



UNIVERSITY of the
WESTERN CAPE

A MODEL FOR NATUROPATHY WITHIN THE SOUTH AFRICAN HEALTHCARE SYSTEM

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DECLARATION

I, **Wendy Ericksen-Pereira**, declare that the thesis entitled '*A model for naturopathy within the South African healthcare system*' submitted for the Ph.D. degree at the University of the Western Cape is my own work. All the sources that I have used or cited have been acknowledged through complete references. This research project has not been submitted for any examination or degree to any other institution.

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Date signed

31 August 2020

DEDICATION

We educate women because it is smart.

We educate women because it changes the world.

Drew Faust

This work is dedicated firstly to my mother, a strong woman who taught me that faith makes all things possible, who, because of her life experience, believed in the importance of educating a girl-child in order to secure a better future for herself and the generations who would follow her; and secondly, to all the strong women that I have had the privilege of knowing: you have been a source of inspiration.

ABSTRACT

One of the sustainable development goals the World Health Organization (WHO) has set for member countries is the implementation of universal health coverage (UHC) in order to ensure all citizens have the right to access healthcare. In recognising that the global demand for traditional and complementary medicine (T&CM) continues to grow, the WHO has encouraged the inclusion of T&CM into the national health systems of member countries as a way of ensuring that UHC can be achieved.

South Africa, as a member country of the WHO, is moving towards a restructuring of the health system with the aim of achieving UHC. In order to achieve this, it has proposed a National Health Insurance (NHI) system that aims to draw on all health service providers, including T&CM practitioners to provide UHC for all citizens. No system of complementary medicine (CM) in South Africa has yet been critically evaluated to determine whether the curriculum and training is adequate to ensure that graduates have the necessary competencies to be integrated into a national health system. This research set out to develop a model for naturopathy, a system of CM, to allow graduates of the training programme to function within an integrated, national health system.

This study employed an exploratory qualitative research methodological design that was conducted over five stages. Stage one explored the history and development of naturopathy in South Africa. The second stage examined the effect of legislation on the treatment practices and role of naturopaths. Stage three reviewed the legal scope of practice and minimum competencies for naturopaths, and in stage four the naturopathy curriculum was benchmarked

and critically reviewed. In stage five, the findings of the first four stages were synthesised and used to develop a model for the training of naturopaths for the South African healthcare system.

While there are a few research articles that argue for the inclusion of naturopathy in a national healthcare system, none explores how this can be achieved. This research evaluates critically all aspects of naturopathy in South Africa and proposes a model for the training of students so that graduates from the training programme will be competent to participate in a national healthcare system.

Keywords

Allopathic medicine

Biomedical

Complementary medicine

Healthcare system

Curriculum

Minimum competencies

Model

Naturopathy

Nation healthcare system

Universal Health Care

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The journey to completing this PhD has been an enlightening one. It has taught me so much about other people, about the human spirit. It has also frustrated and depressed me, challenged me beyond my wildest imagination, forced me to dig deep and confront the truth of who I am. I am grateful for all the lessons I have learnt and for that alone, this journey has been worthwhile.

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List of abbreviations

AHPCSA	Allied Health Professions Council of South Africa
CAM	Complementary alternative medicine
CANMEDS	Canadian Medical Education Directives for Specialists
CD	Communicable disease
CM	Complementary medicine
PHC	Primary Health Care
MC	Minimum competencies
NCD	Non communicable disease
NHI	National Health Insurance
SE	Socio-ecological
SDH	Social determinants of health
SOP	Scope of practice
UHC	Universal health cover
T&CM	Traditional and complementary medicine
WHO	World Health Organization
WNF	World Naturopathic Federation

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**OFFICE OF THE DEAN
DEPARTMENT OF RESEARCH DEVELOPMENT**

14 January 2015

To Whom It May Concern

I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by:
Mrs W Ericksen-Pereira (Social Work)

Research Project: A model for naturopathy within the South African healthcare system.

Registration no: 14/10/35

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

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A place of quality,
a place to grow, from hope
to action through knowledge

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CHAPTER 1

OVERVIEW

1.1 Introduction

The general background and motivation for this study is provided in this chapter. The rationale is explained within the context of a gap in research in South Africa on naturopathy and the broader international naturopathic community. The main research questions are identified and the aims, objectives and value of the study is discussed.

1.2 Background

Complementary medicine (CM) has been defined as the set of healthcare practices which are not a part of a country's traditional or conventional biomedical model of medicine, are not fully integrated into the dominant healthcare system and include the products and practices used (World Health Organization, 2013). The last few decades have seen an exponential growth in the use of CM products and therapies and practitioners with Reilly (2001) suggesting that the CM movement has become the second largest growing industry in Europe. In the United States of America, the National Centre for Health Statistics also found significant increases in the use of acupuncture, massage therapy, meditation, naturopathy and yoga (Barnes, Bloom & Nahin, 2008). The reason for this shift towards CM has been proposed as i) the growing disillusionment with the biomedical model of medicine (Reilly, 2001); ii) the over prescription of drugs and the impersonal approach to patients within Western medicine and iii) the inability of the mainstream biomedical model to successfully treat chronic diseases (Chitindingu, George & Gow, 2014).

The most common forms of CM used globally are reported as acupuncture, Ayurveda, chiropractic, herbal medicine, homeopathy, naturopathy, osteopathy, traditional Chinese medicine and unani tibb medicine (World Health Organization, 2019). A 2012 World Health Organization global survey of 133 member states found that naturopathy was practiced in 98 member states (World Health Organization, 2019).

1.3 What is naturopathy?

Naturopathy is categorised by the World Health Organization (WHO) as a system of CM (WHO, 2010). The terms ‘complementary medicine’ or ‘alternative medicine’ is generally used to refer to the products and health care practices that is not a part of a country’s own traditional or conventional medicine system (WHO, 2013). There are different definitions of naturopathy, which are used. The WHO (2010) defines it thus: ‘naturopathy emphasizes prevention, treatment and the promotion of optimal health through the use of therapeutic methods and modalities which encourage the self-healing process – the *vis medicatrix naturae*’. The American Association of Naturopathic Physicians adopted the following definition of naturopathic medicine at it’s annual conference held at Rippling River in 1989 (Snider and Zeff):

A distinct primary health care profession, emphasizing prevention, treatment, and optimal health through the use of therapeutic methods and substances that encourage individuals’ inherent self-healing process. The practice of naturopathic medicine includes modern and traditional, scientific, and empirical methods (<https://www.naturopathic.org/content.asp?contentid=59>).

In India, the Central Council for Research in Yoga and Naturopathy defines naturopathy as:

A drugless health care practice that focuses on restoring health rather than managing disease. The human body has remarkable recuperative power to heal itself. Naturopathy primarily focuses on disease prevention rather than cure, as prevention is the safe, easy and cost effective approach to health (Central Council for Research in Yoga and Naturopathy).

In South Africa, the following definition of naturopathy is based on the regulations of 2001, *Allied Health Professions Act 63* (South Africa) Regulation 127 2001 No. 22052:5

Naturopathy means a system of healing using the principles, philosophies, acts and medicines of Naturopathy which are based on promoting health and treating disease using the body's inherent biological healing mechanisms to self-heal.

From the above definitions, it is clear that all definitions view naturopathy as a system of health care, aimed at preventing disease and illness and promoting health.

These definitions are rooted in the philosophy that guides the profession. The concepts of vitalism and holism is core to the naturopathic philosophy (Hausser & Lloyd, 2017). These concepts draw on ancient medical philosophy that believe the body has its own vitalism – an innate ability to heal. If healing is to be achieved, all aspects of the individual should be treated, that is, the whole person has to be treated (Hausser & Lloyd, 2017). From this philosophy flow six basic principles, which guide naturopaths in their professional practice. These principles have been codified as: the healing power of nature, first do no harm, find the cause, treat the whole person, doctor as teacher, and disease prevention and health promotion (Pizzorno & Murray, 2006). These principles are used globally by naturopaths in practice (Hausser et al., 2017).

Naturopathy, like other forms of CM, has grown rapidly over the last few decades and its popularity continues to grow (WHO, 2013; World Naturopathic Federation, 2016). In order to ensure the safety of the users of CM, the WHO (2013) recognised the need for member countries to introduce regulations to improve the accreditation, education and training of CM. This would contribute to the improvement of the quality of the services and safeguard the health of the public. The WHO reported in 2013 that 30 per cent of member countries provided tertiary education training programmes for traditional and complementary medicine (T&CM). While the WHO urges member countries to implement measures to regulate the education, registration and practice of T&CM, many have not yet implemented these recommendations. Naturopathy is practiced in over 98 countries (WHO, 2019) – yet only three – Canada, the United States of America and South Africa – have an independent accreditation agency to oversee the minimum standards for entry into the profession (World Naturopathic Federation, 2015). As the profession grows, there is a concomitant growth in the number of training institutions yet there is very little peer-reviewed literature critically evaluating the education and training of naturopaths and other CM professions (Gray, Steel & Adams, 2019). The need for this type of research has become more pressing as the WHO's *Global Report on Traditional and Complementary Medicine* (2019) advocates for the inclusion of T&CM as a part of a healthcare system which provides universal health cover (UHC).

1.4 Universal health cover and naturopathy

At the international conference on primary health care, which took place in Astana in 1978 the broad outlines of a primary health care (PHC) approach, was set out. The three key pillars of PHC were determined to be the concept of 'health for all'. This represents a commitment to justice and equity for all within a health care system; the right of members of the community to be involved in decisions regarding their health services; and the need for the medical profession to collaborate with other health sectors that contribute to the health of a population

(Macdonald, 1995). This was the first recognition of the role that T&CM could play in the provision of PHC. The WHO developed a strategy in 1978 called 'Health for All by the Year 2000', which was based on the Astana Declaration. It was initially aimed at developing countries as a way in which overall health was linked to economic and social development (WHO, 2008). This call has grown louder over the years as it has become clear that access to 'health for all', has not been achieved – rather, the problem has been exacerbated as global disease patterns have changed with an increase in chronic diseases of lifestyle in all countries (World Health Report on Primary Health Care, 2008). In response to these challenges the WHO has modified the call for PHC to one that urges all member countries to provide UHC to its citizens. This shift to UHC focuses on providing access to health services without emphasis on the social determinants of health that the PHC model had. The PHC approach acknowledged healthcare as consisting of several different systems, which collectively contribute to the health of an individual – including T&CM. This has been recognised from the Astana document to the most recent WHO *Global Report on Traditional and Complementary Medicine* (2019). South Africa, as a member country of the WHO, is actively pursuing the implementation of UHC. It has included T&CM into the proposed National Health Insurance (NHI) initiative but it does not set out how it will be integrated into the South African healthcare system.

Based on the philosophy and principles that underpin the naturopathy profession, naturopathy has the potential to contribute to the healthcare system, especially at the level of primary healthcare, as one of the core principles is to prevent disease through addressing lifestyle behaviours (Wardle & Adams, 2013). It has been shown that lifestyle counselling can result in behaviour change which has a long-term improvement in health (Baumann et al., 2015) and diminishes the burden on the economy through reduced health costs (Feldman, Grinorovich & Johansson, 2014).

Although the acceptance of naturopathy as a system of CM has increased globally, the standard of education and training is not uniform and very few countries have regulatory measures in place to control the profession (World Naturopathic Federation, 2015). As a result of this lack in standards the World Naturopathic Federation (WNF) was established with the aim of uniting the global naturopathic community, supporting legislative control of the profession and encouraging the establishment of the highest educational standards for the training of practitioners (<http://worldnaturopathicfederation.org/mission-of-the-wnf/>).

It is important to establish minimum standards of training for naturopaths since the level of training has a direct impact on the safety of the public using the service. Australia is one of the countries that does not have statutory regulation over naturopathy and, until 2015, offered a variety of different training programmes for naturopaths ranging from diplomas to degrees. Research into the various naturopathic programmes offered found that discrepancies between the content taught, contact hours, the length of the programmes and the clinical training resulted in some of the graduates appearing unprepared for clinical practice (Ooi, Mclean & Pak, 2018). This research supports the findings of the WNF (World Naturopathic Federation, 2015).

All health practitioners in South Africa have to be registered with a statutory body by law. The Allied Health Professions Act 63 of 1982 (South Africa) requires all CM diagnostic practitioners to be registered with the statutory body, the Allied Health Professions Council of South Africa (AHPCSA) in order to practice. Within the AHPCSA, various professional boards oversee the CM professions. Naturopathy falls under the Professional Board for Homeopathy, Naturopathy and Phytotherapy (PBHNP). One of the functions of this body is to ‘advise the council in respect of all matters affecting the training of persons in, and the manner of the exercise of the practices pursued in connection with, any profession falling within the ambit of the professional board’ (Allied Health Professions Act 63 of 1982). Recognised CM

professions have been regulated for over three decades in South Africa, yet currently they are not a part of the public healthcare system.

1.5 Problem statement

Non-communicable diseases (NCDs) such as cardiovascular disease, cancer, chronic respiratory disease and diabetes account for more than 70 per cent of global deaths and this number is growing (WHO, 2020). South Africa has seen a similar increase in these preventable lifestyle-related diseases, especially in lower socio-economic groups (Mayosi et al., 2009), widening the gap in life expectancy between the wealthy and the socio-economically deprived (Allen, 2014) with far-reaching consequences for the health system and future economic activity in the country. Lifestyle intervention that is focused on thorough assessment and counselling can result in improved health-related behaviour, reduce the incidence of symptoms and diagnosis of medical conditions, lower the use of prescription medication, and improve the country's overall health status (Alverson & Kessler, 2012).

Naturopathy, therefore, can contribute to the healthcare system, especially at the level of primary healthcare. However, unlike in countries such as Cuba (WHO, 2019), Canada and India (WNF, 2016) where naturopaths fully participate in the healthcare system, in South Africa naturopathy's contribution to the public healthcare system is limited because of the regulations which prevent practitioners from fully participating in it. Proposed changes to the South African healthcare system through the implementation of a system of UHC will see a National Health Insurance (NHI) funding system phased in and be fully functioning by 2026 (<https://www.gov.za/about-government/government-programmes/national-health-insurance-0>).

However, current regulations, as well as the lack of direction on how T&CM will be included in the proposed NHI threaten to further limit the contribution that T&CM can make to the broader healthcare system.

In order to ensure that naturopaths are competent to practice in the public healthcare system, it is necessary to examine and evaluate the curriculum and training of potential practitioners. Further, to determine whether the level of training renders them competent to participate in the South African healthcare system, the minimum competencies, scope of practice and treatment modalities used need to be reviewed.

This research has thus set out to establish whether the training of naturopaths in South Africa renders them sufficiently competent to practice. A conceptual model was developed for the training of naturopaths in the healthcare system in South Africa, based on the research findings.

1.6 Research questions

- Historically, how did naturopathy take root in South Africa?
- How did naturopathy spread and develop in South Africa?
- What form of training did the early naturopaths have?
- Is there a difference in the way the early naturopaths and the tertiary-trained naturopaths view their role and practice?
- What role do naturopaths see themselves playing in the healthcare system in the future?
- Do all naturopaths use the same treatment practices?
- What is the legal scope of practice for naturopaths in South Africa?
- To what extent does the scope of practice support the practice of naturopaths?
- Does the scope of practice meet the minimum competencies required for practice?
- Is the curriculum used for training adequate to ensure competent practitioners?
- Has the curriculum been benchmarked to any standard?
- What are the views of the graduates of their training programme?

1.7 Aim

The aim of the study was to develop a model for naturopathy within the South African healthcare system in order to provide a template to guide the education and training of naturopaths to competency to practice within the proposed National Health Insurance.

1.8 Objectives

The objectives of the study were to:

- Explore the development of naturopathy in South Africa
- Explore the role and practices of naturopathy within South Africa
- Review the scope of practice for the training of naturopaths in South Africa
- Critically analyse the current curriculum and training of naturopaths in South Africa
- Develop a model for the training of naturopaths within the South African healthcare system

1.9 Significance of the study

With the increase in chronic diseases related to lifestyle and aging, there has been a concurrent increase and unprecedented growth in the use of T&CM products and services (WHO, 2013). The WHO acknowledges the important role that T&CM continues to play as a healthcare provider (WHO, 2013). These systems of healthcare continue to be a significant role player in the provision of healthcare yet in most countries it is not recognised and included in the public healthcare system (WHO, 2019). People often turn to T&CM where there is a lack of access or availability (due to financial constraints) to public healthcare facilities, (WHO, 2013).

WHO policies have shifted from PHC to UHC to ensure that all people have access to basic healthcare without an additional financial burden that this currently poses for many people around the globe (WHO, 2017). While UHC is a basic human right (WHO, 2017), many countries face huge challenges in providing this cover. Given the widespread global use of

T&CM, the WHO has taken active steps to encourage member countries to develop regulations that would promote the safe and effective use of T&CM since 2005. It has also actively developed policy documents to promote the integration of T&CM into member countries' public healthcare systems (WHO, 2019). Integrating T&CM into the public healthcare system can make a significant contribution to achieving UHC by providing healthcare services that meet the needs of society, is culturally sensitive and cost effective, all of which could potentially improve health outcomes (WHO, 2019).

South Africa, as a member of the WHO, is adhering to WHO policies on the implementation of UHC through the implementation of the NHI. This is evidenced in the White Paper (2017) and the National Health Insurance Bill [B11—2019]. While these documents set out how the NHI will be implemented, they make no mention of how other health systems such as T&CM will be integrated into the NHI. Given that T&CM usage in South Africa is estimated at over 70 per cent (Mander et al., 2007), there is a need to integrate T&CM into the proposed NHI as recommended by the WHO (2019). Through integrating T&CM into the bio-medical model of medicine, resources are optimised in order to deal with the new healthcare challenges of the twenty-first century (WHO, 2019). In recognition of this approach to healthcare, the WHO in 2017 changed the name of the T&CM unit to Traditional, Complementary and Integrative Medicine (TCI). In order for T&CM to operate within a system of UHC, it is necessary that norms and standards be set into place to ensure that practitioners are adequately trained to function competently at this level.

This research addresses this challenge. Since the philosophy and principles which guide naturopathy positions it as a form of complementary medicine (CM) suited to addressing the disease challenges of the twenty-first century, this research investigates the practices, education and training of naturopaths in South Africa to determine whether graduates meet the minimum competencies to participate in the broader healthcare system. There is lack of research in

naturopathic practice and professional issues globally (Wardle et al., 2013). Further, this research represents the first structured research in this country in the CM profession of naturopathy. It was guided by the WHO policy documents for T&CM and South African legislation. Even though it develops a model for the training of naturopaths in South Africa, this model can be adapted to apply to all other registered CM professions in this country.

1.10 Definition of terms

Allopathic medicine refers to Western modern medicine (<https://www.healthline.com/health/allopathic-medicine>). The term biomedicine is commonly used interchangeably with allopathic medicine or Western medicine (<https://www.healthline.com/health/allopathic-medicine>)

Complementary medicine has been identified as 'a group of diverse medical and healthcare systems, practices and products that are not presently considered to be part of conventional medicine' (National Library of Medicine, 2010).

Healthcare system is defined as all the institutions, people, resources and activities which collectively work together to improve the health of the population (<https://www.who.int/healthsystems/hssglossary/en/index5.html>).

Minimum competencies have been defined as the knowledge, skills and behaviour that a practitioner is expected to have (Schuiling & Slager, 2000).

Model describes the overall framework used from which to examine reality (Clarke, 2005).

Natural medicine refers to any form of healthcare that enhances the body's natural healing powers (<https://medical-dictionary.thefreedictionary.com/natural+medicine>).

Private healthcare system refers to all healthcare providers and services that are privately funded by the user.

Public healthcare system refers to all healthcare providers and services that are funded by the state.

Scope of practice describes the ranges of treatment practices that a practitioner is legally allowed to use. For naturopaths the scope of practice is set out in Act 63 of 1982.

Traditional and complementary medicine is the merging of the terms traditional medicine and complementary medicine (WHO, 2013).

Treatment practices is the term used to describe the various therapeutic healing practices used by naturopathic practitioners when treating patients.

Western medicine is a term sometimes used interchangeably with allopathic or biomedicine (<https://www.healthline.com/health/allopathic-medicine>).

1.11 Outline of the thesis

This thesis documents the various stages of research conducted in order to meet the five objectives of the research. The literature review, conceptual framework and methodology provide the foundation from which the research was conducted. The research findings for each objective was then written up as a research article, which forms the basis of the chapter.

Chapter 1

This introductory chapter provides the rationale for the research by providing the contextual background information. The aim and objectives of the research is established and outline of the thesis is set out as well as a definition of the terms used.

Chapter 2

This chapter is the conceptual framework and is divided into two sections. Section A explores the literature which underpins this research. It provides a discussion of the factors that contribute to the growth of CM in general and naturopathy in particular. The literature on the history and growth of naturopathy is explored in order to show how it has evolved into the current form practiced globally and in South Africa. The chapter concludes with the relevance of naturopathy and the potential it has to contribute to the public healthcare sector on the level of primary healthcare.

Section B sets out the theoretical framework. The socio-ecological theoretical model is discussed within the context of healthcare systems. Based on this theoretical framework, a model was developed to represent how the research process was undertaken.

Chapter 3

Chapter 3 is the methodological overview. It sets out the qualitative research methods employed. It provides an overall explanation of the research process that follows. The various stages of research undertaken and the methodological process followed with each stage of the research are very broadly discussed and the details of the methodology used are explored in each stage of the research.

Chapter 4

The chapter explores the history of the development of naturopathy as a system of CM in South Africa. The early roots of CM are explored as the development of naturopathy is intertwined with the general growth of CM in South Africa. The effects of various laws on the growth of naturopathy is also explored. The information is presented in the form of a paper published in a South African peer-reviewed open-access journal.

Article

Ericksen-Pereira, W.G., Roman, N.V., Swart, R. (2018). 'An overview of the history and development of naturopathy in South Africa' *Health and Gesondheid*, 23. Retrieved from a1078.<http://doi.org/10.4102/hsag.v23i0.1078>.

Chapter 5

Chapter 5 explores the role and treatment practices of naturopaths in South Africa. Naturopaths have been practising in South Africa for over 50 years. Training in the early years was not regulated by any legislation or professional body as it currently is. This chapter explores the role and treatment practices of naturopaths who trained before legislation and after. The essence of this chapter is presented as a paper that has been published in an international, open-access peer-reviewed journal.

Article

Ericksen-Pereira, W.G., Roman, N.V., Swart, R. (2020). The effect of legislation on the treatment practices and role of naturopaths in South Africa, *BMC Journal of Complementary Medicine and Therapies* 20(139), <https://doi.org/10.1186/s12906-020-02916-5>.

Chapter 6

This chapter presents the implementation and findings of the Delphi process used to review the legal scope of practice (SOP) and minimum competencies for naturopaths in South Africa. Through the Delphi process, it was established that the SOP was benchmarked to international standards. It was found that there is, however, no minimum competencies to clearly guide the training of naturopaths. A set of minimum competencies required for training was developed and proposed for further consideration by professional bodies. The article was submitted to the *African Health Sciences Journal*, a peer-reviewed open--access journal.

Article

Ericksen-Pereira, W.G., Roman, N.V., & Swart, R. (Submitted). A review of the scope of practice and development of minimum competencies for the training of naturopaths in South Africa using a modified Delphi approach. Under review in *African Health Sciences*.

Chapter 7

This chapter compares the current curriculum used for training naturopaths to international curricula and then employs a graduate survey to evaluate critically the curriculum used in South Africa for training naturopathic students. It explores whether the curriculum is adequate to ensure competence in all elements of the SOP. Findings show that, although the South African curriculum is benchmarked to international standards, the graduate review found that there is a need for the curriculum to be reviewed and restored in order to ensure competence to practice. The article in this chapter was submitted to a peer-reviewed open-access South African journal. It was returned for revision based on the reviewers' comments and with a subsequent response, was accepted for publication.

Article

Ericksen-Pereira, W.G., Roman, N.V., & Swart, R. A comparative analysis and evaluation of the naturopathic curriculum in South Africa. Accepted for publication in *African Journal of Health Professions Education*.

Chapter 8

Chapter 8 synthesises the research findings in chapters 4, 5, 6 and 7. Using a systems theoretical approach model, a framework for the training of naturopaths is proposed to ensure that graduates are competent to participate in the South African healthcare system. In this chapter, a model, which draws on the findings of the various stages of the research, is proposed to

provide a systematic approach to the training of naturopaths to ensure competence to practice within the broader healthcare system. An article has been submitted to an open-access, peer-reviewed journal.

Article

Ericksen-Pereira, W.G., Roman, N.V. & Swart, R. A model for naturopathy in the South African healthcare system. Under review in the *African Journal of Health Professions Education*.

Chapter 9

In this concluding chapter, the overall findings are discussed. The various challenges and limitations of the study are presented and suggestions are made for the way forward for naturopathy in South Africa.

1.12 References

- Allen, C. Supporting effective lifestyle behaviour change interventions. (2014). *Nursing Standard*, 28(24), 51-58.
- Alverson, E. M. & Kessler, T. A. (2012). Relationships between lifestyle, health behaviour and health status outcomes for underserved adults. *Journal of American Academy of Nurse Practitioners*, 24(6), 364-74.
- Barnes, P. M., Bloom, B. & Nahin, R. L. (2008). Complementary and alternative medicine use among adults and children: United States, 2007. *National Health Statistics Reports*, 10(12), 1-23. Retrieved from <http://www.cdc.gov/nchs/data/nhsr/>.
- Baumann, S., Toft, U., Aadahl, M., Jorgensen, T. & Pisinger, C. (2015). The long-term effect of screening and lifestyle counselling on changes in physical activity and diet. *International Journal of Behavioural Nutrition and Physical Activity*, 12(33).
- Central Council for Research in Yoga and Naturopathy. Retrieved June 24, 2018, from www.ccryn.gov.in.
- Chitindingu, E., George, G. & Gow, J. (2014). A review of the integration of traditional complementary and alternative medicine into the curriculum of South African medical schools. *Biomed Central Medical Education*, 14(40).
- Clarke, R. (2005). *Research models and methodologies: HDR seminar series*. Retrieved from <https://documents.uow.edu.au/content/groups/public/@web/@commerce/documents/doc/uow012042.pdf>.
- Department of Health. (2017). *White paper on National Health Insurance for South Africa: Towards universal health coverage*. Retrieved June 2, 2020, from

<https://serve.mg.co.za/content/documents/2017/06/29/whitepaper-nhi-2017compressed.pdf>.

Feldman, I., Grigorovich, D. & Johansson, P. (2014). Changes in lifestyle risk factors: Health and economic impact as estimated by the population based RHS model. *Biomed Central Health Services Research*, 14(P41).

The free dictionary. (2017). Retrieved January 10, 2020, from <https://medicaldictionary.thefreedictionary.com/natural+medicine>.

Gray, A., Steel, A. & Adams, J. (2019). A critical integrative review of complementary medicine education research: Key issues and empirical gaps. *Biomed Central Complementary and Alternative Medicine*, 19(73).

Hausser, T & Lloyd, I. (2017). The roots of naturopathy: Introducing the WNF white paper. *Naturopathic Doctor News*, November.

Healthline. *What is allopathic medicine?* Retrieved January 10, 2020, from <https://www.healthline.com/health/allopathic-medicine>.

Macdonald, J. J. (1995). *Primary healthcare medicine in its place*. London, Earthscan.

Mander, M., Ntuli, L., Diederichs, N. & Mavundla, K. (2007). Economics of the traditional medicine trade in South Africa. *South African Health Review*, (1), 189-195.

Mayosi, B.M., Flisher, A.J., Lalloo, U.G., Sitas, F., Tollman, S.M. & Bradshaw, D. (2009). The burden of non-communicable diseases in South Africa. *Lancet*, 374,934-947.

National Library of Medicine. (2010). Retrieved November 10, 2019, from https://www.nlm.nih.gov/tsd/acquisitions/cdm/subjects_24.html.

- Ooi, S.L., Mclean, L. & Pak, S.C. (2018). Naturopathy in Australia. *Complementary Therapies in Clinical Practice*, 33, 27-35.
- Pizzorno, J. E. & Murray, M. T. (2006). *Textbook of natural medicine*. Missouri: Churchill Livingstone Elsevier.
- Presidential Health Summit Compact. (2019). *Strengthening the South African health system towards an integrated and unified health system*. Retrieved April 22, 2020, from [www.thepresidency.gov.za /download/file/fid/1650](http://www.thepresidency.gov.za/download/file/fid/1650).
- Reilly, D. (2001). Comments on complementary and alternative medicine in Europe. *Journal of Alternative and Complementary Medicine*, 7(supplement), 23-31.
- Schuiling, K.D. & Slager, J. (2000). Scope of practice: Freedom within limits. *Journal of Midwifery and Women's Health*, 45(6).
- Snider, P. & Zeff, J. (2019). Unifying principles of naturopathic medicine origins and definitions. *Integrative Medicine: A Clinicians Journal*, 18(4):36-39
- Wardle, J. & Adams, J. (2013). Naturopaths and their role in primary healthcare delivery. In Adams, J. (Ed.), *Primary healthcare and complementary and integrative medicine: Practice and research* (pp. 73-93). London: World Scientific Publishing Company.
- Wardle, J., Adams, J., Lui, C. & Steel, A.E. (2013). Current challenges and future directions for naturopathic medicine in Australia: A qualitative examination of perceptions and experiences from grassroots practice. *BMC Complementary and Alternative Medicine*, 13, 15.
- World Health Organization. *Health systems strengthening glossary*. Retrieved January 10, 2020, from https://www.who.int/healthsystems/hss_glossary/en/.

- World Health Organization. (2008). *The World Health Report 2008: Primary health care – now more than ever*. Retrieved May 19, 2015, from <http://www.who.int/whr/2008/en/>.
- World Health Organization. (2010). *Benchmarks for training in traditional/complementary and alternative medicine: Benchmarks for training in naturopathy*. Retrieved April 9, 2018, from <http://apps.who.int/medicinedocs/documents/s17553en/s17553en.pdf>.
- World Health Organization. (2013). *Global action plan for the prevention and control of non-communicable diseases 2013–2020*. Retrieved July 16, 2017, from <http://www.who.int/nmh/publications/ncd-action-plan/en/>.
- World Health Organization. (2013). *Traditional Medicine Strategy 2014–2023*. Retrieved July 16, 2017, from <http://apps.who.int/iris/bitstream/10665/92455/1/9789241506090eng.pdf>.
- World Health Organization. (2017). *Together on the road to universal health coverage: A call to action*. Retrieved April 4, 2019, from <https://apps.who.int/iris/handle/10665/258962>.
- World Health Organization. (2019). *Global report on traditional and complementary medicine*. Retrieved September 28, 2019, from <https://apps.who.int/iris/bitstream/handle/10665/312342/9789241515436-eng.pdf?ua=1>.
- World Health Organization (2020). *Noncommunicable diseases progress monitor 2020*. Retrieved June 20, 2020, from <https://www.who.int/publications/i/item/ncd-progress-monitor-2020>.
- World Naturopathic Federation. (2015). *Report: Findings from the 1st Naturopathic Federation survey*. Retrieved January 8, 2018, from www.worldnaturopathicfederation.org.

World Naturopathic Federation. (2016). *Naturopathic numbers report*. Retrieved October 14, 2019, from <http://worldnaturopathicfederation.org/wp-content/uploads/2015/12/2016-Naturopathic-Numbers-Report.pdf>.

World Naturopathic Federation. (2017). *WNF White Paper: Naturopathic philosophies, principles and theories*. Retrieved May 5, 2018, from <http://worldnaturopathicfederation.org/wnf-publications/>.

World Naturopathic Federation. *Mission of the WHF*. Retrieved January 15, 2020, from <http://worldnaturopathicfederation.org/mission-of-the-wnf/>.

CHAPTER 2

CONCEPTUAL FRAMEWORK

2.1 Introduction

This chapter consists of two sections: in section 2.2, the theoretical framework that underpins a comprehensive understanding of health and the complex contributing factors – and thus the similarly complex nature of health care – is explored and discussed within the context of the current study. In section 2.3, the literature review explores literature around the various aspects of naturopathy, the historical development of naturopathy and the reasons for the growth of profession. The philosophy and principles that underpin this system of CM is discussed, as is the treatment practices that flow from the principles that guide the profession. The global perspective on naturopathy, and how various research view the professional training, is discussed and applied to the South African context.

2.2 Section A: Constructing the theoretical framework

Any discussion on health and health related matters would be limited if it were to focus exclusively on the physical health of individuals. The concept of health was a topic that ancient philosophers grappled with for centuries. The ancient Greeks believed that harmony between the mind and body was crucial to health (Kleisiaris, Sfakianakis & Papathanasiou, 2014). Hippocrates viewed health as determined by the interplay between the environment, an individual's lifestyle, their constitution (genetic make-up) and their psychological well-being (Svalastog, Doner, Kristoffersen & Gajovic, 2017). When the WHO accepted the definition of health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity', it expanded the basic concept of health as determined by Hippocrates when adding the concept of social well-being (Svalastog, Doner, Kristoffersen & Gajovic,

2017). This idea links health to the social environment, and how it can be affected by socio-economic, political and environmental factors, amongst others. There is a social dimension to environmental change as the social, economic and environmental interaction impacts on economic development (WHO, 2011).

The effect of environmental factors has become more urgent as climate change continues to have a devastating impact worldwide on the economies of countries. It especially affects the agricultural sector with serious long-term effects on food supplies. Food and water security should be a basic human right (Universal Declaration of Human Rights, 2015) and a lack thereof has adverse effects on health. The current global COVID-19 pandemic is a case in point: the WHO (2020) advocates good hygiene practices and social distancing as some of the measures which can help to slow the spread of the virus. However, in developing countries where many people do not have access to running water to regularly wash their hands and live in overcrowded living spaces in urban areas – there is a greater risk of the virus spreading in these areas as was evidenced in Brazil for example (Lancet, 2020). In countries where environmental change has had negative effects on agriculture, the population that falls into the lower income groups are worst affected. These groups of people are also the ones who have the least access to healthcare (Sommer et al., 2015). Climate change and its effects has its roots in politics as political decisions determine policy which affects economic policy and growth, affects the various institutional systems and ultimately impacts on the individual (Rudolph & Gould, 2015).

The issue of health is a complex one since it requires an understanding of how the social, economic, environmental, cultural and political forces affects the healthcare system of a country and its citizens. Any changes in society on any level will have an effect on the health of the population for better or worse (WHO, 2016). Due to the complexity of the issues that contribute to health, it is necessary when addressing healthcare issues that a theoretical

perspective, which acknowledges this complexity, be used. The systems approach, first proposed by Engel (1977), in the biopsychosocial theoretical model is an example of one such model that acknowledges these complexities (Waite, 2018). Due to the complexity of public health challenges, a comprehensive systems approach needs to be used that integrates the social, organisational, community, cultural and psychological systems which affect public as well individual health.

A systems approach to healthcare is cognisant of the complexities of all the issues that affect the health system and ultimately the individual. Due to the complex nature of health systems, the application of a linear approach to healthcare challenges very seldom produces the desired outcomes, as the components of a complex health system do not act in a linear cause-and-effect manner (Lipsitz, 2012). In viewing health as being a part of a complex system, the best outcomes for individuals and their communities are achieved when all the levels of interaction and contribution to the health system are acknowledged (Sturmberg & Lanham, 2014). The socio-ecological model is an example of a systems model that is well suited to being adapted to the healthcare arena.

2.3 The socio-ecological model

The socio-ecological model (SME) was first developed by Bronfenbrenner as a conceptual model for understanding human behaviour. This model was further revised and developed by others to encompass a construct of health that views it as a result of the interaction between the individual, the community and the environment (Kilanowski, 2017). It provides a framework for analysing, evaluating, designing and implementing public health programs (Stokols, 1996). The model proposed by McLeroy et al. (1988), comprises the following nested levels: intrapersonal, interpersonal, organisational, community/social networks and public policy. These levels can be adapted to different complex multi-level issues since they recognise

that the various components of the environment all affect each other (Hughes, 2006). There is a dynamic relationship between the different levels. The different levels are constantly interacting, influencing and affecting each other (Goldin & Earp, 2012). This model is well suited to this research because it is cognisant of the multiple factors that impact on healthcare and aligns with the integrative healthcare approach promoted by the WHO (2019). This type of healthcare system provides healthcare that meets individuals, families and the broader community at the level they need the most. This requires an integration of all health systems to ensure that universal healthcare is available to all (WHO, 2016). A schematic representation of this model is presented below:

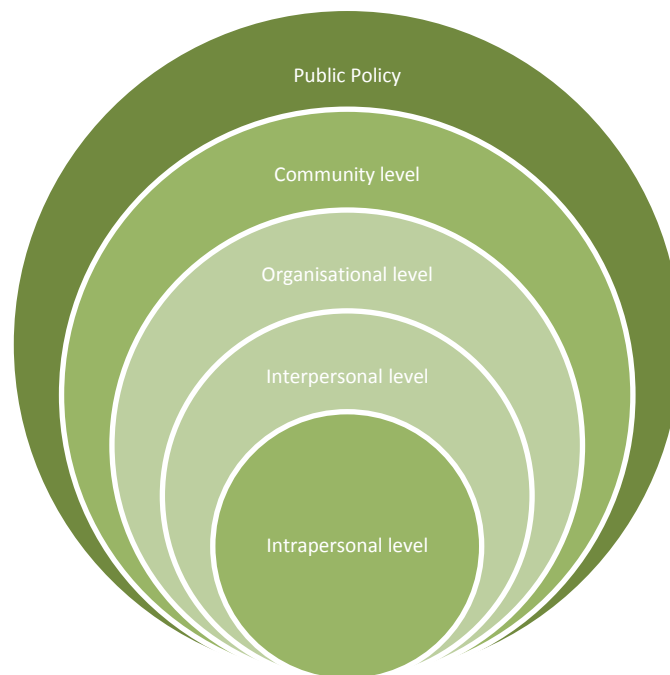


Figure 2.1: The socio-ecological model

2.3.1 The intrapersonal level

The intrapersonal level focuses on the individual. The multiple layers of complexity that makes all individuals unique. Their genetic blueprint that influences their health, the various personality traits that influence behaviour, the beliefs, attitudes, various factors that influence behaviour such as developmental history, age, gender, sexual orientation, education and

racial/ethnic identity (WHO, 2008). This, combined with various socio-economic and environmental factors, predisposes individuals to certain forms of disease. Many health promotion campaigns focus on the role that the individual can play in improving their health status by emphasising the role and responsibility of the individual for their health status. This is a rather linear way of thinking about health, for it ignores the impact of the contribution made by factors such as family, culture and whether the individual has access to adequate safe, nutritious food. Many of these factors are due to socio-economic factors that are out of the control of the individual and can be very disempowering. Sommer et al. (2015), suggest that an individual's low socio-economic status (SES) in low and middle income countries (LMIC) increases their risk of developing non-communicable diseases (NCDs) such as congestive obstructive pulmonary disease (COPD), cardiovascular disease, diabetes, gastric and lung cancers. The social determinants of health (SDH) greatly contribute to the health status of individuals and Early (2016), suggests that the physical residential address of an individual may be a better predictor of health than genetic predisposition. Therefore, while it is important to encourage individuals to take greater responsibility for their health through decreasing behaviours that increase risk – such as decreasing tobacco consumption, alcohol usage and increasing physical activity – it is also necessary to acknowledge and address the larger issues of socio-economic, cultural, political and environmental aspects that impede health (WHO, 1986). Naturopaths, in applying a wholistic approach to patient treatment, have to be cognisant of the various SDH that impact on individual health and treat the patient accordingly.

2.3.2 The interpersonal level

Individual behaviour is influenced by norms and beliefs of the social network which includes family, friends, peers, colleagues (Kumar et al., 2012), as well as religious and cultural networks (UNICEF, 2009). These formal and informal social networks have the ability to influence individual behaviour (Kumar et al., 2012). Interpersonal processes allow for the

interaction of individuals within groups that facilitate an exchange of ideas on attitudes and perceptions. This is important for healthcare, as the health promotion aspect necessitates the modification of behaviour of the individual as well as those within the social network if there are to be long-term beneficial effects. Kumar et al. (2012), found that the influence of family and friends as well as factors such as the values, norms, culture, religious perspectives held by the social network of the individual played an important role in the individual making decisions around health and other issues (UNICEF, 2009). When looking at the challenges of NCDs and the various state-sponsored efforts made to create awareness around the issues of nutrition and lifestyle, the socio-ecological theory provides a framework for looking at the broad spectrum of factors, which influence the choices and behaviour of the community and the individual within the community. There has to be a recognition of the effect of various SDH and their influence on decision-making (Sturmberg & Lanham, 2014). For example, in communities with high levels of unemployment and poverty, food availability and choices are limited (Rudolph & Gould, 2015) and it is these factors that will affect the nutritional health status of all within the community. By locating the individual within the locus of a larger sphere of influence, it is possible to address both individual and sphere of influence. This could be achieved through the examination of perceptions held through the process of educating and training the participants to create awareness of the role that every individual can play in taking control of their health and their role in the healthcare system (Goldin & Earp, 2012).

2.3.3 The organisational/institutional level

At the institutional level, the health care system and the various policies and service providers that are available are recognised. This model facilitates the examination of the attitudes, perceptions and rules of the institutions and the impact they have on individuals and their health. The WHO (2017) views access to healthcare as a basic human right and advocates for the implementation of UHC in all countries. The goal of UHC is that all individuals and

communities will have access to healthcare services. This is somewhat of a linear approach to a complex problem as the health challenges people face are linked to issues such as decent, affordable housing, public safety, employment, access to nutritious food, quality education and a clean environment (Early, 2016). If these SDHs are not addressed then the long term health status of the community will not change significantly as the various components of a complex system interact in a non-linear manner and unexpected results are often produced (Lipstiz, 2012). The institutional level is guided by policies and, therefore, the latter should be designed to address health concerns in a wholistic, integrative manner that involves addressing the various SDH as well. The absence of certain forms of healthcare from policies may make such healthcare unavailable to the population.

