 August 2015).

Manchanda, R., & Kulashreshtha, M. 2005. *Cost effectiveness and efficacy of homoeopathy in primary health care* (online). Available at: http://www.delhi.gov.in/wps/wcm/connect/doit-homeopathy/Homeopathy/Home/Clinical+Studies+And+Publications/Cost+Effectiveness+in+P.H.C+Unit (Accessed 12 August 2015).

Marten, R., McIntyre, D., Travassos, C., Shishkin, S., Longde, W., Reddy, S., & Vega, J. 2014. An assessment of progress towards universal health coverage in Brazil, Russia, India, China, and South Africa (BRICS). *The Lancet* (online). 384: 2164–2171. Available at: http://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(14)60075-1.pdf (Accessed 16 September 2015).

Mateen, F. J., Dua, T., Steiner, T. & Saxena, S. 2008. Headache disorders in developing countries: research over the past decade. *Cephalalgia journal* (online). Available at: http://www.l-t-b.org/assets/43/AD3430D9-CB7B-11FA-45855267C6C0D716_document/Research_in_LAMI_countries_online_version.pdf (Accessed 14 September 2015).

Mayosi, B., & Benatar, S. 2014. Health and health care in South Africa – 20 years after Mandela. *The New England journal of medicine* (online), 371: 1344-1353. Available at http://www.nejm.org/doi/full/10.1056/NEJMsr1405012#t=article (Accessed 4 August 2015).

Mayosi, B., Lawn, J., Niekerk, A., Bradshaw, D., Karim, S., Coovadia, H. 2012. Health in South Africa: changes and challenges since 2009. *The lancet* (online), 380(9858): 2029-2043. Available at: http://www.sciencedirect.com/science/article/pii/S0140673612618145 (Accessed 4 August 2015).

Morrison, R. 1993. *Desktop guide to keynotes and confirmatory symptoms*. Albany, California: Hahnemann Clinic Publishing.

Morrone, A. 2007. Poverty, health and development in dermatology. *The international journal of dermatology* (online), 46(2): 1-9. Available at: http://www.skincareforall.org/wp-content/uploads/2012/10/21.-Poverty-Health-and-Development-in-Dermatology.pdf (Accessed 15 September 2015).

Mthembu, J. 2010. *The road to National Health Insurance* (online). Available at: http://www.anc.org.za/show.php?id=6013 (Accessed 7 February 2015).

Naidoo, P. 2014. Other health-seeking behaviour of HIV and AIDS patients visiting private sector doctors in the eThekwini Metropolitan Municipality of KwaZulu-Natal, *South African family practice* (online), 56(4): 223-228. Available at: http://www.tandfonline.com/doi/pdf/10.1080/20786190.2014.953884 (Accessed 16 September 2015).

National Centre of Complementary and Alternative Medicine. 2012 (online). Complementary and Alternative Medicine. Available: http://www.nccam.nih.gov/health/whatiscam (Accessed 23 September 2015).

Nienaber, S. 2014. Interviewed by P. Pramlall. Durban University of Technology. Durban, 17 September 10:00.

Nienaber, S. 2015. Interviewed by P. Pramlall. Durban University of Technology. Durban, 27 July 09:00.

Olaniyan, T., Dalvie, M., & Jeebhay, M. 2015. *Ambient air pollution and childhood asthma: a review of South African epidemiological studies* (online) Available at: http://reference.sabinet.co.za/webx/access/electronic_journals/caci/caci_v28_n2_a11.pdf (Accessed 14 September 2015).

O'Reilly, W. B. 1996. *Organon of the medical art*. Translation by S. Decker. 6th ed. Redmond WA: Birdcage Books.

Pillay, S. 2013. A study on the knowledge, attitudes and perceptions of primary healthcare nurses in the eThekwini municipality district with regards to the inclusion

of homoeopathy in the primary healthcare. M Tech: Homeopathy dissertation. Durban University of Technology.

Rajagopaul, A., Kistnasamy, E., & Reddy, P. 2014. Predictors of tuberculosis treatment defaulting in informal dwellers within the eThekwini Municipality, KwaZulu-Natal. *Southern African Journal of Infectious Diseases* (online), 29(1): 27-32. Available at: http://www.sajei.co.za/index.php/SAJEI/article/view/502 (Accessed 12 September 2015).

Roberts, R. 2008. *Integrating homoeopathy into primary care* (online). Available at: http://dcscience.net/rachel-roberts-soh+refs--nhe-nov-dec-2008.pdf (Accessed 12 August 2015).

Roddis, N. 2009. A descriptive study investigating an Indian homoeopathic medical hospital as a homoeopathic primary health care facility. M. Tech: Homoeopathic dissertation, University of Johannesburg, Johannesburg.

Sekhejane, P. R. 2013. South African National Health Insurance (NHI) policy: prospects and challenges for its efficient implementation. Africa Institute of South Africa. (online). Available at: http://www.ai.org.za/wp-content/uploads/downloads/2013/12/South-African-National-Health-Prospects-and-Challenges-for-its-Efficient-Implementation.pdf (Accessed 11 August 2015).

Shirwaikar, A., Govindarajan, R., & Rawat, A. 2013. *Integrating complementary and alternative medicine with primary health care* (online). Available at: http://www.hindawi.com/journals/ecam/2013/948308/ (Accessed 12 August 2015).