2.3.4 The community level

There are various role players within the community level. These focus on the various religious, cultural and community support and advocacy groups that function within communities and engage community members and, in so doing, allow transformation to take place (UNICEF, 2009). Successful community intervention can result in improved health in the community as community action can play a vital role in effecting sustainable change. Community mobilisation is, however, dependent on the empowerment of citizens to have information, to understand how and where they can engage, and a responsiveness of the system to this engagement (Weinstein, et al., 2017). As the WHO drives a campaign for member countries to make UHC available to all its citizens it becomes essential, when implementing any policy that could affect health, that the system be orientated towards putting ‘people at the centre of decision-making, engaging families and communities in their local health services’ (WHO, 2017:19).

The inequalities in South Africa did not happen overnight and the long history of apartheid has left significantly large areas of the country without a proper infrastructure to support the well-being of the community (South African Human Rights Commission, 2018). Hove et al. (2019), conducted research in a rural area in Limpopo and asked participants to identify one of the major obstacles to health. Participants, who consisted of traditional healers, various community officials and family members, identified the lack of running water as the biggest risk to health. In a community such as this, setting up a health clinic will not necessarily result in a better health status because the infrastructure does not support health and well-being as poor infrastructure does not support community health (Weinstein et al., 2017). This points to the important role that community organisations have in identifying what it is that the community needs, for if development policies are to be successful in addressing the health inequalities in the country, the various community structures need to be engaged to ensure successful, sustainable implementation (Weinstein et al., 2017).

2.3.5 Public policy

The level of public policy makes reference to the laws and regulations that enables and supports health or disables it. The South African Constitution of 1996 enshrines the right to water as a basic human right and has enacted several legislative acts to ensure the redress of access to water (Hove et al., 2019), yet these laws have still not resulted in the execution of this basic human right 24 years later. While the implementation of various policies can have a significant effect on improving some of the SDH, the approach used will determine whether the implementation and sustainability of the policy programmes are successful or not (Weinstein et al., 2017). Policy, if it does not engage with all the other components of the socio-ecological model (SEM) and the SDH, can defeat the intention of legislation and policy as demonstrated in the research by Hove (2019). For any policy strategy to be successful, collaboration needs to take place on a multi-level that includes government, non-governmental organisations,

private enterprises, public community organisations and private individuals (Weinstein et al., 2017). At the Presidential Health Summit (PHC) of 2018 (South Africa, Presidential Health Summit, 2019) a SEM was used in setting out how UHC will be rolled out in South Africa through the NHI. Health professionals from across the spectrum, including the Allied Health Professions Council of South Africa (AHPCSA), attended this summit. Some of the recommendations, if implemented, would address the various health determinants, prioritise health promotion and disease prevention and work collaboratively with other sectors in order to ‘effectively manage the critical social determinants of health’ (p.57). Another proposed intervention is the integration of ‘traditional and complementary medicine with the modern health system to improve cooperation between health professionals providing health care (p.57). Further, the statutory councils (one being the Allied Health Professions Council of South Africa) ‘agreed to facilitate recognition between different stakeholders to improve access to care’ (p.57).

2.4 Section B: Literature review exploring naturopathy

2.4.1 Rationale for the growth of complementary medicine

Traditional medicine has been used by early civilization (Guthrie et al., n.d) and continues to be used. The nineteenth century saw the development of new systems of complementary medicine like homeopathy and naturopathy, originally rooted in Germany, and spread in Europe and eventually around the world (Hausser, 2018). These systems of medicine shared the same historical roots as the biomedical model of medicine and it was essentially the German medical practitioners, who contributed to the development of naturopathy (Hausser, 2018). With the discovery and use of antibiotics, vaccines and other pharmaceuticals, in addition to advancements in the treatment of disease, led to the rise of the modern biomedical model of medicine in the twentieth century that resulted in the gradual decline in the use of traditional and complementary medicine (Baer, 2001) as the favoured system of medicine.

As the patterns of disease changed, people realised that the biomedical model was not without its shortcomings and side effects (Reilly, 2001). Disease prevention through medication intervention was insufficient and not always effective in preventing the increasing burden of disease (Stokols, 1996). Social changes in the 1960s and 1970s saw an upsurge in interest in CM again (Smith & Logan, 2002). This period saw the questioning the role of the conventional biomedical model of medicine as the only route to health (Baum, 2008), its limitations with regard to the over prescription of drugs, the impersonal approach to patients and the inability to successfully treat chronic diseases (Chitindingu, George & Gow, 2014).

Since this period there has been a sustained growth in the use of CM globally (WHO, 2013) and evidence suggests many sufferers of chronic diseases make use of CM for disease management (Falci, Shi & Greenlee, 2016). The diagnosis of a chronic disease often brings with it a life-long use of medication, which results in increased costs. A literature review conducted by Tangkiatkumjai, Boardman & Walker (2020), found that CM was perceived to be safe and users are motivated to utilize CM as part an empowering process to improve overall health. The disease challenge for the twenty-first century has shifted. Non-communicable diseases (NCD) have increased exponentially. The increase in chronic diseases of lifestyle such as diabetes, high blood pressure, cardiovascular disease and cancer has become a global epidemic (WHO, 2018). In 2012, thirty-eight million deaths globally were due to NCDs and this is projected to increase to fifty-two million by 2030 (WHO, 2014). The growth in NCDs places a huge economic burden on countries, especially low-and middle-income countries (Sommer et al., 2015; WHO, 2014), where they co-exist with communicable diseases (CD). It has been estimated that productivity cost of illness in Africa can be attributed at 37 per cent to NCDs and at 27 per cent to CDs (WHO, 2019). It is predicted that by 2030 the number of deaths in sub-Saharan Africa due to NCDs will outnumber deaths due to CD (Economist Intelligence Unit, 2014). The increase in NCDs in lower socio-economic groups is due to

factors such as increased urbanisation, changing eating habits and lifestyle (WHO, 2008). Increasing illness, loss of productivity and premature death place the family, community, healthcare system and economy under pressure. This disparity in health widens the gap in life expectancy between the wealthy and the socio-economically deprived with far-reaching consequences for the health system and economy (Braveman et al., 2011).

Both these disease profiles require an approach which focuses on the prevention of disease and promotion of health through changes in diet and lifestyle (WHO, 2013). This has been the focus of naturopathy since its inception.

2.4.2 Historical global development of naturopathy

Germany is generally viewed as the country of origin for naturopathy and homeopathy (Albrecht, 2001). The work by Alfred Brauchle (1898–1964), is regarded as the first attempt to document an objective account of the general history of natural medicine in Germany (Jutte, 1999). Johan Sigmund Hahn (1696–1773) authored *The Healing Powers of Water*. In it, he expands on his theory of the therapeutic system of healing, which was based bathing and drinking cold water (Jutte, 1999). The early writing of Hahn and others like him inspired and influenced other followers and practitioners. In 1835, Eucharius Oertel published *The History of the Water Cure from Moses to Our Present Time* (Jutte, 1999). This book included the writings of Hahn.

There appears to be two main protagonists of the water cure in the first half of the nineteenth century in Germany in the persons of Vincint Priessnitz (1799–1851) and Sebastian Kneipp (1821–1897). Priessnitz was a practitioner of the water cure and in a biography published a year after his death it claimed him to be the ‘clear sighted founder of a new therapy’ (Jutte, 1999, 349). Kneipp is regarded as the founder of a form of treatment called Nature Cure (Smith & Logan, 2002). During Kneipp’s theological studies, he developed pulmonary tuberculosis.

He read the book by Johan Sigmund Hahn and in an attempt to find a cure for his illness he decided to apply the treatment advocated in the book to himself (<http://www.kniep.com/>). He experimented with the treatment and modified it until he regained his health. He was then able to continue with his theological studies and in this period, he continued using the treatment and started treating fellow students. After his ordination, he used his treatment on parishioners when he was called to minister to the sick who stood very little chance of recovering from their illnesses. Throughout this time, he continued to develop his water treatments and in 1886, he published his first book called *My water cure* (<https://www.gcrn.org.uk/introduction/early-history-of-naturopathy/>), in which he included herbal remedies, exercise and nutritional advice. This book popularised his particular form of treatment.

A contemporary of Priessnitz, Johan Schroth, added nutritional changes to the water cure. This he did in the form of dietary support, food rotations and restrictions as part of the therapeutic treatment. He could be considered one of the early naturopaths in Germany (<https://www.gcrn.org.uk/introduction/early-history-of-naturopathy/>). The use of food and herbs as medicine can be traced to the time of Hippocrates and the use of herbal medicine had long been used globally in traditional medicine. It reached its peak in sixteenth-century Europe, so it is not surprising that these forms of medicine were also incorporated into the therapeutic treatments used in Germany (Hausser, 2018). Over time, other treatment practices like homeopathy and physical therapies was added to the therapeutic treatments used. Naturopathy has continued to grow in Germany and spread to other countries in Europe and beyond.

The term ‘naturopathy’ was officially used in the nineteenth century when Benedict Lust established the first training centre for naturopaths in the United States of America. His philosophy was heavily influenced by Kneipp and Preissnitz who were based in Germany and his approach to treatment used a combination of medicinal herbs, exercise and various forms of hydrotherapy (Smith & Logan, 2002; WHO, 2010). Lust studied under Kneipp and when

he moved to America in 1892, he introduced 'Nature Cure' as a treatment modality. He later trained as an osteopath. The term naturopathy was first used when he opened the first training centre called the American School of Naturopathy in 1902. He taught the principles of Nature Cure and over time added manipulative therapies as well as homeopathy to the training. His biggest contribution may be considered to be the therapeutic eclecticism which he encouraged which is still evident in naturopathy today. The 1920s and 1930s saw naturopathy grow in popularity with the opening of many new schools (Smith & Logan, 2002). Graduates of these institutions spread naturopathy to other countries such as Great Britain, Australia and South Africa. As biomedicine became more dominant, there was a slow decline in interest in CM which appeared to peak in the 1950's (Pizzorno & Murray, 2006).

The 1970s saw the establishment of naturopathic colleges, one of which, the John Bastyr College of Naturopathic Medicine, is still in existence as Bastyr University. There have been other naturopathic colleges that have been established since the 1970s, and seven of these colleges formed the American Association of Naturopathic Medical Colleges (AANMC) (<https://aanmc.org/about>), all of which are recognised training institutions and their graduates complete a certified board examination. This association has been the driving force in setting standards for the curriculum and training in naturopathic colleges registered with the association. The American Association of Naturopathic Physicians was formed in 1985 (<https://www.naturopathic.org/about>) and along with the AANMC have been instrumental in developing the history of naturopathy and codifying the philosophy and principles of naturopathy. In 1997, the AANP published the article, *The process of healing: a unifying theory of naturopathic medicine*. This seminal article signalled the emergence of a new discourse among all stakeholders around the theories and philosophy underpinning naturopathic medicine (Zeff, Snider & Myers, 2006).

In India, the introduction of naturopathy into the country was through Shri Chelapati Sharma who translated Louis Kuhn's book, *New Science of Healing* in 1894. This book was subsequently translated into different dialects (Central Council for Research in Yoga and Naturopathy: <http://www.ccryn.org/>). This led to the establishment of clinics practising Nature Cure, which is currently still the form of naturopathy practised in India (World Naturopathic Federation, 2015). Mohandas Karamchand Gandhi (Gandhiji) was impressed by Adolf Just's book, *Return to Nature* and he subsequently wrote and published several articles on the treatments prescribed in the book. He also applied the treatment to himself, his family and the members of his ashram. He often used to stay at a Nature Cure clinic in Pune run by Dr Dinswaha Mehta between 1934 and 1944 (Central Council for Research in Yoga and Naturopathy). When he died the government established the National Institute of Naturopathy in 1986 at the site in Pune. Although there are many institutions training naturopaths in India, currently twelve colleges offer a five-year degree programme that is recognised by the Ministry of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) (Central Council for Research in Yoga and Naturopathy).

The World Naturopathic Federation (WNF) was formed in 2012 with one of the aims being uniting the global naturopathic community (World Naturopathic Federation, 2015). As a result, for the first time research into various aspects of naturopathy was conducted in 22 countries. The WNF (2017) released a white paper which summarised the naturopathic philosophies and principles. This aligned well with previous attempts by Zeff, Snider, Meyers and others to codify naturopathy's philosophy and principles (World Naturopathic Federation, 2017).

2.4.3 Philosophy and principles underpinning naturopathy

Though it is historically acknowledged that naturopathy has its roots in the early nineteenth century in Germany, it was not until the twentieth century that attempts were made to codify

the historical development and the philosophy that underpin naturopathy. In developing the history and philosophy of naturopathy, researchers have gone back to the roots of modern medicine.

Through the centuries, there have been various philosophical approaches to medicine. Hippocrates is often described as the father of modern medicine due to the different approach that he took at the time – for example, relying on the power of nature to cure and observing: ‘Those by nature over weight die earlier than the slim’ was among his many observations (Grammaticos & Diamantis, 2008, p.2). This aptly applies to the increasing rates of obesity and the related health challenges currently experienced globally.

Core to naturopathic philosophy are the concepts of vitalism and wholism. The concept of vitalism draws on healing traditions, which date back thousands of years to Ayurveda, Chinese, Greek, Arabic, and monastic European traditions (World Naturopathic Federation, 2017). These traditional systems of medicine all believed that the body had the ability to heal itself. The *Corpus Hippocraticum* (460–377 B.C.) is reputed to be the first document to describe the concept of vitalism as an instinctual human force inside all of us, which is responsible for health (World Naturopathic Federation, 2017). The concept of vitalism has been defined as:

The intelligence that animates each and every person and it refers to forces beyond the physical self that govern life, health and healing. Vitalism postulates that there is a self-organising principle within all life (World Naturopathic Federation, 2017:10).

The vital force could be understood as the innate life force, which animates us and keeps us alive. Each individual has their own level of vitality, which allows the healing process to proceed. It is used as a conceptual tool in practice. In order to achieve total health, the mental, emotional as well as the physical history of the individual has to be examined in conjunction with the lifestyle and environment that the individual finds themselves in. This wholistic

evaluation enables the development of a treatment plan, which aims at treating the individual holistically in order to support the vitality of the individual.

The concept of wholism dates back to Plato and has been defined as:

The understanding that all entities and systems in the universe exist as a unified whole. The parts of the whole are dynamically interdependent and interrelated. The whole is greater than the sum of its parts and cannot be comprehended through an isolated examination of its constituent parts. Wholism asserts that the parts must be discussed as an integrated whole in order to be fully understood (World Naturopathic Federation, 2017:14).

The application of this principle to naturopathy recognises the interplay and interdependence of the emotional, psychological, physical and spiritual aspects of an individual and its interaction with social and environmental factors that impact on health. Thus, a holistic approach in treating patients is required to arrive at the root cause of the disease.

Flowing from this philosophy, the principles that underpin naturopathy have been developed:

First do no harm (primum non nocere)

This principle has its origins in the writings found in the *Corpus Hippocraticum*. The naturopath is expected to treat the patient in a way that works with and supports the patient's innate vital force. The form of treatment used must not in any way cause harm to the patient. It is the responsibility of practitioners to ensure that they are well trained in order to ensure that acts of commission and omission do not occur (Pizzorno & Murray, 2006).

Healing power of nature (vis medicatrix naturae)

It is the role of the naturopathic doctor to support the *vis medicatrix naturae* process by ensuring that they identify the obstacles to patient's health and assist the patient to remove it. They have the duty to support the body's innate healing abilities through recommending lifestyle changes,

the use of natural therapies and physical treatments in order to create the conditions for the innate healing process to ensue (World Naturopathic Federation, 2017).

Treat the cause (tolle causum)

This principle stresses the importance of identifying and treating the root cause of the illness/disease in order to return the body to its innate state of equilibrium. Taking a thorough case history to identify the root cause of disease is important if the process of healing is to occur. A failure to do this results in the alleviation of the symptoms only. Naturopathic doctors have to look at the full range of factors which contribute to the diseased state and treat the patient wholistically in order to address the root cause of the disease (World Naturopathic Federation, 2017).

Treat the whole person (tolle totum)

This principle draws strongly on the philosophy of wholism. It recognises the complexity of factors which impacts an individual's state of health. This principle acknowledges the complexity and interconnectedness of the human being. Health and healing can be achieved only when the whole individual is treated.

Naturopathic practitioners as teachers (docere)

The encounter between the patient and naturopath is unique in that every individual is unique. The role of the naturopath is to empower the patient to make the best possible lifestyle/health choices for themselves in order to ensure that long-term health is achieved. Within the consultation the naturopath therefore, has to educate the patient so that they understand how their illness developed. The patient is empowered to take the necessary steps needed to adjust their lifestyle and dietary habits in order to improve their health status.

Disease prevention and health promotion

This principle builds on the idea of 'naturopath as a teacher'. The naturopath has a responsibility to encourage the patient to be proactive in improving their health status rather

than being reactive to treating disease. In implementing this principle, the naturopath aims to prevent or slow the progression of disease and in so doing avoid the development of long-term chronic disease.

These naturopathic principles are not unique – but rather is the distillation of many philosophical views on health dating back to the ancient Greeks (World Naturopathic Federation, 2017). It has been codified over the years and used as a guide in practice. Research conducted by the World Naturopathic Federation (2016) found that most naturopathic training institutes taught these principles as part of their curriculum. Zeff, Snider and Myers (2006) used these principles to develop the therapeutic order of healing to guide the practitioner in treating patients which is represented in the figure below:

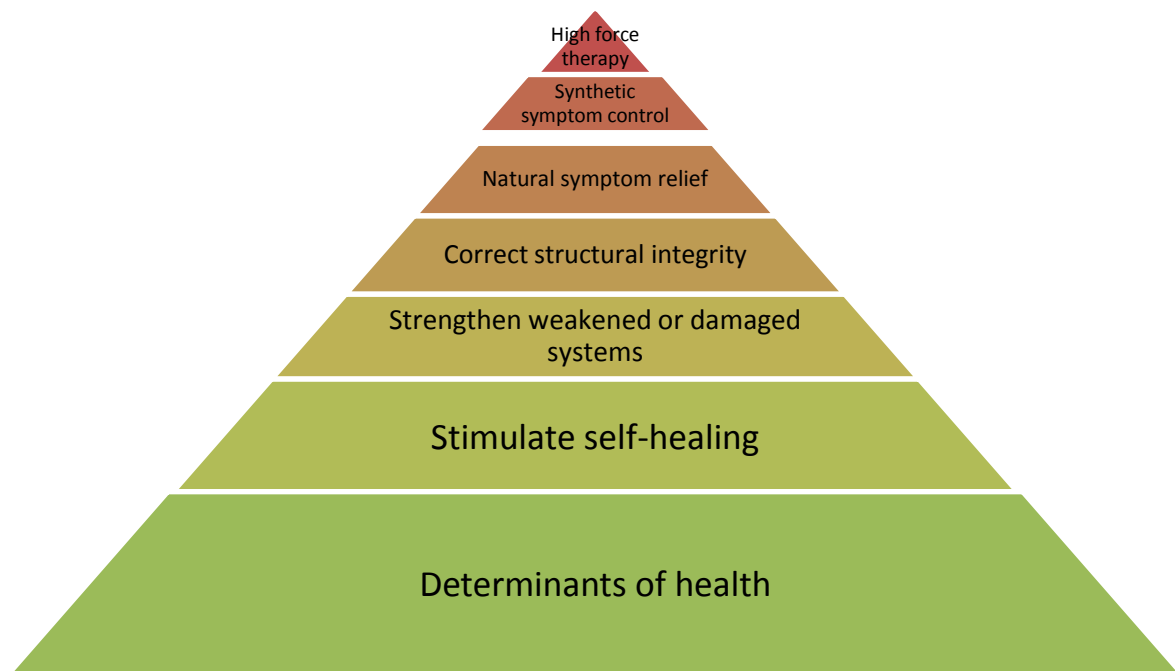


Figure 2.2: The therapeutic order of healing

Zeff, Snider & Meyer (2006), identified the seven components of the therapeutic order. These are:

Determinants of health: in order to establish a foundation of good health, it is necessary to first remove the obstacles to health such as poor diet and address lifestyle factors such as stress, too little sleep, exposure to toxins (<https://aanmc.org/featured-articles/therapeutic-order/>). This is based on the principle of treating the root cause of disease.

Stimulate self-healing: Once the root cause of disease is addressed, the practitioner then focuses on stimulating the innate healing inabilities of the body through the use of various therapies such as constitutional hydrotherapy, meditation or yoga (Zeff, Snider & Meyer, 2006).

Strengthen weak or damaged systems: Some organ systems may be functioning sub-optimally due to over stimulation (for example adrenal fatigue after a prolonged period of stress). Naturopaths can draw on a range of treatment modalities such as botanical medicine or nutritional supplements to support, stimulate and repair the weakened organ (Zeff, Snider & Meyer, 2006).

Correct structural integrity: Many structural problems are thought to stem from stress on some internal organ – for example, mid-back discomfort or misalignment can be associated with long term underlying stress on the digestive system (Zeff, Snider & Meyer, 2006). Various physical therapies like massage, electrotherapy, or spinal manipulation can be used to support and maintain muscular and skeletal integrity (<https://aanmc.org/featured-articles/therapeutic-order/>)

Natural symptom relief: While the objective of naturopathic medicine is to treat the underlying pathology, there are times when symptomatic relief is necessary – in this

instance the naturopath is to use natural substances which will not add to the toxic burden in the body – the principle of ‘first do no harm’ is the guiding principle applied here (Zeff, Snider & Meyer, 2006).

Synthetic symptom control: While every effort is made to apply naturopathic principles to treatment, there are situations when referral to a biomedical practitioner is necessary. Naturopathic practitioners should be well-trained to recognise when this becomes necessary (Zeff, Snider & Meyer, 2006).

High force, invasive therapies to treat pathology and suppress symptoms: This becomes necessary to save the life of a patient. While symptom suppression is not encouraged, the principle of ‘first do not harm’ has to always be prioritized (Zeff, Snider & Meyer, 2006).

The therapeutic order of treatment should be used to guide the practitioner in the treatment of a patient. However, it has to be acknowledged that not all naturopaths subscribe to the therapeutic order and treat on a symptom basis with an over prescription of supplementations – which does not address the underlying cause of the illness (Zeff, Snider and Meyer, 2006), Consequently the patient repeatedly returns for treatment as the symptoms persist once the supplementation is stopped. The philosophy and principles which guide naturopathic practice makes naturopathy an ideal system of medicine to address the crisis of chronic disease which plagues the 21st century.

2.4.4 Size of the profession

The size of the naturopathic profession varies from country to country, depending on the legal requirements for registration. In Germany there is a long tradition of CM usage, especially in homeopathy and naturopathy. Except for a short period during the Nazi rule, there has been few restrictive legislations on CM. For many years, non-medically trained *Heilpraktikers*

(‘health practitioners) were allowed to practice alongside medical doctors. By the 1930s it was estimated that the number of these health practitioners were equal to the number of medical doctors (Ernst, 1996.). These practitioners were not obliged to undertake medical training or testing (Ernst, 1996). In order to practise they had to pass a test conducted by the local authorities that focused on legal issues to ensure that they would not endanger the lives of their patients. Other than this, they were free to practice (Ernst, 1996; Albrecht, 2001).

As a result of the implementation of these laws, in 2007 Germany had a ratio of *Heilpraktikers* to physicians of 1:3 (Joos et al., 2008). Germany has a unique situation whereby a range of different types of training is offered - from diploma courses to degree courses for the training of naturopaths. General practitioners are allowed to practise some form of CM in combination with biomedicine (Joos, 2008), and many of these have acquired a naturopathy qualification through courses approved by the state medical associations (Ernst, 1996). It is now estimated that Germany currently has over 40 000 naturopaths in practice (Hausser, 2018).

Naturopathy is practised in twenty-seven out of the fifty-four European countries with a variety of the training programs used (see table below). As a result of the different methods of training, most naturopathic practitioners are unregulated (World Naturopathic Federation, 2016), hence it is difficult to quantify the exact number of naturopaths in practice in Europe.

Table 2.1: European countries where naturopathy is practised

European countries naturopathy is practiced			
Austria	France	Italy	Slovenia
Belgium	Germany	Luxembourg	Spain
Bosnia and Herzegovina	Greece	Netherlands	Sweden
Cyprus	Hungary	Norway	Switzerland
Czech Republic	Iceland	Portugal	Ukraine
Denmark	Ireland	Romania	United Kingdom
Finland	Israel	Russia	

Source: World Naturopathic Federation, 2016

In the United States of America (USA) it is also difficult to determine the numbers of naturopaths in practice since different professional bodies have different requirements for registration and different states also have different registration requirements (Baer, 2001). Research conducted by the WNF (2015) estimate that there are between 2 500 and 7 000 naturopaths in America. Naturopathy is a licensed profession in 20 of the 50 states. In order to be licensed, a licensing examination has to be passed after completion of a training course (<https://www.naturopathic.org/regulated-states>). Due to the existence of different types of training programmes varying from online courses to four-year courses, there are licensed and unlicensed naturopaths, depending on the requirements of the different states. It is therefore not possible to determine the exact number of naturopaths in practice (Baer, 2006; WNF, 2016).

Naturopathy was introduced into Canada from Europe and the United States in the early twentieth century and by the 1920's naturopathy was established in Canada. The Canadian Association of Naturopathic Doctors (CAND) was established in 1955 to promote naturopathy (<http://www.cand.ca/>). Up until 1981, naturopaths were trained in America and then practiced in Canada (Gort & Coburn, 1988). In 1978, the first naturopathic training institution was established in Ontario. Currently the CAND has a membership of over 2500 Canadian Naturopaths and naturopathic students (<http://www.cand.ca/>).

Naturopathy spread to South America in the early twentieth century when one of Benedict Lust's students, Juan Estève Dulin, established a naturopathic school in Buenos Aires in 1919. From here, naturopathy gradually spread through South America with most training centres opening in the last two decades. Currently thirteen training institutions exist in the region (World Naturopathic Federation, 2015).

The early naturopaths in Australia were either trained overseas through apprenticeships, or were self-educated. They went on to set up practice and/or they set up naturopathic colleges

(Baer, 2006). During the 1960s and 1970s, naturopathy became more popular. By the 1980s, a number of private naturopathic or natural therapy colleges were established (Baer, 2006). An absence of regulation and a lack of registration in the 1990s resulted in a huge growth in the number of private institutions as well as multiple public university courses offering training in CM such as naturopathy, western herbal medicine and homeopathy (McCabe, 2005). By 2005 CM in Australia was regarded as the unofficial form of healthcare running parallel with mainstream healthcare (McCabe, 2005). Naturopathy is largely self-regulated (McCabe, 2008). The demand for naturopaths in Australia has increased to such an extent that naturopathy is on the skills shortage list for 2019 (<https://www.nwivisas.com/nwi-blog/australia/shortage-skills-occupation-list-for-australia-for-2019/>).

Naturopathy has been practised in India since the turn of the twentieth century (Nair & Nanda, 2014). There are colleges that offer degree courses as well as a number of private training centres that offer a diploma or a certificate in naturopathy (Nair & Nanda, 2014). Colleges are accredited by government (World Naturopathic Federation, 2015), but the private colleges are unregulated and it is not easy to determine exactly how many naturopaths are practicing.

Naturopathy is currently practised in Africa in Botswana, the Democratic Republic of Congo, Ghana, Kenya, Mauritius, Namibia, Nigeria, South Africa, United Republic of Tanzania, Zambia and Zimbabwe (WNF, 2016) and there are two training institutions – one in Zambia and one in South Africa (World Naturopathic Federation., 2015). In South Africa, all allied diagnostic professions are required by law to be registered with the AHPCSA. At the present time, there are 84 registered naturopaths in South Africa (AHPCSA Practitioners' Register, <http://ahpcsa.co.za/wp-content/uploads/2018/03/NATUROPATHY-1.pdf>). Although there are many CM practitioners who identify themselves as naturopaths, in South Africa naturopaths

have title protection and only registered naturopathic practitioners may legally use the title of naturopath.

Due to the growth of naturopathy and the large number of naturopaths in practice, the WHO (2010) developed benchmarks for the training of naturopaths. The aim of the document was to set minimum standards for the training of naturopaths. This document provides benchmarks for the basic training of practitioners with the aim of promoting safe standards of practice in order to minimize the harm to users of naturopathic services. It also provided a source of reference for governments wishing to establish a set standard for training and registration. Since the publication of this document the WHO (2013) has published the Traditional Medicines Strategy that encourages member countries to introduce regulation for all T&CM in order to ensure the safety of the public when making use of these healthcare services.

2.4.5 Scope of practice

The WHO (2010) has established a broad range of treatment practices in the scope of practice (SOP) for naturopaths that include the following: acupuncture, botanical medicine, counselling, homeopathy, hydrotherapy, naturopathic osseous manipulation, nutrition and physical therapies.

The WNF conducted research into the treatment practices, curriculum and training of naturopaths in 22 countries across the globe and found that the treatment practices used by naturopaths globally are very similar (World Naturopathic Federation, 2015). The most common treatment practices were found to be hydrotherapy, lifestyle therapy/counselling, massage therapy, energetic therapies, clinical nutrition, botanical medicine, homeopathy, physical therapies and traditional Chinese medicine (TCM) practices.

The SOP for naturopaths in South Africa was established by the Allied Health Professions Act 63 of 1982, and amended by Government Notice No. R266 of 26/3/2001, section 45(5). It sets out the treatment practices that naturopaths may legally use in practice. These includes light therapy, hydrotherapy, thermal therapy, acupuncture or acupressure, electrotherapy, massage therapy, exercise therapy, vibration therapy, reflex therapy and remedies, dietary advice or dietary supplementation.

A comparative analysis of the SOP's indicate that the South African SOP is aligned with that practiced globally though the terms used may differ: for example – acupressure or acupuncture fall into the larger category of traditional complementary medicine (TCM) but is referred to as stand-alone treatments in the South African SOP.

2.4.6 Naturopathic curriculum

The SOP as prescribed in the regulations is aimed at establishing a curriculum that is standardized and ensures that practitioners who graduate from the recognized training institutions are competent (Clarke, Doel & Segrott, 2004). Currently there is only one tertiary training institution that is approved by the AHPCSA for the training of naturopaths in South Africa.

Government Notice No. R266 of 26/3/2001 determines the minimum competencies required to register as a naturopath in South Africa and states that ‘a person who wishes to register as a naturopath under the Act shall pass at an educational institution a Naturopathy Degree’. The subjects required are listed in table 2.2 below:

Table 2.2: Subjects required for naturopathic training

The major subjects	The ancillary subjects
(i) anatomy	(i) basic aromatherapy and reflexology
(ii) basic naturopathic nutrition	(ii) basic chemistry and biochemistry
(iii) clinical practice management	(iii) basic microbiology
(iv) environmental medicine	(iv) basic homoeopathy
(v) health promotion and community health	(v) basic pharmacology
(vi) integrated patient management	(vi) ethics and jurisprudence
(vii) naturopathic diagnosis, iridology and disorders and cures	(vii) human movement basics
(viii) philosophy of natural medicine	(viii) hydrotherapy
(ix) physiology	(ix) physical exercise and therapeutics
(x) phytotherapy	(x) practitioner development and ethics
(xi) principles of natural medicine	(xi) research methodology
(xii) psychology, counselling, psychobiology	(xii) rest and relaxation and vibrational healing
(xiii) symptomology, diagnostics and pathology	(xiii) practice management
(xiv) traditional medicine systems and African traditional medicine	
(xv) vitamins and mineral therapy	

The South Africa curriculum exceeds the WHO (2010) curriculum recommended as the minimum requirements for training naturopaths. The problem with only listing the subjects in the curriculum is that there is no indication of the depth and content of the various subjects to conduct an in-depth evaluation and comparison of the curricula

2.4.7 The public health sector

Throughout history there has been some form of public health system that has been implemented by societies. During the time of the Roman Empire there were laws governing the burial of the dead, inoculation was used in India and China before the Common Era against smallpox and in Europe in the Middle Ages sufferers of leprosy were isolated (Baum, 2008).

It was, however, only in the nineteenth century that the concept of public health first began to emerge (Turnock, 2009). During the Industrial Revolution, there was a rapid increase and growth of urban areas. An increased population in urban areas resulted in increased unsanitary conditions and, as a result, diseases spread rapidly and industrialised areas were affected by successive episodes of cholera, smallpox and typhoid (Turnock, 2009). Several competing theories speculated on the cause of diseases during this period. European societies were the first to focus a 'public effort at controlling disease and attempting to create healthier living environments' (Baum, 2008, p.20). The Public Health Care Act was passed in Britain in 1848. This allowed local authorities to address unsanitary conditions in the urban areas (Baum, 2008). This was the start of the legitimisation of public health care, an intervention that would impact Britain and all its colonies, including South Africa.

In the twenty-year period between 1879 and 1899, the Colonial Parliament in South Africa passed nineteen laws pertaining to health. As a result of the Public Health Amendment Act 23 of 1897, a department of Public Health and the post of Medical Officer of Health for the colony was created (Van Rensburg, 2010). The 1897 Act gave South African local public health authorities the power to deal with the provision of 'water, buildings, abattoirs, non-white residential areas, harmful and offensive practices, dairies, garbage disposal' (Van Rensburg, 2010, p.57). After the 'Spanish Flu' epidemic of 1918 the Public Health Act 36 of 1919 (South Africa) was passed. This Act aimed at co-ordinating health on a three-tier system in which public health would be co-ordinated at a national, provincial and local level. The focus of this act was essentially the protection of the health of the white population in urban areas (Phatlane, 2006). Despite efforts to change this legislation (for example, through the Gluckman Report of 1944), the core principles of this 1919 legislation continued to impact on the health care system in South Africa. The national Department of Public Health continued to be seen as a source of financing for the other two tiers of public health, while the private healthcare system continued

to grow and the division between curative and preventative health care continued to grow (Van Rensburg, 2010). All of these problems were exacerbated by the implementation of the system of apartheid in 1948 - which continued to build on the segregated and unequal health services developed in the colonial era (Van Rensburg, 2010).

Public health is concerned with the total system and not only the eradication of a particular disease. The WHO defines public health as ‘the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society’ (<http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/public-health-services>). Public health has an important role to play in contributing to the health system in order to ensure that it works effectively. Bloland et al. (2012), has identified six core functions of public health that can significantly contribute to the effectiveness of health systems. The core public health functions are:

The availability of strategic epidemiological information: Scientific evidence should guide decisions on developing health policies. Positive health outcomes should not only be about providing health care – it should also focus on the provision of appropriate care to the appropriate people at the right time.

Strengthening key public health institutions and infrastructure: the focus should be on enhancing public health institutions in order to generate the data needed to inform decision making - for example, to implement public health programmes which will strengthen health systems

Establishing strong public health laboratory networks: International co-operation between public health laboratories to share information relating to public health issues - for example, the effects of climate change on health.

Building a skilled and capable workforce: public health institutions play a vital role in contributing towards the development of a skilled workforce that can competently staff health systems.

Implementing key public health programmes: The core essence of public health is to generate data that is used to develop programmes to protect the health of the public such as programmes to eliminate measles globally.

Supporting critical operational and applied research: Research provides important, reliable information around, for example, pandemics, which can be used to make informed programme decisions that not only address current health challenges but addresses health challenges of the future.

Post 1994 democratic elections in South Africa saw the constitution of the country change. The right to healthcare is enshrined in the Bill of Rights and lays the foundation for a healthcare system based on respect for human rights, social justice, equality and the right to health care for all. Since then these core principles have been developed and expanded upon. The National Health Bill of 2002 seeks to ensure that the goals as set out in the Constitution are met by the introduction of a more local District Healthcare System (DHS) through a system of Primary Health Care (PHC) (Van Rensburg & Pelsler, 2010). The constitutional right to healthcare is addressed in the proposed NHI, which also recognises the important role played by public health (South Africa, Presidential Health Summit, 2019).

2.4.8 Primary healthcare

At the Astana conference in 1978 the broad outlines of a PHC approach was established. PHC was defined as an:

Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the

community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination (WHO, 1978, p.16).

It was envisaged to form an integral part of a country's health system and was seen to be accessible to the community so that it would be the first contact that members of the community would have with the national health system. It set out three key pillars of PHC: the concept of 'health for all' that represents a commitment to justice and equity for all within a health care system; it recognised the right of the community to be involved in decisions regarding their health services and the need for the medical profession to collaborate with other health sectors which contribute to the health of a population (Macdonald, 1995, p.57). The WHO developed a strategy in 1978 called 'Health for All' by the year 2000, which was based on the Astana Declaration. This was initially aimed at developing countries as a way in which overall health was linked to economic and social development (WHO, 2008). However, since this declaration it has become more evident that lifestyle impacts on health and the healthcare system cannot adequately meet the needs of the populace with a changing disease pattern and therefore a new vision of PHC was required.

The disease challenge for the twentieth century has shifted due to changing 'social, demographic and epidemiological transformation fed by globalization and ageing populations' (WHO, 2008, p.1). These changes that have an impact on lifestyle have resulted in a shift in disease patterns which were not previously experienced. There is an increase in chronic diseases of lifestyle and ageing such as diabetes, high blood pressure, cardiovascular disease, cancers and the illnesses associated with ageing seen not only in the western world but in the developing countries as well (WHO, 2008). These new disease patterns required a different strategic PHC approach. The WHO (2008), set the following goals for PHC with the main objective being better health for all:

- to reduce exclusion and social disparities in health (universal health coverage reforms)
- organising health services around people's needs and expectations (service delivery reforms)
- integrating health into all sectors (public policy reforms)
- pursuing collaborative models of policy dialogue (leadership reforms)
- increasing stakeholder participation

The South African National Health Bill of 2002 sets out to achieve the above before the WHO guidelines were developed. This was largely as a result of a change in government with the political vision of making healthcare available to all its citizens, regardless of race. Despite the political will, the healthcare system was still overwhelmed with the rapidly increasing rate of NCDs (South African Medical Research Council, 2018).

2.4.9 Naturopathy as primary healthcare

As a diagnostic system of medicine, naturopathy is one of the major CM systems which is practiced in Europe, North America, Australia, New Zealand, South Asia and Africa (Wardle & Sarris, 2014). The WHO (2010), defines naturopathy in terms of what naturopaths do based on its core philosophy: naturopathy emphasises prevention, treatment and the promotion of optimal health through the use of therapeutic methods and modalities which encourage the self-healing process – the *vis medicatrix naturae*. Naturopathic medicine is viewed as a system of PHC based on the philosophy and principles which determines the practice of naturopathy (Wardle & Oberg, 2011; Fleming & Gutknecht, 2010). The principles of doctor as teacher, finding the root cause of an illness, treating the patient holistically and the role of prevention (Pizzorno & Murray, 2006; WHO, 2010) are what guides naturopaths in treating their patients.

Naturopathy as a system of medicine is well suited to address the disease challenges of the twenty-first century since it focuses on preventative medicine through the use of education and

empowering of patients to understand the cause of their illness and encourages a change in lifestyle. Treatment is non-invasive and can be low-cost. India is an example of a country where naturopathy forms a part of PHC which makes it more accessible to the population (Fritts et al., 2008; Central Council for Research in Yoga and Naturopathy). As the rate of NCDs has increased globally (WHO, 2019), naturopathic organisations globally are increasingly calling for this system of CM to be recognised as a form of PHC (WNF, 2019) since the philosophy and treatment practices of this modality positions it as a viable treatment modality in treating NCDs (Wardle & Adams, 2013). In South Africa, statistics demonstrate an increase in the number of people using CM remedies and therapies in many population groups, especially in the sector that suffers from chronic illnesses (Chitindingu, George & Gow, 2014). This increase in demand for CM services is contributing to the growth of CM therapies and products. There is a burgeoning CM industry in the country and it is estimated that the CM industry generates an annual turnover of R8 billion (Traditional and Natural Health Alliance, 2014).

The potential exists for naturopathy to be a part of the public healthcare system since its core philosophy is about disease prevention and health promotion in the individual as well as in the broader community (Wardle & Oberg, 2011). There is, however, a lack of research in naturopathy and this hampers professional growth and the acceptance of naturopathy by the mainstream biomedical profession (Nair & Nanda, 2014). Institutions that train naturopaths should encourage lecturers and students to engage in research in order to develop an evidence-based approach to naturopathy that will help to develop the profession (Wardle & Sarris, 2014).

The minister of health in South Africa is the governing authority for all health professions. The Medical and Dental Professions Board (MDB) of the Health Professions Council of South Africa (HPCSA) ensures that the standards of training of medical and dental health professionals is maintained at training institutions. A subcommittee of the MDB, the Undergraduate Education and Training (UET), is tasked with monitoring adherence to the

training standards set by the MDB by accrediting the training institutions. In 2011, the Canadian Medical Education Directives for Specialists (CANMEDS) framework, which describes the essential abilities and skills a medical doctor needs to improve patient care (<http://royalcollege.ca/rcsite/canmeds/canmeds-framework-e>), was adapted for health professionals registered with the HPCSA, as the core competencies for training undergraduate and health professionals in South Africa and Africa (Van Heerden, 2013).