Skinner, S. 2001. *An introduction to homoeopathic medicine in primary care*. Aspen: Jones & Barlett Learning.

Smillie, T. 2010. A clinical audit of the Durban University of Technology homoeopathic satellite clinic established at Ukuba Nesibindi. M. Tech: Homoeopathic dissertation, Durban University of Technology, Durban.

South African Government (online). 2015. Available at: http://www.gov.za/about-SA/health (Accessed 11 September 2015).

Statistics South Africa (online). 2011. Available at: http://www.statssa.gov.za/?page_id=1021&id=ethekwini-municipality (Accessed 11 September 2015).

South African History Online (online). 2015. Available at: http://www.sahistory.org.za/place/chatsworth (Accessed 11 September 2015).

Ullman, R. and Reichenberg-Ullman, J. 1995. *The patients guide to homeopathic medicine (updated)*. Edmonds, WA: Picnic Point Press.

Vithoulkas, G. 1993. *The science of homeopathy*. B. Jain, New Delhi.

Watson, T. 2014. A patient benefit and perception survey of the Durban University of Technology homoeopathic satellite clinic established at Ukuba Nesibindi. M. Tech: Homoeopathic dissertation, Durban University of Technology, Durban.

World Health Organisation. 1978. *Declaration of Alma-Ata, International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978* (online). Available: http://www.who.int/publications/almaata_declaration_en.pdf (Accessed 18 August 2015).

World Health Organisation. 2008. *International conference on primary health care and health systems in South Africa* (online). Available at: http://www.afro.who.int/index.php?option=com_content&view=article&id=2034&Itemid=830 (Accessed 18 August 2015).

World Health Organisation. 2014. *500+ Organizations launch Global Coalition to Accelerate Access to Universal Health Coverage* (online). Available at: http://www.who.int/universal_health_coverage/en/ (Accessed 19 August 2015).

Wright, C. Y. & Diab, R. 2011. Air pollution and vulnerability: solving the puzzle of prioritization. *Journal of environmental health* (online), 1-18 Available at: http://researchspace.csir.co.za/dspace/bitstream/10204/4792/1/Wright_2011.pdf (Accessed 12 September 2015).

APPENDICES

Appendix A: Letter to Dr Nienaber

Dear Dr S Nienaber,

Re: Permission to conduct a retrospective clinical audit of the Durban University of Technology homoeopathic satellite clinic in Redhill.
I am currently registered for a Masters Degree at the Durban University of Technology: Homoeopathy. In order to obtain my degree I am required to complete a mini-dissertation. My mini-dissertation is a clinical audit of the DUT homoeopathic satellite clinic in Redhill.

Purpose of clinical audit:
The aim of this retrospective, descriptive and investigative study is to determine a patient demographic and disease profile, describe the various treatment protocols applied as well as the resultant treatment outcomes, it is anticipated that the establishment of such formal data may define the feasibility and viability of homoeopathic care in the primary healthcare sector as well as external funding obtained to aid the clinic setting further.

My research aims to focus on the patient demographics such as age and gender, disease prevalence, treatment protocols, as well as the financial implications of each patient. The patients at this clinic will not be interviewed. The information will only be accessed from the patient files at the clinic and any data which can identify the patients will not be captured.

In order to carry out my research I need to access patient files at the clinic. I would like to request permission to do so, noting that patient confidentiality will be maintained as no names need to be used, no copies of patient files will be made nor shall any of the files be removed from the Redhill Homoeopathic Clinic.

Your participation will be greatly appreciated.
Many thanks,

Dr I Couchman
Supervisor
Email: ingridc@dut.ac.za

Dr S Nienaber
Co - Supervisor
Email:drnienaber@positivehealthkzn.co.za

Pratisha Pramlall
M Tech Student
Email: pratisha01@gmail.com

Appendix B: Letter to District Manager, eThekwini Health District

DUT DURBAN UNIVERSITY OF TECHNOLOGY

The District Manager
eThekwini Health District
Mayville
4000

18 May 2015

Dear Sir/ Madam

<u>Re: Permission to conduct a retrospective clinical audit of the Durban University of Technology homoeopathic satellite clinic in Redhill.</u>

I am currently registered for a Master's Degree at the Durban University of Technology. In order to obtain my degree I am required to complete my dissertation. My dissertation is a retrospective clinical audit of the Durban University of Technology homoeopathic satellite clinic at the eThekwini municipal Redhill clinic.

My research aims to focus on the patient demographics such as age and gender, disease prevalence, treatment protocols, as well as the financial implications of each patient. The patients at this clinic will not be interviewed. The information will only be accessed from the patient files at the clinic and any data which can identify the patients will not be captured.

In order to complete the clinical audit, I am requesting permission to conduct my research. My research proposal has been attached for your perusal. Anonymity and confidentiality of data is guaranteed.