Practitioners registered with AHPCSA are termed allied health professionals and they are allowed by law to ‘diagnose, and treat or prevent physical and mental disease, illness or deficiencies in humans’ (Act 63 of 1982). The Allied Health Professions Council of South Africa (AHPCSA) has no minimum competencies document clearly set out for the naturopathic profession which it regulates. Instead it sets out the scope of practice (Act 63 of 1982 chapter 11) and the Acts pertaining to the profession. A standardised set of core competencies against which the training of practitioners can be judged to determine their level of competence is important to guide the training of naturopathic students as it contributes to ensuring the safety of the public (Clarke et al., 2004).

In the document *Strengthening the South African Health System towards an Integrated and Unified Health System* (2019, p.57), the NHI is envisaged to integrate ‘traditional and complementary medicine with the modern health system to improve co-operation between health professionals providing health care’. How this will be done is not set out in the document. In a systematic review conducted by Armitage et al. (2009), it was found that there are many models which have been developed to demonstrate how integration within the health system can be achieved. The models highlight essential characteristics of ‘patient centeredness, offering services across the continuum of care, strong leadership, accountability through performance measurement, information sharing across the system, focus on primary care, and

healthcare teams” (Armitage et al., 2009: 7) as being important core characteristics to focus on if successful integration is to be achieved..

2.5 Summary

Providing solutions to address the health of the population is a complex matter. The disease patterns have changed over the past few decades and governments are challenged to develop a health care system that addresses both CD and NCD. The increase in NCDs that are chronic in nature has resulted in the increased use of various CM therapies which are often used in conjunction with conventional allopathic medicine (Kania-Richmond & Metcalfe, 2017). In developing a response to the NCD epidemic, the WHO (2013) developed the Global Action Plan for the Prevention and Control of NCD. The document sets out various objectives that expands on PHC, thereby enabling universal health coverage. It also encourages a multi-disciplinary approach to dealing with NCDs. The 2016 *WHO Integrated Care Models: An Overview* document calls for an approach that is centred on addressing the needs of the individual, the family, and the community as this is seen as a way of addressing the increase in chronic disease and NCD-related morbidity. Integration can be understood as a system which integrates all the different types of healthcare providers that the population makes use of. This would include T&CM practitioners as well as allopathic medical practitioners. Gaboury, April & Verhoef (2012, p.5) define integrative healthcare as:

a system of healthcare which is patient-centred and collaborative, encompassing a diversity of therapeutic options (including CM) that has been found to be safe, effective and informed by available evidence to achieve optimal health and healing.

This definition aligns with the objective of integrated healthcare set out in the WHO (2016) document that requires that it be individualized to the patient and it is collaborative. Khorsan et al. (2011) argue that collaborative care should involve shared patient management as well as shared values, goals and practice guidelines. Naturopathy is a system of PHC since the

philosophy and principles that underpin naturopathy has the same objectives as PHC. Although it is currently not a part of the public healthcare system in most countries, countries like Cuba and India provide examples of how naturopathy could be integrated into the public healthcare system (WNF, 2016).

In South Africa development plans are being put into place to shift the healthcare system to that of a National Healthcare Insurance (NHI) system which has as its primary goal UHC (Department of Health, 2017). In order to achieve UHC for all its citizens it is proposed that the new model of healthcare will be an integrative one that includes T&CM. This new, proposed model uses a SEM of healthcare in setting out how the goal of UHC may be achieved as it is cognisant of the complexity of the multiple factors which affect health. However, it only mentions the role of the SDH in one clause in pillar 5.5.8 (p.57): ‘addressing health determinants, prioritising promotion, prevention and public health’. If greater emphasis is not placed on the SDH, the long-term goal of improving the health of the population will be compromised.

2.6 References

- Albrecht, H. (2001). Alternative medicine in Germany. In S. N. Willich & S. Elm (Eds.), *Medical challenges for the new millennium*. Dordrecht: Kluwer Publishers.
- Allied Health Professions Council of South Africa. Retrieved June 4, 2014, from www.ahpcs.co.za .
- Allied Health Professions Council of South Africa. *Naturopathy*. Retrieved April 30, 2018, from <http://ahpcs.co.za/wpcontent/uploads/2018/03/NATUROPATHY-1.pdf>.
- American Association of Naturopathic Medical Colleges (AANMC). Retrieved May 25, 2014, from <https://aanmc.org/about>.
- American Association of Naturopathic Physicians. Retrieved May 25, 2014, from <https://www.naturopathic.org/about>.
- American Association of Naturopathic Physicians. Retrieved June 20, 2016, from <https://www.naturopathic.org/regulated-states>.
- Armitage, G.D., Suter, E., Oelke, N.D. & Adair, C.E. (2009). Health systems integration: state of the evidence. *International Journal of Integrated Care*, 9.
- Baer, H.A. (2001). The sociological status of U.S. naturopaths at the dawn of the 21st century. *Medical Anthropology Quarterly*, 15(3), 329-346.
- Baer, H. A. (2006). The drive for legitimation in Australian naturopathy: successes and dilemmas. *Social Science and Medicine*, 63, 1771-1783.
- Baum, B. (2008). *The new public health* (3rd Ed). Oxford: Oxford University Press.

Bloland, P., Simone, P., Burkeholder, B., Slutsker, L. & De Cock, K. (2012). The role of public health institutions in global health strengthening efforts: The U.S. CDC's perspective. *Plos Medicine*, 9(4).

Braveman, P., Kumanyika, S., Fielding, J., La Veist, T., Borrell, L.N., Manderscheid, R. & Troutman, A. (2011). Health disparities and health equity: The issue is justice. *American Journal of Public Health*, 100(1).

Canadian Association of Naturopathic Doctors. Retrieved May 25, 2014, from <http://www.cand.ca/>.

Central Council for Research in Yoga and Naturopathy. Retrieved June 24, 2014, from www.ccryn.org.

Chitindingu, E., George, G. & Gow, J. (2014). A review of the integration of traditional complementary and alternative medicine into the curriculum of South African medical schools. *Biomed Central Medical Education*, 14, 40.

Clarke, D.B., Doel, M.A. & Segrott, J. (2004). No alternative? The regulation and professionalization of complementary and alternative medicine in the United Kingdom. *Health and Place*, 20, 329-338.

Department of Health (2017). *White paper on National Health Insurance for South Africa: Towards universal health coverage*. Retrieved June 2, 2020, from <https://serve.mg.co.za/content/documents/2017/06/29/whitepaper-nhi-2017-compressed.pdf>.

Early, J. (2016). Health is more than healthcare: It's time for a socio-ecological approach. *Journal of Nursing and Health Studies*, 1(2).

The Economist Intelligence Unit 2014. Sub-Saharan African healthcare: The user experience.

Retrieved August 25, 2016, from www.slideshare.net/economistintelligenceunit/sub-Saharanafican-healthcare-the-user-experience-38206883.

Ernst, E. (1996). Towards quality in complementary healthcare: Is the German

“Heilpraktiker” a model for complementary practitioners? *International Journal for Quality in Healthcare*, 8(2), 187-190.

Falci, L., Shi, Z., Greenlee, H. (2016). Multiple chronic conditions and use of complementary

Alternative medicine among U.S adults: Results from the 2012 National Health Survey Interview. *Preventing Chronic Disease*, 13(1), p. E61.

Fleming, S. A. & Gutnecht, N. C. (2010). Naturopathy and primary care practice. *Primary*

Care, 37(1), 119-136.

Gaboury, I., April, K. T. & Verhof, M. (2012). A qualitative study on the term CAM: Is there

a need to re-invent the wheel? *Biomed Central Complementary and Alternative Medicine*, 12, 131.

General Council and Register of Naturopaths. Retrieved April 30, 2018, from

<https://www.gcrn.org.uk/introduction/naturopathy-in-the-uk>.

General Council and Register of Naturopathy. *The early history of naturopathy*. Retrieved

April 20, 2018, from <https://www.gcrn.org.uk/introduction/early-history-of-naturopathy/>.

Golden, S. D & Earp, J. L. (2012). Socio-ecological approaches to individuals and their

contexts: twenty years of health education and behaviour. *Health Education and Behaviour*, 39(3), 364-372.

- Gort, E. H. & Coburn, D. (1988). Naturopathy in Canada: Changing relationships to medicine, chiropractic and the state. *Social Science and Medicine*, 26(10), 1061-1072.
- Grammaticos, S.P. & Diamantis, A. (2008). Useful known and unknown views of the father of modern medicine, Hippocratis and his teacher Democratus. *Hellenic Journal of Nuclear Medicine*, 11(1), 2-4.
- Guthrie, D., Thomson, W., Richardson, R., Rhodes, P & Underwood, E., A. *A history of medicine*. Retrieved December 5, 2019, from <https://www.britannica.com/science/history-of-medicine>.
- Hausser, T. (2018). Update on naturopathy in Europe: From its roots to global modern practice. *Naturopathic News*. (February). Retrieved April 30, 2019, from <http://worldnaturopathicfederation.org/wnf-publications/>.
- Hove, J., D'Ambruso, L., Mabetha, D., Van der Merwe, M. & Byass, P. (2019). Water is life: Developing community participation for clean water in rural South Africa. *British Medical Journal Global Health*, 4(e001377).
- Hughes, R. (2006). A sociological analysis of the determinants of National Health Nutrition Work Force Capacity. *Family Community Health*, 29(1), 55-61.
- Joos, S., Musselmann, B., Miksch, A., Rosemann, T. & Szecsenyi, J. (2008). The role of complementary and alternative medicine (CAM) in Germany – A focus group study of GPs. *Biomed Central Health Services Research*, 8, 127
- Jutte, R. (1999). The historiography of non-conventional medicine in Germany: A concise overview. *Medical History*, 43, 342-358.

- Kania-Richmond, A. & Metcalfe, A. (2017). Integrative healthcare: What are the relevant health outcomes from a practice perspective? *Biomed Central Complementary and Alternative Medicine*, 17, 548.
- Khorsan, R., Coulter, I. D., Crawford, C. & Hsiao, A. (2011). Systematic review of integrative healthcare research: Randomized control trials, clinical controlled trials and meta-analysis. *Evidence-Based Complementary and Alternative Medicine*, article ID 636134.
- Kilanowski, J. (2017). Breadth of the Socio-Ecological Model, *Journal of Agromedicine*, 22(4), 295-297
- Kleisiaris, C.F., Sfakianakis, C. & Papathanasiou, I.V. (2014). Healthcare practices in ancient Greece: The Hippocratic ideal. *Journal of Medical Ethics and History of Medicine*, 7(6).
- Kumar, S., Crouse-Quinn, S., Kim, K.H., Musa, D., Hilyard, K.M. & Freimuth, V.S. (2012). *Health Education and Behaviour*, 39(2), 229-243.
- Lancet editorial (2020). COVID-19 in Brazil: “So what?”. Retrieved February 20, from <https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2931095-3>.
- Lipsitz, L. (2012). Understanding healthcare as a complex system: The foundation for unintended consequences. *American Medical Journal*, 308(3), 243-244.
- Macdonald, J. J. (1995). *Primary healthcare medicine in its place*. London: Earthscan.
- Mcleroy, K. R., Bibeau, D., Steckler, A. & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Behaviour*, 5(4), 351-377.

- McCabe, P. (2005). Complementary and alternative medicine in Australia: A contemporary overview. *Complementary Therapies in Clinical Practice, 11*, 28-31.
- McCabe, P. (2008). Education in Naturopathy and western herbal medicine in Australia: Results of a survey of educational providers. *Complementary Therapies in Clinical Practice, 14*, 168-175.
- Nair, P. & Nanda, A. (2014). Naturopathic medicine in India. *Focus on Alternative and Complementary Therapies, 19*(3), 140-147.
- New World Immigration. Retrieved October 13, 2019, from <https://www.nwi-visas.com/nwi-blog/australia/shortage-skills-occupation-list-foraustralia-for-2019/>.
- Phatlane, S.N. (2006). *Poverty, health and disease in the era of high apartheid: South Africa, 1948-1976*. Unpublished doctoral thesis. University of South Africa.
- Pizzorno, J. E. & Murray, M. T. (2006). *Textbook of natural medicine*. Missouri: Churchill Livingstone Elsevier.
- Reilly, D. (2001). Comments on complementary and alternative medicine in Europe. *Journal of Alternative and Complementary Medicine, 7*(supplement), 23-31.
- Royal College of Physicians and Surgeons of Canada. Retrieved April 25, 2020, from <http://www.royalcollege.ca/rcsite/canmeds/canmeds-framework-e>.
- Rudolph, C. & Gould, S. (2015). Climate change and health inequities: a framework for action. *Annals of Global Health, 8*(3).
- Smith, M. J. & Logan, A. C. (2002). *Naturopathy: Medical clinics of North America, 86*(1).

Sommer, I., Griebler, U., Mahlknecht, P., Thaler, K., Bouskill, K., Gartlehner, G. & Mendis, S. (2015). Socioeconomic inequalities in non-communicable diseases and their risk factors: an overview of systematic reviews. *Biomed Central Public Health*, 15, 914.

South Africa. Presidential Health Summit Compact (2019). *Strengthening the South African health system towards an integrated and unified health system*. Retrieved April 22, 2020, from www.thepresidency.gov.za/download/file/fid/1650.

South African Human Rights Commission. (2018). *Water and sanitation research brief*. Retrieved December 14, 2019, from <https://www.sahrc.org.za/home/21/files/The%20Right%20to%20Water%20&%20Sanitation%20%20Monitoring%20the%20Implementation%20of%20the%20SAHRCs%202014%20Recommendations%2020117-2018.pdf>.

South African Medical Research Council. (2018). *A silent killer: Why South Africa's health could crumble under pressure from non-communicable diseases*. Retrieved October 14, 2019, from <http://www.mrc.ac.za/media-release/silent-killer-why-south-africa%E2%80%99s-health-could-crumble-under-pressure-non-communicable>.

Stanbrook, M. B. (2013). Can naturopaths deliver complementary preventative medicine? *Canadian Medical Association Journal*, 185(9), 747.

Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion*, 10(4).

Sturmberg, J. & Lanham, H.J. (2014). Understanding healthcare as a complex system. Achieving best possible health outcomes for individuals and communities by focussing on interdependencies. *Journal of Evaluation in Clinical Practice*, 20, 1005-1009.

Svalastog, A.L., Doner, D., Kristoffersen, N.J & Gajovic, S. (2017). Concepts and definitions of health and health related values in the knowledge landscapes of the digital society. *Croatian Medical Journal*, 58(6), 431-435.

Tangkiatkumjai, M., Boardman, H. & Walker, D.M. (2020). Potential factors that influence usage of complementary and alternative medicine worldwide: a systematic review. *Biomed Central Complementary Medical Therapies*, 20(363).

The life of Sebastian Kneipp. Retrieved June 24, 2014, from <http://www.kneipp.com/>.

Traditional and National Health Alliance. (2014). Retrieved July 28, 2016, from www.naturalhealthalliance.co.za/DraftAmendmentCommentDec2014.htm.

Turnock, B. J. (2009). *Public health: What it is and how it works*. Massachusetts: Jones Bartlett Publishers.

United Nations Children's Fund. (2008). *The state of the world's children*. Retrieved December 14, 2019, from <https://www.unicef.org/sowc09/docs/SOWC09-FullReport-EN.pdf>.

United Nations. (2015). *Universal Declaration of Human Rights*. Retrieved December 14, 2019, from https://www.un.org/en/udhrbook/pdf/udhr_booklet_en_web.pdf.

Van Heerden, B. (2013). Effectively addressing the health needs of South Africa's population: The role of health professions' education in the 21st century. *South African Medical Journal*, 103(1).

Van Rensburg, H. C. J. (Ed.). (2010). *Health and health care in South Africa*. Pretoria: Van Schaik.

- Van Rensburg, H. C. J. & Pelsler, A. J. 2010. The transformation of the South African health system. In H. C. J. Van Rensburg. (Ed.). *Health and health care in South Africa*. Pretoria: Van Schaik.
- Waite L.J. 2018. Social Well-Being and Health in the Older Population: Moving beyond Social Relationships. In: National Academies of Sciences, Engineering, and Medicine; Division of Behavioural and Social Sciences and Education; Committee on Population; Majmundar M.K, Hayward M.D, (eds). *Future Directions for the Demography of Aging: Proceedings of a Workshop*. Washington (DC): National Academies Press (US); Jun 26. 4. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK513086/>
- Wardle, J. & Oberg, E. B. (2011). The intersecting paradigm of naturopathic medicine and public health: opportunities for naturopathic medicine. *Journal of Alternative and Complementary Medicine*, 17(11), 1079-1084.
- Wardle, J. & Adams, J. (2013). Are CAM professions engaging in high-level health and medical research? Trends in publically funded complementary medicine research grants in Australia. *Complementary Therapies in Medicine*, 21, 746-749.
- Wardle, J. & Sarris, J. (2014). Student attitudes towards clinical teaching resources in complementary medicine: A focus group examination of Australian naturopathic medicine students. *Health Information and Libraries Journal*, 31, 123-132.
- Weinstein, J.N., Geller, A., Negussie, Y. & Baci, A. (2017). *Communities in action: Pathways to health equity*. Washington, National Academies Press.
- World Health Organization. *Public health*. Retrieved December 6, 2019, from <http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/public-health-services>.

- World Health Organization. (1978). *Report of the International Conference on Primary Health Care*. Alma-Ata, USSR, 6-12 September 1978. Retrieved June 21, 2017, from http://www.unicef.org/about/history/files/Alma_Atacommunication_1978_report.
- World Health Organization (1986). *The Ottawa Charter for Health Promotion*. Retrieved October 29, 2019, from https://www.euro.who.int/data/assets/pdf_file/0004/129532/Ottawa_Charter.pdf.
- World Health Organization. (2005). *National policy on traditional medical and regulation of herbal medicines: Report of a WHO global survey*. Geneva: WHO.
- World Health Organization. (2008). *The World health report: Primary health care – now more than ever*. Retrieved October 26, 2017, from <http://www.who.int/whr/2008/en/>.
- World Health Organization. (2010). *Benchmarks for training in traditional/complementary and alternative medicine: Benchmarks for training in naturopathy*. Geneva: World Health Organisation.
- World Health Organization. (2011). *The social dimensions of climate change: A discussion draft*. Retrieved April 20, 2020, from <https://www.who.int/globalchange/media-centre/events/2011/socialdimensions-of-climate-change.pdf>.
- World Health Organization. (2013). *Traditional Medicine Strategy 2014-2023*. Retrieved July 16, 2017, from http://apps.who.int/iris/bitstream/10665/92455/1/9789241506090_eng.pdf.
- World Health Organization. (2013). *Global action plan for the prevention and control of non communicable diseases 2013-2020*. Retrieved October 9, 2017, from http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf?ua=1.

World Health Organization. (2014). *Global status report on non-communicable diseases*.

Retrieved October 8, 2017, from <https://www.who.int/nmh/publications/ncd-status-report-2014/en/>.

World Health Organization (2016). *Integrated care models: An overview: Health service*

delivery programme. Retrieved March 9, 2018, from <http://www.euro.who.int/data/assets/pdf/0005/322475/Integrated-care-models-overview.pdf>.

World Health Organization. (2017). *Together on the road to universal health coverage: The*

call to action. Retrieved April 8, 2019, from <https://apps.who.int/iris/bitstream/handle/10665/258962/WHO-HIS-HGF-17.1-eng.pdf?sequence=1>.

World Health Organization. (2018). *Final report: WHO GCM/NCD Working Group on the*

Inclusion of NCDs in other Programmatic Areas (Working Group 3.1, 2016–2017). Retrieved April 8, 2019, from <https://apps.who.int/iris/handle/10665/312271>.

World Health Organization. (2019). *A heavy burden: The productivity cost of illness in*

Africa. Retrieved March 31, 2019, from www.who.int/afro.

World Health Organization. (2019). *Global report on traditional and complementary*

medicine. Retrieved September 28, 2019, from <https://apps.who.int/iris/bitstream/handle/10665/312342/9789241515436-eng.pdf?ua=1>.

World Health organization. (2021). Corona virus disease (COVID 19) advice for the public.

Retrieved February 20 from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>.

- World Naturopathic Federation (2015). *Report: Findings from the 1st Naturopathic Federation survey*. Retrieved August 1, 2018, from www.worldnaturopathicfederation.org.
- World Naturopathic Federation. (2016). *Naturopathic numbers report*. Retrieved October 14, 2019, from <http://worldnaturopathicfederation.org/wp-content/uploads/2015/12/2016-Naturopathic-Numbers-Report.pdf>.
- World Naturopathic Federation. (2017). *WNF White Paper: Naturopathic philosophies, principles and theories*. Retrieved May 5, 2019, from <http://worldnaturopathicfederation.org/wnf-publications/>.
- World Naturopathic Federation. (2019). *WNF response to the Astana Declaration*. Retrieved October 14, 2019, from <http://worldnaturopathicfederation.org/wpcontent/uploads/2019/02/WNF-Response-to-the-Astana-Declaration.pdf>.
- Zeff, J., Snider, P. & Myers, S. (2006). A hierarchy of healing: The therapeutic order. In J. J. Pizzorno & M.T. Murray. *Textbook of natural medicine*. Missouri: Churchill Livingstone Elsevier.

CHAPTER 3

METHODOLOGY

3.1 Introduction

The 1978 Astana Declaration saw the WHO embark on a campaign to promote PHC as a means of making healthcare accessible to all. In 1995, the WHO published the document *Traditional Practitioners as Primary Healthcare Workers: Guidelines for Training Traditional Healer Practitioners in Primary Health Care* as a means of encouraging member countries to utilise health practitioners already being used by community members. It states:

Traditional health practitioners are a valuable and sustainable resource that already exists in most communities. The utilization of these practitioners in PHC, working in close collaboration with biomedically trained health staff can be expected to contribute, in many countries, substantially to obtaining more practical, effective, and culturally acceptable health systems for countries (WHO, 1995:3).

CM has continued to grow since then and this growth has resulted in the WHO's acknowledging CM as an important contributor to the health system in member countries. It estimated that up to a third of poorer countries did not have regular access to medical services, with T&CM practitioners being more accessible, more aligned to the community's ideology and more affordable (WHO, 2001). In 2001, the WHO released a working document, *Legal Status of Traditional and Complementary Alternative Medicine: A Worldwide Review* that encouraged member countries to integrate T&CM into their national healthcare system to ensure its rational use and to develop policies to regulate T&CM to ensure the safety of the users. Guidelines such as *the Traditional Medicine Strategy 2014–2023* (2013) has since been published.

The WHO (2013) has urged member countries to promote better education and training of T&CM practitioners and to engage in research that could strengthen and enhance the quality and safety of T&CM. The WHO published minimum guidelines in 2010. These included a recommended minimum curriculum for the training of naturopaths. Due to the increase in the number of naturopaths globally, the international naturopathic community has called for research into all aspects of naturopathic education and training in order to standardise and enhance the training of naturopaths so that clinical outcomes are improved (Wardle & Sarris, 2014).

South Africa, as a member country of the WHO, is striving to achieve UHC and has proposed a system of NHI as a way of achieving this. T&CM has been included in the proposed NHI, although how this will be implemented is not specified (South Africa. Presidential Health Summit, 2019). This present research develops a model for naturopathy which proposes a way in which a system of complementary system can be incorporated into the national health system. This chapter presents the methodological approach that was used to conduct this study. It consists of the following: the methodological framework, the research approach, research setting and the research design.

3.2 Methodological framework

A qualitative research methodological approach adopted in conducting this research, as qualitative research is well suited for use in situations where very little information exists on the subject (Malayan-Malblonado, 2014). The historical use of qualitative research can be traced back to Aristotle (Wertz, 2014) and has gradually increased in use as it was taken up as a research tool by the various branches of the social sciences (Mohajan, 2018). Teherani, Martimianakis, Stenfors-Hayes, Wadhwa & Varpio (2015), have defined qualitative research as the systematic inquiry into social phenomena in natural settings (p. 669). ‘Social

phenomena' can include the different lived experiences people have in the various social settings they find themselves in - such as in organisations and how they are affected within the organisation (Teherani et al., 2015). Qualitative research can be used to record and analyse information that is expressed through the use of language and behaviour by providing a way of understanding beliefs, values and feelings (Berkwits & Inui, 1998). As qualitative research aims to understand people's experiences and the factors that affect them, it is well suited to the health and social sciences and the various interventions used in these disciplines (Toews et al., 2017). Qualitative research provides a means of exploring and understanding the meaning ascribed to a social problem (Creswell, 2014).

Thus, qualitative research methods are increasingly used in expanding the evidence base in a variety of health related fields (Sandleowski & Leeman, 2012). Toews et al. (2017, p.133), provide the following reasons for this:

- 1) It aims to understand people's experiences and perspectives. Research conducted by Oberg et al. (2012), showed that some of the reasons patients chose the services of naturopaths was that they focused on the different psychosocial factors such as stress for example, and they placed an emphasis on educating the patient in order for them to develop a better understanding of their behaviour on their health. The time that naturopaths spend with patients is also contributes positively to patients' experience with naturopathic practitioners (Goetz, Kattage & Steinhauser, 2017). This research finding is supported by research conducted by Wen & Tucker (2015), who found that people chose their doctors based on whether the healthcare practitioner listened to the patient, took time to understand their issues and tried to educate them about their condition.
- 2) It is well suited to understand the various factors that affect the feasibility of different interventions since it is well suited to exploratory research in areas where little

research has been conducted. Thus, it is applicable to this study as there has not been much research into the field of education and training of naturopaths (Wardle et al., 2019).

3) Qualitative research can also be used to explore how and why the different components of interventions may lead to specific outcomes. In naturopathy the effects of the various interventions of the different treatment practices used by naturopaths such as diet and lifestyle therapy, botanical medicines and nutritional supplements has been well documented (Meyers & Vigar, 2019). It is important to recognise that there is research which supports some of the treatment practices used by naturopaths.

4) Findings from qualitative research can contribute to policy decisions through the application of evidence-based health and social care interventions. The high rate of research by Australian naturopaths has resulted in them being awarded more grants by the National Health and Medical Research Council than any other CM profession (Wardle et al., 2019). This has the potential to produce a higher level of evidence-based research that holds the potential of contributing towards influencing healthcare policies and interventions.

Qualitative research data collection is conducted in order to provide evidence for the experience that is being investigated (Polkinghorne, 2005). There are different methods of data collection that is used. Some of these can include:

- 1) Document analysis: Document analysis is a form of data collection which studies and analyses documents for research purposes (Strydom & Delport, 2012). It is a systematic procedure used to evaluate and analyse documents and provides a rich source of information regarding a particular event or organisation (Bowen, 2009). This method is well suited to analysing the archival and organisational documents used in this study.

- 2) Semi-structured interviews: Interviews are often seen as the most common form of qualitative research. While unstructured interviews are more suited to conducting long-term fieldwork (Jamshed, 2014), semi-structured interviews use an interview guide which allows researchers to pursue topics in a more focused and comprehensive manner (Jamshed, 2014), thereby allowing the researcher the flexibility to follow up and get a more detailed response from the participant. It is well suited to research topics that may be controversial or personal (Greef, 2012).
- 3) Open-ended survey questions: The purpose of a survey is to collect responses to a set of questions from a given population. It can be quantitative, through using questionnaires with numerically rated responses, or qualitative: for example, through using open-ended questions (Ponto, 2015). An open-ended survey research methodology was employed in this research in order to elicit and accommodate the diversity of responses from participants (Jansen, 2010).
- 4) Delphi process: The Delphi process has been described as a technique that uses expert opinion in a group discussion to achieve a response based on consensus. It is usually conducted in rounds of three or four (Lachance et al., 2009). It is an iterative process, one that allows for individual contributions to group opinions that can be revised until a group response is arrived at. It has the benefit of maintaining the anonymity of participants (Skumoski, Hartman & Krahn, 2007). The Delphi process is well suited to this research since there is a paucity of information on naturopathy in this country.

The purpose of data analysis in qualitative research is to ‘explore themes, patterns, stories, narrative structure and language within research texts in order to interpret meanings and to generate rich depictions of research settings’ (Cousin, 2009, p.31). This entails reducing the large amount of data collected so that it makes sense to the researcher. During this process, three things normally take place: data is organised, then it is reduced through summarisation

so that themes and patterns are identified (Kawulich, 2004). The manner in which the data is analysed will depend on the theoretical framework used by the qualitative researcher (Thorne, 2000). In this study, a phenomenological approach was used as it allowed for the gathering of 'rich' data from participants through the use of methods such as interviews, discussions and participant observation (Lester, 1999). This allows for the experiences, perceptions and views of the participant to be captured.

There have been a number of criticisms about qualitative research. Most of it is focused on the trustworthiness of the research findings (Shenton, 2004). Qualitative researchers, in response to this critique, have over the years used various strategies to establish the rigor and trustworthiness of the research (Shenton, 2004). The trustworthiness of qualitative research and the criteria used to establish such trustworthiness is explored further in section 3.8.

Qualitative research is an umbrella term that is used to describe the different paradigms used. Creswell (2014, p.3) defines a paradigm as 'a general orientation about the world and the nature of research that a researcher holds'. Terre Blanche, Durrheim & Painter (2010, p.6) described paradigms as 'all-encompassing systems of interrelated practice and thinking that define for researchers the nature of their enquiry along three dimension: ontology, epistemology and methodology'. Each paradigm has its own ontological, epistemological and methodological approach which guides the research design.

3.2.1 Research paradigm

The research paradigm used for this study was an interpretivist one. Interpretivism adopts the approach that reality can be studied through people's subjective experiences. Through adopting an interactional epistemological stance and methodologies such as interviewing and participant observation (De Vos, Strydom, Fouche & Delpont (2012), the research aims to interpret and explain the meaning that underlie social action (Terre Blanche, Durheim & Painter, 2006).

In this study, a qualitative interpretive research paradigm was used as interpretivism assumes ‘that reality should be interpreted through the meaning that research participants give to their world’, (Delpont, Fouche & Schurink, 2012, p.309). Researchers are able to view the world through the lens of the participants and gain insight into their experiences and perceptions that leads to a better understanding of the context in which the research is conducted (Thanh & Thanh, 2015). Data is collected from participants over a period of time. Interpretivism uses thick descriptions obtained through qualitative methods as it allows for a deeper understanding of the context of the research (Thanh & Thanh, 2015). The approach to analysing data thus generated is inductive. The use of an interpretive paradigm allows the researcher to develop a better understanding of social phenomena within its context. This allows the researcher to obtain multiple perspectives which can lead to a deeper understanding of the phenomenon and its complexity (Thanh & Thanh, 2015). Pham (2018, p.2-3), discusses the advantages and disadvantages of the interpretivist paradigm which is summarised below.

Pham (2018) suggests that some of the advantages of using an interpretivist paradigm include a diversity of views on a phenomenon that allows researchers to describe and understand humans or events within a social context. In this study, the diversity of views allowed the researcher to develop a deeper understanding of the events that took place and participants’ reaction and memory of the events. Research from an interpretivist paradigm can be conducted in a natural setting that helps to gain the ‘insiders’ insight to provide authentic information related to the object of research. Interviews allow the researcher the opportunity to investigate, observe and probe the interviewee’s thoughts, values, prejudices, perceptions, views, feelings and perspectives which allow for valuable data to be collected. This allows for a deeper understanding of the responses.

Pham (2018), also suggests there are limitations in using an interpretivist paradigm due to the focus on the complexity of the results of the phenomenon that may not be generalizable to other

contexts. As a result, it could affect the validity and usefulness of research outcomes. Pham (2018), argues that the subjective ontological view can affect the research outcomes due to the researcher's belief system, ways of thinking or cultural preference. However, through applying the criteria of trustworthiness and reflexivity the issue of researcher subjectivity can be addressed. This paradigm focuses on understanding current phenomena rather than focusing on the political and ideological impact on knowledge and social reality. The design of this study allowed for a wholistic understanding of the data.

The limitations of the interpretivist paradigm as argued by Pham (2018) are not necessarily limitations when, as Leedy and Ormrod (2010:100) suggest, the term 'validity' is replaced by words such as 'credibility, trustworthiness, confirmability, verification and transferability'. Triangulating data (checking different data sources), checking accounts with research subjects to clarify the accuracy of information, demonstrating researcher reflexivity, collecting sufficient data for plausibility, and providing rich descriptive accounts to convey findings (Creswell, 2014) are some of the strategies employed to ensure the trustworthiness of the research. Creswell (2014:254), argues that the intention of qualitative research is not to generalise but rather its value is to be found in the description and themes developed in a specific context. Transferability of research may occur when other researchers or practitioners feel that their situation is similar to that which was described in the study (Shenton, 2004).

The interpretivist paradigm used in this study is summarised in the figure below:

Interpretivist research paradigm

Qualitative research methodology

- Data Collection
- document analysis
 - semi-structured interviews
 - open-ended survey questions
 - delphi process

- Data Analysis
dependant on theoretical lens used -
for example
- narrative
 - grounded theory
 - phenomenological research
 - case studies
 - ethnographic research

Exploratory research design

- Trustworthiness
- triangulation
 - reflexivity
 - rich, thick discriptions
 - transerability

- Ethical consideration
- confidentiality
 - informed consent

Figure 3.1: Interpretivist research paradigm

3.3 Explorative approach

This study used an interpretivist paradigm with an exploratory approach. An exploratory research approach was used in the research process as there is not much information available on the area being researched (Malayon-Maldonado, 2014).

The word exploratory is defined as ‘actions done in order to discover something or to learn the truth about something’ (collingsdictionary.com/dictionary/English/exploratory). Exploratory research, therefore, aims to explore research questions on topics where there is not much information available and to study an area that that not previously been studied before (Dudovskiy, 2018). Exploratory research offers alternative ways of looking at and making sense of reality, seeing how things are organised or how they relate to each other by observing and analysing the reality from a different perspective and so reveal facets of reality which were previously hidden (Reiter, 2017). Exploratory research focuses directly on the underlying causality of social phenomena. This focus facilitates an understanding of the reasons why and

how something happened. In exploratory research, an understanding of causality allows the researcher to see how one event can cause or lead to the next (Reiter, 2017). However, this does not mean that definitive answers are provided – rather through exploratory research the foundation is laid for further research in the area to be conducted (Dudovskiy, 2018). The following quote in Stebbins (2001, p.vi), reflects the essence of exploratory research: it is about ‘putting oneself in a place where discovery is possible’.

Exploratory research uses different methods. These include: focus groups, which makes use of small groups engaged in discussion and is particularly useful in exploring views around health interventions, programmes and research; in depth and semi-structured interviews which explore participants’ experiences and the meanings they attribute to them (Tong et al., 2007); surveys which explore the experiences and thoughts of participants (Swedberg, 2018) and case studies that allow for the exploration of a single or multiple cases over a period of time and can generate in-depth and detailed data (Fouche & Schurink, 2011).

One of the advantages of using exploratory research is that it can lay the foundation for further research into a hitherto unexplored area, thereby saving time and resources by establishing in the early stages of research whether certain types of research are worth exploring (Dudovskiy, 2018). Since exploratory research generally use a smaller number of participants, it could be argued to be a disadvantage as the sample size may not be representative of the population and therefore the findings may not be generalizable to a broader population (Dudovskiy, 2018).

3.4 Research setting

There is only one recognised training programme for naturopaths in South Africa. The first tertiary training programme for naturopaths was established at the University of the Western Cape in Bellville, a suburb in Cape Town’s metropolitan region, after the passing of the Allied Health Professions Act 63 of 1982 Regulation 127 of 2001 Government Gazette No.22052.

The programme is offered at the School of Natural Medicine which is located within the Faculty of Community Health Sciences. The School of Natural Medicine offers training in four CM professions: Chinese medicine, naturopathy, phytotherapy and unani tibb. The training programme consists of a three-year undergraduate B.Sc programme which all students have to complete, followed by a two-year postgraduate B. Complementary Health Sciences degree where they choose to study in one of the CM professional programmes. The naturopathic curriculum of the programme offered at the university in 2016 was used in this study.

This study used participants who were registered with the Allied Health Professions Council of South Africa (AHPCSA) during the data-collection phase 2015 to 2016 as well as those who had been registered prior to 2015. Registered naturopaths can be divided into three broad groups: those who studied naturopathy in South Africa at tertiary level at the University of the Western Cape, those who studied in South Africa prior to the opening of the naturopathy programme at the university and those who completed their training overseas in the United Kingdom, Canada, United States of America or Germany. Since training of naturopaths started in the 1950s (Gower, 2013), there is a wide range of ages for registered naturopaths. These registered practitioners are found practicing all over South Africa, mostly in urban areas with Cape Town and Johannesburg having the largest concentration of practitioners. There are less than 100 registered naturopaths in the country with more than half of these being the older naturopaths who had registered before 2001. On interacting with older naturopaths it became clear that in the early days of establishing the CM treatment modalities there was a great deal of activism, planning and commitment on the part of those who wished to see CM established in South Africa. There is a rich history of the events which took place at this time but it had not been fully explored and uncovered. Individuals who were actively involved in establishing the early training colleges for CM practitioners and those who graduated from these establishments

are now ageing and many of the pioneers have passed away without the history having been fully recorded.

In South Africa naturopaths have title protection and only those who are registered with the AHPCSA may use the title of naturopath. The Medpages website, however, reveals that there are many people who are not registered, yet are practising as naturopaths (<https://www.medpages.info/sf/index.php?page=newsearchresults&q=naturopaths&sp=no&lat=&long=&pageno=7>). The exact numbers of these practitioners is unknown as there is no professional body governing them. Using the title of naturopath when unregistered is not allowed as it opens the practitioner up to the risk of being charged for unlawful practicing (Act 63 of 1982). In this study only registered naturopaths were identified as potential participants in the research – exception was made for older participants who had previously been registered as their input was deemed important for the research.

There are not many practitioners alive or practicing who trained in the early years of CM in this country (1950s to 1970s). Therefore, when conducting research on naturopathy, it was necessary to use a snowball method in order to find participants who were willing to discuss the early years of CM in South Africa. Of the older practitioners who were contacted, many were not willing to participate for fear that they would be identified and victimised in some way as this was the situation after the passing of the Act 52 of 1974. The community of registered CM practitioners is relatively small and the older practitioners are all known to each other and as a result, concern was expressed about being identified - even if their identity was kept anonymous. There was a greater willingness among the younger generation of naturopaths to participate on condition of anonymity.

3. 5 Research design of the current study

This research employed an exploratory qualitative methodology in designing it. The research process was conducted in different stages with each stage focused on exploring the different objectives set for the research. While each stage was focussed on a different aspect of research, the research has been designed in such a way that the findings from each stage was used to inform the subsequent stages of research. These stages were as follows:

Objective 1: Exploring the development of naturopathy in South Africa – Stage 1.

Objective 2: Exploring the role and treatment practices of naturopathy in South Africa – Stage 2.

Objective 3: Reviewing the scope of practice and developing minimum competencies for the training of naturopaths in South Africa – Stage 3.

Objective 4: Conducting a comparative analysis and evaluation of the naturopathic curriculum in South Africa – Stage 4.

Objective 5: Developing a model for the training of naturopaths in the South African health system – Stage 5.

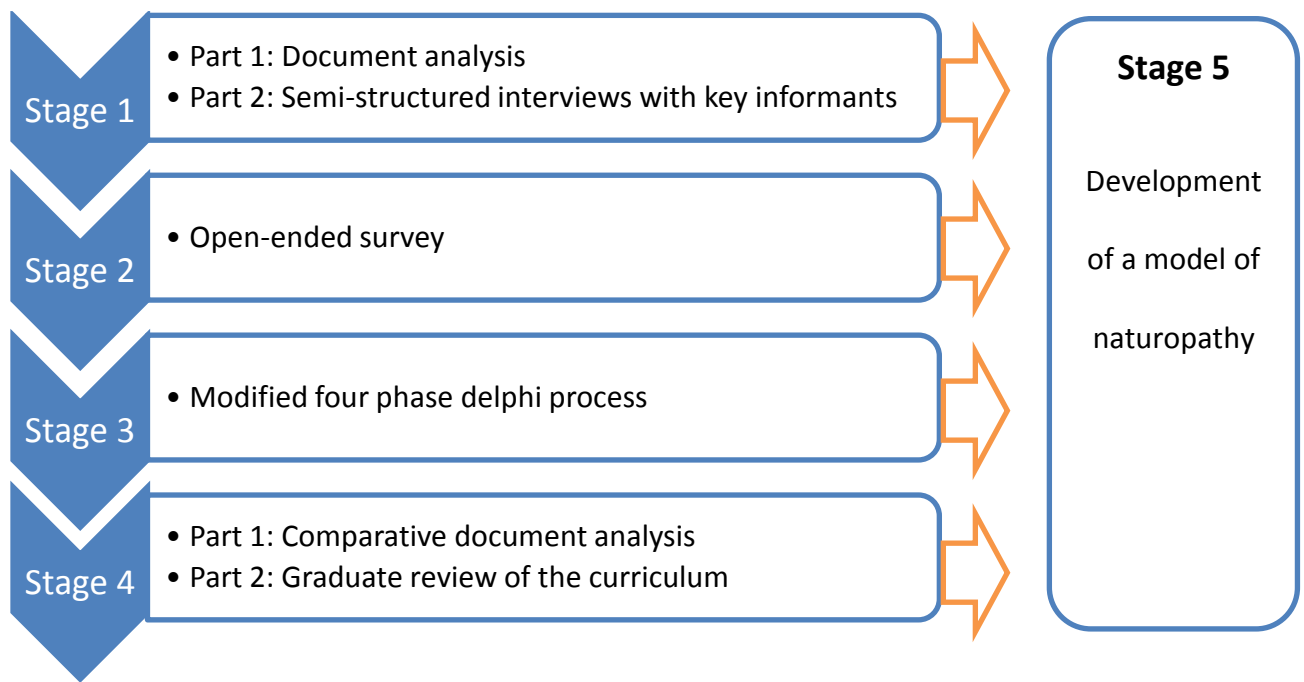


Figure 3.2: Schematic representation of the research design

3.5.1 Stage 1: History and development of naturopathy

The 1960s and early 1970s were the golden years for CM in South Africa. Training schools flourished throughout the country until the passing of Act 52 of 1974 which resulted in the enforced closure of all training facilities. CM practitioners in herbalism, homeopathy, naturopathy or osteopathy were compelled to register and had to choose a profession to be registered in, in order to continue practising. The effect of the passing of this Act, and subsequent regulations, on the development of naturopathy in South Africa continued to 2000 when the Allied Health Professions Council of South Africa (AHPCSA) was established and Regulation 127 of 2001 Government Gazette No.22052 led to the opening of training to naturopaths. This stage was divided into two parts in order to fully explore the history of naturopathy. Part 1 consisted of a document review and analysis. Part 2 used semi-structured interviews

3.5.1.1 Part 1

This consisted of a document search through the archives of the AHPCSA in order to access documents which would shed some light on the history of naturopathy. A formal request was submitted to the AHPCSA for permission to access their archives. Once this was granted, arrangements were made for a suitable time to visit the offices and gain access to the documents. The types of documents were not specified, and the registrar of the AHPCSA made all documents in the archives up to 2009 available. The documents had previously been stored in a garage and once the AHPCSA moved to new premises, many of old documents was disposed of as there had never been a need or request for them. The ones that had been retained were kept in storage until they could be disposed of. As a result, there were gaps in documents. The documents consisted the minutes of meetings, registration applications and approvals dating back to 1974. The researcher was given permission to take photographs of the documents.