Your support and permission to conduct the study at your facility will be appreciated.
Yours Sincerely

[redacted]
Signature
[redacted]

Pratisha Pramlall
M Tech Student
Email: pratisha01@gmail.com

[redacted]
Dr I Couchman
Supervisor
Email: ingridc@dut.ac.za

[redacted]
Co – Supervisor
Email: drniehaber@positivehealthkzn.co.za

2015.06.19
Snr
M Dlopu Manager
331805

Appendix C: Letter to Dr Smillie

DUT DURBAN UNIVERSITY OF TECHNOLOGY

Dear Dr Smillie

Re: Request for permission to utilize the data collection sheet that has been used in the clinical audit of the DUT homoeopathic satellite clinic at Ukuba Nesibindi.

I am currently registered for a Master's Degree at the Durban University of Technology. In order to obtain my degree I am required to complete my dissertation. My dissertation is a retrospective clinical audit of the Durban University of Technology homoeopathic satellite clinic at the eThekwini municipal Redhill clinic.

My research aims to focus on the patient demographics such as age and gender, disease prevalence, treatment protocols, as well as the financial implications of each patient. The patients at this clinic will not be interviewed. The information will only be accessed from the patient files at the clinic and any data which can identify the patients will not be captured.

In order to complete the clinical audit, I am requesting permission to use the data collection sheet that has been used to collect data from patient files at the Ukuba Nesibindi clinic in 2010.

[redacted]

Signature
Dr T. Smillie

Pratisha Pramlall
M Tech Student
Email: pratisha01@gmail.com

Dr I Couchman
Supervisor
Email: ingridc@dut.ac.za

Dr S Nienaber
Co – Supervisor
Email:drnienaber@positivehealthkzn.co.za

Appendix D: Final cost analysis from quotes provided in Appendix F.

LIST OF MATERIALS USED FOR MEDICINES	QUANTITY	PRICE
Simplex syrup BP	2.5 L	R180
Cough Syrup	50 ml	R4.11
Unmedicated granules	2 KG	R167.88
Powders – medicated/unmedicated		R0.29
Plussed potency	20 ml	R3.79
Hypercal tincture	25 ml	R31.64
Crataegus tincture	25 ml	R29. 74
Bottles:		
	500 ml	R6.77
	250 ml	R3.39
	100 ml	R3.33
	50 ml	R2.92
	25 ml	R2.49
Ethanol 99.9%	2.5 L	R650
No. 1 vial filled with medicated/unmedicated granules		R1.57
Tissue salts	1000 tablets	R157.32
Tissue salts	90 tablets	R14.14
Creams:		
Hypercal cream	100 g	R10.94
Arnica cream	100 g	R11.70
Plain empty vials:		
No1 vial		R1.10
No 2 vial		R1.20
No 4 vial		R1.53
No 10 vial		R3.84

Appendix E: Data collection sheet

1. File Number	

2. Gender	
Male	
Female	
3. Race	

4. Age	
0 - 18 years	
18 – 24 years	
25 – 39 years	
40 – 64 years	
65 years and above	

5. Year of first consult at the clinic	
2010	
2011	
2012	
2013	

6. Number of follow ups	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
More than 10 (Specify)	

7. Clinical Diagnoses	Date:	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

8. Medication							
	Dosage	**Potency**	**Frequency**	**Quantity**	**Materials used**	**Price**	**Cost of Clinician**
Homoeopathic remedy							
Herbal Creams							
Herbal Tinctures							

Tissue Salts							

Appendix F: Price lists

FUSION
HOMOEOPATHICS

CK Number : 2010/147623/23

Unit B4 Micro Industrial Park
17 -19 Hammer Avenue
Strydom Park
Randburg
2169

P.O. Box 3823
Randburg
2125
South Africa

Phone Number
+ 27 11 027 3665
Fax Number
+ 27 86 552 4818

Contacts
Sales
Dr Ameesha Manga
+27 82 767 3665
ameesha@fusionhom.co.za

Technical
Dr Uwe Hohl
+27 84 400 2114
uwe@fusionhom.co.za

Quote

VAT Registration Number : 4080260054

Document no : QU0028

Date: 29 September 2014

Durban University of Technology Homoeopathy Clinic
1st Floor New Clinic Building, Ritson Campus
Cnr Steve Biko and Ritson Roads
Berea
KwaZulu-Natal