3.5.1.2 Part 2

Gathering information involved interviewing naturopaths who had been practicing since the 1960s and 1970s. All CM practitioners were afforded the opportunity to register in 1974 under the Homeopaths, Naturopaths, Osteopaths and Herbalists Act 52 of 1974 (South Africa) No. 4414. After this, the register was closed and no new practitioners were allowed to register. Students who were studying at a college at the time the legislation was passed were allowed to complete their studies and register. The researcher downloaded the AHPCSA register for naturopaths from the website and those with registration numbers which began with 00 were noted. This was then cross-checked with the register for homeopaths, phytotherapists, naturopaths and osteopaths for 2015 in order to identify the naturopaths who had multiple registrations. Once they were identified, an internet search was conducted using sites like Medline and Therapists Online in order to find their contact details. Five practitioners were

identified but only one agreed to participate. In order to identify possible participants, key informants were identified since they had knowledge and experience of an area possessed by few (Marshall, 1996). The one participant identified five practitioners who were active during the 1960's and 1970's. Contact was made with them and one agreed to be interviewed. A snowball method of sampling was then used to identify key informants. This method was used in order to identify other possible participants to interview. This method was ideally suited to this research since there was no information available about the early naturopaths (De Vos et al., 2012). Although the aim was to interview a minimum number of 12 informants - this being the minimum number required in order to give a balanced view from the sample (De Vos et al., 2012). The small pool from which to draw resulted in a saturation point being reached at eight. One of the participants was not a naturopath but had been actively involved in the CM movement during this period. Another was no longer registered with the AHPCSA due to age, but remained in practice.

3.5.1.3 Data collection

All the documents provided by the registrar were in files that the researcher sorted into different categories. Photographs were taken of significant documents: for example, application for registration in 1974 (see Appendix F), notes were made of dates of registrations, the minutes of meetings and the various training institutions which existed at the time. The data was collected over a period of three days. The information was later summarised and written up in an article on the history and development of naturopathy in South Africa).

Semi-structured interviews were conducted with seven of the participants since one participant agreed to participate only if they could write the responses and forward it via email because there was 'information that I am not prepared to share because it will clearly identify me'. The use of semi-structured interviews allowed the interviewer the opportunity to explore responses

in detail – this being a necessary consideration since some of the participants were fairly old. Conducting the interview in this format was time-consuming but it allowed the interviewer time to make the participant feel at ease and helped to facilitate the interview and explore any new ideas which was brought up, instead of the researcher dictating the encounter (Greef, 2012).

Three of the interviews were conducted face to face, three were conducted via Skype and one was done telephonically. Interviews with six of the participants were recorded since it allowed for a fuller record than did notes (Greef, 2012). However, one of the participants refused to be recorded or have the interviewer make any notes while in their presence for fear of being identified.

3.5.1.4 Data analysis

Data collected from part 1 was chronologically arranged. It was then divided into different categories which consisted of minutes of the various board meetings held, minutes of council meetings, and registration documents dating back to the first registration process which took place in 1974. From this process emerging themes became obvious and the information extracted was then arranged into the two themes of registration and minutes of board meetings. Interviews conducted in part 2 were transcribed and triangulated with the data obtained from the historical document search in order to validate the information provided by the participants and used to construct a history of naturopathy.

3.5.2 Stage 2: Exploring the effect of legislation on the treatment practices and role of naturopaths

From the start, the curriculum used to train naturopaths was essentially benchmarked to that being taught internationally. As a result naturopaths were also taught homeopathy, herbal medicine and osteopathy. With the promulgation of Act 52 of 1974, practitioners registered for

multiple CM professions. Regulation 1745 of 1983 Government Gazette No. 8844 amended the Associated Health Service Professions Act 63 of 1982 (South Africa) by establishing a defined scope of practice (SOP) for homeopaths, chiropractors, herbalists, osteopaths and naturopaths - which reduced some of the overlap between the professions by clarifying the treatment practices for each of the registered professions. With the reopening of training to naturopaths in 2001, students were trained at a tertiary institution in Cape Town and the curriculum was different to that used in the 1950s to the 1970s since training had to comply with the legislated SOP. At present, there are still many naturopaths in practice who were trained during the early years of naturopathy in this country. The aim of this stage of research was to establish the effect of legislation on the treatment practices of the early naturopaths and the naturopathic graduates from the tertiary institution, to determine what treatment practices registered naturopaths use, and how they see their role within the South African healthcare system.

The second stage of the study used an exploratory approach. The names of all the registered naturopaths had been obtained in stage 1. The contact details of all registered members was sought through an electronic online search and the contact details of 64 naturopaths were found – located all over the country. This was done in order to ensure greater sample representivity (Leedy & Ormrod, 2010).

Of the 64 naturopaths contacted, 21 naturopaths participated in the research. There was a wide range of practice experience in this cohort which ranged from newly qualified to over 50 years of experience. The training levels also differed in the group as 11 of the respondents were graduates of the tertiary training programme that had opened in South Africa in 2002, two were trained in South Africa at Lindlhar college, six were trained through a combined system of mentorship by other CM practitioners and attendance at unregistered private colleges which existed at the time and two trained abroad in the 1960s and 1970s at established CM training

colleges. Many of the older practitioners have been actively involved in campaigning for the legitimisation of CM in South Africa. Of those who agreed to participate, 17 were based in the Western Cape, one was based in the Free State, two were based in Gauteng and one was working abroad.

Table 3.1: Regional representation of participants

Region	Participants
Free State	1
Gauteng	2
Western Cape	17
Abroad	1
Total	21

3.5.2.1 Data collection

Due to geographical location, it was not have been possible to interview all participants in person. Interviews were conducted with eight participants from the Western Cape. Thirteen participants chose to forward their response via email either because they did not have the time to be interviewed or they were too far away and did not have Skype – but they wished to participate. An interview schedule was set up and an open-ended survey using the same questions were emailed to the 13 participants. Interviews were recorded and transcribed verbatim. All the responses were coded and then summarised.

3.5.2.2 Data analysis

The summarised responses were thematically coded manually (Braun & Clark, 2006). Four main themes were identified as follows:

- Definition of naturopathy
- Naturopathic registration

- Treatment practices
- Role of Naturopaths: Integration into the current healthcare system.

3.5.3 Stage 3: A review of the scope of practice and minimum competencies for the training of naturopaths

The purpose of a SOP is to clarify the parameters of practice within a profession, inform the public of the role and practices of the practitioners, and guide the education and training of students' competency and professionalism (American Speech Language Hearing Association, 2019). The SOP for naturopaths is set out in Regulation 1745 of 1983 Government Gazette 8844 and has not been changed in the past 36 years. There have been many developments in the field of naturopathic medicine over the past three decades on the international level yet in South Africa the SOP has remained the same. Over this period of time disease patterns have shifted globally and the approach to treatment of these diseases have changed as well. In the interest of best practice, it is important that the SOP be reviewed on a regular basis.

In this research, the SOP is reviewed to determine whether the treatment modalities set out in the SOP allows students to have the necessary competencies to treat the diseases that predominate in the twenty-first century as the SOP determines the training of naturopathic students. However, there needs to be clear guidelines on the minimum competencies needed to direct the level of training in the treatment modalities contained in the SOP. Minimum competencies define the skills set, knowledge and attributes (Schuiling & Slager, 2000; Battel-Kirk, Barry, Taub & Lysoby, 2009) that a graduate requires to successfully function in a particular profession. Without a clear set of minimum competencies, the professional training of students is compromised. There are no clauses or documents delineated in the legislation that sets out the minimum competencies required for naturopathic training that graduates have to meet in order to register with the legislative body, the Allied Health Professions Council.

The professional body for naturopaths in South Africa, the South African Naturopathy Association (SANA), has not developed any minimum competencies for the training of naturopaths either. This stage of the research, therefore, sets out to develop a set of minimum competencies that is benchmarked on international standards.

A qualitative sequential design was used for this stage of the research. The Delphi method is well suited to areas of research where there is very little data available (Linstone & Turnoff, 1975). It works well as a research instrument when there is not sufficient knowledge about a problem and the goal is to improve the understanding thereof (Skulmoski, Hartman & Krahn, 2007). A modified Delphi method was used to review the scope of practice for naturopaths in order to determine the promoters and inhibitor aspects of the SOP on the training of naturopaths in South Africa. This was then used to develop the minimum competences for the training of naturopaths. The Delphi process was conducted in four sessions.

3.5.3.1 Pilot study – Round 1

A discussion group with naturopathic lecturers, alumni and members of the professional naturopathic association was scheduled with the purpose of 1) discussing their understanding of the SOP that is legislated for the profession; and 2) discussing the minimum competencies that are required for naturopathic training. The scheduled discussion took place over a day and was divided into two sessions. In the first session Chapter 11 of Act 63 of 1982 was used as the basis of the discussion. In the second session the core competencies document of the Medical and Dental Board (MDB) of South Africa was used as an example of the minimum competencies required for the medical professional. This was then used as a template to develop minimum competencies for the naturopathic training programme.

3.5.3.2 Data collection and analysis

Minutes were manually recorded throughout the day. The first session was then thematically analysed while the discussion on the minimum competencies was summarised into a table.

3.5.3.3 Naturopathy discussion group – Round 2

Naturopathic practitioners were invited to participate in a four-hour discussion group on the SOP for naturopaths. This was done to achieve a wider input from the broad naturopathic community on their views of the SOP. From the list of naturopaths identified in stage two, forty-five naturopaths who practise in the Cape Town area were identified and sent emails, inviting them to participate in this process. Eleven responses were received; six positive responses with five apologies from people who wanted to participate but were unable to do so. The session that took place two weeks after the initial meeting commenced with an introduction on the purpose of the discussion group. The SOP was explained to the participants and the full SOP was projected onto the board so that participants could use it as a reference point during discussion which focused on key focus questions

3.5.3.4 Data collection

The session was recorded and later manually transcribed. The researcher also took notes during the course of the discussion. The main themes that emerged from the discussion were summarised.

3.5.3.5 Document analysis – Round 3

The same group of 45 naturopaths contacted in the second session were contacted again five days afterwards via email. They were invited to participate in the next round of the discussion that had the objective of developing a set of minimum competencies for naturopathic training. Five responses were received. In this session the summary of the discussion in the first two sessions was presented to the group to confirm the accuracy of the summary. This was followed

by a discussion on minimum competencies. The WHO's *Benchmarks to Training Naturopaths* (2010) document as well as Act 63 of 1982, Regulation 127 of 2001 and the *Code of Ethics* in Board Notice 268 of 2015 (South Africa) No.39531 was examined to determine if any minimum competencies could be clearly identified. Documents on minimum competencies from the MDB (used in the first session) and the Core competencies for graduating students (American Association of Naturopathic Medical Colleges (AANMC), 2016) was then discussed and used as a guide for formulating minimum competencies for naturopathic students in South Africa. The purpose of this was:

- to develop an understanding of what minimum competencies are and why they are needed in the naturopathic training programme.
- To link the SOP to the minimum competencies.
- To discuss the minimum competencies as set out in the MDB and AANMC documents.
- To formulate a proposed set of minimum competencies based on the above.

3.5.3.6 Data collection and analysis

The discussion session was recorded and later manually transcribed. This transcription was then used to develop a document describing minimum competencies, setting out the minimum competencies required in naturopathic training naturopathic students in South Africa.

3.5.3.7 Minimum competency consensus document – Round 4

Emails were sent out to the same 45 naturopaths as in the previous three sessions. They were invited to provide input into the minimum competency document that had been developed as a result of the discussions held in the previous three stages. The same five participants from stage three participated. Each participant received a copy of the draft minimum competencies

document and the group worked through each competence, discussed it and consensus was reached before moving forward to the next point.

3.5.3.8 Data collection and analysis

The session was recorded and transcribed. The changes recommended, were made to the document.

3.5.4 Stage 4: A comparative analysis and evaluation of the naturopathic curriculum

In order for minimum competencies to be met the curriculum and training should be reviewed regularly to determine whether they are capable of addressing the training needs of the SOP (Hendriksen et al., 2015). The naturopathic training course opened in 2002 and had not been updated since. The objective of this stage was to review the curriculum and training of the naturopathy training course. For this reason the curriculum was examined in this stage to determine if it meets minimum requirements for training naturopathic professionals.

This stage was conducted in two parts. The first part consisted of a comparative analysis of international curricula recommended by the WHO (2010), the WNF (2016) and the South African naturopathic curriculum. The WHO recommended curricula was used because South Africa is a member of the WHO and follows guidelines set by the WHO. The curricula proposed by the WNF is based on global research of naturopathic training institutes and thus provided a base for comparison and benchmarking.

Part two consisted of a curriculum review by graduates of the programme. It entailed conducting a critical analysis of the current curriculum as taught by the School of Natural Medicine (SONM) by past graduates. All registered contactable naturopathic graduates from the tertiary training institution were emailed. The purpose of the research was explained and they were invited to provide input on all the subjects in the programme, as well as make recommendations for changes and/or improvements to the programme by completing a

summarised table of all the subjects. A total of 38 emails were sent out with 18 responses received.

3.5.4.1 Data collection and analysis

The curriculum recommended by the WHO (2010) was compared to the curriculum established by the World Naturopathic Federation (WNF, 2016), which was based on a survey conducted in 30 countries, and the South African naturopathic curriculum. The three curricula was summarised and compared. Responses to the curriculum by past graduates were returned via email. All responses were coded and summarised and thematically analysed.

3.5.5 Stage 5: Developing a model for naturopathy

Since first introduced into South Africa in the 1950s (Gower, 2013), naturopathy has been a part of the private healthcare system. Currently there is a global call for naturopaths to be part of the public healthcare system, as there are few countries that have naturopathy as part of the publically funded healthcare system (World Naturopathic Federation, 2017). The WHO has encouraged all member countries to move to a system of UHC (2017). In order to achieve this all health systems within a country should be fully utilised, including T&CM (WHO, 2019). South Africa, in moving towards implementing a system of UHC, has started the gradual phasing in of a system of NHI. In regulations which has been promulgated (2019), T&CM has been included, although how this is envisioned to be implemented is not specifically laid out. This study was conducted with the aim of developing a model for the training of naturopaths based on benchmarked international standards, which are tailored to the South African context to ensure competency to practice in the the South African public healthcare system.

In the first stage a historical account of the development of naturopathy was developed which highlighted the role that legislation plays in all aspects of the discipline. In the second stage the effect of legislation on treatment practices and role of naturopaths was explored. This was

followed in the third stage by reviewing the scope of practice and minimum competencies legislated for naturopaths and, finally, the curriculum was evaluated in the fourth stage.

Based on the findings of the first four stages a model for naturopathy was developed using a systems approach. This approach was used because it reflects the interconnectivity of the findings of the different stages. At the core of the model is the minimum competencies which students are expected to develop during the course of their training to ensure that they are competent to practice as registered naturopaths within the South African healthcare system. Encompassing, controlling and influencing all aspects of naturopathy is the legislation which influences the scope of practice of practitioners and as well as the training curriculum.

The current study design was implemented in five stages, with each stage exploring a specific aspect of naturopathy. Information gained from one stage of the research was used to inform the next stage of research. The final stage of the research saw the development of a model for naturopathy based on the research that was generated in the previous four stages. The figure below illustrates how the data collected in the different stages overlapped and fed into the final stage of the research, which saw a theoretical model for the training of naturopaths in South Africa, developed:

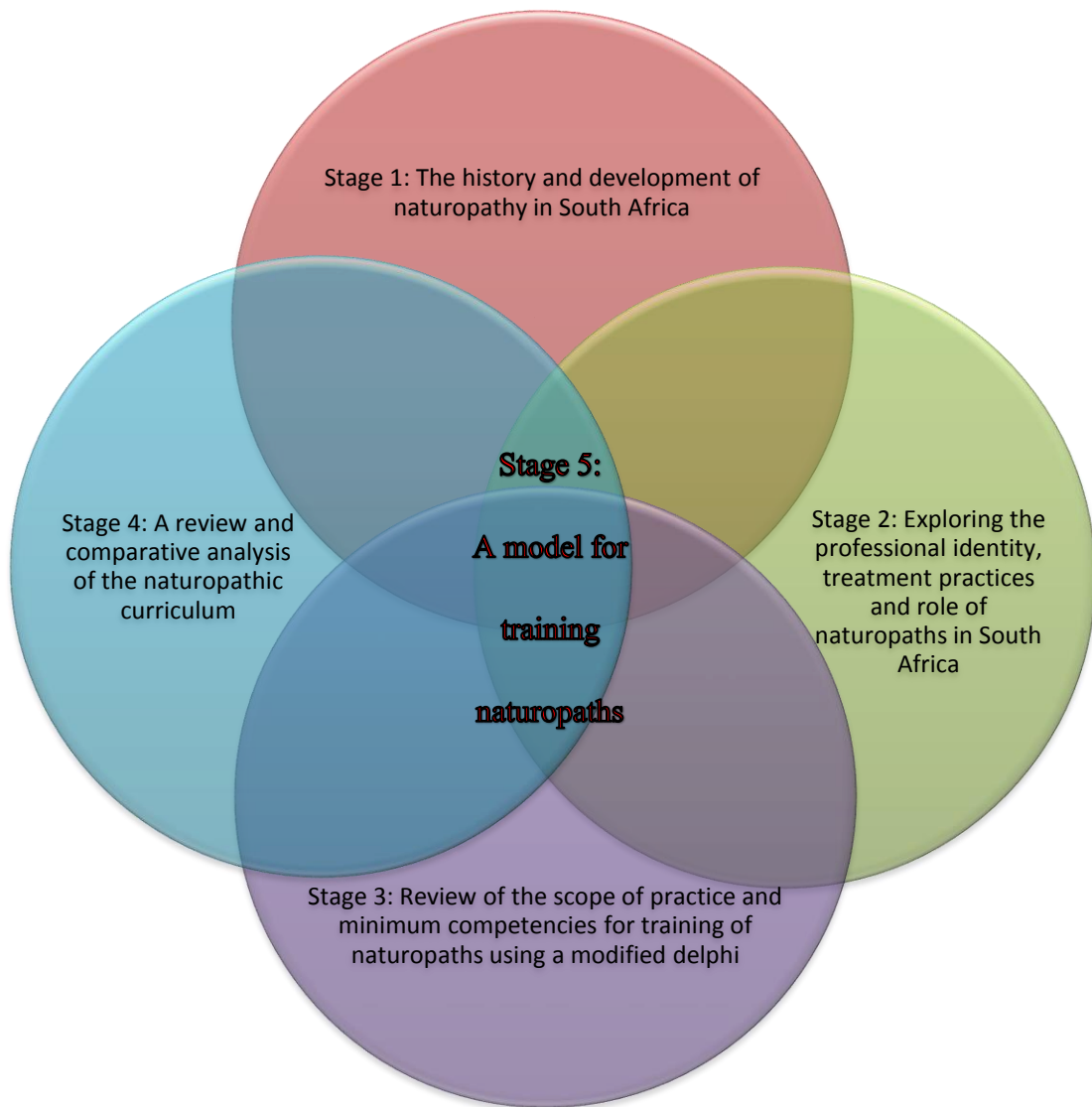


Figure 3.3: Design of a model for training of naturopaths

3.6 Ethical considerations

Ethical guidelines serve as a standard by which a researcher evaluates their own conduct (DeVos et al., 2012). The researcher has a responsibility to the participants to conduct research in an ethical manner to ensure an avoidance of any harm to them. Permission to conduct the study was sought from the ethics committee of the Faculty of Community and Health Science's Research Ethics Committee of the University of the Western Cape and from the university's Senate Research Committee.

All participants were provided with an information sheet (see Appendix A), in English, explaining the purpose of the study. The contents of the information sheet were explained to all participants and it was emphasised that, while participation in the study was voluntary, participants should in no way feel pressured or duty bound to participate. The participant had the right to decide to participate in the study and to withdraw at any point without having to provide a reason for doing so or fear of penalty. Participants in stage 3 were informed that in the focus groups their identity and views would become known to other participants in the focus group (see Appendix C).

Informed consent to participate in the study was obtained verbally and in written form from all the participants prior to the start of the interviews, Delphi study and electronic surveys and input (see Appendix B). Confidentiality was strictly maintained throughout this study. Within the focus groups the need for strict adherence to confidentiality was explained. The identities of the participants and the contents of the discussion remained within the group and was not shared with anyone outside of the group. The identity of the participants was kept confidential except in the case of the focus groups where the confidentiality of the participants was dependent on individual participant. The researcher was the only person having access to the information. Interviews were coded and the names of the participants remained anonymous. The information gathered during the course of the study was stored digitally in a password-protected computer. Participants were also informed that the finding of the study would be published.

From a procedural ethical perspective, all necessary issues dealing with informed consent and confidentiality had been addressed in the research (Ellis, 2007). However, once data collecting began it became clear that there were other ethical challenges which needed to be addressed. In a situation where research is conducted on small connected communities (Damianakis & Woodford, 2012), the possibility exists that there is a risk that participants may be identified

when the research was published. Even though participants were all provided with the information sheet and the ethical approval document approved by the university's research ethics committee, protecting the identity and confidentiality of all participants became a key concern. Some participants wanted verbal guarantees of this – and for this reason some of the information provided on the participants was deliberately kept vague to ensure that the identity of the participant would be protected. According to Kaiser (2009), when there is a choice between confidentiality and research, confidentiality has to come first and alternative methods of ensuring research accuracy and validity must be found. This was done through a system of coding known only to the researcher (Damianakis & Woodford, 2012). Some of the participants were happy to be identified but in the interest of consistency, all participants' right to privacy and confidentiality was maintained at all times. Hence the identity of some of the participants may be known to others when, in stage 1, a snowball method was used to identify possible participants. In stage 3 with the group discussions, the group knew the identity of the participants and their input. However, all participants were required to sign documents agreeing to keep the identities of the participants confidential, not to discuss the topic with each other outside of the discussion session or with other individuals outside of the group.

Since the pool of possible participants was small and within a community where many of the participants knew each other or had – at some point – heard of each other, the researcher found that in general those participants who agreed to participate were eager to be involved and to tell their story. In the Delphi study participants and researcher spent many hours together in the discussion groups and became acquainted with all participants as they exchanged and debated ideas. This raised the issue of relational ethics. While the ethical process is crucial for research to ensure that researcher and participants are held accountable, the role of relational ethics has to be acknowledged in this research for in the process of research, relationships are formed and

there is a sharing and co-creating of knowledge (Hall, 2014). This has contributed to the depth of the data gathered.

3.7 Trustworthiness

The trustworthiness of a qualitative study is important as it establishes the rigour used in conducting the research and supports the findings as worth paying attention to (Elo et al., 2014). There are a range of criteria which have been proposed for assessing the trustworthiness of qualitative research. Criteria outlined by Lincoln and Guba are accepted by many qualitative researchers (Connelly, 2016). These criteria are credibility, dependability, confirmability and transferability. These are explored below.

3.7.1 Credibility

The credibility of a research study reflects the confidence that can be placed in the findings of the research (Korstjens & Moser, 2018). It establishes the plausibility of the research findings. Credibility is enhanced by thorough, in-depth descriptions of the source data and thick descriptions. Morrow (2005, p.252), describes thick descriptions as ‘detailed, rich descriptions not only of participants experiences of phenomena but also of the contexts in which those experiences occur’. When discussing their history and the effect of legislation on themselves as naturopaths, participants spoke about events which took place and the impact it had on their lives. Some of them had never shared these experiences with anyone before. The credibility of the data collected was established through triangulation with other documents and corroborating the data against input from other participants (Shenton, 2004).

3.7.2 Dependability

In order for the findings of a study to be dependable, there has to be transparency in describing the manner in which research was undertaken at each step along the research process (Korstjens & Moser, 2018). The process of keeping an audit trail through chronologically recording the

research activities and processes as well as the influences and challenges to data collection and the analysis of emergent themes or development of a model should be open to review by peer researchers, colleagues or others (Morrow, 2005). In this study all the research activities are documented – even when the data collection became a challenge. In stage 2 of the data collecting process the researcher was compelled to use two different methods of data collecting. The process of doing this was detailed in the methodology and it was recognised as a possible limiting factor in the research. However, in the endeavour to ensure the trustworthiness of the study, the full data collecting process and analysis was recorded.

3.7.3 Transferability

Transferability questions the extent to which research can be applied or transferred to other situations (Shenton, 2004). The research needs to provide rich, full descriptions of all the data collected as well as the context so that the outsider can understand (Korstjens & Moser, 2018) and generalise the findings to their own context (Morrow 2004). A comparative analysis and evaluation of the naturopathic curriculum was conducted in stage 4 of this research study. This was then written up and submitted to a peer-reviewed journal. One of the reviewers who was based in another country on a different continent commented that ‘the comments listed are similar to those that we hear in other countries that are undergoing curriculum review’.

3.7.4 Confirmability

According to Elo et al. (2014), confirmability refers to the ‘congruence between two or more independent people about the data accuracy, relevance or meaning’ (p.2). This is achieved once credibility, dependability and transferability are achieved (Nowell, Norris, White & Moules, 2017). Confirmability is based on the premise that the findings reflect the actual data collected, the methodology and data analysis are reported and tied together in a manner which shows the findings to be adequate (Morrow, 2005). In this study the findings of the research are brought

together in a theoretical model that proposes a framework for the training of naturopaths in South Africa that allows for the inclusion of naturopaths into a national healthcare system.

3.8 Reflexivity

Morrow (2005, p.254), states that ‘all research is subject to researcher bias’. However, researchers use various strategies to minimise this bias. Reflexivity is used in qualitative research to overcome this bias. Korstens and Moser (2018) see reflexivity as a process that involves critical self-reflection as a researcher which includes examining one’s biases, opinions and preconceptions as well as the one’s relationship to the participants and how this relationship may affect the participants’ responses.

As this research study consisted of five different stages, a different reflexive approach was required in each stage, not only in the data gathering stage but also in analysing and coding the data gathered. The researcher wore several different hats in this study; that of naturopath, lecturer and researcher. Trying to wear only the researcher hat at the different stages of the research was not always possible. The older participants in the study were extremely suspicious of anyone doing research on their profession. It was only when the researcher donned the additional hat of naturopath that some of the participants were more willing to participate in the research. This placed the researcher in the position of an insider, and to ensure that the participants’ reality was accurately captured in the interviews, semi-structured interviews were used to allow the participant to fully express themselves while allowing for the researcher to delve more deeply, explore responses and seek clarity through adopting the position of a ‘naïve inquirer’ (Morrow,2005, p.254).

There were times (stage 2 and 3) when the researcher wore all three different hats: when some of the participants were the older naturopaths, the hat of naturopath and researcher was used. In some stages where some of the participants were former students, the lecturer hat was added.

Keeping a journal throughout the research process allowed the researcher to have an internal discourse reflecting on the responses or discussion sessions. This allowed the researcher to more clearly identify assumptions and biases which cleared the way for identifying what would be incorporated into the data (Morrow, 2005).

3.9 Conclusion

In this chapter the methodological framework which underpins this study is set out. The research setting of the study was discussed and the research design of the study is explained. A detailed discussion of the ethical considerations used and the various strategies used to establish trustworthiness in the study is provided. In chapters four to eight the results of the study is presented in manuscript format as they were either published or are currently under review.

These chapters are:

Chapter 4: The history and development of naturopathy in South Africa.

Chapter 5: The effect of legislation on the treatment practices and role of naturopaths in South Africa.

Chapter 6: A review of the scope of practice and minimum competencies for the training of naturopaths in South Africa.

Chapter 7: A comparative analysis and evaluation of the naturopathic curriculum in South Africa.

Chapter 8: A model for the training of naturopaths in the South African healthcare system.

3.10 References

- American Association of Naturopathic Medical Colleges. (2016). *AANMC core competencies of the graduating naturopathic student*. Retrieved July 27, 2017, from https://aanmc.org/wpcontent/uploads/2016/04/11CCACO_Competency_Doc_ADOPTED_and_FINAL_11_4_14.pdf.
- American Speech, Language and Hearing Association. (2019). *Scope of practice in speech language pathology*. Retrieved December 14, 2029, from <https://www.asha.org/policy/SP2013-00337/>
- Battel-Kirk, B., Barry, M.M., Taub, A. & Lysoby, L. (2009). A review of the international literature on health promotion competencies: identifying frameworks and core competencies. *Global Health Promotion, 16*(2).
- Berkwits, M. & Inui, T.S. (1998). Making use of qualitative research techniques. *Journal of General Internal Medicine, 13*.
- Bowen, G. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal, 9*(2), 22-40.
- Braun, V. & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101.
- Connelly, L. (2016). Trustworthiness in qualitative research. *MedSurg Nursing, 25*(6).
- Cousin, G. (2009). *Researching in higher education*. Oxford, Routledge
- Creswell, J. (2014). *Research Design: Qualitative, quantitative and mixed methods approaches* (4th ed.) London, Sage Publications.
- Damianakis, T. & Woodford, M.R. (2012). Qualitative research with small connected communities: generating new knowledge while upholding research ethics. *Qualitative Health Review, 22*(5), 708-718.

Delpport, C.S.L., Fouche, C.B. & Schurink, W. (2012). Theory and literature in qualitative research in A. S de Vos, H. Strydom, C. B. Fouche, & C. S. L Delpport. *Research at grassroots*. Pretoria, Van Schaik.

Department of Health. National Health Insurance Act. *Government Gazette* No. 42598 of 2019. Retrieved April 11, 2020, from https://www.gov.za/sites/default/files/gcis_document/201908/national-health-insurance;bill;b;11;2019.pdf.

De Vos, A. S., Strydom, H., Fouche, C. B. & Delpport, C. S. L. (2012). *Research at grassroots*. Pretoria, Van Schaik.

Dudovskiy, J. (2018). Exploratory research. Retrieved June 4, 2020, from <https://research-methodology.net/>.

Ellis, C. (2007). Telling secrets, revealing lives. Relational ethics in research with intimate others. *Qualitative Inquiry*, 13(1), 3-29.

Elo, S., Kaariainen, M., Kanste, O., Polkki, T., Utrianen, K. & Kyngas, H. (2014). Qualitative content analysis: A focus on trustworthiness, *Sage Open*, 1-10 January.

Exploratory [definition]. Retrieved June 4, 2020, from [Collings dictionary.com/dictionary/english/exploratory](http://Collingsdictionary.com/dictionary/english/exploratory).

Fouche, C.B. & Schurink, W. (2012). Qualitative research designs. In A.S. de Vos, H. Strydom, C. B. Fouche & C. S. L. Delpport. *Research at grassroots*. Pretoria, Van Schaik.

Goetz, K., Kattage, S. & Steinhausser, J. (2017). The phenomena of naturopathic practitioner predictors of a high patient throughput. *Evidence-based Complementary and Alternative Medicine*.

- Gower, N. (2013). Homeopathy in South Africa. *Homeopathy papers past and present*. Retrieved July 26, 2016 from <http://hpathy.com>.
- Greef, M. (2012). Information collection: Interviewing. In A. S. de Vos, H. Strydom, C. B. Fouche & C. S. L. Delpont. *Research at grassroots*. Pretoria, Van Schaik.
- Hall, L. (2014). Developing an ethics of relational responsibility: Locating the researcher within the research space and allowing connection, encounter and collective concern to shape the intercultural space. *Ethics and Education*, 9(3), 329-339.
- Hendriksen, M., Zeifman, M., Thompson, H. G., Beasleigh, S., Byrd-Vaughn, M., Carino, J.,...Yanez, J. (2015). *Developing core competencies for naturopathic medicine programs in North America. AANMC core competencies of the graduating naturopathic student*. MedEdPublish, 5(5).
- Jamshed, S. (2014). Qualitative research method: Interviewing and observation. *Journal Basic Clinical Pharmacy*, 5(4), 87-88.
- Jansen, H. (2010). The logic of qualitative research and its position in the field of social research methods. *Qualitative Social Research*, 11(2).
- Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research*, 19(11), 1632-1641.
- Kawulich, B. (2004). *Qualitative data analysis techniques*. Retrieved April 25, 2020, from <https://www.researchgate.net/publication/258110388>.
- Korstjens, I. & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120-124.

- Lachance, L.L., Hawthorne, V., Brien, S., Hyland, M.E., Lewith, G.T., Verhoef, M.J. & Zick, S. (2009). Delphi-derived development of a common core for measuring complementary and alternative medicine prevalence. *Journal of Alternate and Complementary Medicine*, 15(5), 489-494.
- Leedy, P. D. & Ormrod, J. E. 2010. *Practical research planning and design*. New Jersey, Pearson Education.
- Lester, S. (1999). *An introduction to phenomenological research*. Retrieved April 25, 2020, from www.sld.demon.co.uk/resmethy.pdf.
- Linstone, H. A. & Turoff, M. (1975). *The Delphi method: Techniques and applications*. Boston, Addison-Wesley Publishing.
- Malayon-Maldonado, G. (2014). Qualitative research in health design. *Research Methods*, 7(4), 120-134
- Medpages. Retrieved on May 18, 2000, from <https://www.medpages.info/sf/index.php?page=newsearchresults&q=naturopaths&sp=no&lat=&long=&pageno=7>.
- Meyers, S.P. & Vigar, V. (2019). The state of evidence for whole system, multi-modal naturopathic medicine: a scoping review. *Journal of Alternative and Complementary Medicine*, 25(2), 141-168.
- Mohajan, H.K. (2018). Qualitative research methodology in social science and related subjects. *Journal of Economic Development, Environment and People*, 7(1), 23-48.
- Morrow, S. (2005). Quality and trustworthiness in qualitative research in counselling psychology. *Journal of Counselling Psychology*, 52(2), 250-260.

- Nowell, L.S., Norris, J.M., White, D.E. & Moules, N.J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16, 1-13.
- Oberg, E.B., Bradley, R., Hsu, C., Sherman, K.J., Catz, S., Calabrese, C. & Cherkin, D. (2012). Patient-reported experiences with first-time naturopathic care for type 2 diabetes. *PLoS ONE*, 7(11).
- Pham, L. (2018). *A review of key paradigms: Positivism, interpretivism and critical inquiry*. Retrieved April 25, 2020, from <https://www.researchgate.net/publication/324486854>.
- Polkinghorne, D.E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counselling Psychology*, 52(2), 137-145.
- Ponto, J. (2015). Understanding and evaluating survey research. *Journal of Advanced Practitioner Oncology*, 6, 168-171.
- Reiter, B. (2017). Theory and methodology of exploratory social science. *International Journal of Science and Methodology*, 5(4).
- Sandelowsky, M. & Leeman, J. (2012). Writing usable qualitative health research findings. *Qualitative Health Research*, 22(10), 1404-1413.
- Schuiling, K.D., & Slager, J. (2000). Scope of practice: Freedom within limits. *Journal of Midwifery and Women's Health*, 45(6).
- Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Research Projects*, 22, 63-75.
- Skulmoski, G., Hartman, F. & Krahn, J. (2007). The Delphi method for graduate research. *Journal of Information Technology Education*, 6.

Presidential Health Summit Compact (2019). *Strengthening the South African health system towards an integrated and unified health system*. Retrieved April 22, 2020, from [www.thepresidency.gov.za /download/file/fid/1650](http://www.thepresidency.gov.za/download/file/fid/1650)

Department of Health. National Health Insurance Act. *Government Gazette* No. 42598 of 2019. Retrieved April 22, 2020, from https://www.gov.za/sites/default/files/gcis_document/201908/national-health-insurance;bill;b;11;2019.pdf.

Stebbins, R.A. (2001). *Exploratory research in the social sciences*. California: Sage.

Strydom, H., & Delpont, C.S.L. (2012). Information collection: Document study and secondary analysis. In A. S de Vos, H. Strydom, C. B. Fouche & C. S. L. Delpont. *Research at grassroots*. Pretoria: Van Schaik.

Swedberg, R. (2020). On the uses of exploratory research and exploratory studies in social science. In C. Elman, J. Gerring, & J. Mahoney. *The production of knowledge: Enhancing progress in social science*. Cambridge: Cambridge University Press.

Teherani, A., Martimianakis, T., Stenfors -Hayes, T., Wadhwa, A. & Varpio, L. (2015). Choosing a qualitative research approach, *Journal of Graduate Medical Education*, 7(4), 669-670.

Terre Blanche, M., Durrheim, K. & Painter, D. (2006). *Research in practice*. Rondebosch: University of Cape Town Press.

Thanh, N.C. & Thanh, T.T. (2015). The interconnection between interpretivist paradigm and qualitative methods in education. *American Journal of Educational Science*, 1(2), 24-27.

Thorne, S. (2000). Data analysis in qualitative research. *Evidence-based Nursing*, July.

- Toews, I., Booth, A., Berg, R., Lewin, S., Glenton, C., & Munthe-Koas, H. (2017). Qualitative research in health and social care. *Clinical Epidemiology*, 88, 133-139.
- Tong, A., Sainsburg, P. & Craig, J. (2007). Consolidated criteria for reporting qualitative research: A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357.
- Wardle J. & Sarris, J. (2014). Student attitudes towards clinical teaching resources in complementary medicine: A focus group examination of Australian naturopathic medicine students. *Health Information and Libraries Journal*, 31, 123-132.
- Wardle, J., Steel, A., Casteleijn, D. & Bowman, D. (2019). An evidence-based overview of naturopathic practice in Australia. *Australian Journal of Herbal and Naturopathic Medicine*, 31(1).
- Wertz, F. (2014). Inquiry in the history of psychology. *Qualitative Psychology* 1(1), 4-16
- World Health Organization. (1995). *Traditional practitioners as primary healthcare workers: Guidelines for training traditional health practitioners in primary healthcare*. Retrieved October 2, 2017, from <https://apps.who.int/medicinedocs/en/d/Jh2940e/>.
- World Health Organization. (2001). *Legal status of traditional medicine and complementary medicine: A worldwide review*. Retrieved October 30, 2018, from <https://apps.who.int/iris/handle/10665/42452>.
- World Health Organization. (2019). *Global report on traditional and complementary medicine*. Retrieved August 28, 2019, from <https://apps.who.int/iris/bitstream/handle/10665/312342/97892415436-eng.pdf?ua=1>.

World Naturopathic Federation. (2016). *Naturopathic numbers report*. Retrieved October 14, 2019, from <http://worldnaturopathicfederation.org/wp-content/uploads/2015/12/2016-Naturopathic-Numbers-Report.pdf>.

World Naturopathic Federation. (2017). *WNF white paper: Naturopathic philosophies, principles and theories*. Retrieved May 5, 2018, from <http://worldnaturopathicfederation.org/wnf-publications/>.

CHAPTER 4

AN OVERVIEW OF THE HISTORY AND DEVELOPMENT OF NATUROPATHY IN SOUTH AFRICA

4.1 Introduction

This chapter constitutes the first stage of the research process. Complementary medicine has been part of the South African private healthcare system for over half a century. Despite this, there is very little literature to be found on the history of CM in the country. This study aimed to investigate the history of CM in South Africa. A two-part qualitative research design was used. This consisted of a document search and semi-structured interviews. A snowball sampling technique was employed because of the small pool of possible participants available. Through triangulation of the data gathered a history of naturopathy was developed. The findings from this study indicate that the early history of naturopathy is closely linked to the history of CM, as a distinction was not made between the different CM professions and people were trained in a variety of treatment practices. It was only with the introduction of legislation in 1974 that they were required to choose how they would identify themselves professionally in order to register. With the introduction of legislation, the separation of professions became more distinct. The findings of this stage of research have revealed the impact of legislation on controlling and curtailing the growth of CM. Legislation has had a long-lasting effect on the registered professions as well as on many of the practitioners of that era. The findings of this first stage have been documented in a research article titled: ‘An overview of the history and development of naturopathy in South Africa’.

4.2. SA Health: A reflection on the submission and review process

The manuscript was submitted for review to the journal, *Health SA Gesondheid*, on 10 January 2017. The journal has an impact factor of 0.28 and is open-source and peer reviewed. The aim of the journal is to foster interprofessional communication on matters of health in South Africa. The manuscript was sent for review on the 9 March 2017 and a decision to accept the article with major revision was conveyed on the 24 April 2018. One reviewer required minor changes to the article while the second reviewer required major changes. Corrections were completed and submitted (see Appendix J). The paper was published in July 2018 (see Appendix L).

4.3 Contribution record

The following contributions were made by the candidate's joint publication with the supervisors:

<i>Authors</i>	<i>Contributions</i>
Wendy Ericksen-Pereira	Designed the research study, conducted all the research, identified the journal, wrote the manuscript, was the corresponding author and communicated with the editor-in-chief, reviewers and copywriters.
Nicolette Vanessa Roman	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.
Rina Swart	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.

4.4 Visibility of research

The publication of this article in a peer-reviewed journal is an indication that there is an interest in the CM health sector in South Africa. Naturopathy has fewer than 100 registered practitioners in the country and is not a well-known CM profession yet statistics on Researchgate indicate that to date the article has been read 174 times since its publication.

4.5 Article: An overview of the history and development of naturopathy in South Africa

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ABSTRACT

Background: A huge growth in complementary and alternative medicine (CAM) took place in South Africa in the 1960s which paralleled what was happening in other parts of the Western world. Naturopathy has been practised in South Africa for over 60 years, and the history of naturopathy is entwined with the broader history of CAM. No laws existed at that stage to regulate the curriculum, education and training of CAM practitioners. With the passage of time, various statutes were introduced which eventually led to changes in legislation and the establishment of a recognised training programme. Naturopathy became a legally regulated profession, the full history of which has never been documented.

Objective: This article explores the history of naturopathy in South Africa.

Method: A two-part qualitative research design was used, consisting of a document search and semi-structured interviews with key informants who were identified through a process of snowballing. Information collected from the naturopaths who participated in the interviews was triangulated with documentation uncovered in the archives of the Allied Health Professions Council of South Africa (AHPCSA) and other literature available.

Results: The result is a history of events which took place and reveals the effect of various legislations on the profession.

Conclusion: Changes in the political system paved the way for changes in legislation which allowed for the registration and training of naturopathic practitioners. However, the lack of a functioning association as well as the small number of naturopathic graduates has hampered the growth of the profession, preventing it from becoming a significant contributor to the health care system.

Introduction

The emerging trend is to use the term ‘traditional and complementary medicine (T&CM)’ as it encompasses the practices, practitioners and products of both traditional and complementary medicine (WHO 2013). For the purposes of this research, the term ‘CAM’ has been used as research by Ng et al. (2016) shows that CAM is the most commonly used term to describe complementary medicine. Complementary and alternative medicine (CAM) has been identified as ‘a group of diverse medical and healthcare systems, practices and products that are not presently considered to be part of conventional medicine’ (National Library of Medicine 2010).

The last few decades have seen exponential growth in the use of CAM products and therapies, with Fischer et al. (2014) suggesting that CAM will play an important role in addressing the rise in chronic diseases because of ageing in Europe. The reasons for this shift towards CAM have been proposed as growing disillusionment with the biomedical model of medicine (Reilly 2001), over-prescription of drugs and the impersonal approach to patients within western medicine, together with the inability of the mainstream biomedical model to successfully treat chronic diseases (Chitindingu, George & Gow 2014). South Africa has also experienced a growth in the use of CAM. In 1999, it was estimated that turnover from the use of CAM products was R1.29 billion (Caldis, McLeod & Smith 2001). In 2014, this figure was estimated to be R8 billion (MCC listens to CAMS concerns 2014; Traditional and Natural Health Alliance 2014).

The history of CAM in South Africa goes back centuries. The early Dutch settlers brought their traditional medicines with them. By the nineteenth century, there was a small number of CAM practitioners (Gower 2013), but after World War II, South Africa experienced an increase in immigrants, and among them were CAM practitioners. Old Dutch medicines and homeopathic remedies were already in use in the country, but the new wave of immigrants – especially those

from Germany – used homeopathy, naturopathy and herbal medicines to treat various illnesses (Pretorius 2010).

Medical practitioners began to campaign against the growing number of CAM practitioners, and this resulted in the Medical Association of South Africa declaring CAM to be ‘illegal and unscientific’ in 1953 (Pretorius 2010:525) and any co-operation between allopathic and CAM practitioners was prohibited in their medical code (Hassim, Haywood & Berger 2007). This meant that CAM practitioners could not share premises with biomedical practitioners, nor refer patients to them. CAM practitioners were therefore excluded from the public health care system. Thus, all CAM modalities were forced into a private health care setting (Pretorius 2010). The Health Professions Act 56 (South Africa) 1974 No. 31825 was amended in 2009 with the insertion of rule 8A which states that practitioners are only allowed to share rooms with others who are registered under the Act. Thus, through regulation, all CAM practitioners were legally prevented from working in or making a contribution to the public health care system.

As a system of CAM, the history of naturopathy is reflected in the history of CAM in South Africa. Dr Lilley immigrated to South Africa from the United Kingdom and in 1951 started training the first group of homeopaths (Gower 2013). He was instrumental in establishing Lindlahr College which trained homeopaths, naturopaths and osteopaths (Gower 2013; Prinsloo n.d.). He was one of the founders involved in the formation of the South African Naturopathic and Homeopathic Association (Gower 2013; Prinsloo n.d.); this was the start of the training of naturopaths in South Africa.

Naturopathy in South Africa is defined as a ‘system of healing based on promoting health and treating disease using the body’s inherent biological healing mechanisms to self-heal through the application of non-toxic methods’ (Regulation 127 of 2001). Naturopathic medicine is

viewed as a system of primary health care based on the philosophy and principles of naturopathy (Fleming & Gutknecht 2010; Wardle & Oberg 2011). These principles are the healing power of nature, the naturopathic doctor as teacher, finding the root cause of an illness, treating the patient holistically, health promotion and prevention of disease, and encouraging overall wellness (Hausser et al. 2017). As a system of medicine, it is well suited to address the disease challenges of the 21st century as it focuses on preventative medicine through the use of education. By empowering patients to understand the cause of their illness, it encourages a change in lifestyle. Treatment is non-invasive and can be low cost. Naturopaths are well placed to participate in and contribute to the public health care system on a primary health care level. However, at present, the small number of registered naturopathic practitioners, together with the legislature, presents a challenge for integration. To understand the current situation, it is necessary to trace the history of naturopathy in South Africa to comprehend how a once burgeoning CAM profession was prevented from training new practitioners for close to 30 years owing to legislative enactments. It is the objective of this article to document the history of naturopathy in South Africa, for it is a story which has never been fully explored.

Methodology

In order to research the history and development of naturopathy in South Africa, a qualitative design was employed with the research being divided into two parts. The first part consisted of a document search, while the second part consisted of interviews with practitioners who were either students during the early years of naturopathy in South Africa or were practising at the time.

Part 1: Document search

Permission was obtained from the registrar of the Allied Health Professional Council of South Africa (AHPCSA) to search their archives as per a request for Access to Record of Public Body (section 18[1] of the Promotion of Access to Information Act 2 [South Africa] 2000 No. 20852).

Available records were accessed on 3–5 May 2015. The researcher had access to all documents available at the AHPCSA office up to the period that the current registrar took over in 2009, which consisted of over 30 files and record books. Records included registration documents as well as minutes of meetings. It should be noted that there might be gaps in information owing to old documents which had not been accessed for many years by the AHPCSA having been disposed of during a recent move to new premises. Registration records of people deceased or deregistered for longer than 10 years were among the documents not retained, although the original registration applications along with identity document copies were retained. Documentation of all active registrations, regardless of the duration of registration, was also retained.

Documents were separated into the two main themes which emerged. The first theme was registration, as it involved the files of the first practitioners registered as a result of the implementation of the Homeopaths, Naturopaths, Osteopaths and Herbalists Act 52 (South Africa) 1974 No. 4441. The second theme was that of minutes of meetings of the different boards within the AHPCSA, starting with the establishment of the first council to regulate natural medicine in South Africa in 1983.

Part 2: Interviews

Inclusion criteria for the interviews were determined as all naturopaths who are currently registered with the AHPCSA or had been registered as a naturopath between the period of 1974 and 2005. Any other registered CAM practitioner who had been registered at any point between 1974 and 1983 was also considered, because of the overlaps in training that took place in the 1960s and 1970s. All naturopaths who graduated from the tertiary training institution after the passing of Regulation 127 of 2001 were excluded.

The researcher went through the list of registered naturopaths on the AHPCSA website and listed all naturopaths with the earliest registration numbers which started with double zero (00). This process was repeated for registered chiropractors, homoeopaths, osteopaths and phytotherapists to establish whether multiple registrations were held. A list was then compiled of the naturopaths who had registered under Act 52 of 1974. By searching the internet – including the Medline directory and the Therapists Online site as well as the telephone directory – the contact details of these early naturopaths were obtained. Contact was made telephonically and/or via email. The purpose of the communication was explained, and the naturopaths were asked if they were willing to participate in the research project. Five people were identified, of whom four were contacted telephonically. One refused to be interviewed, one agreed to be interviewed, while the receptionists at the practices of the other two advised that the request be sent via email. The fifth person was not contactable via telephone and was emailed. However, none of the emails was responded to. As a result of this low response, a snowball sampling technique was used to identify further participants for the research; this resulted in a total of eight people being interviewed. One person was no longer registered and another was not a naturopath, but, because of their involvement in the 1960s and 1970s, they were interviewed in order to develop a history of CAM in South Africa. Semi-structured interviews were conducted as this allowed the interviewer the opportunity to explore responses

in greater detail – this being a necessary consideration, given the age of some of the key informants. Interviews were conducted at the convenience of the participants. Three interviews were conducted face-to-face, three were conducted via Skype, one telephonically and one requested the interview questions and provided a written response to the questions via email. All interviews except for one were recorded.

They were then transcribed verbatim and, along with the response received electronically, were thematically coded based on the interview questions and analysed manually (Braun & Clark 2006).

Participants were all emailed the information sheet, ethics clearance document as well as interview questions before the interview. The identities of the participants were protected through the use of a coding system known only to the researcher. All information gathered in the process of research was securely kept in a password-protected computer and a back-up external hard disk, which, along with other documents collected, is kept under lock and key and is accessible only to the researcher.

Through triangulation of the interviews with the document search and available literature, a history of naturopathy in South Africa was constructed.

Results

The following themes and sub-themes emerged:

Part 1: Document Search – registrations and minutes of meetings

Part 2: Interviews – early history, effect of legislation, activism

Part 1: Document Search

Registrations and minutes of meetings

Act 52 of 1974 was promulgated in Parliament on 16 October 1974. Section 3(a) of this Act required practitioners to register within a 6-month period from the date of publication of the gazette with the Department of Health. It allowed for the registration of CAM practitioners who were already in practice, provided that they could show proof of their training in the form of a certificate issued by a training institution. Students who were still studying and provided proof of the institution they were studying at were registered as students. Foreign practitioners were in addition required to submit proof of permanent residency or proof that they were ‘capable of acquiring South African citizenship’ (Act 52 of 1974 3[b i]). Failure to register either as a practitioner or as a student meant that the practitioner would not be allowed to continue practising or the student would not be allowed to register once they had completed their studies.

A summary of practitioners who registered with the Department of Health as a result of the promulgation of Act 52 of 1974 is provided in Table 1.

Table 1: 1974 Practitioner registrations (n=171)

Age Group: Year Born	Naturopathy	Homeopathy	Osteopathy	Herbalism + Homeopathy	Naturopathy + Osteopathy	Naturopathy + Homeopathy	Naturopathy + Herbalism	Homeopathy + Osteopathy	Naturopathy, Homeopathy + Osteopathy	South African	Foreign
Up to 1910		5	1		1	6		1	1	11	4 (American, British + German)
1911- 1920	3	18				8		4	10	38	6 (British, Cyprian, German, Indian , Irish, Italian)
1921- 1930	1	20			1	17	1		11	40	11 (British, Dutch, German, French, Portuguese, Rhodesian)
1931- 1940	1	16	1	1		12		3	14	40	8 (American, Dutch, German, Greek, Indian, Swiss, Portuguese)
1941- 1950		5				3			5	12	0
Totals	5	64	2	1	2	46	2	8	41	142	29
Percent -age	2.9	37.4	1.2	0.6	1.2	26.9	1.2	4.7	23.9	83	17

This table is not conclusive as it could not be ascertained if all the applications had been forwarded to the Council by the Department of Health in 1983 or if any of the files were disposed of by the AHPCSA. Gower (2013) puts the number of registered homeopaths at 350. It should be borne in mind that these files only recorded practitioners and not students. The registration process divided applicants into two groups: practitioners and students. Students were allowed to continue with their studies and were registered after 1974 if they had registered as students in 1974.

The data available indicate that the majority of the practitioners who were registered in 1974 were South African, confirming the presence of training institutions in South Africa for each of these professions at the time. It must be noted that multiple registrations predominated, with practitioners registered for homoeopathy and naturopathy being the most common combination (26.9%), followed by homeopathy, naturopathy and osteopathy (23.9%). The various combinations with naturopathy account for 53.2% of registrations, whereas registration for naturopathy alone accounts for only 2.9%. The number of homeopaths who registered only for homoeopathy was 37.4%. From these figures, it can be seen that the number of homeopaths registered were in the majority.

Minutes of meetings

The Chiropractors, Homeopaths and Allied Health Service Professions Council became the Allied Health Professions Council of South Africa in 2000 (Caldis et al. 2001; Gower 2013). The Chiropractors, Homeopaths and Allied Health Service Professions Amendment Bill was first published in Government Gazette No. 21825 of 2000 and later promulgated as the Allied Health Professions Act 63 (South Africa) R127 2001 No. 22052. This provided for the establishment of professional boards which enabled naturopaths and other diagnostic and therapeutic professions to be registered with their respective professional boards. As no specific

system had been used to sort through the files before discarding them, the files which were available were not in chronological order. Minutes of the meeting of the Public Board of Homeopathy, Naturopathy and Phytotherapy (PBHNP) ranged from 2002 to 2005. One of the major issues which appeared most on the agendas of the PBHNP meetings was the registration of naturopaths and phytotherapists. At one PBHNP meeting in 2002, the list of registered naturopaths was tabled. The registration list contained the names, colleges trained at, year of completion of studies and year of first registration as naturopaths. At least 18 naturopathic training colleges existed in the 1960s and 1970s (Appendix 1) with 100 registered naturopaths at the time.

From the minutes of PBHNP meetings held in May 2003, the outcome of applications from naturopaths for registration was tabled. Of the 76 applications, 3 were approved to sit the Council Regulated Examinations (CRE) and 73 were conditionally approved to sit the examination – on condition of submission of proof of a certificate that the naturopathic studies were completed. Not all documents indicated the place of study of the applicants. However, the known institutions of training are summarised in Table 2.

Table 2: Training institutions

Name of training institution	Medical doctors	Heilpraktiker (Germany)	Belcher College (USA)	Clayton College of Natural Health (USA)	SA College of Herbal Medicine	SA College of Natural Medicine	SA College of Naturopathic Medicine	Webber Natural Medicine Institute	World Correspondence College
Number of graduates	2	2	2	2	3	8	11	4	5

Of this list of applicants who were conditionally approved to write the CRE, no further minutes were found relating to the number who finally wrote the examination or the outcome

of these examinations. However, in minutes tabled in 2003, concerns were raised about the legitimacy of some of the documents that had been submitted.

Part 2: Interviews

Early history

A detailed history of the early years of naturopathy was developed as a result of the input from all participants. One participant chose to email the response because they did not wish to be recorded and was only prepared to divulge certain information. However, the information which was provided corroborated the information provided by other participants.

The period from the 1950s to 1974 showed rapid growth and training of CAM practitioners in the areas of chiropractic, homeopathy, naturopathy and osteopathy. Private training colleges flourished as there was no control over the registration of these colleges or the curriculum taught. Of the more highly regarded training facilities at the time was the Lindlahr College in Johannesburg. The college offered training in homeopathy, naturopathy and osteopathy (Gower 2013). Naturopaths trained at the Lindlahr College, and records indicate that by 1957, naturopaths were graduating from the college (Prinsloo n.d.). By the 1960s, many training schools of varying quality were flourishing all over the country. One of the interviewees referred to these as the ‘fly by night’ schools.

Interviewees report that many practitioners were trained through ‘apprenticeships’ with other practitioners. Evidence also suggests that there were a number of practitioners from England who either came over for periods of time to teach or settled in the country. In the Cape Town area, Dr Oliver Lawrence, who was a British naturopath, set up a practice at his home, where he taught his students after hours and over weekends. He taught the same curriculum as at Lindlahr College which included subjects such as anatomy, physiology, hygiene theory and

homeopathy, among others. Dr Stanley Dean was a herbalist who had a practice on the Foreshore in Cape Town in the late 1960s and he taught the herbal component of the course. All the interviewees agree that there was an abundance of training facilities available at the time. There was a considerable degree of overlap in the training of students in homeopathy, naturopathy, herbal medicine as well as osteopathy; this explains why the early practitioners had a broad range of modalities which they used in practice, and it is the reason for such a high number of dual or multiple registrations (Table 1). On qualification, many of these practitioners went on to establish training centres where they in turn trained other practitioners.

Effect of legislation

With the introduction of Act 52 of 1974, all CAM training facilities were to be phased out and shut down. Practitioners were given a period of 6 months to register with the Department of Health. Students who were still training also had to register as students and were allowed to register on completion of their studies. As a result of this Act, hundreds of practitioners were not registered, either because they were not aware of the legislation or because their applications were not approved owing to lack of certification to prove training.

Absence of registration did not stop people from practising, and interviewees confirm that, with the appointment of the first chairperson of the Chiropractors and Homeopaths Association, a serious effort was made to clamp down on unregistered practitioners in practice. If any practitioner was reported to the chairperson, the chairperson reported to the police to follow up. If practitioners were caught in the act, they were arrested and charged with practising unlawfully. This punitive measure did not stop many practitioners who used euphemisms for their practices rather than the term 'naturopath', although in essence they still continued to practise as naturopaths. This is evidenced by the number of applicants who applied for

registration as a result of the passing of Act 40 of 1995. If there was a lack of certification, it meant they could not write the CRE and were still excluded from the registration process.

The Associated Health Service Professions Act 63 (South Africa) 1982 No. 8160 made provision for the establishment of the Associated Health Services Professions Board. As a result of the passing of this Act, all practitioners who had registered in 1974 were required to register again. However, no new registrations were allowed; according to the legislation, there were to be no new registrations of naturopaths after 1982, whereas the register was opened to chiropractors and homeopaths with the establishment of the Associated Health Service Professions Amendment Act 105 (South Africa) 1985 No. 9867. This Act also gave the new board the power to control and regulate the education of allied registered practitioners. According to minutes from 1987, training for chiropractors and homeopaths was approved by the Minister of Education in 1987 and courses officially started in 1989 (Chiropractic education in South Africa 1993). No other training institutions for other professions were allowed.

Activism

The situation caused dissatisfaction among the other professions and led to the formation of the Confederation of Complementary Health Associations of South Africa (COCHASA). The South African Naturopathic Association (SANA) was formed in the early 1990s and lobbied as one of the members of COCHASA to open the register. In 1994, after the first democratic South African elections, there was a re-examination of laws in the country, including health care laws. This created an opening for COCHASA to lobby the Minister of Health to launch an investigation into the Chiropractors, Homeopaths and Allied Services Professions Council; as a result, the Chiropractors, Homeopaths and Allied Health Service Professions Amendment Act 40 (South Africa) 1995 No. 16643 was enacted which allowed practitioners who had previously not been able to register to apply for registration. This led to the institution of what

was termed the 'grandfather' clause which allowed practitioners to undergo a 2-year period of training to upgrade their training to a level determined to be acceptable to the Council. They then wrote a CRE and, if they passed, they were registered.

The Chiropractors, Homeopaths and Allied Health Service Professions Second Amendment Act 50 (South Africa) 2000 No. 21825 led to the establishment of the Chiropractors, Homeopaths and Allied Health Service Professions Interim Council which operated from 1995 to 2000. Despite these concessions, COCHASA continued to lobby for the opening of the register which would effectively mean that the training of naturopaths and other allied diagnostic professions would become a possibility. Members of COCHASA presented their case in November 2000 to the Parliamentary Portfolio Committee on Health, who subsequently voted for the registers to be opened. This led to the promulgation of Regulation 127 of 2001 which provided for the opening of the register for the diagnostic professions of Ayurveda, Chinese medicine and acupuncture, naturopathy, osteopathy, phytotherapy and unani tibt.

SANA members became actively involved with the AHPCSA to determine the scope of practice and, through a comparative analysis of established international training institutions, drew up the curriculum required for the training of naturopaths. They also sought to actively engage with tertiary institutions to establish training facilities for naturopaths and other diagnostic professions which were not offered in South Africa. A School of Natural Medicine which offered training in naturopathy, phytotherapy, traditional Chinese medicine and unani tibt was opened at a tertiary institution in the Western Cape in 2002 and currently provides what is still the only training for these diagnostic professions in South Africa.

Discussion

This article explores the development of naturopathy as a system of CAM in South Africa. The findings show that the history of naturopathy is closely aligned with the history of CAM in this country. One of the challenges experienced in conducting this research was finding participants who met the inclusion criteria. Naturopaths who either practised or studied between the 1950s and 1974 are now few in number as many are now deceased, or no longer in practice, or were unwilling to speak about this period, especially the period after the passing of Act 52 of 1974. It was found that participants remembered the events that took place but might have forgotten the precise dates when these occurred. Through the process of triangulating, the validity of the information was established (Carter et al. 2014).

The years after the passing of Act 52 in 1974 have had a long-term effect on practitioners. One of the participants chose to respond to the interview questions via email so that the content of the response was controlled by the participant. Others asked questions about confidentiality, and the researcher had to explain in detail the ethical and confidentiality procedures. There still exists a sense of distrust and fear of being identified by peers.

No documentation of the number of practitioners who registered as a result of this Act could be found. The original registration forms were kept by the Department of Health and, with the establishment of Act 63 of 1982, the documentation was sent to the Council. AHPCSA disposed of some of the archived documents. This decision was made on the basis of the legal precept that permits documentation older than 5 years to be destroyed. No record was kept of which documents were disposed of, so there is no exact record of the numbers of practitioners who were registered. Information provided by the interviewees suggests that the number ran into the thousands. One of the shortcomings in this research is lack of certainty of the exact

numbers of practitioners registered in the years leading up to the establishment of the AHPCSA in 2000.

After 1982, the records show that 17 naturopaths were registered between 1984 and 1996. Nine of these had dual registration as homeopaths and naturopaths, two had dual registration as osteopaths and naturopaths, and five were only registered for naturopathy. Missing information on the CRE and registration, discrepancies in registration numbers and years of qualification appear to confirm allegations by some practitioners of selective and preferential deviations from the regulations. The document search supports some of these claims. Act 63 of 1982 made provision for the establishment of the South African Associated Health Service Professions Board (Gower 2013) which had several objectives – the most important was to ‘assist in the promotion and protection of the health of the population of the Republic’ (1[3a]) and to ‘control the registration of persons in respect of any profession and to set standards for the training of intending practitioners’ (1 [3c]). The evidence available appears to suggest that this council failed in fulfilling these objectives. Practitioners were registered with a minimum of training as doctors and allowed to legally practise.

Act 40 of 1995 allowed for the ‘grandfather’ clause which made provision for practitioners who had not previously been registered to undergo a 2-year period of training to upgrade their training before writing a CRE. The qualifications of some the applicants are of concern because there was no clear indication that they studied any naturopathy courses. There was no minimum criteria set for entry into the CRE and one sees training colleges springing up to provide this training. This undermined the objective of the council to set appropriate standards for the training of practitioners which would safeguard the health of the public.

According to some of the interviewees, it was after the establishment of the naturopathy training course in 2002 that SANA gradually became less functional. By the time naturopathic

students graduated, they found themselves with no functional association able to support and guide their professional development, which has had an adverse effect on the growth of the profession. Drawing from the North American situation, one finds organisations such as the Canadian Association of Naturopathic Doctors actively promoting and advocating for the professionalisation of, and regulatory changes for, naturopathy (National Associations for Naturopathic Doctors n.d.). This activism has resulted in an increase in the number of naturopathic students. In 2009, this advocacy resulted in registered naturopaths being granted the right to prescribe certain categories of pharmaceuticals (Eggertson 2010) which essentially placed them on the same level as general practitioners. In 2016, naturopathic graduates become actively involved in relaunching SANA; this may herald the start of another chapter in the history of naturopathy in South Africa.

Conclusion

The history of naturopathy in South Africa has not been recorded prior to this article. This research has revealed a period of rapid growth of CAM in the period from 1950s to 1974 which was abruptly halted through the introduction of legislation. As a direct result of continued activism by naturopaths and other CAM practitioners, legislation was changed and has led to legal recognition. This was a time of huge optimism for the CAM sector as it saw the legitimisation of CAM professions through the establishment of the AHPCSA as the start of a period of growth for these professions. This in turn resulted in establishing training programmes at tertiary institutions.

However, this has not resulted in an increase in numbers of registered naturopaths. If naturopaths are to make a significant contribution to the health care system, there has to be a substantial increase in the number of naturopathic graduates as well as a strong association to

promote public awareness of naturopathy. Growth and professionalization of the profession should ultimately lead to a change in legislation.

References

- Braun, V. & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Caldis, K.S., McLeod, H.D. & Smith, P.R. (2001). The fall of the Bamboo Curtain: A review of complementary medicine in South Africa. *South African Actuarial Journal*, 1, 63–93.
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J. & Neville, A.J. (2014). The use of triangulation in qualitative research. *Oncology Nursing Forum*, 41(5), 545–547.
- Chiropractic education in South Africa. (1993). *Dynamic Chiropractic*, 11(18).
- Chitindingu, E., George, G. & Gow, J. (2014) A review of the integration of traditional complementary and alternative medicine into the curriculum of South African medical schools. *Biomed Central Medical Education* 14, 40.
- Eggertson, L. (2010). Naturopathic doctors gaining new powers. *Canadian Medical Association* 182(1), 109–3112.
- Fischer, F.H., Lewith, G., Witt, C.M., Linde, K., von Ammon, K., Cardini, F. (2014). High prevalence but limited evidence in complementary and alternative medicine: Guidelines for future research. *Biomed Central Complementary and Alternative Medicine* 14, 46.
- Fleming, S.A. & Gutknecht, N.C. (2010). Naturopathy and the primary care practice. *Primary Care: Clinics in Office Practice*, 37(1), 119–136.

- Gower, N. (2013). *A brief look at the history of homeopathy in South Africa. Homeopathy papers past and present*. Retrieved July 25, 2016, from <http://hpathy.com/homeopathy-south-africa/>.
- Hassim, A., Haywood, M. & Berger, J. (2007). *Health and Democracy: A guide to human rights, health law and policy in post-apartheid South Africa*. Cape Town: Siber Ink CC.
- World Naturopathic Federation (2017). WNF white paper: Naturopathic philosophies, principles and theories. Retrieved February 2, 2018, from www.worldnaturopathic-federation.org.
- MCC listens to CAMS concerns*. (2014). Medical Chronicle. Retrieved December 8, 2016, from <http://www.medical-chronicle.co.za/mcc-listens-cams-concerns/>.
- National Associations for Naturopathic Doctors (n.d.). Retrieved December 19, 2016, from <https://aanmc.org/national-associations/>.
- National Library of Medicine. (2010). Retrieved March 23, 2018, from https://www.nlm.nih.gov/tsd/acquisitions/cdm/subjects_24.html.
- Ng, J.Y., Boon, H.S., Thompson, A.K. & Whitehead, C.R. (2016). Making sense of “alternative”, “complementary”, “unconventional”, and “integrative medicine”: Exploring the terms and meanings through textual analysis. *Biomed central Complementary and Alternative Medicine* 16, 134
- Pretorius, E. (2010). Complementary/alternative and traditional healthcare in South Africa. In H.C.J. van Rensburg (Ed.), *Health and Healthcare in South Africa*, Pretoria, van Schaik Publishers.

Prinsloo, J.P. (n.d). *History of homeopathic training in South Africa*. Retrieved March 21, 2018, from http://www.biocura.co.za/homeopathy/history_homeopathic_education_in_south_africa.html.

Reilly, D. (2001). Comments on complementary and alternative medicine in Europe. *Journal of Alternative and Complementary Medicine*, 7(Suppl), 23–31.

Traditional and National Health Alliance. (2014). Retrieved July 28, 2016, from www.naturalhealthalliance.co.za/Draft_AmendmentCommentDec2014.htm.

Wardle, J. & Oberg, E. (2011). The intersecting paradigms of naturopathic medicine and public health: Opportunities for naturopathic medicine. *Journal of Alternative and Complementary Medicine* 17(11), 1079–1084.

World Health Organisation. (2013). *WHO traditional medicine strategy: 2014–2023*. Retrieved March 28, 2018, from <http://www.who.int/medicines/publications/trmstrategy1423/e>.

CHAPTER 5

THE EFFECT OF LEGISLATION ON THE TREATMENT PRACTICES AND ROLE OF NATUROPATHS IN SOUTH AFRICA

5.1 Introduction

This chapter reports on the second stage of the research process, based on the findings of the first stage of research which established that registered naturopaths are not a homogenous group of CM practitioners. There was a huge difference in the manner in which they were trained prior to the introduction of the 1974 legislation and post to that of 2001. There was also a gap of almost 30 years between the first registered naturopaths and the registration of the tertiary-educated naturopathic graduates. This stage of the research set out to explore the effect of legislation on the treatment practices used and the role envisioned for naturopaths in South Africa. Findings suggest that legislation determines the treatment practices used by naturopaths and restricts naturopaths to working in the private healthcare system. This second stage has been written up in an article: ‘The effect of legislation on the treatment practices and role of naturopaths in the South Africa’ and was submitted to a DHET-accredited journal.

5.2 Biomed Central Journal of Complementary Medicine and Therapies: A reflection on the submission and review process

The manuscript was submitted on the 3 October 2019 to *Biomed Central: Journal of Complementary Medicine and Therapies*. It is an open-source peer-reviewed journal with an impact factor of 2.109. The aim of the journal is to publish original research which focuses on various aspects of CM. On 9 December 2019 the response of the peer reviewers was received. Both reviewers provided in-depth feedback on the article (see Appendix L). Despite the lengthy

feedback, both reviewers found the area of research to be a valuable one for CM. The article was reworked and resubmitted on the 8 January 2020. The article was then reviewed again by the same reviewers who provided further input that was received on the 22 January 2020. On the strong recommendation of one of the reviewers, the title of the article was modified and the article reworked and re-submitted on the 21 February (see Appendix M). Although at this stage one of the reviewers was happy with the article, the second reviewer was adamant that the discussion around professional identity was not dealt with in sufficient depth. The author was in agreement with the reviewer that the topic of professional identity required further exploration – however, it was felt that this would require an article on its own – therefore the decision was made to modify the title. The final decision to publish was received on the 2 April 2020 (see Appendix P).

5.3 Contribution record

The following contributions were made by the candidate's joint publication with the supervisors:

<i>Authors</i>	<i>Contributions</i>
Wendy Ericksen-Pereira	Designed the research study, conducted all the research, identified the journal, wrote the manuscript, was the corresponding author and communicated with the editor in chief and reviewers.
Nicolette Vanessa Roman	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.
Rina Swart	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.

5.4 Visibility of research

After the peer-review process this article was returned with comment, reworked and then resubmitted. The fact that it was not rejected is an indication that there is an indication that there is interest in the field of naturopathy globally. This field has been dominated by research emanating from Western countries and this is the first time that research in naturopathy on the African continent is being conducted and – based on the reviewers' comments – there is an interest in this area.

5.5 Article: The effect of legislation on the treatment practices and role of naturopaths in South Africa

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Abstract

Background: In South Africa naturopaths have been practising for over half a century. Over this period, changes in legislation have resulted in different levels of training and registration processes - which has impacted on the profession in various ways. This paper explores the effect of legislation on the treatment practices and role of naturopaths in South Africa.

Methods: This was a qualitative study which used an exploratory approach. Participants were sampled from the list of naturopaths registered with the Allied Health Professions Council of South Africa (AHPCSA). A set of 15 open-ended survey questions were emailed to 59 naturopaths. Twenty one naturopaths participated: thirteen responded via email and eight were interviewed. Responses were coded and thematically analysed.

Results: It was found that despite differences in training and years of practice experience, four core treatment practices of diet therapy, lifestyle medicine, supplementation and physical therapies were common to all participants with the older, more experienced naturopaths using a wider range of treatment practices. There is a shared common vision of wanting the profession to have greater participation in the public healthcare system. This research has found that legislation influences the treatment practices and role played by naturopaths in South Africa. The findings of this paper acknowledges the limiting impact of state legislation on naturopathic and other complementary medicine professions

Conclusion: Naturopathy has to operate within the legislative framework and this appears to be one of the key factors which has contributed to the lack of growth of naturopathy in South Africa. Findings thus highlight the need for new legislation to reflect the changes in society to ensure that the emergent healthcare needs of the population are met.

Keywords: complementary medicine, regulatory body, scope of practice, treatment practices, legislation

Background

The World Health Organisation (WHO) defines complementary medicine as those healthcare practices which are not part of a country's traditional or conventional allopathic healthcare system.¹ Naturopathy is recognised as a system of complementary medicine (CM).² Naturopathic medicine is underpinned by the Aristotelian³ and Hippocratic⁴ philosophy of vitalism and wholism. The principles which guide naturopathic practice have their roots in this philosophy and were codified as: the healing power of nature, first do no harm, treating the root cause of an illness, treating the patient wholistically, the role of the naturopath as teacher, and the prevention of illness and disease.⁴ It is this philosophy and foundational principles which guide the assessment, diagnosis and treatment practices of the naturopath.^{5,6}

Naturopathy in South Africa

The history of naturopathy is intertwined with the history of CM in South Africa until 1985 when legislative changes resulted in the recognition and growth of the chiropractic and homeopathic professions.

CM, in the form of homeopathy, was first introduced into South Africa by European immigrants and was practised in the country since the 1800s.⁷ After the second world war South Africa experienced a wave of European immigrants, among them homeopaths, naturopaths and herbalists.⁸ The 1960s and early 1970s saw a proliferation of private training colleges for naturopathic, homeopathic, chiropractic and osteopathic medicine. One of the first professional organisations for these professions was the South African Naturopathic and Homeopathic Association, founded in the 1960s by Dr William Lilley.⁷

With the passing of the Homeopaths, Naturopaths, Osteopaths and Herbalists Act 52 in 1974,⁹ all CM practitioners recognised by the act were expected to register within six months from the date of promulgation of the Act with the Department of Health. Many naturopaths who registered as a result of this Act were trained in more than one diagnostic profession (a profession legally permitted to diagnose and treat patients⁸) through private colleges which existed at the time. As a result, many naturopaths applied for dual registration as naturopaths and homeopaths or osteopaths. This register was closed to practitioners in 1975. However, students at private training colleges at the time were allowed to complete their studies and register.⁸ Training colleges were gradually phased out and by 1982 all training colleges were closed. The Associated Health Service Professions Act 63 of 1982¹⁰ resulted in all the registers being closed and no new registrations were allowed. This made it illegal to practise naturopathy, herbalism, homeopathy, chiropractic and osteopathy if unregistered.

The objective of this act was to protect and promote the public health, and control registration and practice of the different CM professions (Act 63 Section 2(1)3).¹⁰ The act also made provision for the establishment of the South African Associated Health Service Professions Board. As a result of the work of this board the scope of practice (SOP) for the five recognised professions was developed and published in the Government Notice Regulation 2610 in 1982.¹¹ In 1985 the register was opened to chiropractors and homeopaths and shortly thereafter training programmes in these professions were established at tertiary institutions.⁷ The passing of the Chiropractors, Homoeopaths and Allied Health Service Professions Amendment Act 40 (South Africa) 1995 No. 16643¹² allowed practitioners who had trained in the 1970s but missed the cut-off date for registration as well as those who trained abroad after 1975 to apply for registration. Also included were individuals who completed various complementary medicine courses at unregistered training centres in the country and practiced without registration. All categories of applicants were expected to undergo two years training to upgrade their

knowledge and skills and complete a council regulated examination (CRE). Those who passed were registered. This was called the ‘grandfather’ clause.

In 1997, naturopaths formed a professional association, the South African Naturopathic Association (SANA) and joined with the Confederation of Complementary Health Associations of South Africa (COCHASA) to lobby for changes in legislation.¹³ Regulation 127 of 2001¹⁴ meant certain sections of Act 63 of 1982¹⁰ were amended, which allowed for the registration of Ayurveda, Chinese medicine and acupuncture, naturopathy, osteopathy and phytotherapy professions. This allowed practitioners who had not been ‘grandfathered’, or had studied either locally or abroad and could provide documentary evidence of training, to apply to write a CRE.⁷ The regulation also set out educational training requirements, paving the way for training of naturopaths and other legally recognised CM professions at tertiary level. This led to the establishment of the only training programme for naturopaths in the Faculty of Community Health Sciences at one of the established universities, which saw the first cohort of naturopaths graduate in 2006.⁸

Although sections of Act 63 were repealed and new regulations introduced, all legislation should be read in conjunction with Act 63¹⁰ as collectively they set the parameters for legal practice.

Public awareness of naturopathy

Unlike other fields of medicine, there is little public awareness of the naturopathic profession, even though the latter has been in practice for over 50 years in South Africa. Responsibility for promoting a profession to the public lies with the professional associations.¹⁵ This requires a clear understanding of the broader healthcare system, the regulations which govern the profession and treatment practices which naturopaths may use. This allows the professional body to promote the profession to the broader public,¹⁶ by providing a framework from which

to better understand the nature and practice of the profession. Research documenting the effect of legislation on the role and treatment practices of naturopaths has, until recently, been lacking. This paper aims to describe the effect of legislation on the role and treatment practices of naturopaths in South Africa, as perceived by registered South African naturopaths.

Method

Ethical approval for the study was obtained from the University of the Western Cape's Senate Ethics Committee. All information gathered is securely kept and accessible only to the researcher. Signed informed consent forms were obtained from all participants.

In this study qualitative study an interpretive research paradigm was used, as interpretivism assumes "that reality should be interpreted through the meaning that research participants give to their word" (p.309).¹⁷ This study used an exploratory approach, as there is a lack of information on this topic¹⁷ in South Africa. Participants were sourced from the website of the Allied Health Professions Council of South Africa (AHPCSA),¹⁸ the regulatory body with whom all diagnostic CM practitioners are registered, as required by Act 63 of 1982.¹⁰

Names of registered naturopaths were identified from the register. Due to a legal requirement for AHPCSA members' contact details were sought through an electronic search of the white pages telephone directory, medical practitioner sites, Facebook and Google, which yielded details for 64 AHPCSA registered naturopaths. These naturopaths were then contacted telephonically or via email. The purpose of the research was explained, and they were invited to participate in the study.

Five of the naturopaths who were registered prior to the passing of Regulation 127 of 2001,¹⁴ refused to participate, eight agreed to be interviewed, and the remainder asked for the list of questions to be forwarded via email. A total of 59 naturopaths were sent a set of 15 open-ended

survey questions, an ethics clearance and an informed consent form via email. Examples of the open-ended questions were: (1) Provide a definition of what you feel a naturopath is; (2) Describe the various therapeutic treatment practices you use with your patients; (3) Discuss the role that you feel naturopaths play in the South African healthcare system; (4) How would you like to see this role in the future?

Thirteen naturopaths forwarded responses to the questions via email. Interviews with eight naturopaths were conducted at a time and venue convenient to participants. Questions posed in the interviews were the same as those sent via email. Interviews were recorded and transcribed verbatim. Once all data was collected, participants' responses were coded in order to ensure anonymity. All responses were summarized according to the questions and then thematically analyse.¹⁹

Results

Twenty one naturopaths agreed to participate. Practice experience of participants ranged from newly qualified to over 50 years of experience. Table 1 summarizes the practice experience of participants.

Table 1: Practice experience

Registered naturopaths	Over 50 years	Between 40 - 49 years	Between 30 - 39 years	Between 20 - 29 years	Between 10 - 19 years	Between 5 – 9 years	Between 0 – 4 years
No of years since completion of naturopathic studies	1	1	1	2	3	10	3
Full time practice	1	1	1	2	3	3	1
Part-time practice					0	3	1
Not in practice at all					0	1	1
Postgraduate studies					0	3	0
Dual registration	1	1	1	0	0	0	0

The eight most experienced naturopaths were the same participants who agreed to participate only by being interviewed. They all requested more information about the researcher and the project compared to less experienced naturopaths.

The ethics clearance document was explained and credentials of the researcher as a registered naturopath were established. Participants acknowledged that they preferred speaking to the researcher as they were weary of divulging information on naturopathy when they did not know how the information would be used. Naturopaths who were graduates of the tertiary training programme were willing to answer questions electronically and email their response.

Participants' naturopathic training ranged from unregistered private colleges in the 1960s to the 1990s, naturopathic training colleges abroad and graduates of the AHPCSA accredited tertiary training programmes. Table 2 summarizes the levels of training of participants:

Table 2: Participants training levels

Training institution	Trained at unregistered naturopathic colleges in South Africa	Trained at Lindlhar college in South Africa	Trained at naturopathic colleges abroad	Trained in South Africa at the tertiary training institution.
Number of participants	6	2	2	11

When asked about their training, older, more experienced naturopaths went into detail explaining how they were trained. They viewed themselves as early pioneers of naturopathy in South Africa and spoke with a sense of pride about the diverse treatment practices they were trained in and used in practice. There was also a sense of pride in having been able to practice for the length of time which they had - despite changes in regulations which they felt had a negative effect on growth of the profession. Two naturopaths admitted they had practiced ‘illegally’, as unregistered health practitioners for many years, until legislation changed in 1995.⁸ From the responses of some older naturopaths it would appear the introduction of legislation in 1974⁹ led to a period of strict punitive enforcement of the law which had left its mark on them and could explain why five naturopaths refused to participate (see below: 2).