Item Code	Description	VAT Rate	Qty	Unit Price	VAT	Total
MTVITAG1000	Vitex agnus castus Ø HAB 4A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTARCUV1000	Arctostaphylos uva-ursi Ø HAB 2A 1000mL	Rate @ 14%	3	R 1,043.46	R 438.25	R 3,568.62
MTAVESA500	Avena sativa Ø HAB 1A 500mL	Rate @ 14%	1	R 567.39	R 79.43	R 646.82
MTCALOF1000	Calendula officinalis Ø HAB 3A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTCHAM1000	Chamomilla Ø HAB 3A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTCIMRA1000	Cimicifuga racemosa (HAB 3A) ø 1000mL	Rate @ 14%	3	R 1,043.46	R 438.25	R 3,568.62
MTCRAOX1000	Crataegus oxyacantha Ø HAB 2A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTDIOVI500	Dioscorea villosa Ø HAB 3A 500mL	Rate @ 14%	1	R 600.00	R 84.00	R 684.00
MTECHPU1000	Echinacea purpurea Ø HAB 3A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTEQUHIE1000	Equisetum hiemale Ø HAB 1 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTGINBI500	Ginkgo biloba Ø HAB 3A 500mL	Rate @ 14%	1	R 567.39	R 79.43	R 646.82
MTGLYGL1000	Glycyrrhiza glabra Ø HAB 4A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTHYPPE1000	Hypericum perforatum Ø HAB 3A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTMELOF500	Melissa officinalis Ø HAB 3A 500mL	Rate @ 14%	1	R 567.39	R 79.43	R 646.82
MTMENPIP500	Mentha piperita Ø HAB 3A 500mL	Rate @ 14%	1	R 567.39	R 79.43	R 646.82
MTMYRRHE500	Myrrhe Ø HAB 4A 500mL	Rate @ 14%	1	R 567.39	R 79.43	R 646.82
MTPANGI500	Panax ginseng Ø HAB 4A 500mL	Rate @ 14%	1	R 567.39	R 79.43	R 646.82
MTPASIN500	Passiflora incarnata Ø HAB 3A 500mL	Rate @ 14%	1	R 600.00	R 84.00	R 684.00
MTPETCRI1000	Petroselinum crispum Ø HAB 3A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTPHYAM1000	Phytolacca americana Ø HAB 3A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTRUMCRI1000	Rumex crispus Ø HAB2A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTSARSPAR10	Sarsaparilla Ø HAB 4A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTSYZJA1000	Syzygium jambolanum Ø HAB 4A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTTAROF1000	Taraxacum officinalis Ø HAB 2A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTTHYVUL1000	Thymus vulgaris Ø HAB 3A 1000ml	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTVALOF500	Valeriana officinalis Ø HAB 4A 500mL	Rate @ 14%	1	R 567.39	R 79.43	R 646.82
MTPULPRA1000	Pulsatilla pratensis Ø HAB 3A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTVERBAS1000	Verbascum Ø HAB 2A 1000mL	Rate @ 14%	3	R 986.75	R 414.44	R 3,374.70
MTVIBOPU1000	Viburnum opulus Ø HAB 3A 500mL	Rate @ 14%	1	R 567.39	R 79.43	R 646.82
MTZINOFF500	Zingiber officinalis Ø HAB 4A 500mL	Rate @ 14%	1	R 567.39	R 79.43	R 646.82
TSCALFLU1000	No. 1 Calc fluor Tissue Salt 1000 tabs	Rate @ 14%	1	R 138.00	R 19.32	R 157.32
TSCALPHO1000	No. 2 Calc phos Tissue Salt 1000 tabs	Rate @ 14%	1	R 138.00	R 19.32	R 157.32
TSCALSUL1000	No. 3 Calc sulph Tissue Salt 1000 tabs	Rate @ 14%	1	R 138.00	R 19.32	R 157.32
TSFERPHO1000	No. 4 Ferrum phos Tissue Salt 1000 tabs	Rate @ 14%	2	R 138.00	R 38.64	R 314.64
TSKALMUR1000	No. 5 Kali mur Tissue Salt 1000 tabs	Rate @ 14%	1	R 138.00	R 19.32	R 157.32
TSKALPHO1000	No. 6 Kali phos Tissue Salt 1000 tabs	Rate @ 14%	1	R 138.00	R 19.32	R 157.32
TSKALSUL1000	No. 7 Kali sulph Tissue Salt 1000 tabs	Rate @ 14%	1	R 138.00	R 19.32	R 157.32
TSMAGPHO1000	No. 8 Mag phos Tissue Salt 1000 tabs	Rate @ 14%	2	R 138.00	R 38.64	R 314.64
TSNATPHO1000	No. 10 Nat phos Tissue Salt 1000 tabs	Rate @ 14%	1	R 138.00	R 19.32	R 157.32
TSSILICE1000	No. 12 Silicea Tissue Salt 1000 tabs	Rate @ 14%	2	R 138.00	R 38.64	R 314.64

Total VAT **R 9,055.99**

DUT
DURBAN
UNIVERSITY OF
TECHNOLOGY

DEPARTMENT OF
PROCUREMENT

Department of Procurement
Durban University of Technology
41-43 ML Sultan Road,
ML Sultan Campus, Durban, 4001

P O Box 1334
Durban, 4000
South Africa
Tel: (031) 373 6858
Fax: (031) 373 5189

www.dut.ac.za

Order

Document Number: PO84738

Quantity	Unit	Trade	Vat %	Unit Price	I/E	Total Value
3.000	EACH	0.00	0.140	546.69	E	1869.68
	ECHINACEA PURPUREA 500ML					
4.000	EACH	0.00	0.140	546.69	E	2492.91
	CALENDULA OFFICINALUS 500ML					
4.000	EACH	0.00	0.140	546.69	E	2492.91
	URTICA URENS 500ML					
2.000	EACH	0.00	0.140	546.69	E	1246.45
	PULSATILLA (VULGARIS) 500ML					
1.000	EACH	0.00	0.140	247.37	E	282.00
	HYPERICUM 200ML					
2.000	EACH	0.00	0.140	546.69	E	1246.45
	ARNICA MONTANA 500ML					
1.000	EACH	0.00	0.140	546.69	E	623.23
	ARCOTSTAPHYLLUS UVA URSI 500ML					
1.000	EACH	0.00	0.140	247.37	E	282.00
	MENTHA PIPERITA 200ML					
1.000	EACH	0.00	0.140	546.69	E	623.23
	EQUISETUM ARVENSE 500ML					
1.000	EACH	0.00	0.140	546.69	E	623.23
	ACHILLEA MILLEFOLIUM 500ML					
2.000	EACH	0.00	0.140	546.69	E	1246.45
	PAEONIA OFFICINALIS 500ML					
1.000	EACH	0.00	0.140	546.69	E	623.23
	VIBURNUM OPOLUS 500ML					
1.000	EACH	0.00	0.140	546.69	E	623.23
	SYMPHYTUMOFF 500ML					

A supplier who delivers the supplies in accordance with this order shall be bound by all the terms & conditions - which are available on request - whether or not they signed the acceptance of the order.
Order valid only if machine printed. Valid for 30 days.