Practice experience of participants in this study ranged from the first group of naturopaths who trained in South Africa in the 1960s to the most recent naturopathy graduate. Data obtained from this research indicated that all the naturopaths with more than 10 years practice experience were in full-time practice whereas only four naturopaths with less than 10 years of experience are in full-time practice. Respondents in part-time practice expressed the wish to work as full-time naturopaths. Five were in part-time practice for a while but found it a financial challenge and gave up their practices.

Survey questions and interview responses were analysed thematically and the following themes were identified:

1. Definition of naturopathy
2. Naturopathic registration
3. Treatment practices
4. The role of naturopaths in South Africa: integration into the public healthcare system

1. Definition of Naturopathy

In South Africa Regulation 127 of 2001¹⁴ defines naturopathy as: “a system of healing based on promoting health and treating disease using the body’s inherent biological healing mechanisms to self-heal through the application of non-toxic methods.” This definition does not encompass other naturopathic principles such as the treating the root cause of disease, treating the patient holistically and the role of doctor as teacher.²⁰

The older respondents provided a more general definition of the term which was closer to the legislated definition of naturopathy. This could be due to some of them having been involved in lobbying for changing the legislation which led to the opening of the register to naturopaths in 2001.¹³ For example:

“Naturopathy is a system of healing that uses natural methods and remedies to support and enhance the body’s natural healing mechanisms in order to treat disease and promote health and well-being” (participant 8).

More recent naturopathic graduates incorporated more of the principles of naturopathy into the definition of naturopathy – this could be attributed to the difference in training, the progression and refinement of naturopathic philosophy, terms and practices over the years and the increased availability of naturopathic literature, compared to the 1960s and 70s.

“It is a distinct, comprehensive, patient-centric system of medicine which focuses on the root cause of disease, and takes into account the ‘whole’ person by addressing physical, mental, emotional, social, environmental, spiritual and genetic factors” (participant 11).

All participants identified themselves as naturopaths, regardless of whether they were in practice or not, based on the principles which underpin naturopathy.

“I will always be a naturopath as the basic underlying principles of naturopathy you can take into any area of life or work. I am currently working in the public health system where we do a form of analysis called root cause analysis to uncover the root cause of the problem in the health system. This is what we as naturopaths do - unpack the root cause of a patient’s disease” (participant 16).

Naturopaths who are not in practice continue to identify as naturopaths as they are still on the naturopathic register¹⁸ and legally have the title of naturopath. Since they are not in practice, they continue to apply the principles of naturopathy to their everyday lives and in the workplace.

2. Naturopathic registration

Respondents’ work experience could be categorized as either: full-time practice, pursuing postgraduate qualifications, part-time practice or not in practice at all (see table 1). Registration with the regulatory body was important to all participants since it allowed them to use the title of naturopath and to practice legally. Although all respondents were registered with the AHPCSA, for some respondents this had not always been the case as some had previously been denied the opportunity to register due to legislation:

“I completed my training in the 1980s but wasn’t allowed to register. I practised as a natural medicine practitioner even though I trained as a naturopath. With the new law introduced in 1995 I was ‘grandfathered’ and passed the exam. I could register and use the title naturopath for the first time” (participant 3).

“Naturopaths who didn’t register in the six month window period either went underground and used creative titles to continue practising or were forced to stop practising” (participant 2).

“I was arrested at my practice in front of my patients in the 1970s because I practiced without being registered. It cost me everything to defend myself. After I got off on a technicality I was constantly watched” (participant 1).

Participants identified some of the challenges with registration. One of the participants reported the following experience when they failed to pay their registration fees:

“I didn’t pay my fees as I had gone back to studying. I was deregistered. There was so much bureaucracy and all the outstanding fees that had to be paid.....it is easier to pay your fees than go through that process” (participant 18).

If registration lapses due to lack of fee payment, the practitioner is not only deregistered, but required to pay an application fee and double or triple the annual fee, if they wish to be registered again.²¹ Conditions for registration are set in out in Regulation 127 of 2001.¹⁴ Students are required to register within the first six months of graduating or undergo a competency assessment (for which they have to pay). The challenge around registration for naturopathy graduates appears to be the cost of registration fees - currently approximately 20 per cent of the average salary of a new graduate.²²

Those who were not in practice indicated that they maintained their registration because they hoped to go into full-time practice when they were in a financial position to do so. Having completed a five year naturopathy training programme at a university, it is the general wish of graduates to enter practice. This poses a challenge, as they may not have the funds to go into full time practice immediately after graduating – however, they still have to pay the full annual registration fee.

“After graduating my main source of income came from working in a health shop, after a few months I started a practice part-time” (participant 3).

Only once naturopaths are legally registered can they practice. Without being registered, the title naturopath may not legally be used. The title of naturopath is protected in South Africa as Act 63 of 1982¹⁰ sets out the legal definition of the term naturopath: “a person registered as such under this Act.” For older naturopaths, registration was a source of pride and achievement, for they were able to overcome the challenges to registration, while for more recent naturopathic graduates, registration also provided a sense of achievement, at having completed a five year training programme:

“I was involved in COHASA - lobbying the government to amend Regulation 63 so that the register could be opened to naturopathy and other CM professions. We presented our case to the Parliamentary Portfolio Committee on Health in November 2000 and the committee voted for the opening of the registers. Finally I and other naturopaths could register” (participant 2).

3. Treatment practices

Respondents reported using a range of treatment practices, summarised in Table 3 below:

Table 3: Reported Treatment Practices

Type of treatment	Proportion of practitioners practising treatment
Diet therapy	100%
Lifestyle medicine	94%
Supplementation	94%
Physical therapies	88%
Botanical medicine	69%
Acupressure	25%
Acupuncture	25%
Homeopathy	25%
Iridology	25%
Exercise therapy	20%
Hydrotherapy	20%

These results indicate the variety of treatment practices used by naturopaths. Of the 11 treatment practices identified, four were used by most respondents. These treatment practices focussed on diet therapy, lifestyle medicine, supplementation and physical therapies.

Naturopaths who used a more extensive range of treatment practices were older naturopaths, and either hold dual registration as a naturopath and homeopath, or trained abroad:

“I use a wide range of treatments, depending on what my patients need: lifestyle counselling, diet therapy, homeopathy, herbal medicine, hydrotherapy, massage therapy and iridology” (participant 4).

Less experienced naturopaths who trained in South Africa used a limited number of treatment practices, which reflects on the training received:

“Due to our limited scope of practice I only used diet therapy, herbal therapy, vitamin supplementation, lifestyle therapy and massage therapy when I was in practice” (participant 16)

Regardless of training, the results indicate all participants used treatment practices which are within the naturopathic scope of practice (SOP) as set out in Act 63 of 1982.¹⁰

4. The wider role of naturopaths in South Africa

South Africa has a system of dual healthcare: one public and one private. All participants expressed the wish to see naturopaths play a more significant role in the healthcare system, expressing the hope that naturopathy be incorporated into the public healthcare system. Their reasons for this varied. It was felt that there is insufficient public awareness of the profession of naturopathy - what it is and services naturopaths offer - and that the professional associations do not adequately promote the profession to the public:

“They should play a much bigger role. They are not doing enough to promote naturopathy in society....We need more people to be exposed to naturopathy and what we do” (participant 14).

This, along with the current legislation, is seen as curtailing naturopaths’ ability to set up a viable practice. Regulation 127 of 2001¹⁴ sets out the few remedies (emollients, tissue salts, vitamins and minerals) which naturopaths may use in practice listed in Table 4 below:

Table 4: Remedies Naturopaths May Prescribe:

Remedy	Explanation
Vitamins	Excludes injectables and other substances containing an injectable form of Vitamin A or B12
Emollients	Substances that exclusively intended for application to the skin which are not scheduled or prepared according to homeopathic principles
Minerals	Any mineral that is not scheduled or prepared according to homeopathic principles
Scheussler's Tissue Salts	Calcarea flouorica; Calcarea phosphorica; Calcarea sulphuricum; Ferrum phosphoricum; Kali muriaticum; Kali phosphoricum; Kali sulphuricum; Magnesia phosphorica; Natruim muriaticum; Natrium phosphoricum;Naturium sulphuricum; Silicae. The above substances to be in one part per million.

Regulation also prevents naturopaths from working in interdisciplinary practices with registered Health Professions Council of South Africa (HPCSA) practitioners. Section 8A of Board Notice 26 published in Government Gazette 36183 of 2013 states: "A practitioner shall not share his or her rooms with a person or entity not registered in terms of the Act"²³ This regulation forces naturopaths and other AHPCSA registered practitioners to work within the private healthcare system.

"...it is very restrictive to naturopathy as a profession due to the limited access to remedies, making the profession less viable financially. We are also unable to work in an interdisciplinary practice with medical doctors. This discourages students from joining the profession and encourages practitioners to leave the country or abandon the profession or practice only part time, whilst they take on other jobs in order to pay the bills" (participant 21).

As a result, practitioners struggle to establish viable practices. It is believed that by becoming part of the public healthcare system, the public will be more exposed to naturopathy and demand for the services of naturopaths will increase. As a result of this increased demand, there would also be a greater interest in studying naturopathy.

Participants felt that the underlying philosophy which guides naturopathic practice, with its emphasis on health promotion and disease prevention, means naturopaths could contribute to the prevention of chronic illness and diseases of lifestyle, thereby lessening the burden of the high cost of non-communicable diseases on the healthcare system.

“Naturopathy can be immensely valuable in the primary healthcare setting in helping to prevent chronic illness and lessen the burden on the (public) healthcare system. Unfortunately naturopathy can only provide a service within the private healthcare system.” (participant 9).

Discussion

The roles and practices of naturopaths have been extensively shaped by the historic-legal context in South Africa. Therefore this discussion aims to analyse findings in the light of this historic-legal framework.

As the use of traditional and complementary medicine (T&CM) medicine increases,²⁴ it is assumed that regulation is important to ensure the safety of the public using T&CM products and services. The WHO has encouraged member countries to pursue implementing a system of regulation for T&CM.²⁴ South Africa started the process of regulation of CM in 1974 – the aim being to regulate and control CM practitioner numbers by enforcing registration and closing all training facilities for CM. This regulation has its roots in the early 1950s when medical practitioners began to campaign against the growing number of CM practitioners.²⁵ In 1953 alternative therapies were declared to be unscientific and illegal by the Medical Association of South Africa and the medical code prohibited co-operation between allopathic and alternative practitioners.²⁶ The resultant effect of this regulation was to radically reduce the number of CM practitioners, especially naturopaths.^{8,27}

Current legislation defines naturopathy, sets the educational standards for training, determines the SOP, sets conditions for registration and the code of ethical practice for naturopaths.

Regulation of a profession might be seen as a legitimizing of the profession, thus giving practitioners more status,²⁸ and providing the public with clear definition of the profession, the treatment practices offered, as well as the assurance of the level of care which may be expected.²⁸ Participants in this research all understood that being registered allowed them to legally practice under the title of naturopath. Despite the challenges some participants experienced with registration, being registered affords naturopaths title protection²⁸ and allows naturopaths to enter private practice when they have the means to do so. Currently there are less than 100 registered naturopaths on the AHPCSA register.²⁹ The number of registered practitioners is small, given that naturopathy has been practised in South Africa for over 50 years.⁸ It raises questions about the lack of growth of naturopathy in this country compared to the global growth of the profession.³⁰

Participants expressed concern that regulation does not serve the naturopathic profession, because it has an inhibitory effect on the profession. Naturopaths and other CM practitioners are prohibited from sharing practice rooms with allopathic practitioners registered with the HPCSA.²³ This regulation therefore excludes naturopaths from practising in integrative private practices as well as the public healthcare system and perpetuates the separation of allopathic medical practitioners from CM practitioners, contrary to the interest of patients. The WHO²⁴ advocates for universal health coverage, through integration of traditional and complementary medicine into health service delivery, as it allows patients to choose the form of healthcare service they most want to use. Wholistic, integrated care and patient choice may optimise health services and promote the best health outcomes for the population. It has been shown that collaborative practices facilitates improved care and as a result, improved health outcomes.³¹

In South Africa the White Paper on the National Health Insurance Act (NHI), published in the Government Gazette No. 42598 of 2019,³² sets out the proposed plan to ensure universal health coverage for all by 2030. It envisions multidisciplinary clinics being located within the

community, where service providers will be private practitioners contracted by the state to work in the clinics. This could potentially create the opportunity for naturopaths to work in a primary healthcare (PHC) setting if regulations prohibiting AHPCSA CM practitioners from working in the same practice as HPCSA registered practitioners are withdrawn.

Naturopathy is growing globally, including on the African continent.³⁰ Lack of growth of naturopathy in South Africa goes against this trend. This research found that current regulation is one factor that hampers the growth of the naturopathic profession. Further investigation into the legislation and its effects on CM needs to be conducted.

A limitation of this study was the two different methods in which responses to the open-ended questions were obtained. However, due to the punitive manner in which the regulations were implemented in the 1970s and 80s, older naturopaths remain seemingly suspicious of anyone enquiring about naturopathy and what they practice. The repressive environment in which they trained and practiced has shaped their experiences and how they view an ‘outsider’ questioning them about their practice.⁸ Due to the age of participants, it appeared important to accommodate their requests. They have lived experience of all the changes in legislation and vast practice experience. This knowledge will be lost if it is not recorded, hence the importance of granting them a voice in this study.

Conclusion

This research found that legislation affects all aspects of the naturopathic profession in South Africa. It prescribes the range of treatment practices used and determines who may use the title of naturopath. While naturopaths share a similar vision for a future role in the public healthcare system, this vision cannot be achieved under current legislation. In the light of the information provided by South African naturopaths, there is a need to review the current regulations, in view of the increased demand for CM and recommendations by the WHO for the integration

of the different medical systems into the national public healthcare system. This could ensure universal and comprehensive healthcare is provided to the population.

Within the South African context this is the first research to be conducted about naturopathy as a diagnostic system of CM. Further research should include an examination of the changes required in the regulatory environment to promote naturopaths' presence in the South African public healthcare system.

List of Abbreviations:

AHPCSA – Allied Health Professions Council of South Africa

CM – Complementary Medicine

COCHASA – Confederation of Complementary Health Association of South Africa

CRE – Council regulated examination

HPCSA – Health Professions Council of South Africa

NHI – National Health Insurance

PHC – Primary healthcare

SANA – South African Naturopathic Association

SOP – Scope of practice

T&CM – Traditional and Complementary Medicine

WHO – World Health Organisation

Declarations: None

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Written consent to participate was obtained from all participants.

Consent to publish: Not applicable

Availability of data: The datasets used and analysed in the course of the study are not publically available in order to protect the identity of the participants. It is available from the corresponding author on reasonable request.

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References

1. World Health Organisation. Traditional, complementary and integrative medicine. Definitions. Available from: <https://www.who.int/traditional-complementary-integrative-medicine/about/en/> [Accessed 20 February 2020].
2. World Health Organisation. Benchmarks for training in traditional/complementary and alternative medicine: Benchmarks for Training in naturopathy. 2010. Available from: <http://apps.who.int/medicinedocs/documents/s17553en/s17553en.pdf>. [Accessed 9 April 2018].

3. Pizzorno J.E. & Murray, M.T. *Textbook of natural medicine*. Vol 1 3rd edn Missouri: Churchill Livingstone Elsevier; 2006.
4. Hausser T, Lloyd I, Yanez J, et al. WNF white paper: Naturopathic philosophies, principles and theories. *World Naturopathic Federation*. 2017. Available from: www.worldnaturopathicfederation.org. [Accessed 5 February 2018].
5. Wardle JL., & Oberg E.B. The intersecting paradigm of naturopathic medicine and public health: Opportunities for naturopathic medicine. *J Altern Complement Med*. 2011; 17 (11):1079-1084.
6. Wardle JL., Adams J., Lui L., Steel AM. et al. Current challenges and future directions for naturopathic medicine in Australia: A qualitative examination of perceptions and experiences from grassroots practice. *BMC: Complement Altern Med*. 2013; 13(15).
7. Gower N. Homeopathy in South Africa. *Homeopathy papers past and present*. Available from: <http://hpathy.com/homeopathy-south-africa/> [Accessed 9 March 2016].
8. Ericksen-Pereira W., Roman N. & Swart R. An overview of the history and development of naturopathy in South Africa. *Health SA Gesondheid*. 2018; 23.
9. South Africa. Homeopaths, Naturopaths, Osteopaths and Herbalists Act 52 of 1974 Government Gazette 4441.
10. South Africa. Associated Health Professions Act 63 of 1982 Government Gazette 8160.
11. South Africa. Government Notice Regulation 2610 of 1982.
12. South Africa. Chiropractors, Homeopaths and Allied Service Professions Amendment Act 63 of 1995 Government Gazette 16643.

13. Caldis KS., McLeod HD. & Smith PR. The fall of the bamboo curtain: A review of complementary medicine in South Africa. *SA Actuarial Journal*. 2001; 1: 63-93.
14. South Africa. Government Notice regulation No 127 of 2001. <https://ahpcsa.co.za/wp-content/uploads/2015/10/Regulations-2001.pdf> [Accessed 20 February 2020].
15. Smitina A. The link between vocational identity, study choice, motivation and satisfaction with studies. *Procedia Soc Behav Sci*. 2010; 5:1140-1145.
16. Prosek EA. & Hurt KM. Measuring professional identity development among counsellor trainees. *Counsellor education and supervision*. 2014; 53(4), 284-293.
17. Fouche CB. & Delpont CSL. *Research at grassroots for the social sciences and human service professions*. Pretoria: Van Schaik, 2012.
18. Allied Health Professions Council of South Africa. Available from: <https://ahpcsa.co.za> [Accessed 11 February 2016].
19. Braun V. & Clark V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006; 3(2):77-101.
20. Hausser T., Lloyd I., Yanez J., et al. Naturopathic roots report. *World Naturopathic Federation*. Available from: www.worldnaturopathicfederation.org. [Accessed 8 January 2018].
21. Allied Health Professions Council of South Africa. Available from: <https://ahpcsa.co.za/wp-content/uploads/2019/12/SCHEDULE-OF-FEES-2020.pdf>. [Accessed 6 January 2020].
22. Living wage series. South Africa. <https://wageindicator.org/salary/living-wage/south-africa-living-wage-series-september-2019>. [Accessed 6 January 2020].

23. South Africa. Board Notice No 26 in Government Gazette No 36183/2013 of Health Care Act 56 of 1974. Available from: https://www.greengazette.co.za/pages/national-gazette-36183-of-01-march-2013-vol-573_20130301-GGN-36183-002.pdf [Accessed 20 February 2020].
24. World Health Organisation. Traditional Medicine Strategy 2014-2023. Available from: http://www.who.int/medicines/publications/traditional/trm_strategy14_23/en/. [Accessed 11 June 2018].
25. Pretorius E. Complementary/alternative and traditional Healthcare in South Africa, In van Rensburg HCJ. (Ed.) *Health and healthcare in South Africa* (pp.506-560). Pretoria: van Schaik Publishers; 2010.
26. Hassim A., Haywood M., Berger J. *Health and Democracy: A guide to human rights, health law and policy in post-apartheid South Africa*. Cape Town: Siber Ink CC; 2007.
27. Prinsloo JP. *The history of homeopathy in South Africa*. Available from: http://www.biocura.co.za/homeopathy/history_homeopathiceducation_in_south_africa.html. [Accessed 24 August 2019].
28. Christmas S. & Cribb C. How does professional regulation affect identity of health and care professionals: exploring the views of professionals. 2017. Available from: [Accessed 6 January 2020].
29. Allied Health Professions Council of South Africa: Available from: <https://ahpcsa.co.za/wp-content/uploads/2019/12/NATUROPATHY.pdf> [Accessed 15 December 2019].
30. World Naturopathic Federation. Naturopathic numbers report. 2016. Available from: <http://worldnaturopathicfederation.org/wp-content/uploads/2015/12/2016-Naturopathic-Numbers-Report.pdf>.

31. Morley L. & Cashell A. Collaboration in healthcare. *Journal of Medical Imaging and Radiation Sciences*. 2017; 48:207-216.

32. South Africa. National Health Insurance Act. Government Gazette No 42598 of 2019.

Retrieved April 22, 2020, from:

https://www.gov.za/sites/default/files/gcis_document/201908/national-health-insurance-bill-b-11-2019.pdf.

CHAPTER 6

A REVIEW OF THE SCOPE OF PRACTICE AND DEVELOPMENT OF MINIMUM COMPETENCIES FOR THE TRAINING OF NATUROPATHS IN SOUTH AFRICA USING A MODIFIED DELPHI METHOD

6.1 Introduction

This chapter represents the third stage of research. A modified Delphi process was used to review the SOP and minimum competencies required for naturopathic training. The findings from the process show that the South African SOP is benchmarked to international standards. It was also found that no minimum competencies document for the training of naturopaths currently exists for evaluating graduating students. Given the global call by the WHO and other international naturopathic bodies to regulate the profession, the implementation of regulation is not sufficient to ensure that naturopathic graduates are competent. The professional body needs to establish minimum competencies that can guide the curricular process so that naturopathic students are adequately trained in the SOP and can, therefore, meet the required level of competency to practice. This stage of research addressed this shortcoming in the training of naturopaths. The findings of this third stage is reported in the article: ‘A review of the scope of practice and minimum competencies for the training of naturopaths in South Africa’.

6.2 African Health Sciences: A reflection on the submission and review process

Given that naturopathy is now practised in 11 African countries with only South Africa having a recognised training programme for naturopaths at a tertiary institute, it was felt that submitting this article to an open-source, peer-reviewed journal would contribute to establishing a knowledge base for developing the standard of training of naturopaths in Africa. This article was submitted to the *Africa Health Sciences*, a peer reviewed open-access online journal with DHET accreditation. The article is currently under review. The journal promotes research focused on the health sciences in Africa. The journal is indexed on databases such as MEDLINE and PUBMED Central.

6.3 Contribution record

The following contributions were made by the candidate's joint publication with the supervisors:

<i>Authors</i>	<i>Contributions</i>
Wendy Ericksen-Pereira	Designed the research study, conducted all the research, identified the journal, wrote the manuscript, was the corresponding author and communicated with the editor in chief and reviewers.
Nicolette Vanessa Roman	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.
Rina Swart	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.

6.4 Visibility of research

The African Health Sciences is a peer reviewed journal which is published online bi-annually. The focus of the journal is on various aspects of health. While the target audience is in Africa, as a part of the African journal online (AJOL) stable, the journal is available globally on an open-source platform with an impact factor of 0,842.

6.5 Article: A review of the scope of practice and development of minimum competencies for the training of naturopaths in South Africa using a modified Delphi method

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Abstract:

Background: A legal scope of practice exists in South Africa that prescribes the treatment practices for the naturopathic profession. There are, however, no minimum competencies established to guide the education and training of naturopaths to ensure competence in the scope of practice (SOP). This study sets out to review the scope of practice and develop minimum competencies for the profession. It represents the first set of minimum competencies developed for a registered complementary medicine (CM) profession in South Africa. It contributes to benchmarking the standard of training for the naturopathic profession.

Method: This research used a qualitative design. A modified Delphi method was used across four sequential rounds to review the SOP and develop minimum competencies for training naturopathic students. Registered naturopaths participated in the four-round process. All participants received the information sheet as well as the focus group binding documents. The discussion in all four rounds was recorded and transcribed.

Results: It was found through the Delphi process that, while the South African SOP was benchmarked internationally, the lack of clarity in the definitions leads to different interpretations of the SOP. A core set of minimum competencies does not exist for the training of naturopaths. Through a document review process, participating naturopaths developed a set of minimum competencies for naturopathic training in South Africa that is aligned to international standards.

Conclusion: This study reviews the South African SOP and developed a set of minimum competencies benchmarked to international standards. This provides a template for evaluating naturopathic students to ensure that graduates are competent to practice in the South African healthcare system.

Keywords: Complementary medicine, Delphi, minimum competencies, scope of practice, treatment practices

Introduction

There has been sustained growth in complementary medicine (CM) usage globally. Many reasons have been put forward for this growing phenomenon, including an increase in the growth of chronic illness (World Health Organisation, 2013), the lack of success of mainstream medicine has had in treating lifestyle-related diseases, an increase in an aging population, the burgeoning healthcare costs linked to broader societal changes and a greater awareness of the effects of environmental changes on health (Coulter & Willis, 2004; WHO, 2008).

Naturopathy is one of the major forms of CM gaining in popularity globally (World Naturopathic Federation, 2016). It is a diagnostic system of medicine practiced across the globe (Wardle & Sarris, 2014). The World Health Organization (2010) defines naturopathy in terms of what naturopaths do, based on a core philosophy and principles. These principles emphasise prevention, treatment and the promotion of optimal health through therapeutic methods and treatment modalities that encourage the body's self-healing processes. With the growth in the number of naturopaths globally there has been a concomitant attempt in various countries to professionalise the discipline through standardising the training (Baer, 2001; Clarke, Doel & Segrott 2004; McCabe, 2008).

Institutions that train naturopaths are encouraged to engage in research to develop an evidence-based approach to naturopathy and thus promote the development of the profession (Wardle & Sarris, 2014). There is, however, a lack of a standardised set of core competencies against which the training of practitioners can be judged to determine their level of proficiency and competence (Clarke, Doel & Segrott, 2004). In 2014, the Association of Accredited Naturopathic Medical Colleges (AANMC) undertook to address some of these concerns and

published a document outlining the core competencies expected of graduating naturopathy students (Hendriksen et al., 2015).

The passing of the Associated Health Professions Act 63 of 1982 No 8160 in South Africa resulted in the registration of chiropractors, herbalists, homeopaths, naturopaths and osteopaths, the establishment of the Allied Health Professions Council of South Africa (AHPCSA), the regulatory body for CM professions, and the development of the Scope of Practice (SOP) for the regulated CM professions.

The purpose of a SOP is to be specific and operational. Within the legal framework, it prescribes the range of treatment practices and skills which a practitioner may legally practice (Schuiling & Slager, 2000). The SOP may assist in professionalising the discipline by establishing clear parameters within which a professional operates (Verhoef et al., 2003), although it does not define or specify the core knowledge, skills and behavioural attributes that graduates must possess (Lock, 2011).

There has been rapid growth in CM in South Africa and there is now a burgeoning CM industry in the country. It is estimated that this industry generates an annual turnover of R8 billion (Traditional and National Health Alliance, 2014). Given the aforementioned international drive to use an evidence-based approach to developing the naturopathic profession (Wardle & Adams, 2013), this is seen as lending the treatment practices research validity and in turn, provides greater efficacy and safety for the patient. To ensure that naturopathic graduates in South Africa are competent to practice, the SOP has to be regularly reviewed and Minimum Competencies (MC) for training need to be evaluated as these determine whether a practitioner is sufficiently competent to safely practise the prescribed SOP of a profession. Minimum Competencies can be defined as the combination of knowledge, skills, abilities attitudes and values that underpin effective performance (Battel-Kirk, Barry, Taub & Lysob, 2009). Given

that the regulatory and educational framework for CM is well developed in South Africa, the lack of a set of core competencies mitigates for the development of a set of core MC.

This study has, therefore, sought to review the SOP and develop MC for naturopathic training in South Africa so that graduates both remain focused within their professional guidelines (SOP) and are competent to practice as safe practitioners within the South African healthcare system. Such a review of a CM profession has not before been conducted in South Africa.

Method

This research used a qualitative methodological approach. A modified Delphi method was used across four sequential rounds. The Delphi method was used as it applies to situations that are not well researched and where data is not easily available (Linstone & Turoff, 1975). This study addresses a need that has hitherto received little attention. A total of seven participants engaged with the Delphi process at various stages.

The four rounds were developed to ensure that the adequate scope and coverage of the research aims were achieved. Round 1 took place over a full day. The discussion sessions for rounds 2 to 4 were scheduled to take place every two weeks for four hours a session, over six weeks. All the sessions were recorded and transcribed. These rounds were as follows:

Round 1: A discussion of the SOP and MC with naturopathy lecturers, alumni of the naturopathy tertiary training programme and members of the naturopathic association.

Round 2: A discussion of the SOP, the understanding thereof, the strength and weaknesses and possible changes to the SOP.

Round 3: Developing MC for naturopathic training.

Round 4: Validating the MC guidelines document.

Round 1: Pilot study

Method:

Invitations to participate in a one-day discussion group on the SOP and MC were emailed to four lecturers and forty alumni of the naturopathy programme. The South African Naturopathy Association (SANA) executive members were also invited to participate in the study. One lecturer and the secretary of SANA attended. The SANA representative was a recent graduate of the naturopathy tertiary training programme. The day was divided into two sessions: in the first session the discussion focused on the wording of the SOP and on operationalising its meaning.

In the second session, the group discussed competencies and the MC required for naturopathic training. The seven core competencies – as set out in the Medical and Dental Board’s (MDB) core competencies document for undergraduate students in clinical associate, dentistry and medical teaching and learning programmes in South Africa (Medical and Dental Board 2014) – were used to illustrate how competencies are applied generically in the healthcare profession in South Africa. Every core competency from this template was discussed as it pertained to the naturopathic training programme. The focus was on developing an understanding of what these competencies might uniquely mean, for the training of naturopaths per se. The discussions were all recorded and transcribed.

Round 2: Naturopath discussion

Participants:

The AHPCSA list of registered naturopaths was used to identify naturopaths. Through an internet search, 45 naturopaths who practice in the greater Cape Town area were identified. Emails inviting them to participate in discussions around the scope of practice and MC for the

training of naturopaths in South Africa were sent out. Eleven responses were received: six confirmed their attendance, five apologised for not being able to attend. The participants' practice experience ranged from over 20 years of experience to a recent graduate of the naturopathy programme. Four of the participants were graduates of the naturopathy programme. One of the participants was the SANA secretary, who had attended the first discussion session. Two of the naturopaths had been actively involved in SANA in the 1990s until 2003 and one had served on the Professional Board of Homeopathy, Naturopathy and Phytotherapy (PBHNP) after the passing of Regulation 127 of 2001 (see Table 1 summary of participants).

Table 1: Participant summary table:

Participant	1	2	3	4	5	6
Years' experience	>22	>14	7	5	3	4 months
Training	Diploma from an overseas naturopathic college.	A qualified pharmacist. Completed naturopathic training at a local college in South Africa.	A qualified teacher and graduate of the tertiary training programme.	A qualified dentist and graduate of the tertiary training programme.	A graduate of the tertiary training programme.	A qualified teacher and graduate of the tertiary training programme.

All participants were emailed a copy of the study information sheet as well as the focus group confidentiality binding form. The purpose of the research and the discussion was explained to all participants at the start of the session to ensure that there was clarity on the aim of the discussion and the importance of the confidentiality agreement form.

Method:

The SOP was projected onto a screen so that everyone could view it and refer to it if needed. Each participant was also provided with a copy of the SOP. Key focus group questions were: ‘Does the current SOP address the needs of naturopaths in practice?’ and ‘What recommendations could be made to improve the SOP?’ Discussions were recorded and transcribed

Round 3: Document analysis

Method:

Emails were sent out to all 45 naturopaths identified in the previous session inviting them to participate in discussions around the SOP and MC for naturopaths. Five responses were received, with all five having participated previously in the second session. The SANA secretary did not respond. A summary of the discussions around the SOP in the first two sessions was presented to the group in order to reach a consensus on the findings on the SOP and to frame a further discussion on what MC may emerge from such a SOP.

To further scaffold this discussion, the core competencies document, ‘Core competencies for graduating students (Hendriksen et al., 2015), were used. These were compared with the seven core competencies in the MDB document relevant to allied medical and dental training.

The WHO (2010) *Benchmarks* document was also examined to establish if any MC could be identified. The discussion was recorded and transcribed. The major points raised were summarised into a table and sent to all participants to reflect on and discuss at the next MC focus group session

Round 4: Validation of minimum competencies

Method:

Emails reminding naturopaths of the final discussion session on the MC for naturopaths were sent to the same group of 45 Naturopaths. The same participants as in the third session responded. The discussion session started with a member validation check of the summarised competencies of the documents used in the previous session. Through a process of discussion and consensus, an agreement was reached on the MC required for naturopathic training.

Results:

Round 1

At the end of the first session, consensus was reached on the lack of clarity in the SOP. It was found that the language used along with a lack of definitions to clarify the terminology, resulted in some of the clauses being vague. It was felt that this could result in different interpretations of the clauses in the SOP. In the second session, there was much discussion around the definition of a competency and what was expected of graduating naturopathic students. Through a discussion of the MDB's (2014), core competency document, participants acquired a clearer understanding of core competencies and how they relate to the SOP and clinical training.

Round 2

The focus group spent much time debating the SOP and its limitations. The two older naturopaths who had been active in naturopathy associations in the 1990s and early 2000s explained how the SOP, developed in 1982, was based on the training programme taught at colleges in South Africa in the 1960s and later ratified in 2000.

In 2000, as part of the process of revising the SOP, members of the SANA compared the SOP in South Africa with that used in Australia, Britain, America, Canada and Germany. The two older naturopaths believed that the SOP was adequate while the other naturopaths (who were graduates of the tertiary training programme), felt that it was lacking as it fell short when compared with the SOP of naturopaths practising in North America. These younger naturopaths believed that the South African SOP was very limited. Consensus could not be reached. Consensus was, however, reached on the lack of clarity of definitions in the SOP and the problems that it could cause practitioners who applied differing interpretations of the treatment modalities permissible in the SOP. It was agreed that the SOP should be benchmarked internationally and the definitions should be based on internationally accepted definitions such as that set out in the WHO (2010) document.

Round 3

The only document found to contain specific MC for naturopaths was from the AANMC (2016) since the WHO (2010) document tables the learning outcomes for naturopathic training. There was an agreement by all participants that no documentation could be found that sets out the MC required for the training of naturopaths based on the SOP in South Africa. The AANMC documents were deemed to be the most suitable since the competencies were specific to naturopathy. Nevertheless, it was felt that, by applying the relevant legislation, it could be adapted to the South African context to ensure that the MC was congruent within the accepted legal framework in South Africa.

Round 4

Based on all the input from the discussions, a draft MC document was developed and finalised. It was agreed that the document reflected the core philosophy of wholism and vitalism as well as the seven principles of naturopathy that should always guide and inform the training and

practice of naturopaths. The researcher edited the draft document and the final MC document was forwarded to the participants for further comment. It was accepted by all participants as an accurate reflection of the discussions and decisions that had taken place.

Delphi findings

Scope of practice:

Table 2 lists the legal SOP for naturopaths based on *Allied Health Professions Act 63 of 1982*. This illustrates the consensus reached in round 1 and 2 on the lack of operationalisation for each treatment practice in the SOP, an example of this being a failure to provide a precise definition and parameter of each treatment practice.

Table 2: SOP and definitions of treatment practices

SOP	Definition
Light therapy	No definition
Hydrotherapy	No definition
Thermal therapy	No definition
Acupuncture or acupressure therapy	Acupuncture means the insertion of metal needles through the skin at certain points in the body Acupressure means the use of direct pressure applied on acupoints
Electrotherapy	No definition
Massage therapy	Massage means the mobilisation of soft tissue
Exercise therapy	No definition
Vibration therapy	No definition
Reflex therapy	No definition
Remedies, dietary advice or dietary supplementation	No definition of remedies

Minimum competencies: Document analysis

The only documents found to contain clear MC was the AANMC documents. Following a process of discussion and consensus, a list of six core competencies was agreed upon. The summary of a set of proposed MC to serve as a guideline for naturopathic training follows in Table 3 below:

Table 3: Minimum competencies for Naturopaths in South Africa

<p>1. NATUROPATHIC HEALTHCARE PRACTITIONER</p> <p>In the role of a healthcare practitioner, the naturopathic practitioner integrates the philosophy and principles into the wholistic evaluation of patients so that the root cause of the disease is addressed. The practitioner's role is to:</p> <ol style="list-style-type: none">1.1. Integrate naturopathic philosophy and principles in the assessment, diagnosis and treatment phases of patient management.1.2. Develop a thorough knowledge base in naturopathic medicine theory and integrates it into practice.1.3. Conduct a comprehensive history, physical examination and assessment to formulate a diagnosis.1.4. Provide effective, wholistic patient care based on short and long term management, considering patients' socio-economic situation.
<p>2. NATUROPATHIC PROFESSIONAL</p> <p>Naturopathic practitioners demonstrate a commitment to competent ethical practice which upholds the laws of a healthcare practitioner in South Africa. The professional's role is to:</p> <ol style="list-style-type: none">2.1. Utilise knowledge of naturopathic philosophy and principles to guide their professional engagement and development.2.2. Display and promote ethical and professional behaviour in practice and personal conduct following the AHPCSA's Code of Conduct.2.3. Serve the public through ascribing to the Patients' Rights Charter, ethical practice, health promotion and disease prevention.2.4. Ensure professional competence through ongoing self-assessment and professional development.

3. NATUROPATHIC HEALTH ADVOCATE

As health advocates, naturopathic practitioners use their knowledge and skills to promote health and prevent disease in individual patients, and the larger community. They advocate for changes in environmental and health practices that affect the health status of their patients and larger communities. Their role is to:

- 3.1. Promote sustainable, healthy environments and lifestyles for patients and society based on the philosophy and principles of naturopathic medicine.
- 3.2. Develop a knowledge base that enables advocacy for groups with various health needs.
- 3.3. Influence others by identifying various opportunities to promote healthy lifestyles and environments as an essential element in health promotion and disease prevention.

4. NATUROPATHIC INTERPROFESSIONAL COLLABORATOR

Healthcare practitioners—are expected to be knowledgeable about the different roles played by different healthcare professionals. They demonstrate a willingness to collaborate with other healthcare providers in the interest of the patient and the health of the broader community. Their role is to:

- 4.1. Collaborate with other healthcare professionals to optimise patient treatment and healing.
- 4.2. Recognise the diversity of roles that exist in healthcare and collaborate with the different role-players.
- 4.3. Collaborate with others to develop a healthy environment to support health and prevent disease.

5. NATUROPATHIC HEALTH SCHOLAR

The naturopathic practitioner stays informed of global, regional and local health issues and challenges. They are life-long learners and engage in research and other scholarly activities that create and disseminate evidence-based health research that contributes to the growth of the naturopathic profession. The Naturopathic health scholar 's role is to:

- 5.1. Exemplify the principle of doctor as teacher in every patient and public interaction through the dissemination of knowledge with patients, colleagues, other healthcare professionals, and the broader community.
- 5.2. Maintain and enhance professional competence through participation in continuous professional development learning activities as prescribed by the AHPCSA.
- 5.3. Advance the practice of naturopathic medicine through the development, critical assessment and dissemination of research and information.

6. NATUROPATHIC MANAGER

As managers, naturopathic practitioners understand and implement business principles of practice management which allows for quality assurance of service delivery to patients. They work collaboratively with other healthcare professionals to ensure optimal patient service and care. Their role is to:

- 6.1. Establish, develop and manage their practice following legal prescriptions.
- 6.2. Exhibit strong personal management skills and engage in activities that contribute to practice improvement.
- 6.3. Participate in committees and meetings to promote naturopathy and educate the public about naturopathy.

Discussion

The current SOP for naturopaths in South Africa is comparable with that recommended by the WHO (2010). Research conducted into the treatment practices of naturopaths globally by the World Naturopathic Federation (2015) supports this. This validates the information provided by the experienced naturopaths in the round two. The legal SOP for naturopaths is benchmarked to international standards.

The major concern with the SOP, however, was around the definitions used in Act 63 of 1982. For example, herbal medicine is not listed in the SOP as a treatment practice yet it is a requirement set out in the Allied health Professions Act 63, R127 (12) of 2001 which sets out the requirements for registration as a naturopath: ‘the completion of 15 major subjects, one of them being phytotherapy’ (Chapter 6:45(5) a:X). This regulation requires that phytotherapy be taught as a major subject in the naturopathic curriculum. The SOP allows for the use of ‘remedies, dietary advice or dietary supplementation’ (Act 63 of 1982, chapter 11). None of the regulations provides any definition of what constitutes a remedy. The Merriman-Webster dictionary defines it as a ‘medicine or treatment that relieves pain or cures a usually minor illness’. The Oxford dictionary defines it as ‘a medicine or treatment for a disease or illness’. The use of the word ‘remedy’ in the act does not set out the clear parameters of what constitutes a remedy and thus leaves it open to include a range of compounds, including herbal. If a remedy is defined as a medicine, Allied Health Professions Act 63, R127 of 2001, (12) defines a medicine as ‘any substance or mixture of substances intended to be used by, or administered to, human beings...and includes any substance which originates from a plant, mineral, chemical or animal’.

Regulation 41064 of 2017 in terms of the Medicine and Related Substances Act (1965) does not use the term 'remedy', but states 'complementary medicine defines this term as any substance or mixture of substances that (a) originates from plants, fungi, algae, seaweeds, lichens, minerals, animals or other substance as determined by the Authority'. Phytotherapy should, therefore, be specifically included in the SOP. Naturopaths have always used herbs (Lindlahr, 1913) - the use of herbs is core to naturopathic treatment practice globally, with the WHO (2010) document emphasising the importance of competency in herbal knowledge.

Given that an understanding of several legislative acts is necessary to understand that phytotherapy is a part of the naturopathic SOP, it explains how the lack of clarity around the definitions and parameters of the treatment modalities could result in the view that the SOP is inadequate. Since naturopaths are legally bound to operate within the SOP, the definitions of each treatment practice and the parameters in which naturopaths operate should be clearly defined in the legislation. This will provide guidelines for the training of naturopaths, set the parameters within which naturopaths practice, and inform the public of the treatment practices which naturopaths are allowed to perform.