DUT
DURBAN
UNIVERSITY OF
TECHNOLOGY

DEPARTMENT OF
PROCUREMENT

Department of Procurement
Durban University of Technology
41-43 ML Sultan Road,
ML Sultan Campus, Durban, 4001

P O Box 1334
Durban, 4000
South Africa
Tel: (031) 373 6858
Fax: (031) 373 5189

www.dut.ac.za

Order

Document Number: PO84738
20-MAR-2014

4235
COMED HEALTH (PTY) LTD
313 KUIT STREET
WATLOO
PRETORIA

0184

Currency: RSA RANDS

COMED HEALTH (PTY) LTD
Tel: 012 8139432

Delivery Information

Delivery Date: 21-MAR-2014 00:00
Bld: Floor: Room:
Department: HOMEOPATHY
Person: Tel:

Quantity	Unit	Trade	Vat %	Unit Price	I/E	Total Value
16.000	EACH	0.00	0.140	200.83	E	3663.14
	UNMEDICATED GRANULES 2KG					
2.000	EACH	0.00	0.140	456.96	E	1041.87
	MAG PHOS ELECTROLOID (1000) TABS					
2.000	EACH	0.00	0.140	276.98	E	631.51
	POT CHLOR-IRON PHOS (PCIP) ELECTROLOID					
1.000	EACH	0.00	0.140	456.96	E	520.93
	SILICA FLUOR ELECTROLOID (1000) TABS					
4.000	EACH	0.00	0.140	515.74	E	2351.77
	CONVALLARIA MAJALIS 500ML					
1.000	EACH	0.00	0.140	546.69	E	623.23
	CHELIDONIUM MAUJ 500ML					
1.000	EACH	0.00	0.140	233.37	E	266.04
	CARDUUS MARINUS 200ML					
2.000	EACH	0.00	0.140	546.69	E	1246.45
	CRAETAEGUS OXY 500ML					
6.000	EACH	0.00	0.140	515.74	E	3527.66
	VALERIANA OFFICINALIS 500ML					

A supplier who delivers the supplies in accordance with this order shall be bound by all the terms & conditions - which are available on request - whether or not they signed the acceptance of the order.
Order valid only if machine printed. Valid for 30 days.

Dr Ruth Bloch
Dip. Pharm. (CT); D. Hom (S.A.)
Homoeopath
Reg no. A0426
PR No: 0800198
WC01306D

22 Wessels Rd.,
Green Point
Cape Town
8005
Tel: 021 434 1068
Fax: 021 434 1161

=

PROFORMA **Invoice**

Medical Aid **Member No.** 6/3/2015

Name	Tariff code	ICD 10	Quantity	Nappi c	Amount
[redacted]					
Laboratory Tecnician					
Dpt Homoeopathy					
DUT					
For UKUBA NESIBINDI HOMOE					
Unmedicated Lactose Powders	2500 per box		6		3600
					3600

- Appointments not cancelled within 24 hours will be charged for.
- We are not contracted to medical aids. Patients are responsible for their own fees.
- Fees are not in accordance with NHRPL rates.
- We do not run accounts.
- Fees are payable immediately.

Bank details:
Nedbank
Account number: 1010 021184
Branch code: 101 009

CoMED HEALTH

Deliver To:
CODPID

PAID IN ADVANCE DOCTORS
[redacted]
Homoeopathy Clinic DUT
1st Floor
11 Ritson Road
Berea, Durban

Tax Registration	**XXXXXXXXX**
Telephone	
Fax	
Email	

Tax Invoice
INV015230

Account	Date	Order No	Delivery Note	Customer Order No
CODPID	2011/01/28	SO017311	DEL014461	**Raeesa Aboobaker**

Item Code	Item Description	Lot No	Order Qty	Inv Qty	Price (Excl)	Disc %	Vat	Total (Excl)
09COM2G1	Hypertensive Complex 100(		1.0000	1.0000	453.88	25.00	47.66	340.41
09UMEDR2	Unmedicated Granules 2kg	10RI05	1.0000	1.0000	167.88		23.50	167.88
DELCOU	Delivery Charge - Courier		1.0000	1.0000	71		9.94	71.00

Bank : Nedbank
Branch Code: 14974500/198765
Account No: 1497218365

Total (Excl)	579.29
Less Discount	0.00
Plus Vat	81.10
Total (Incl)	**660.40**

2011/01/28 03:37:40 PMUwe Hohl

NATURA

bioter HEALTH

Directors: Mr C. [illegible] (B.Sc; MBA); Mr G. Shayne (B.Com; CA); Dr M. [illegible]; Mr W. B. Jonker (B.Com (Hons); B.Compt.; MBA); Mr F. M. [illegible] (B.SC. [illegible])
Company Secretary: [illegible]
(Vat. No. [illegible]) (Reg. No. [illegible])