The treatment modalities allowed by the SOP are used to support the body's inherent healing mechanisms. This is underpinned by the philosophy and principles which guide the profession (World Naturopathic Federation 2016). Minimum competencies guide the assessment and training of naturopathic students. The development of MC for graduates in a profession helps to define the attribute, abilities, skills set and knowledge (Schuiling & Slager, 2000; Jonsdottir, 2011) that they need to possess to be deemed safe and competent professionals. Given that CM is still trying to establish credibility in the health sphere dominated by the biomedical model of medicine, the establishment of these competencies is paramount (Clarke, Doel & Segrott 2004).

It was found that none of the acts or regulations that govern the training of naturopaths have any MC set out. The AHPCSA, the regulating body for CM practitioners and therapists in South Africa, does not have any documents which specifically reference the competencies expected of graduates. In the Code of Ethics promulgated in *Government Gazette* 39531 of 2015 (Board Notice 268 of 2015), there are elements under duties and obligations (section 3C – I) which could be interpreted as competencies. These are, however, legal obligations expected of all AHPCSA practitioners whereas MC stipulates the knowledge, skills and behaviour (Schuiling & Slager, 2000) that is required to practice competently in a specific profession.

The six competencies identified in this research are a broad set of competencies that provide a framework for the training of a naturopathic practitioner within the South African healthcare system.

Limitations of the study

It might be argued that shortcomings in this research involved a relatively small sample size. According to O'Reilly & Parker (2013), it is not the sample size in qualitative research that matters but rather the range of opinions and the richness of information obtained from the participants. In this research, the participants not only had a range of experience but a range of opinions as well which contributed to the depth of data obtained.

Implications for future research

It is proposed that a workshop be conducted with all stakeholders – SANA, the naturopathic association, the AHPCSA regulatory body, and the training institution – to further evaluate and develop this set of MC. This, in conjunction with the SOP, should provide the framework for the curricula, learning objectives and assessment of competency to practice (O'Reilly & Parker,

2013). This would represent a significant step forward in the establishment of a system of quality assurance in the training and the professionalisation of naturopathy within South Africa.

Conclusion

This research has established that the current SOP for naturopaths in South Africa is benchmarked to international standards. Its shortcoming is that there is no MC to guide the training of naturopaths. One of the outcomes of this research has been to address this shortcoming and this represents what will be the first set of MC to be developed for a CM profession registered with the AHPCSA. It is based on international standards and adapted to the South African health context. It contributes to benchmarking the standard of training for the naturopathic profession in South Africa.

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References

- American Association of Naturopathic Medical Colleges. (2016) *AANMC core competencies of the graduating naturopathic student*. Retrieved July 27, 2019, from <https://aanmc.org/reports-and-research/aanmc-professional-competencies-graduating-naturopathic-physicians/>.
- Baer, H.A. (2001). The sociological status of U.S. naturopaths at the dawn of the 21st century. *Medical Anthropology Quarterly*, 15(3), 329-346.
- Battel-Kirk, B., Barry, M.M., Taub, A. & Lysob, L. (2009). A review of the international literature on health promotion competencies: identifying frameworks and core competencies. *Global Health Promotion*, 16(2).
- Clarke, D.B., Doel, M.A. & Segrott J. (2004). No alternative? The regulation and professionalization of complementary and alternative medicine in the United Kingdom. *Health and Place*, 10(4), 329-338.
- Coulter, I.D. & Willis, E.M. (2004). The rise and rise of complementary alternative medicine: A sociological perspective. *Medical Journal of Australia*, 180(11), 587-589.
- Hendriksen, M., Zeifman, M., Thompson, H.G., Beasleigh, S., Byrd-Vaughn, M., Carino, J. & Yanez, J. (2015). Developing core competencies for naturopathic medicine programs in North America: AANMC core competencies of the Graduating Naturopathic student. *MedEdPublish*, 5(5).
- Jonsdottir, S., Hughes, R., Thordottir, I. & Yngve, A. (2011). Consensus on the competencies required for public health nutrition workforce development in Europe: The Jobnut project. *Public Health Nutrition*, 14(8), 1439-49.

- Linstone, H. A. & Turoff, M. (1975). *The Delphi method: Techniques and applications*. Boston, Addison-Wesley Publishing.
- Lock, L.R. (2011). Selecting examinable nursing core competencies: A Delphi project. *International Nursing Review*, 58, 347–353.
- McCabe, P. (2008). Education in naturopathy and western herbal medicine in Australia: results of a survey of education providers. *Complementary Therapies in Clinical Practice*, 14, 168-175.
- Medical and Dental Board. (2014). *Core competencies*. Retrieved May 5, 2016, from http://www.hpcsa.co.za/uploads/editor/UserFiles/downloads/medical_dental/MDB%20Core%20Competencies%20-%20ENGLISH%20-%20FINAL%202014.pdf.
- Merriam-Webster Dictionary*. Retrieved September 12, 2016, from <http://www.merriam-webster.com/dictionary/remedy>.
- O'Reilly, M. & Parker, N. (2013). 'Unsatisfactory saturation': A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13(2), 190-197.
- Oxford Dictionary*. Retrieved September 12, 2016, from <http://www.oxforddictionaries.com/definition/english/remedy>.
- Schuiling, K.D. & Slager, J. (2000). Scope of practice: Freedom within limits. *Midwifery Womens Health*, 45(6).
- Traditional and National Health Alliance. Retrieved July 28, 2016, from www.naturalhealthalliance.co.za/DraftAmendmentCommentDec2014.htm.

- Verhoef, M.J., Boon, H.S. & Mutasingwa, D.R. (2003). The scope of naturopathic medicine in Canada: an emerging profession. *Social Science and Medicine*, 63, 409-417.
- Wardle, J. & Adams, J. (2013). Are CAM professions engaging in high-level health and medical research? Trends in publically funded complementary medicine research in Australia. *Complementary Therapies in Medicine*, 21, 746-749.
- Wardle, J. & Sarris, J. (2014). Student attitudes towards clinical teaching resources in complementary medicine; a focus group examination of Australian naturopathic medicine students. *Health Information and Libraries Journal*, 31, 123-132.
- World Health Organization. (2008). *The World health report 2008: Primary health*. Retrieved May 19, 2016, from <http://www.who.int/whr/2008/en/>.
- World Health Organization. (2010). *Benchmarks for Training in Naturopathy*. Retrieved September 16, 2016, from <http://apps.who.int/medicinedocs/documents/s17553en/s17553en.pdf>.
- World Health Organization. (2013). *Traditional Medicine Strategy 2014-2023*. Retrieved September 27, 2019, from http://www.who.int/medicines/publications/traditional/trm_strategy14_23/en/.
- World Naturopathic Federation Report. (2015). *Findings from the 1st World Naturopathic Federation survey*. Retrieved October 19, 2016, from www.worldnaturopathicfederation.org.
- World Naturopathic Federation. (2016). *Naturopathic numbers report*. Retrieved May 21, 2018, from <http://worldnaturopathicfederation.org/wpcontent/uploads/2015/12/2016Naturopathic-Numbers-Report.pdf>.

CHAPTER 7

A COMPARATIVE ANALYSIS AND EVALUATION OF THE NATUROPATHIC CURRICULUM IN SOUTH AFRICA

7.1 Introduction

This chapter constitutes the fourth stage of the research process. It critically evaluates the South African naturopathic curriculum in two sections. The first being to benchmark the curriculum to accepted, recognised international naturopathic curriculum. The second section uses a graduate review to evaluate the curriculum. While the curriculum was found to compare favourable to the international curricula, the graduate review found that the curriculum needs to be restructured in order to meet the needs of the South African naturopathic practitioner. This was a significant finding for the cultural and economic climate differs from country to country and if practitioners are to be competent to meet the healthcare needs to the communities they serve, the curriculum needs to be adapted to meet this requirement. This stage of the research was written up in an article entitled: A comparative analysis and evaluation of the naturopathic curriculum in South Africa and submitted to a journal.

7.2 African Journal of Health Professions Education: A reflection on the submission and review process

The focus of this stage of the research was on an evaluation of the naturopathic curriculum. Given that naturopathy is now practised in 11 African countries with only South Africa having a recognised tertiary training institute for the training of naturopaths, it was felt that publishing in an open-source, peer-reviewed journal in Africa, would contribute to the standard of training of naturopaths on the continent. *The African Journal of Health Professions Education* is an open-source, online journal published quarterly. The journal focusses on advancing education

in the health professions. The research article was submitted on the 9 October 2019. On the 4 February 2020 the journal responded, requesting the authors to revise the article based on the comments made by the reviewers. This process was completed and the article re-submitted on the 30 March 2020. Both reviewers were very positive and encouraging about the research article and the comments centred around issues of clarity and further suggestions to add more depth to the article. (See Appendix Q). This article was accepted for publication on the 27 July 2020.

7.3 Contribution record

The following contributions were made by the candidate's joint publication with the supervisors:

<i>Authors</i>	<i>Contributions</i>
Wendy Ericksen-Pereira	Designed the research study, conducted all the research, identified the journal, wrote the manuscript, was the corresponding author and communicated with the editor in chief, reviewers and copywriters.
Nicolette Vanessa Roman	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.
Rina Swart	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.

7.4 Visibility of research

There has been a huge growth in CM products and practices in South Africa. There are currently three accredited tertiary training institutions in the country for legally recognised CM professions. These programmes all fall under the umbrella of the health sciences faculty at the respective institutions. The oldest training programme in chiropractic has been in existence for over 30 years and is regularly reviewed by an international body. The naturopathic curriculum

has never been benchmarked. This article was submitted to a peer-reviewed journal with a focus on health education at tertiary institutes in Africa. Publication in this journal is significant for it is a recognition of the importance of the contribution that CM makes to the healthcare system and the resulting need to critically evaluate the curriculum. Publication of this research could provide guidelines for the development of a curriculum for the training of naturopaths in Africa.

7.5 Article: 'A comparative analysis and evaluation of the naturopathic curriculum in South Africa'

'A comparative analysis and evaluation of the naturopathic curriculum in South Africa'

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Abstract

Background: Naturopathy has been taught at tertiary level in South Africa (SA) for eighteen years. This research paper examines the naturopathic curriculum to determine whether it is benchmarked to international standards and meets the needs of graduates in practice. It is the first research paper that critically reviews the curriculum of a complementary alternative medicine profession taught at a higher education institution (HEI) in SA.

Objectives: To critically review the naturopathy curriculum taught at a South African Higher Education Institution.

Methodology: This research used a sequential two-stage qualitative methodology. In stage one, a comparative document analysis was conducted using the curriculum recommended by the World Health Organization (WHO), the World Naturopathic Federation (WNF) and the curriculum used by the University of the Western Cape. Stage two consisted of a graduate review of the curriculum. Eighteen graduates participated in the review by providing input on all the subjects in the curriculum via email. The responses were summarised and thematically analysed.

Results: It was found that the SA curriculum is aligned to international curricula. Graduate input suggests a restructuring of the curriculum so that subjects which are core to naturopathic training can be taught in greater depth over a longer period of time.

Conclusion: The subjects offered in the SA naturopathic curriculum is on par with international standards. Concerns raised by graduates suggest a need for a restructuring of the curriculum to develop a deeper understanding of it to ensure that graduates are competent to meet the changing healthcare needs of the population.

Introduction

Naturopathy is a system of complementary medicine (CM) that emphasizes prevention, treatment and the promotion of optimal health through the use of therapeutic methods and modalities which encourage the self-healing process – the *vis medicatrix naturae* (World Naturopathic Organization, 2016). Philosophical underpinnings guide naturopathy which focuses primarily on the prevention of illness through education, lifestyle and dietary changes (Pizzorno & Murray, 2006; Wardle & Oberg, 2011). Over 100 000 naturopaths currently practice globally (World Naturopathic Federation, 2016).

Naturopaths have been practicing in South Africa since the 1950s (Ericksen-Pereira, Roman & Swart, 2018). Currently only one HEI in South Africa offers naturopathic training as a five-year course. This consists of a three-year undergraduate Bachelor of Science in Complementary Health Sciences (B.Sc. CHS) degree, which provides the foundation for the professional two year post-graduate Bachelor of Complementary Medicine in naturopathy (BCM naturopathy) degree. The training programme started in 2002 at a time when there was no benchmark available to serve as a roadmap for the development of the course. In 2010 the WHO benchmarked the minimum standards for the education and training of naturopaths - which included listing the curriculum and the number of training hours required for minimum competency (World Health Organization, 2013). This, and subsequent documents aimed to set standards for training to ensure the safety of the public, create awareness of the different levels of training for naturopaths, assist governments in regulating and accrediting practitioners and, ultimately, to promote the integration of naturopathy into the public health system (World Health Organisation, 2010). In 2016, based on the findings of a global survey of naturopathic educational institutions, the World Naturopathic Federation (WNF) established that there is global uniformity of the type of curriculum used in naturopathic training programmes.

The use of a comparative and benchmarked template affords the opportunity to engage in suggested corrective action (Chinta, Kebritchi, & Elias, 2016). In this study the South African curriculum was compared and evaluated against the WHO and WNF curriculum in order to establish whether the curriculum meets the minimum requirements. A systems view of relevant training HEIs demonstrate how various inputs from students, staff, faculty and various other resources can potentially help to transform and improve both the training and outcomes of an institution. This study used the input from graduates. Using a comparative analysis of the curricula as well as graduate reviews, recommendations for the improvement to the South African naturopathic programme were made.

Methodology

This research used a sequential qualitative methodological approach consisting of two stages. The first stage consisted of a comparative document analysis based on the major categories and the courses in each category of the naturopathic curriculum proposed by the WHO (2010), the WNF Roots Survey which summarises the curricula taught in 30 different countries across all the continents (World Naturopathic Federation, 2016) and the SA curriculum.

The second stage consisted of a purposively sampled graduate review of the programme. All registered naturopaths who had graduated from 2007 to 2016 and whose email contact details could be traced, were invited to participate in the research via email. Thirty-eight emails were sent explaining the purpose of the research. Included in the email was the ethics clearance document and the document summarising all the subjects in the training course, divided into the B.Sc. and B.CM degree courses (see Appendix S). Participants were requested to 1) provide comment on all the subjects covered in the curriculum and 2) make suggestions for improvements if they felt it was necessary to do so. Over a period of two months, three reminders were sent and eighteen participants responded. These responses represent a spread

across the years from the first cohort of graduates of the naturopathy programme to the 2016 graduates. Half of the respondents were in full-time practice as naturopaths. The response rate was higher among participants who graduated later. Responses were coded in order to protect the identity of the participants. The responses were summarised and thematically analysed based on the frequency of an occurring theme.

Results

Stage 1: Comparison of curricula

An analysis of the three documents found that the curriculum could be divided into four major categories consisting of the basic sciences, clinical sciences, naturopathic studies and clinical training. This is summarized in Table 1:

Table 1: A comparison of curricula

WHO	WNF	South African curriculum
<p>Basic Sciences:</p> <p>Anatomy Physiology Pathology</p>	<p>Basic Sciences: Hours – Basic + Clinical Sciences combined: 1200+</p> <p>Anatomy Physiology Pathology</p>	<p>Basic Sciences: Hours – 2000</p> <p>Biotechnology Chemistry Medical bioscience (anatomy & physiology) Medical microbiology Pathology Pharmacology Physics</p>
<p>Clinical Sciences:</p> <p>Patient history taking Clinical assessment Physical examination First aid & emergency medicine Hygiene and public health</p>	<p>Clinical Sciences: Hours - Basic + Clinical Sciences combined: 1200+</p> <p>Patient history taking Clinical assessment Physical examination</p>	<p>Clinical Sciences: Hours – 900</p> <p>Patient history taking Clinical assessment Physical examination Emergency Medicine General Medicine</p>
<p>Naturopathic Studies:</p> <p>Naturopathic history and practice Nature cure Nutrition Hydrotherapy Botanical medicine Homeopath & tissue salts Bach flower therapy Stress management Lifestyle counselling Light therapy Electrotherapy Iridology Soft tissue therapies Aromatherapies Acupuncture</p>	<p>Naturopathic Studies: Hours – 950 minimum</p> <p>Naturopathic history, principles and philosophy Clinical nutrition Applied nutrition Hydrotherapy Botanical medicine Homeopathy Counselling and naturopathic psychotherapy Pharmacology Energetic therapies Physical manipulation Massage and soft tissue techniques.</p>	<p>Naturopathic Studies: Hours – 1200</p> <p>Naturopathic principles and philosophy Nutrition Hydrotherapy Botanical medicine Tissue salts Bach flower therapy Stress management Lifestyle counselling Light therapy Electrotherapy Iridology Soft tissue therapies Aromatherapies Thermal therapy</p>
<p>Clinical Training: Hours – 400+</p>	<p>Clinical Training: Hours – 1200+</p>	<p>Clinical Training: Hours – 1200+</p>
		<p>Additional subjects: Hours – 650</p> <p>Computer literacy Primary health care Principles of natural healing English for educational development Complementary healing systems Interdisciplinary health promotion Health psychology Study of human development</p>
Total number of hours of naturopathic training:		
1500+ hours	4550+ hours	5950 hours

It was found that the SA curriculum falls into the same category of subjects as that stated in the WHO (2010) and the WNF (2016) documents and offered a wider range of subjects in the basic sciences. The basic science subjects of anatomy, physiology and pathology are offered in the SA curriculum. In addition, it offers physics, chemistry, biotechnology and pharmacology. These subjects provide a foundation that fosters an understanding of the various biochemical processes and its impact on the body at a cellular level (Levin, Schmidt & Bland, 2016). The curriculum also offers a number of additional subjects which cover various topics such as: psychology, an introduction to natural health and healing systems, as well as foundational courses such as computer literacy and English for educational development (EED) which address the SA context.

When comparing the total number of training hours it was found that the SA training programme exceeded the minimum recommended training time determined by the WHO (2010) and WNF (2018). The SA programme meets the minimum clinical training hours set by the WNF but has a bigger emphasis on the basic and clinical sciences component and exceeds the minimum number of hours recommended by the WNF by 1700 hours.

Stage 2: Graduate review

The following themes were identified:

Responses to the B.Sc. (Complementary Health Sciences) programme:

Theme 1: Limited relevance of the course

While there was a general agreement that most of the subjects taken for the undergraduate B.Sc. degree were essential as a foundation to the BCM degree, the relevance of the following subjects for the course was questioned.

English for Educational Development (EED): It is an elective taught in the first year. Respondents questioned the need for the English component when the medium of instruction at the university was English. It was felt that students needed ‘to have a basic knowledge of Xhosa and Afrikaans in order to communicate with people from different walks of life - especially in the Western Cape region’ (participant 8).

Computer Literacy: is a compulsory subject for all first year students. Its relevance was questioned since it was felt to be too basic as most students were computer literate by the time they enter university. Respondents felt that a competency assessment would determine if students needed to do this course, proposing that it ‘should be an elective for those who never really used computers’ (participant 10).

Theme 2: Important to the course but the content needs to change

The participants all agreed on the following subjects being important to the course since they provide a foundation for understanding concepts which would be taught later in the course – but the participants found the content did not fulfil this expectation.

Complementary Health Sciences 201: This subject was deemed to be important to the course since it introduced students to the different CM professions taught at the university. Respondents felt it to be ‘very superficial’ and not ‘detailed enough’ and there needed to have more ‘depth’ added to the course contents (participant 2). It was suggested that a greater focus on ‘philosophies of the different complementary healing systems would provide some insight into how and why the different healing systems practice in a particular way’ (participant 7).

Pharmacology 204: All respondents considered this subject to be important for a proper understanding of the pharmacokinetics of commonly prescribed drugs. However, there needed to be a greater ‘focus on drug-herb interactions as naturopaths use herbs as a part of their treatment and many of the patients naturopaths see are already using chronic medication’ (participant 9). It was also felt that the course needed to be more focused ‘on the effects of polypharmacy as this is what practitioners see in practice’ (participant 11).

Nutrition 211 and 221: These subjects were seen to provide the foundation of nutrition and it was suggested that ‘the course should be extended to include functional and nutritional therapy and be introduced from the first year’ (participant 17).

Primary Health Care: The aim of this subject is to introduce students to the South African public healthcare system and create awareness of the needs of the communities who access the system. There was consensus among all respondents that this subject does not achieve the objective of getting all students to understand ‘how the whole health system in SA works and where naturopathy fits into the bigger South African context’ (participant 18).

General Medicine 301: This introduces students to common pathologies and disease presentation. There was consensus on the importance of the course. However, because the course content was considered ‘a lot and overwhelming’ (participant 4), it was suggested that ‘the content needs to be covered over a two year period’ (participant 6).

Theme 3: Important to the course but method of delivery needs to be improved

These courses were acknowledged by all participants to be crucial to understanding the anatomy and physiology of the body. The main concern with these subjects was the method of delivery and the challenges experienced with assessment.

Medical Biosciences 111, 121, 231 and 232: These subjects were acknowledged as being key to an understanding of pathology and the disease process in the rest of the curriculum since it covers anatomy and physiology. Respondents felt that, ‘due to the volume of work and the difficulty of the work, the quality of teaching and assessment needed to be improved on’ (participant 6). It was suggested that the ‘number of lectures per week needs to be increased as well the number of tutorials and assignments’ (participant 2).

Theme 4: Mixed comments

Comments on these subjects were varied and could not be categorised into any one theme. It is important, however, that the responses are reflected as they contribute to the evaluation of the curriculum.

Principles of Natural Healing 111: This subject introduces students to the theories and principles which underpin natural medicine. The responses could be divided into three categories:

- 1) Unable to recall – one third of the respondents reported not being able to recall any of the course content.
- 2) The contents needed to be changed – as ‘it was very superficial - it didn’t provide a sound basis for understanding how natural medicine differs from conventional medicine’ (participant 3).
- 3) Important to the course but poor delivery – ‘this course is a foundation to understanding what natural medicine is, therefore it should be taught properly with more student engagement’ (participant 1).

Biotechnology 216: This subject builds on the first-year science courses and is aimed at developing an understanding of how the living systems organisms work. It also develops the basic skills needed to do research in laboratories. Responses to this subject ranged from those who questioned the relevance of the course, while others felt that it was necessary but ‘the focus should be on nutritional biochemistry, which would be more relevant for naturopaths’ (participant 9). Others felt that that this course was only relevant for those students who intended ‘to follow a career path that required laboratory work/skills’ (participant 10).

Study of Human Development 211 and Health Psychology 224: In these subjects students are introduced to the various developmental theories and the various biological, psychological and social factors which influence health respectively. The responses to these subjects were similar and ranged from ‘I can’t remember much of the course’ (participant 4), ‘I’m not sure how it all integrates together’ (participant 5) to ‘it was offered on a very basic level’ (participant 9).

Interdisciplinary Health Promotion: This subject creates awareness in students of the need to work together as an interdisciplinary team in order to maximise patient health outcomes. Responses ranged from those who felt the course was important because ‘the more different health professions are exposed to one another the better the opportunity for inter-professional co-operation which is in the patient’s best interest’ (participant 15), others felt that ‘it was poorly structured and taught’ (participant 2) and they ‘didn’t understand what they were supposed to get out of the course’ (participant 6)

Responses to B.CM (Naturopathy) programme

This programme is a postgraduate professional degree. Completion of the B.Sc. (CHS) degree is a prerequisite for entry into the BCM (Naturopathy) programme. All subjects in the curriculum are core to the naturopathy training programme. The responses from the participants

were summarised into the following themes: 1) relevance to the course, 2) content needs to be changed.

Theme 1: Relevance of course

There was only one subject where the relevance of the course was questioned. From the responses received it is clear that it was not the relevance of the course itself but the research topics which students were given.

Research project 508: The research project component is the practical application of research skills in a research project. The majority of the participants questioned the relevance of the research project topics as ‘the research project consumed a disproportionately large amount of time’ (participant 5) and it was not related to what the students were studying. As a result the project, and by implication, the course, was deemed to be ‘a waste of time’ (participant 7) as the ‘research topic had no relevance to the profession we were studying’ (participant 1).

Theme 2: Content needs to change

Most participants identified the following subjects as needing to have some aspect of the content changed.

Counselling Skills 410: This subject aims to develop the skills to enable students to counsel patients. It is taught in the final year of the programme. All participants agreed on the importance of counselling to the training programme but felt that the course needed to ‘be extended over a full year and the content expanded to include the theories underpinning counselling as well as develop the skills to enable them to use it effectively within a consultation’ (participant 5).

Ethics, Jurisprudence and Practice Management: This course introduces students to the various ethical theories and the legislation as it pertains to the registered Allied Health Professions Council of South Africa (AHPCSA) professions. All participants found the subject very important, interesting and also relevant but there was consensus that ‘the practice management component needs to be expanded on in order to better prepare students to run a on their own practice’ (participant 8).

Differential Diagnosis: The respondents agreed on the importance of the subject as it develops the knowledge and skills to arrive at a differential diagnosis but felt that it needed ‘greater depth using practical examples’ (participant 11) and should be ‘integrated into other subjects so that students can understand how the different parts are all connected’ (participant 2).

Treatment Modalities: These subjects are core to the naturopathy programme, teaching the philosophy and principles as well as the various treatment methods which naturopaths use in practice. The general view regarding the course is that it requires the teaching of all treatment practices in the legal scope of practice (SOP). It was felt, however, that all treatment practices should not be allocated an equal amount of teaching time as the view was expressed by some of the participants that the treatment practices taught impacts on the graduate once they are in practice: ‘treatment practices taught should be focused on practice, what is affordable and realistic on implementation – for example, the various physical therapies, botanical medicine’ (participant 1). It was felt that a standardised curriculum needs to be developed based on the SOP. The following comment summarised the view of the majority of participants on the nutrition component of the course: ‘as dietary intervention is the cornerstone of naturopathy, nutrition should be taught throughout the duration of the programme, not only in the second and third year of the B.Sc. programme’ (participant 13).

Responses to the overall programme

Restructure the curriculum: Most of the participants made recommendations for changes to the curriculum so that there is improved scaffolding and an ‘integration of subjects in order for naturopathic subjects to be taught earlier as two years is not enough to teach a naturopathic course’ (participant 6). This would entail removing subjects from the curriculum deemed to be irrelevant to the course so that more time could be spent on teaching the naturopathic curriculum in greater depth. Recommendations for restructuring of the programme included a bigger emphasis on the teaching of nutrition as the two-year curriculum is specific to naturopaths and has ‘too much content which is overwhelming and there isn’t enough time to practice the knowledge and skills in a clinical setting’ (participant 4).

Discussion

The South African naturopathy curriculum was found to exceed the curriculum benchmarked by the WHO (2010). It also compares favourably to international curriculum established by the WNF (2016). The curriculum places emphasis on the basic sciences in the curriculum. While knowledge of the biochemical and physiological processes are important in understanding disease processes and treatment (Levin, Schmidt & Bland, 2006), this has to be balanced with adequate clinical training as it is here that the theoretical knowledge is integrated into practical clinical training and patient care (Doane & Brown, 2011). Baer (2001) suggests that naturopathy, in an attempt to legitimise the training offered to students, has increasingly incorporated the basic sciences into its programmes. Clinical training is crucial for developing the necessary competencies to ensure that graduates are safe, competent practitioners – and re-evaluating the time allocated to the different components of the training is necessary to ensure that there is a balance in the hours allocated to the theoretical component and clinical training. This was reflected in some of the comments in the graduate review.

The graduate review looked at the curriculum from a different perspective. Often graduates are not consulted for input on their training programmes. Their input on the evaluation of a programme potentially offers opinions which could improve the programme (Mubuuke, Basinge & Kiguli-Malwaddle, 2014) and provide insights into possible deficits in the programme (Doane & Brown, 2011). This could stimulate curricular debate and ultimately changes beneficial to future students of the programme. In order to ensure that a curriculum remains relevant to address the health needs of a country, it is necessary to regularly review the curriculum (Mubuuke, Basinge & Kiguli-Malwaddle, 2014) to ensure that students are prepared to meet the challenges of a changing health system (Mukinda, Goliath, Williams, Zunza & Duddley, 2015). Concerns raised by graduates with respect to the curriculum need to be weighed up in terms of the competencies expected of them within the South African health system as determined by the professional body, the AHPCSA.

It was more than a year – or longer – since all the participants had graduated from the naturopathic programme and they had been working in various capacities in the healthcare sector. The response from graduates indicated a recognition of the importance of most of the subjects in the programme, although the relevance of certain subjects in the programme was questioned by all the respondents. The inclusion of these subjects needs to be considered in terms of the population of students who are enrolled in the course. The university population is drawn from diverse communities, cultures and age groups (Bharuthan & Kies, 2013) and students from impoverished communities and rural areas may not have the requisite English language or computer literacy skills needed to successfully manage academically at a university. Thus subjects such as Computer Literacy and EED are important for such students to ensure that they develop the requisite skills necessary to succeed at university. By participating in EED students engage with each other and this helps to break down language (Bharuthan & Kies, 2014) and cultural barriers. Primary Health Care and Interdisciplinary

Health Education are important co-curricular subjects for they provide students in the Faculty of Community Health Sciences with the opportunity to develop an understanding of the South African health system, the different medical professions and how they work together inter-professionally within the health system (Blue & Zoller, 2012) in order to address the healthcare needs of their patients. These subjects have to be integrated into the broader curriculum so that there is a scaffolding of skills and knowledge to ensure that students have acquired the skills and knowledge which they need in the senior years (Dahle, Brynhildsen, Fallsberg, Rundquist & Hammer, 2002).

One of the main challenges with regard to the naturopathic curriculum appears to be related to the need to integrate it on both a horizontal and vertical level so that all the subjects are offered in sufficient depth. Since the complete five-year curriculum comprises the basic sciences, a clinical science component, a naturopathic theoretical component as well as the additional subjects discussed above, horizontal integration at every year level would help students to understand how the different subjects and concepts (Blumberg, Mostrom, Bendl, Kimchuk & Wolbach, 2005) are related to each other while a vertical integration allows students to understand how the different subjects are scaffolded. Restructuring the programme into one degree course may allow for a better understanding of the inclusion of different subjects in a curriculum. This is important as integration in a medical curriculum encourages clinicians to view and critically review their subject matter and methods of diagnosis and therapy (Dahle, Brynhildsen, Fallsberg, Rundquist & Hammer, 2002).

Findings from this research suggest that there is a need for a restructuring of the naturopathic programme to ensure that the curriculum is relevant and ensures that graduates have the necessary knowledge and skills to competently practice their profession within the South African healthcare system.

One of the limitations of this research was the small sample size. With this in mind it needs to be noted, however, that there are less than 100 registered naturopaths in South Africa and of these less than half are graduates of the tertiary programme. There was a 47 per cent response rate. Another limitation was that responses were obtained via email. Some of the participants went into great detail in their responses while others kept their responses very brief. Conducting this research via face-to-face interviews may have resulted in more in-depth responses from all participants. This research focused on the subjects taught and excluded a deeper analysis of the content of the subjects in the naturopathy curriculum.

Conclusion

In order to ensure that the naturopathic programme remains relevant and contextual to the demands of the public there is a need for a regular review of the programme. This is necessary to enable all aspects of the programme to constantly improve. This ensures that graduates achieve an acceptable level of competency and professionalism. Further research into the re-circulation of the programme and a critical evaluation of the content could assist in developing a programme which ensures that naturopathy graduates are competent to meet the current challenges of the South African health system when they are in practice.

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Ethical approval

Ethical approval for the research was obtained for this research.

References

- Baer, H.A. (2001). The socio-political status of U.S. naturopathy at the dawn of the 21st century. *Medical Anthropology Quarterly*, 15(3), 329-346.
- Bharuthram, S. & Kies, C. (2013). Introducing e-learning in a South African Higher Education Institution: Challenges arising from an intervention and possible responses. *British Journal of Educational Technology*, 44(3), 410-420.
- Blue, A.V. & Zoller, J.S. (2012). Promoting interprofessional collaboration through co-curricular environment. *Health Interprofessional. Practice*, 1(2), eP1015.
- Blumberg, P., Mostrom, A.M., Bendl, B., Kimchuk, A. & Wolbach, K. (2005). A model for integration of content, concepts and context within separate courses: making explicit the connections among disciplines. *Problems, Resources, and Issues in Mathematics Undergraduate Studies*, 15(1), 59–80.
- Chinta, R., Kebritchi, M. & Ellias, J. (2016). A conceptual framework for evaluating higher education institutions. *International Journal. Educational Management*, 30(6), 989-1002.
- Dahle, L., Brynhildsen, J., Fallsberg, B., Rundquist, I. & Hammer, M. (2002). Pros and cons of vertical integration between clinical medicine and basic science within a problem-based undergraduate medical curriculum: examples and experiences from Linköping, Sweden. *Medical Teacher*, 24(3), 280–285.
- Doane, G.H. & Brown., H. (2011). Recontextualizing learning in nursing education: Taking an ontological turn. *Journal of Nursing Education*, 50(1).

- Ericksen-Pereira, W., Roman, N. & Swart, R. (2018). An overview of the history and development of naturopathy in South Africa. *Health SA*, 23.
- Levin, B., Schmidt, M.H. & Bland, J.S. (2006). Functional medicine in natural medicine. In J.E. Pizzorno & M.T. Murray (Eds.). *Textbook of natural medicine*, vol. 1 3rd ed. St Louis Missouri, Churchill Livingstone Elsevier.
- Mubuuke, A.G., Businge F. & Kiguli-Malwaddle, E. (2014). Using graduates as key stakeholders to inform training and policy in health professions: The hidden benefit of tracer studies. *African Journal of Health Professions Education*, 6(1), 52-55.
- Mukinda, F.K., Goliath, C.D., Williams, B., Zunza, M. & Dudley, L.D. (2015). Equipping medical students to address health systems challenges in South Africa. *African Journal of Health Professions Education*, 7(1 Suppl 1), 86-91.
- Pizzorno, J.E. & Murray, M.T. (2006). *Textbook of natural medicine*, vol. 1 3rd ed. St Louis: Churchill Livingstone Elsevier.
- Wardle J. & Oberg, E.B. (2011). The intersecting paradigm of naturopathic medicine and public health: opportunities for naturopathic medicine. *Journal Alternative Complementary Medicine*, 17(11), 1079-1084.
- World Health Organisation. (2010). *Benchmarks for training in traditional/complementary and alternative medicine: Benchmarks for Training in naturopathy*. Retrieved April 9, 2019, from: <http://apps.who.int/medicinedocs/documents/s17553en/s17553en.pdf>.
- World Health Organisation. (2013). *Traditional Medicines Strategy 2014–2023*. Retrieved December 9, 2018, from http://apps.who.int/iris/bitstream/10665/92455/1/9789241506090_eng.pdf.

World Naturopathic Federation. (2016). *Naturopathic Roots Report*. Retrieved July 7, 2018, from www.worldnaturopathicfederation.org.

World Naturopathic Federation. (2018). *WNF education and credentials*. Retrieved March 30, 2020, from http://worldnaturopathicfederation.org/wp-content/uploads/2019/11/WNF-Education_and_Credentials_complete.pdf.

CHAPTER 8

A MODEL OF NATUROPATHY FOR THE SOUTH AFRICAN HEALTHCARE SYSTEM

8.1 Introduction

The research project had five different research objectives. The findings of objective 1 ('An overview of the history and development of naturopathy in South Africa') were written up as a research article in chapter 4; objective 2 ('An exploration of the treatment practices and role of naturopaths in South Africa') written up as a research article in chapter 5'; objective 3 ('A review of the scope of practice and minimum competencies for the training of naturopaths in South Africa) written up as a research article in chapter 6' and objective 4 ('A comparative analysis and evaluation of the naturopathic curriculum in South Africa') written up as a research article in chapter 7. This chapter addresses objective 5 ('To develop a model for naturopathy'). It draws on and synthesises the findings of research in chapters 4 to 7 to develop a model for naturopathy training in South Africa.

8.2 Literature review

The declaration made at the Astana Conference on Primary Healthcare (PHC) defined health as a fundamental human right – a state of mental, physical and social well-being (WHO, 1978). In order for this to be achieved, health has to be linked to socio-economic development and issues like water, food security, employment, education, sanitation and improvement to the environment need to be addressed before a significant long-term improvement in population health status can be achieved.

The WHO has released several policy documents subsequent to the Astana declaration. Thirty years after the Astana Declaration, the *World Health Report* of 2008 (WHO, 2008) proposed reforms to PHC to ensure that the various health systems collectively contribute to social justice and equity in health by reforming health services to match the needs and expectations of the populace, to review public health policies in order to ensure healthier communities and to move towards universal access and coverage of health. It advanced the view that health reforms, in order to be effective in bringing about universal health coverage, needed to be combined with social health protection.

The 2017 WHO document, *Together on the Road to Universal Health Coverage*, once again makes a strong call to all member states to work towards implementing a system of UHC – not as ‘an end in itself: its goal is to improve the chances of every person attaining the highest level of health and well-being and contributing to socioeconomic and sustainable development’ (p.vii). South Africa has embarked on a process of implementing a system of universal health coverage (UHC). Details for its proposed implementation were first published in the National Health Insurance (NHI) *White Paper* of 2017. The executive summary, while acknowledging the role of social determinants of health (SDH), goes on to state that ‘good health is an essential value of the social and economic life of humans and is an indispensable prerequisite for poverty reduction, sustained economic growth and socio-economic development’ (p.1). However, access to health services alone is not a guarantee of good health: employment, housing and education are some of the SDH that significantly contribute to overall health (Ataguba, Day & McIntyre, 2015) – health being defined in the Astana Declaration (WHO, 1978) as ‘a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity’ (p.2).

When looking at the manner in which the implementation of the NHI is proposed in the *White Paper*, it would appear that there is a lack of direction on how the SDH will be dealt with. With

the focus of the NHI on UHC, the goals of PHC are not fully addressed (Saunders, Nandi, Labonte, Vance & Van Damme, 2019), as the focus of implementation is only on one aspect of the health system – the implementation of healthcare services to all. Changes in policy is required to collectively strengthen all health systems in public health to ensure that the country is able to respond to the health challenges facing it (Schemets, Rajan & Kadandale, 2016). The 2019 Presidential Health Summit (www.thepresidency.gov.za/download/file/fid/1650) recognises T&CM as a contributor to the health system in the statement in the document: “this collective approach has unleashed the energy of all stakeholders. including government departments, labour, civil society, patient advocacy groups, the academic sector and health professionals from diverse fields in the public and private sectors” but fails to address how the integration of T&CM into the public healthcare system will take place. This is despite the Astana Declaration (WHO, 1978), the *Traditional Medicines Strategy* (WHO, 2013) and most recently the *Global Report on Traditional and Complementary Medicine* (WHO, 2019) - all of which recommended that WHO member countries include T&CM into the public healthcare system as a way of ensuring that the healthcare needs of all sectors of the population are met.

As the rate that lifestyle related non-communicable disease (NCD) and population aging has increased, so has demand for CM products and services (Singer & Adams, 2014). In the *Traditional Medicines Strategy*, the WHO (2013), acknowledge this increasing global demand and has encouraged member countries to regulate these professions in order to ensure the safety of the public. Many countries have acknowledged this shift and have begun to develop policies which incorporate T&CM into the country’s healthcare system (WHO, 2019).

South Africa is one of the countries that has introduced legislation to regulate these professions in 1974 (Ericksen-Pereira, Roman & Swart, 2018) – before the call made by the WHO for member countries to introduce legislation for CM (WHO, 2013). Naturopathy was one of the CM professions that was negatively affected by the introduction of this legislation in South

Africa in that it led to a reduction in the number of naturopaths as well as a hiatus of almost thirty years before naturopaths were officially trained in South Africa again (Ericksen-Pereira, Roman & Swart, 2018). The introduction of further regulations over the years has had the effect of keeping naturopathy and other registered CM professions out of the public healthcare arena and ensuring that it was only available in the private healthcare sector. However, other forms of T&CM that does not require registration has continued to grow and flourish. It is estimated that there are over 200 000 traditional healers in Southern Africa (Truter, 2007) and with the proposed NHI, T&CM has been recognised but there is no indication of how it will be integrated, thereby effectively still keeping an ever-growing healthcare provider out of the public healthcare environment.

Legislation has had a huge impact on the development of the recognised CM professions and has been both supportive and repressive. While South Africa has been ahead of its time in introducing regulations which control the scope of practice, education and training and registration of CM practitioners, one has to examine the reason such legislation were introduced in the first place and what it aimed to achieve. The first legislation intended to repress the growing T&CM field. In 1953, the Medical Association of South Africa declared alternative therapies illegal and unscientific and co-operation between allopathic and alternative practitioners was prohibited in the medical code (Hassim, Heywood & Berger, 2007). The Health Professions Act 56 of 1974 resulted in the establishment of the Health Professions Council (regulatory body for biomedical practitioners) while the Homeopaths, Naturopaths, Osteopaths and Herbalists Act 52 was passed in later 1974 and resulted in the closure of training colleges for the CM. The passing of the latter Act took place at a time when the training of CM practitioners was flourishing.

Although legislation has previously excluded naturopaths and other T&CM practitioners from participating in the public healthcare system, the NHI Bill (Government Gazette No 42598,

2019) has, for the first time, created the possibility that T&CM practitioners may be included into the NHI. This research set about to develop a model for the training of naturopaths in South Africa ensure that naturopathic graduates are competent to practice within the broader healthcare system as part of the NHI.