SPECTROCHEM

VAT NO.: 4810255408 REG. NO.: 2009/015098/07
P.O. BOX 74065 ROCHDALE PARK 4034
TEL. NO.: 031-5075730 FAX NO.: 031-5005735

08/08/2014

REF: SPEC/DUT 8291

Durban University of Technology
Mansfield Road
Durban
4001

Attention: [redacted]

Re: Quotation

Description	Pack Size	Unit Price
Ethanol 99.9%	2.5L	[redacted] R650.00

Price Basis : Nett
Delivery : Approx 3 – 4 days from receipt of order
Vat : Not Included
Validity : Thirty (30) days
Orders : Orders of non-stock items may not be cancelled.

Hope the above quote meets with your approval. Should you have any queries, please do not hesitate to contact me.

Kind Regards

Gerard Joseph
Mobile: 082 823 8558.

KHARWASTAN PHARMACY & MEDICINE DEPOT

VAT No. 4030108353

SHOP 1, 2 QUAIL ST
KHARWASTAN
DURBAN
4092

TEL: (031) 401 0815
FAX: (031) 401 0632

quotation

To: Durban university of technology
[redacted]

Date: 20-Aug-14

ITEM	PACK SIZE	UNIT PRICE	QTY	TOTAL
Preg test cassette type	36	350.00	6	2100.00
Urine Dipstick 10	100	130.00	500	65000.00
simplex syrup BP	2.5L	[redacted] 180.00	1	180.00
Reitzers Aq Cream	500	16.00	1	16.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
				0.00
			SUB TOT	R 67,296.00
			VAT 14%	R 9,421.44
			TOTAL	R 76,717.44

LABORATORY EQUIPMENT
& SUPPLIES (KZN)

UNIT 6 EBONY PLACE
12 EBONYFIELD AVE
SPRINGFIELD PARK

TEL: 031 579 3123
FAX: 031 579 3121
labequipkzn@telkomsa.net

12 May 2010

Durban University of Technology
Homeopathic Dept.
Attention: [redacted]

Ref No: MN: 294/04/10

We thank you for your valued enquiry and have pleasure in quoting as follows:

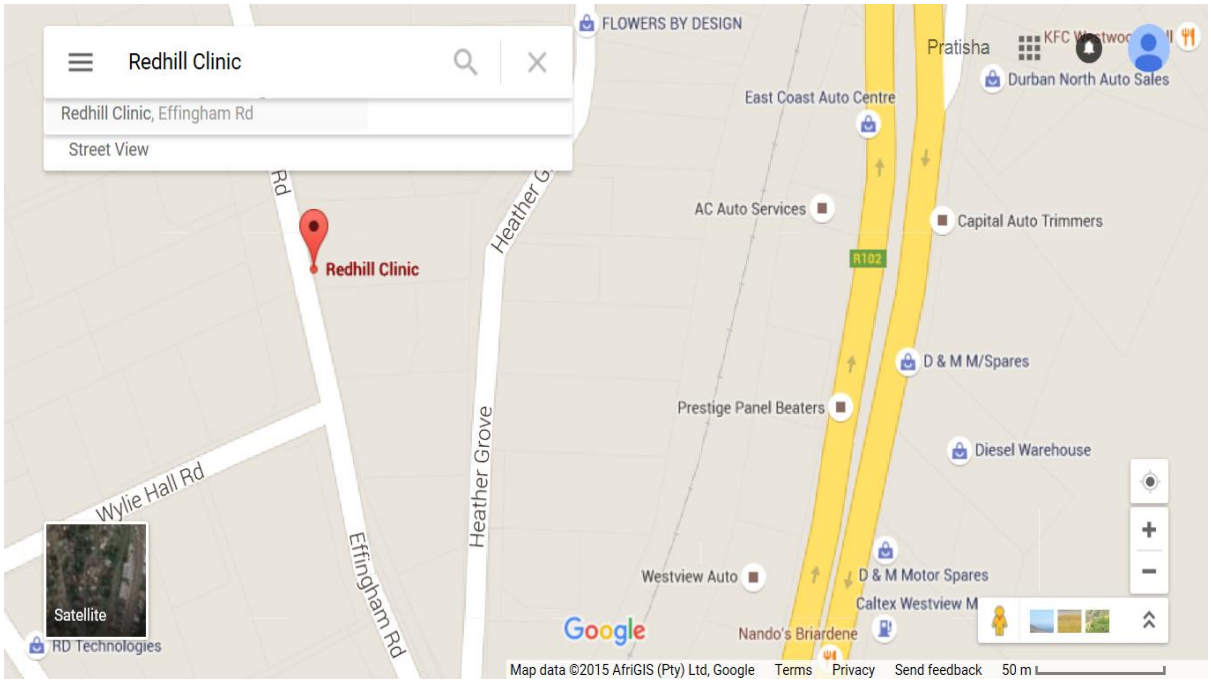
Repair 20lt Schott Bottles (repair neck GL 45)	R 390.00 ea
500ml Amber Medical Rounds (box of 48)	R 325.00/bx
100ml Amber Medical Rounds (box of 108)	R 360.00/bx
50ml Amber Medical Rounds (box of 144)	R 421.00/bx
25ml Amber Medical Rounds (box of 288)	R 718.00/bx
Glass Polytop VialsNo.1 (box of 100)	R 110.00/bx
Glass Polytop VialsNo.2 (box of 100)	R 120.00/bx
Glass Polytop VialsNo.4 (box of 100)	R 153.00/bx
Glass Polytop VialsNo.10 (box of 50)	R 192.00/bx
Dropper Bottle with cap & insert Amber 20ml (box of 216)	R 598.00/bx
Dropper Bottle with cap & insert Amber 30ml (box of 168)	R 543.00/bx
Plastic Flip Top Vials No.10 (pack of 100)	R 42.90/pk
Plastic Flip Top Vials No.20 (pack of 100)	R 49.40/pk
Plastic Flip Top Vials No.30 (pack of 100)	R 65.00/pk
Plastic Flip Top Vials No.50 (pack of 100)	R 81.90/pk
Plastic Flip Top Vials No.100 (pack of 100)	R 139.10/pk
Bakelite Caps 28mm – Black (box of 2000)	R 780.00/bx
Ointment Jars 50ml (box of 144)	R 621.00/bx
Ointment Jars 100ml (box of 72)	R 400.00/bx

- ✓ Price: Exclude VAT, based on the current rate of exchange.
- ✓ Delivery: +/ - 5 days, subject to prior sale thereafter 3-4 weeks
- ✓ Quotation: Valid for a period of 15 days
- ✓ Cancellation: Orders are firm and not subject to cancellation. Where cancellation of an order is accepted, the purchaser will become liable for a cancellation fee of no less than 20% of the selling price, plus the cost of shipping the good back to the country of origin. For special import items a 50% deposit will be required. Orders for 'special' cannot be cancelled.

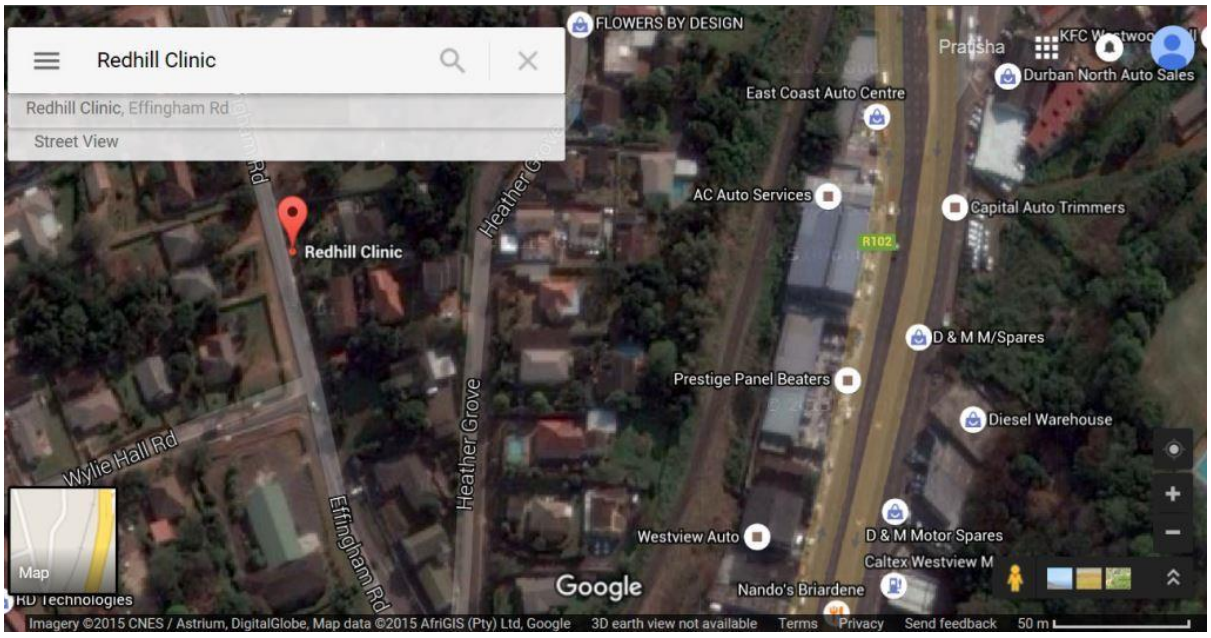
Regards,
Mervin Naidoo

For all your laboratory requirements
Vat Reg No: 4760195539

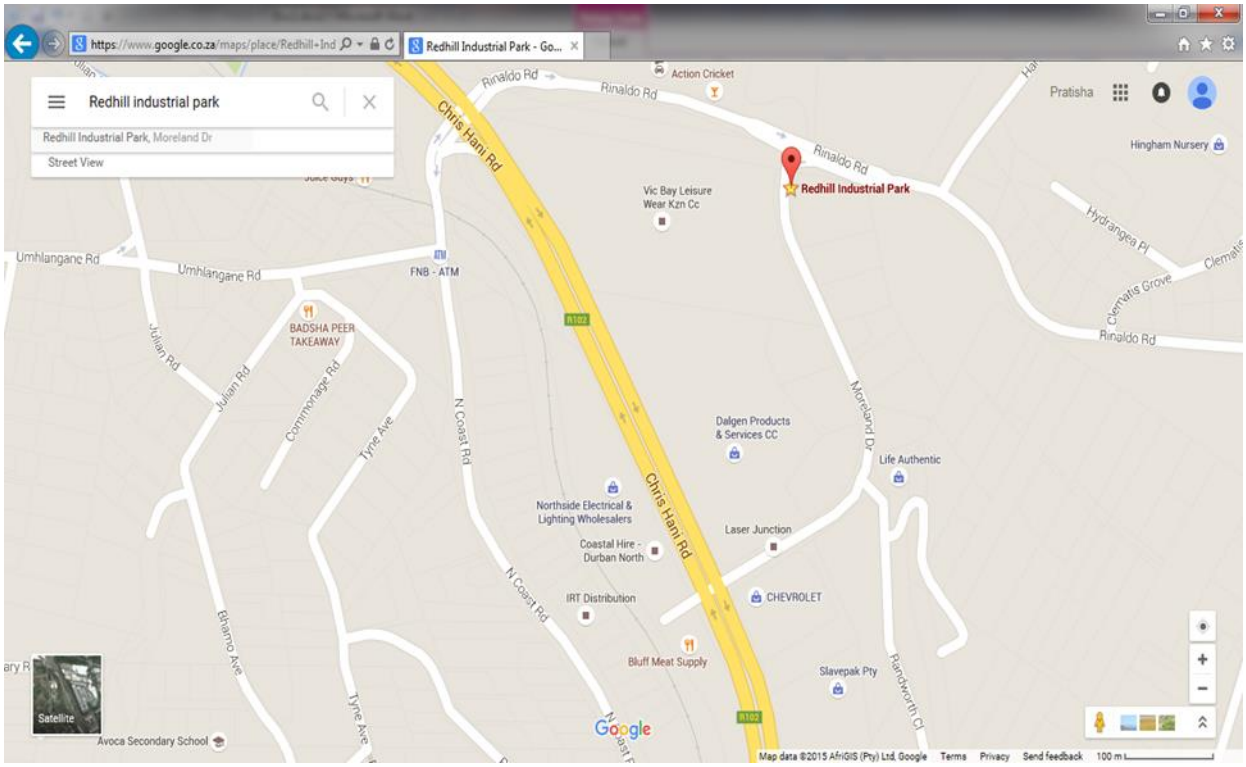
Appendix G: Map location of Redhill Clinic



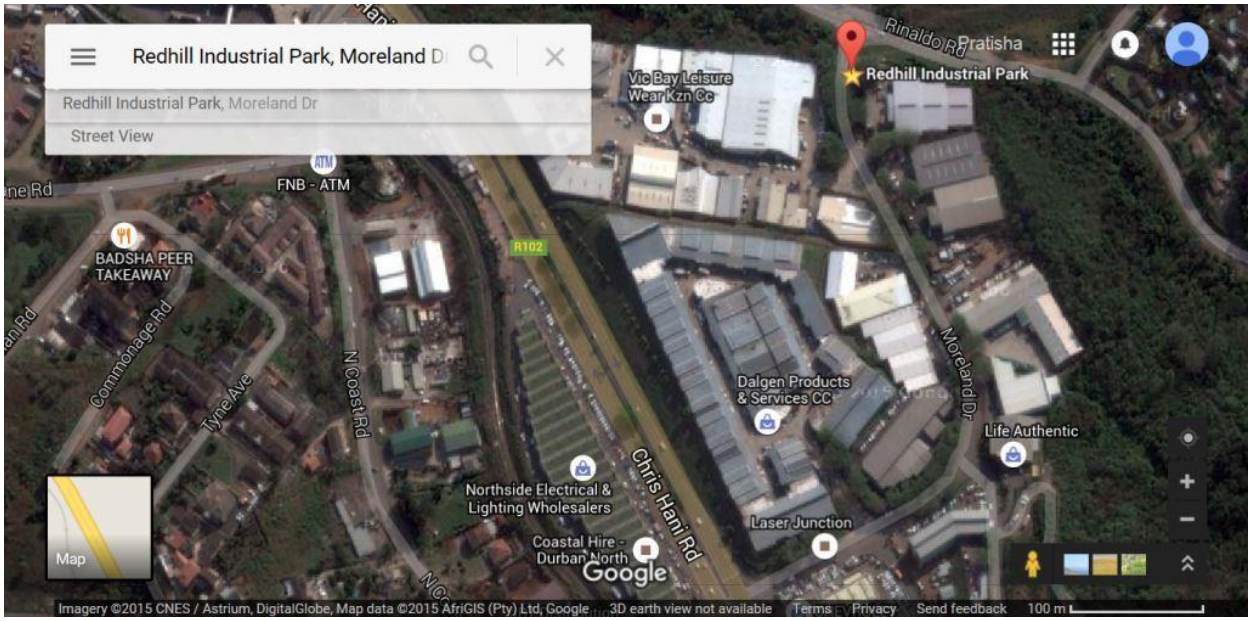
(Google maps 2015)



(Google maps 2015)



(Google maps 2015)



(Google maps 2015)