8.3 Methodology

This research project used a qualitative design throughout all five stages of the research. The research was structured in stages which allowed the researcher to work from the outside inwards, peeling away at the layers that collectively resulted in the type of training programme which exists and the skills of the graduates who complete the programme. This process commenced by looking at how naturopathy started in South Africa. This stage of the research consisted of two parts – the first being a document search through the AHPCSA’s archives, followed by interviews conducted with practitioners who were trained in the early years of the establishment of CM in South Africa.

Findings from stage 1 showed that, due to historical developments, there was a gap of almost 30 years in the training of naturopaths from the time the training was shut down to the re-opening of training programmes. The second stage set out to explore the treatment practices and role of naturopaths in South Africa. An exploratory approach was used with naturopaths being purposively sourced from the AHPCSA website. Findings from this stage informed the design of stage 3 which used a modified Delphi process using naturopaths who had differing training and practice experience. Stage 4 used a two-phase sequential process to benchmark the South African curriculum and critically examine the current curriculum used to train naturopaths.

The research findings generated in the first four stages informed the development of the final stage of the research, namely, the development of a model for naturopathy. This consisted of a two- part process which led to the formulation of the model.

8.4 Findings

The findings from each stage of the research provided information which had previously not been recorded or explored. This information provides insight into the history and development, not only of naturopathy but also the development of CM as a whole in South Africa.

Stage 1

The early years of CM, from the late 1950s to early 1970s, was a period of great excitement and growth in CM. Any distinction between the different CM professions was blurred and participants in this study reported being taught a range of treatment modalities. They did not clearly identify themselves as naturopaths, homeopaths, herbalists or osteopaths. It was only with the introduction of legislation in 1974 that they were forced to choose a profession to register in. Many of them chose to register in multiple professions. Documents found in the AHPCSA archives support this. From an analysis of this data, registration in homeopathy was seen to be more advantageous as individuals who chose to register in multiple professions, chose homeopathy and naturopathy. This could have been due to homeopathy being the oldest CM to be established in the 1820's in South Africa (Gower, 2013). Act 52 of 1974 not only forced CM practitioners to identify themselves as practitioners in a specific category of CM, but it also excluded a number of CM practitioners from registering as they had no certification to prove that they had studied at a private college or through a system of preceptorship. Practitioners were given only six months to register and those who were not aware of the new legislation were excluded from registering. All of the participants in this stage reported that the

overall effect of this legislation was to greatly reduce the number of registered CM practitioners in the country.

Through the enactment of subsequent legislation the CM community was further divided by what appeared to be preferential treatment being accorded to the professions of chiropractic and homeopathy. After the passing of this Act 63 of 1982, no further registrations were allowed. Minutes found in the AHPCSA archives show that the board of the South African Associated Health Professions wrote to the minister of health on the October 6 1983 to request that Act 63 of 1982 be amended to open the registers for the chiropractic and homeopathic professions and to provide the minimum education standards for registration in these professions. Among the amendments later introduced was the *Associated Health Service Professions Amendment Act 108 of 1985 No 9867* which allowed for opening of the register for chiropractors and homeopaths. Eventually new training colleges were opened in 1987 for homeopaths (Gouwer, 2013) and in 1989 for chiropractors (Chiropractic in South Africa, n.d.). Naturopaths were only allowed to train after the passing of Regulation 127 of 2001. The findings from stage 1 suggest that legislation was used to control the practice and number of CM practitioners. Thus any expansion of the role that naturopaths and other CM professions could play within the South African healthcare system was by determined by legislation.

Stage 2

The impact of legislation on the professional identity, practices and role that naturopaths see for themselves in the South African healthcare system was evidenced in this stage of the research. Prior to the passing of legislation, naturopaths used a wide variety of treatment practices. Those who held dual registration were able to maintain a broader range of treatment practices than those who registered after the 2001 regulation was promulgated. This resulted

in graduates of the naturopathic training programme finding the SOP for naturopaths to be limiting.

The effect of legislation is also seen in the way in which naturopaths identify themselves. Since it is illegal to use the title ‘naturopath’ without being registered, the act of being registered allows practitioners to use the professional title. Due to the challenges some of the younger participants had with registration and the experiences the older participants had with getting registered, all participants shared a common professional identity – as registered naturopaths.

All the participants expressed the hope that at some point in the future naturopaths would be able to participate in the public healthcare system. With current discussions around the restructuring of the health system, participants were hopeful that the role of naturopaths would be expanded beyond the private healthcare system.

Stage 3

Conducting the Delphi process brought naturopaths who had trained abroad or through private (illegal) colleges together with graduates of the naturopathic programme for the first time. The difference in their training affected the manner in which the SOP was viewed, with the older naturopaths expressing the view that it covered all the treatment practices naturopaths needed while the naturopathic graduates did not share this view. The consensus was that it was the wording of the SOP that made it ambiguous. It was agreed that the minimum competencies expected of a graduating student would be affected if the curriculum used did not teach all the treatment practices covered in the SOP.

Stage 4

Stages two and three provided insight into the differences in the training between graduates of the naturopathic programme and naturopaths who trained elsewhere. Graduates of the

naturopathic programme use a smaller range of treatment practices. The comparative analysis of the whole curriculum found that it is benchmarked to international curricula. The graduate review highlighted the shortcomings of the curriculum and made recommendations for its restructuring. Most of the concerns centred on the content of the subjects offered in the curriculum. While the curriculum meets the requirements set out in Regulation 127 of 2001, there is a lack of clarity on the content of subjects offered in the curriculum.

Stage 5

The findings of the four stages led to the conclusion that legislation controls and affects every aspect of naturopathy. The SOP determines the competencies graduates need to have when they go into practice but this is dependent on having all the treatment practices included in the curriculum. In order to understand the relationship between the different components which are all controlled by legislation, a model was developed to reflect the process that needs to be followed to ensure that graduating naturopaths are competent to meet the healthcare needs of the South African public. The findings of this stage was presented in the article below:

8.5 African Journal of Health Professions Education: A reflection on the submission and review process

The manuscript was submitted for review to the *African Journal of Health Professions Education* on the 31 July 2020. Given that the practice of naturopathy is growing in Africa, the decision made to submit to an open-source, peer reviewed journal approved by the Department of Higher Education and Training (DHET). If accepted, it could contribute to developing the standard of training of naturopaths in Africa.

8.6 Contribution record

The following contributions were made by the candidate's joint publication with the supervisors:

<i>Authors</i>	<i>Contributions</i>
Wendy Ericksen-Pereira	Designed the research study, conducted all the research, identified the journal, wrote the manuscript, was the corresponding author and communicated with the editor in chief, reviewers and copywriters.
Nicolette Vanessa Roman	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.
Rina Swart	Critically reviewed the manuscript and provided feedback for improvement to the manuscript.

8.7 Visibility of research

The African Journal of Health Professions Educations is a peer-reviewed, open-source journal with a focus on health professions education in Africa. With the growth of naturopathy in Africa, publishing in a journal approved by the department of higher education lends the article more credibility and has the potential to contribute to further responsible development of naturopathy in a manner that would comply with WHO minimum requirements for training.

8.8 References

- Ataguba, J., Day, C. & McIntyre, D. (2015). Explaining the role of social determinants of health on health inequality in South Africa. *Global Health Action* 8, 28865.
- Chiropractic in South Africa. Retrieved August 15, 2019, from [https://chiropractic.co.za/history-of-chiropractic/#:~:text=Chiropractic%20in%20South%20Africa,recognised%20profession%20in%20South%20Africa.&text=The%20first%20chiropractic%20faculty%20was,Technology%20\(DUT\)%20in%201989](https://chiropractic.co.za/history-of-chiropractic/#:~:text=Chiropractic%20in%20South%20Africa,recognised%20profession%20in%20South%20Africa.&text=The%20first%20chiropractic%20faculty%20was,Technology%20(DUT)%20in%201989).
- Department of Health. (2017). *White paper on National Health Insurance: Towards universal health coverage*. Retrieved October 9, 2017, from <http://www.health.gov.za/index.php/component/phocadownload/category/383>.
- Ericksen-Pereira, W., Roman, N. & Swart., R. (2018). An overview of the history and development of naturopathy in South Africa, *Health SA* 23.
- Gouwer, N. (2013). *Homeopathy in South Africa. Homeopathy papers past and present*. Retrieved July 25, 2016, from <http://hpathy.com>.
- Hassim A., Haywood, M. & Berger, J. (2007). *Health and democracy: A guide to human rights, health law and policy in post-apartheid South Africa*. Cape Town: Siber Ink CC.
- Presidential Health Summit Compact. (2019). *Strengthening the South African health system towards an integrated and unified health system*. Retrieved April 22, 2020, from www.thepresidency.gov.za/download/file/fid/1650.
- Saunders, D., Nandi, S., Labonte, R., Vance, C. & Van Damme, W. (2019). From primary healthcare to universal health coverage: One step forward and two steps back. *The Lancet*, 394(10199), 619–21.

- Schemets, G. Rajan, D. & Kadandale, S. (2016). *Strategizing national health in the 21st century*. Geneva: World Health Organization.
- Singer, J. & Adams J. (2014). Integrating complementary and alternative medicine into mainstream healthcare services: The perspectives of health service managers. *Biomed Central Complementary and Alternative Medicine*, 14, 167.
- South Africa. National Health Insurance Bill -11 of 2019. *Government Gazette* No 42598 of 2019. Retrieved April 22, 2020, from https://www.gov.za/sites/default/files/gcis_document/201908/national-health-insurance;bill;b;11;2019.pdf.
- Truter, I. (2007). African Traditional Healers: Cultural and religious beliefs intertwined in a wholistic way. *South African Pharmaceutical Journal*, 74 (8).
- World Health Organization. (1978). *Report of the International Conference of Primary Health Care Alma-Ata, USSR, 6-12 September 1978*. Retrieved October 9, 2017, from <http://apps.who.int/iris/bitstream/10665/39228/1/9241800011.pdf>.
- World Health Organization. (2008). *World health report: Primary healthcare now more than ever*. Retrieved October 7, 2017, from <http://apps.who.int/medicinedocs/documents/s22232en/s22232en.pdf>.
- World Health Organization. (2013). *Traditional medicines strategy 2014–2023*. Retrieved June 11, 2019, from http://www.who.int/medicines/publicactions/tradiional/trm_strategy14_23/en/.
- World Health Organization. (2017). *Together on the road to universal health cover: A call to action*. Retrieved April 8, 2019, from <https://apps.who.int/iris/bitstream/handle/10665/258962/WHO-HIS-HGF-17.1-eng.pdf?sequence=1>.

World Health Organization. (2019). *Global report on traditional and complementary medicine*. Retrieved September 28, 2019, from <https://apps.who.int/iris/bitstream/handle/10665/312342/9789241515436-eng.pdf?ua=1>.

8.9 Article

A model for the training of naturopaths in the South African health system

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Abstract

Dynamic changes in health are occurring globally. Life expectancy has increased, patterns of communicable disease (CD) are changing and there is a global increase in the rate of non-communicable diseases (NCD). These changes are placing increased pressure on countries' health resources. In the face of increased chronic disease, more people are turning to traditional and complementary medicine (T&CM). The World Health Organization (WHO), in recognition of the global increase in the use of T&CM, has encouraged member countries to find ways to integrate T&CM into its healthcare systems, thus helping ensure additional health services are made available to the public to address the goal of universal health coverage (UHC). The WHO has called for the implementation of new strategies to evaluate and conduct research into the education and training of T&CM practitioners in order to ensure that they are adequately trained to ensure the safety of the public. There is a drive within the global naturopathic community to regulate and professionalise naturopathy. This research aims to address these converging calls by developing a training model for naturopaths within the South African healthcare system, to help ensure minimum competencies and safe practice within the South African health system.

Keywords: health systems, minimum competencies, curriculum, legislation, scope of practice

Introduction

Disease patterns in the twenty-first century have shifted dramatically on a global level, with communicable disease (CD) now co-existing with NCDs (WHO, 2017a). Some of the reasons for this have been attributed to increased globalisation, changing patterns of disease, environmental changes and an increase in life expectancy. The Global Status Report on NCDs (WHO, 2018a) demonstrated that in 2012, 68 per cent of global deaths were due to NCDs. In 2016 this figure rose to 71 per cent, with the highest level of death due to NCDs, such as cardiovascular disease and stroke, being in low-and middle-income countries (LMIC) (WHO, 2018a) such as South Africa. Given this development, new approaches to health and disease had to be pursued and the WHO (2013a) developed the *Global Action Plan for the Prevention and Control of Non-Communicable Diseases* to address this growing problem. One of the objectives set out is the development of a multi-sectorial approach to dealing with NCDs and the implementation of a system of universal health coverage (UHC) in member countries. This requires a focus on improving and strengthening health systems (Senkubuge, Modisenyane & Bishaw, 2014).

The WHO developed the document *Health for All by the Year 2000* which was based on the Astana conference of 1978 (WHO, 1978). In this declaration the key pillars of primary healthcare (PHC) were set out with one of the goals being 'health for all'. This represented a commitment to justice and equity for all within a system of Universal Health Coverage (UHC), initially aimed at developing countries to link overall health to economic and social development. The 2008 WHO report acknowledged that the social and economic changes that had taken place globally had negatively affected the attainment of the goal of UHC since the Astana Declaration. The WHO has now set 2030 as the goal for the achievement of UHC in its member countries (WHO, 2017b). Achieving this would require political leadership from

those in government to invest in national health and a strengthening of all health systems (WHO, 2017b). In planning and strategizing for the implementation of UHC, governments are encouraged to involve all sectors of health systems to engage in the discussion, development and implementation of UHC (Schemets, Rajan & Kadandale, 2016).

The Astana Declaration (VII.7), in promoting the goal of health for all, addressed the use of traditional medicine practitioners in the health system at PHC level as it:

Relies at local and referral levels on health workers, including physicians, nurses, midwives, auxiliaries and community workers as applicable, as well as traditional practitioners as needed, suitably trained socially and technically to work as a health team and to respond to the expressed health needs of the community (WHO, 1978, p.5).

The incorporation of traditional medicine in the public health system is again addressed in the WHO Traditional Medicine Strategy (2013b) which acknowledges the increased use of and demand for traditional and complementary medicine (T&CM) globally. It also recognises the contribution that T&CM can make to health care and encourages member countries to find a way to harness the potential of T&CM through the formulation of national policy to regulate and integrate T&CM into national health systems in order to promote the goal of UHC.

Based on the WHO (2017b) definition of UHC, all individuals in a given country should have access to quality essential health services regardless of their ability to pay for these services. UHC is seen as a basic human right as identified in the Astana Declaration (WHO, 1978). The Astana Declaration (WHO, 2018b), suggests that the success of PHC will become more achievable when scientific and traditional knowledge is applied and extended to a range of healthcare services that people can access. Since significant numbers of people make use of T&CM, this system of medicine should also be included in the services offered under UHC. As UHC is people centred, it should reflect the health needs of the population (WHO, 2017b).

Implementing UHC thus requires an approach that shifts from the curative, biomedical model to a people centred one (Schemets, Rajan & Kadandale, 2016).

South African healthcare system

South Africa has a system of dual healthcare: one public and one private. This system has its roots in gender and racial discrimination from the late twentieth century which was based on the unequal, segregated health system developed in the colonial era (Coovadia et al., 2009). With each successive change in government this became further entrenched. The first democratic elections in South Africa in 1994 were followed by the adoption of a new Constitution in 1996. The right to healthcare is now enshrined in the Constitution's Bill of Rights and lays the foundation for a healthcare system based on respect for human rights, social justice, equality and the right to health care for all (Van Rensburg & Pelsler, 2010). These core principles have been developed and expanded upon since 1994.

South Africa's National Health Act 61 of 2003 Government Gazette 26595 seeks to ensure that all citizens of SA have access to healthcare as determined by the Constitution and sets out the structure of the healthcare system on a national, provincial and district level (Hassiem, Heywood & Honnerman, 2008). These objectives are aligned to those of primary healthcare as outlined in the Astana Declaration (WHO, 1978). In furthering the goal of making healthcare available to all citizens, a National Health Insurance (NHI) is envisaged and the release of the White Paper proposes a way to achieve UHC (Department of health, 2017).

Naturopathy as a health system

There is emerging evidence on the effectiveness of complementary medicine (CM) to support and enhance the health and well-being of individuals and as a result, improve community health

and wellbeing (Wardle & Oberg, 2011). Evidence show that CM has the potential to contribute and enhance public healthcare systems (World Naturopathic Federation, 2017).

Naturopathy is a system of complementary medicine (CM) that has its roots in the writing of the ancient Greece philosophers and physicians like Hippocrates, Socrates and Galen (World Naturopathic Federation, 2017). Naturopathic medicine is grounded in the philosophy of vitalism and wholism. Vitalism, or the vital force, is viewed as the invisible life force that animates life. Naturopathic practitioners are trained to assess and work with an individual's vitality. Treatment can include food, exercise, hydrotherapy and herbs. It may include additional therapies such as homeopathy, acupuncture, meditation, mindfulness exercises and other modalities that support the individual's vital force (World Naturopathic Federation, 2017). Wholism requires that the whole person, not just the symptoms of the disease, be taken into consideration when treating a patient. All the symptoms are viewed as an integrated whole in order to be fully understood as the emotional, physical, spiritual aspects are interdependent. The intrapersonal and interpersonal dynamics, as well as the interaction of individuals with their environment, external and social factors should also be taken into consideration when treating (World Naturopathic Federation, 2017).

Flowing from the philosophy are six principles which guide naturopathic practice. These are: first do no harm (*primum non nocere*), the healing power of nature (*vis medicatrix naturae*), treat the cause (*tolle causam*), treat the whole person (*tolle totum*), doctor as teacher (*docere*), disease prevention and health promotion. These philosophies and principles guide naturopaths in practice globally (World Naturopathic Federation, 2015).

Naturopathy is a part of the health system in over 90 countries but in most is not part of the public health system (World Naturopathic Federation, 2015). Naturopaths focus on health rather than on disease, on prevention of disease through diet, lifestyle and an emphasis on

health promotion through education. Through addressing the root causes of disease, they aim to prevent or slow the development of chronic disease. They are thus ideally placed to be situated at primary health and early prevention levels of medical systems of healthcare.

Naturopathy in South Africa

Naturopathy has been a part of the South African health system for over five decades (Ericksen, Roman & Swart, 2018). During the early years there were no set standards of training or minimum entrance requirements to enter the study of naturopathy. Training took place in various ways, ranging from tutelage and mentorship under a qualified practitioner, to private colleges (Ericksen, Roman & Swart, 2018). This resulted in a huge growth in the numbers of naturopathic practitioners. The introduction of legislation from 1974 onwards curtailed the growth of the naturopathic profession and it was only with the passing of Regulation 127 of 2001 that training of naturopaths was once again allowed – this time at tertiary institution level (Ericksen, Roman & Swart, 2018).

The history of healthcare globally has demonstrated that improving living conditions, sanitation and nutrition resulted in improved health and increased longevity before the advent of modern medicine (Van Rensburg & Pelsler, 2010). There are many problems that challenge the healthcare system in South Africa. In order to meet these challenges, it is necessary to include all sectors of the health system (WHO, 2000). The WHO (2000) defines health systems as consisting of ‘all the organisations, institutions and resources that are devoted to producing health actions’ (p.ix). This includes all the people whose main goal is to improve the health of those they serve. Thus formal health services, T&CM practitioners, nongovernmental health and social service providers as well environmental agencies are all part of health systems, since they contribute to the health of the population in various capacities (WHO, 2000).

In order to optimise the health outcomes for the population of this country, there has to be a recognition and inclusion of all the different health systems into the health policies to ensure that all citizens can have access to the health services of their choice as enshrined in the Patients' Rights Charter and guaranteed under the constitution (Act 108 of 1996). This research study has developed a model for naturopathy within the South African health system in order to demonstrate that, by using a systematic approach based on the legislation and the healthcare needs of the population and developing a rigorous, responsive curriculum to ensure graduates are competent to practice it is possible to integrate the profession into the public healthcare system, as recommended by the WHO.

Theoretical model development

A two-stage approach was used to develop a model. Stage 1 involved using a qualitative document analysis design to examine the NHI *White Paper* (2017), as this document outlines how the proposed NHI system will be implemented, in order to determine whether there is scope for a system of CM, such as naturopathy, to be included into the new health structure.

Stage 2 drew on the findings of a series of research articles which examined various aspects of naturopathy in South Africa. A qualitative research design was used in all the research articles which included a document analysis, interviews, open-ended survey questions and a modified Delphi process. The articles focused on the following areas:

1. An overview of the history and development of naturopathy in South Africa.
2. The effect of legislation on the treatment practices and role of naturopaths in South Africa.
3. A review of the scope of practice and minimum competencies for the training of naturopaths in South Africa using a modified Delphi process.
4. A comparative analysis and evaluation of the naturopathic curriculum in South Africa.

The findings of the two stages were framed within a systematic model to capture the interacting components of naturopathy within the wider health care system. A model can be described as a theoretical description that explains how a process or system may work (<https://www.collinsdictionary.com/dictionary/english/model>). It provides a framework for the education and training of naturopaths (Kuss et al., 1997). This model is based on a systems approach which recognises that everything within a system is constantly influencing each other in a circular rather than a linear manner. The boundaries that exist between the various levels are permeable which allows for interaction between the different levels (Rothery, 2001). This conceptual approach was adopted because it provides a framework to conceptualize and evaluate CM and the different factors which impact on the training (Bell et al., 2002) of naturopaths in South Africa. Thus this model takes a dynamic approach in proposing four levels, which are all linked and ultimately determines the minimum competencies needed, in order to be regarded as a competent practitioner.

Summary of findings

Stage 1: NHI White Paper

The NHI document (2017), states that the aim of the new system of healthcare insurance is to ensure that all citizens of the country have the right to access quality healthcare services. This is aligned with the WHO policy on UHC. The focus on UHC as the route to the improved health of the populace can tend to minimize the impact other social determinants have on health. Food security and nutrition, access to clean water and sanitation, environmental disasters linked to climate change, human rights and gender inequality are all factors which impact on health (Saunders et al.; Ataguba, Day & McIntyre, 2015). These factors are often at the root cause of disease.

Stage 2: Summary of research

Article 1: An overview of the history and development of naturopathy in South Africa

It was found that during the period of the late 1950s to 1974 resulted in a period of growth for chiropractic, herbalism, homeopathy, osteopathy and naturopathy. The introduction of the first legislation for CM in 1974 resulted in the forced registration of CM practitioners, a reduction in the number of practitioners and the phasing out of CM training. The introduction of Act 63 in 1982 saw the promulgation of a regulatory body and a scope of practice for the four recognised professions to guide practitioners of these professions. In 2001, the passing of Regulation 127 paved the way for the training of naturopaths at a tertiary level.

Article 2: The effect of legislation on the treatment practices and role of naturopaths in South Africa

Historically legislation has determined the rules of registration, the qualifications needed for registration and the scope of practice for these professions. It also gave the regulatory body the authority to determine the education necessary for the training in each profession. The legislative framework provided the rules and structure within which naturopathy and other regulated CM professions have to operate.

This research found that, despite the difference in age, number of years in practice and type of training received, all the participating naturopaths were found to share four common treatment practices based on the principles which guide naturopathic practice globally. The treatment practices all fell within the legal SOP, as determined by legislation. There was a shared vision of a broader role for naturopaths as part of the public health system. It was found that legislation has a restrictive effect on the practice and growth of naturopathy in South Africa.

Article 3: A review of the scope of practice and minimum competencies for the training of naturopaths in South Africa, using a modified Delphi process

Using a Delphi process, it was established that the scope of practice (SOP) for naturopaths in South Africa was on par with international standards. However, problems were identified with the SOP in relation to the wording used, as it left certain clauses open to interpretation. It was found that there are no minimum competences to guide the training of naturopaths in South Africa. Through the Delphi process, a set of minimum competencies was developed for naturopathic training.

Article 4: A comparative analysis and evaluation of the naturopathic curriculum in South Africa

The curriculum used for the training of naturopaths in South Africa exceeds that recommended by the WHO (2010) and compares favourably with the broad international curricula used in training institutions. It was also found that the curriculum needs to be restructured in order to ensure that graduating students meet the minimum competencies to enter practice.

Based on the above findings, a model for naturopathy was developed, utilising a systems theoretical approach (Rothery, 2001).

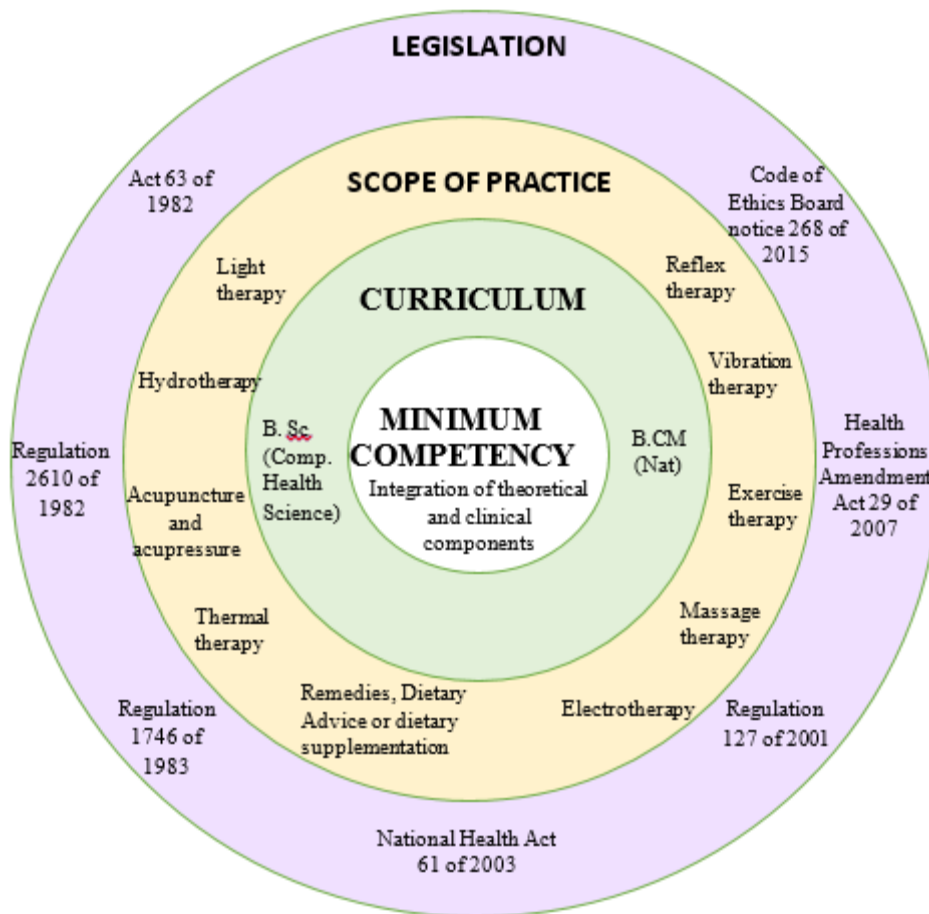


Figure 1: A conceptual model for the training of naturopaths in South Africa

Level 1: The role of legislation

Act 52 of 1974 enforced the registration of herbalists, homeopaths, naturopaths and osteopaths within a six-month period (Ericksen-Pereira, Roman & Swart). With the introduction of Act 63 of 1982 (the Allied Health Professions Act), the legislation governing the four recognised CM professions was more clearly set out. This Act described the functions of the council, the registration process for practitioners and students, the disciplinary powers of the council, judicial matters offices and penalties and general supplementary provisions. It also established the South African Associated Health Services Professions Board. Some of the duties the board was tasked with included:

- the promotion and protection of the health of the South African population
- to administer and set policy relating to the registered CM professions
- to set the standards for the training of practitioners

The passing of Regulation 2610 in December 1982 set out the SOP for the various professions and further expanded on how disciplinary matters would be dealt with. The passing of Regulation 127 of 2001 was important for CM because it not only served to amend sections of Act 63 but also addressed the issue of the education and training for CM, setting out the minimum requirements for registration. This included a schedule of the major and ancillary subjects which each profession should cover.

This legal framework clearly set out the parameters within which registered CM professions, including naturopathy, have to operate. The use of the term naturopath is protected by Act 63 and only registered practitioners are allowed to use this title. This also means that every aspect of the education, training and practice of naturopaths is affected by legislation which has been put into place. This level has been identified as the first level, given that it effectively encompasses and controls all aspects of the profession.

Level 2: The scope of practice

The SOP can very broadly be defined as the range of treatment practices used by a profession (Schuiling & Slager, 2000). These treatment practices are usually set within a set legal framework. The SOP for naturopaths is set out in chapter 11 of Act 63. The SOP is defined in chapter 11 as the ‘acts specially pertaining to any specific profession’. This legally prescribed SOP has been in place since 1982 and has not changed since it was promulgated. The SOP as legislated for naturopaths in South Africa is aligned to that developed by the WHO (2010).

The World Naturopathic Federation (2015) conducted global research into the treatment practices used by naturopaths. The findings indicated that there is similarity of treatment practices used by naturopaths globally – including South Africa. Thus the treatment practices prescribed by the SOP are aligned with that used internationally. A critique of the SOP would be that within the regulations there is a lack of definitional clarity around specifying the details and parameters of treatment practices.

Level 3: Curriculum

The formal curriculum could be defined as encompassing the objectives, content, learning experiences, resources and assessment (UNESCO, 2010) components of a programme. While the different modules taught must meet the requirements as set out in Regulation 127 of 2001, this regulation only sets out the minimum curriculum, not the objectives, specific content, resources and assessment, which is determined by university policy. However, Act 63 of 1982 1.21 (16A) sets out the role the AHPCSA has over the training of all registered CM practitioners:

No person or institution shall offer or provide any education or training in any allied health profession....unless such education or training has been considered by the relevant professional board and approved by the council after considering a recommendation by the relevant board.

The shortcoming of the current legislation is that it tables the subjects to be covered in training, without looking at the sum total of all the elements of the formal curriculum. The current curriculum used in the training of naturopaths should be benchmarked for this process. Such benchmarking will enable programmes to be compared, and can result in an improvement in all aspects of the curriculum (Tasopoulou & Tsiotras, 2017). In order to meet the requirements of the AHPCSA and the training institutions, it is necessary for the two to work together

closely, to ensure that the curriculum used to train naturopaths covers the treatment practices prescribed by the SOP as well as all other aspects of the formal curriculum.

Level 4: Minimum competencies

Competencies can be broadly defined as the set of skills, knowledge and attitudes needed in order to successfully perform tasks within a given situation that can be measured against set standards (UNESCO, n.d.). Competencies set the standard for professional training and provide a system of quality assurance (Battel-Kirk et al., 2009).

Within the South African context, competencies are determined by the professional body, the AHPCSA, taking into consideration the legislation, SOP and curriculum and training programme for naturopaths as set by the educational institute. These three factors collectively determine the minimum credits for training, hours allocated to the various subjects, the integration of the theoretical training with the practical training and the number of hours and patient numbers to be met by a student. Students who meet the academic requirements set by the educational institution, graduate and then register with the professional body as naturopaths.

A review of the legislation found no specific competencies identified. A web search revealed that neither the AHPCSA website nor the naturopathic association, the South African Naturopathic Association (SANA) have any minimum competency documents available. The only minimum competency documents found was for the Health Professions Council of South Africa (HPCSA). It has a set of minimum competency documents available for students and registered medical practitioners. The establishment of a set of minimum competencies for a profession provides the public with the assurance of the standard of training of graduates in the profession. It also serves to guide the education institution in reviewing the curriculum, in order

to ensure that graduates meet the minimum level of competencies expected of naturopaths functioning within the healthcare system (Battel-kirk et al., 2009).

Discussion

The WHO *Global Report on Traditional and Complementary Medicine* (2019) advocates the inclusion of T&CM into national healthcare policies. This strategy recognises the continued global growth and use of T&CM products and services. It also recognises the role that it can play in health promotion, disease prevention and in the long term could help to reduce health costs, as patients are empowered to take responsibility for their health (Barnett, 2007). In the 2019 *Global Report on Traditional and Complementary Medicine* (WHO, 2019) the important role played by T&CM is once again acknowledged as having the potential to significantly contribute to achieving UHC. The handbook *Strategizing National Health in the 21st Century* encourages states to strengthen their health systems as the foundation to achieving the goal of UHC (Schemets, Rajan & Kadandale, 2016).

South Africa, as a member country of the WHO, is guided by WHO policies. The NHI White Paper uses the following quote from the Astana Declaration to explain primary healthcare:

Primary healthcare is essential healthcare based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community (p.vi).

In essence, this is what the NHI proposes to achieve in South Africa. It sets out the rationale and various mechanisms on how it will be rolled out and implemented.

The stated goals of the NHI (*Government Gazette*. 42598, 2019) are to ensure that the population has equal access to quality health care services, to reduce the out-of-pocket payment for health services and to extend the range of health care services ‘to which the population is entitled.’ There is no specific mention of what the range of healthcare services are. The NHI

defines a health service provider as ‘a natural or juristic person in the public or private sector providing health care services in terms of any law’ (*Government Gazette* 42598, 2019). The National Health Act 61 of 2003 defines a healthcare provider as anyone registered under the Allied Health Professions Act 1982, the Health Professions Act of 1974, the Nursing Act of 1978, the Pharmacy Act of 1974 and the Dental Technicians Act of 1979. This seems to suggest that CM practitioners registered with the AHPCSA are included within the proposed NHI.

The Health Professions Council of South Africa’s (HPCSA) *Guidelines for good practice in the healthcare professions*, booklet two, *Ethical and professional rules of the Health Professions Council of South Africa*, 2016, states in 2.1(8A) that a practitioner cannot share their rooms with another who is not registered under this Act, but 9(2) allows for referrals to practitioners registered with another health profession. This rule prevents AHPCSA registered practitioners from working in the public healthcare system. These ethical rules of conduct for HPCSA registered practitioners were first implemented under the Health Professions Act 56 in 1974 and are still in force. *Government Gazette* 24598 of 26 July 2019 notes the various Acts which will be affected by the NHI, among these being Act 56 of 1974 and Act 63 of 1982, which affects CM. This government notice appears to provide cause for hope for changes to legislation that could herald an expansion of the role of naturopathy and other forms of T&CM into the NHI system in the future.

A study conducted in integrated practices in Australia with biomedical practitioners, naturopaths, traditional Chinese medicine, yoga, shiatsu and massage practitioners found that patients provided with wholistic healthcare provided patients with better health outcomes (Singer & Adams, 2014). Another study conducted over a period of a year in Canada on 156 postal workers aged between 25 and 65 with a high cardiovascular risk factor, demonstrated a reduction by a third in the risk factor of the naturopathic group who received individualised lifestyle, nutritional and botanical support in comparison to the control group (Herman et al.,

2014). A systematic review conducted by Myers & Vigar (2019), found that across global literature, studies found that, across a broad range of naturopathic treatment modalities there were positive outcomes and thus improved quality of life in individuals with, or at risk of chronic conditions such as cardiovascular disease, diabetes mellitus, chronic pain, anxiety and menopausal symptoms. Emerging research is beginning to make a strong argument for integrating naturopaths into a multi-disciplinary medical practice.

Through the decades of training, a minimum level of competency required to practice has never been established for naturopaths. The model proposed in this paper develops a strategy to be used to ensure that the training of naturopaths is approached in a systemic and wholistic manner. It adopts a dynamic, systems approach and is cognizant of the multiple factors which contribute to and impact on the training of naturopathic students. It also demonstrates how all the different factors are linked together at different levels and affect the training of naturopaths. This model is aimed at ensuring that naturopathic graduates are competent to practice and can make a positive contribution to the broader South African health system.

Limitations of the model could be that it is viewed as adopting an insular approach to as it does not consider the role of other stakeholders in the healthcare system. T&CM has been recognized by the governing authorities (Department of Health, 2019) as being a part of the South African healthcare system, decisions now have to be made as how it will be included into the public healthcare system as part of the NHI. While this model was developed for the training of naturopaths, it is based on a methodological framework which is cognizant of all other role players within the healthcare system.

Conclusion

The escalating rate of NCDs have a deleterious long-term economic effect and it calls for a different vision and approach to public health. The WHO advocates prevention and health promotion as a means to address this growing health challenge. The current trend shows that there is a global increase in the use of T&CM services. In order for naturopaths to be considered as a part of a universal healthcare system they have to meet the expected competencies as determined within the South African context. Thus a model of naturopathy has been developed to ensure that the training is sufficient to meet the minimum competencies necessary to practice within the South African healthcare system, which will assist them in joining the ranks of healthcare professionals required to meet South Africa's burgeoning health needs.

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References:

- Ataguba, J., Day, C. & McIntyre, D. (2015). Explaining the role of social determinants of health on health inequality in South Africa. *Global Health Action*, 8:28865.
- Barnett, H. (2007). Complementary and alternative medicine and patient choice in primary health care. *Quality in Primary Care*, 15(2), 7-12.
- Battel-Kirk, B., Barry, M.M., Taub, A. & Lysob, L. (2009). A review of the international literature on health promotion competencies: identifying frameworks and core competencies. *Global Health Promotion*, 16(2).
- Bell, I., Caspi, O., Schwartz, E., Grant, K., Gaudet, T., Rychener, D.,... Weil, A. (2002). Integrative medicine and systematic outcomes research issues in the emergence of a new model for primary health care. *Archives of Internal Medicine*, 162:133-140.
- Collins English dictionary*. Retrieved April 11, 2019, from <https://www.collinsdictionary.com/dictionary/english/model>.
- 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), 817-34.
- Department of Health (2017). *White paper on National Health Insurance for South Africa: Towards universal health coverage*. Retrieved October 9, 2017, from <https://serve.mg.co.za/content/documents/2017/06/29/whitepaper-nhi-2017-compressed.pdf>.

Department of Health. National Health Insurance Act. *Government Gazette* No. 42598 of 2019. Retrieved April 11, 2020, from https://www.gov.za/sites/default/files/gcis_document/201908/national-health-insurance;bill;b;11;2019.pdf.

Ericksen-Pereira, W., Roman, N. & Swart, R. (2018). An overview of the history and development of naturopathy in South Africa, *Health SA*, 23(0), a1078.

Hassiem, A., Heywood, M. & Honnerman, B. (2008). *The National Health Act 61 of 2003: A guide*. Cape Town, Siber Ink.

Herman, P., Szcurko, O., Cooley, K. & Seeley, D. (2014). A naturopathic approach to the prevention of cardiovascular disease: cost effective analysis of a pragmatic multi-worksite randomized clinical trial. *Journal of Occupational Environmental Health*, 56(2).

Kuss, T., Proulx-Girouard, L., Lovitt, S., Katz, C., & Kennelly P. (1997). A public health nursing model. *Public Health Nursing*, 14(2), 81-91.

Myers, S.P. & Vigar, V. (2019). The state of evidence for whole system multi-modality naturopathic medicine: a systematic scoping review. *Journal of Alternate and Complementary Medicine*, 25(2),141-168.

Rothery, M. (2001). Ecological systems theory. In N. Coady & P. Lehmann (Eds), *Theoretical perspectives for direct social work practice: A generalist eclectic approach*. New York. Springer.

Saunders, D., Nandi, S, Labonte, R., Vance, C. & Van Damme, W. (2019). From primary healthcare to universal health coverage – one step forward and two steps back. *The Lancet*, 394 (10199), 619-21.

- Schemets, G., Rajan, D. & Kadandale, S. (2016). *Strategizing national health in the 21st century*. Geneva: World Health Organization.
- Schuiling, K.D. & Slager, J. (2000). Scope of practice: Freedom within limits. *Journal of Midwifery Women's Health*, 45(6).
- Senkubuge, F., Modisenyane, M. & Bishaw, T. (2014). Strengthening health systems by health sector reforms. *Global Health Action*, 7(1).
- South Africa. Associated Health Service Professions Act 63 of 1982 *Government Gazette* No. 8160.
- South Africa. Government Notice Regulation 127 of 2001 *Government Gazette* No.22052.
- South Africa. National Health Insurance Bill -11 of 2019. *Government Gazette* No. 42598.
- Singer, J. & Adams, J. (2014). Integrating complementary and alternative medicine into mainstream healthcare services: the perspectives of health service managers. *Biomed Central Complementary Alternative Medicine*, 14:167
- Tasopoulou, K. & Tsiotras, G. (2017). Benchmarking towards excellence in higher education, *Benchmarking: An International Journal*, 24(3), 617-634.
- United Nations Educational, Scientific and Cultural Organisation. (2010). *The formal curriculum*. Retrieved April 29, 2019, from <http://www.unesco.org/education/tlsf/mods/theme a/popups/mod05t01s01.html>.
- United Nations Educational, Scientific and Cultural Organisation. (n.d). *Resources and services*. In *TVETipedia Glossary*. Retrieved May 5, 2019, from <https://unevoc.unesco.org/home/TVETipedia+Glossary/filt=all/id=100>

- Van Rensburg, H. C.J., & Pelsler, A.J. (2010). The transformation of the South African health system. In H.C.J. van Rensburg (Ed.), *Health and healthcare in South Africa*. Pretoria: Van Schaik.
- Wardle, J. & Oberg, E. (2011). The intersecting paradigms of naturopathic medicine and public health: opportunities for naturopathic medicine. *Journal of Alternative and Complementary. Medicine*, 17(11), 1079-1084.
- World Health Organization. (1978). *Report of the International Conference of Primary Health Care Alma-Ata, USSR, 6-12 September*. Retrieved October 9, 2018, from <http://apps.who.int/iris/bitstream/10665/39228/1/9241800011.pdf>.
- World Health Organization. (2000). *World health report 2000: Health systems: Improving performance*. Retrieved March 30, 2019, from https://www.who.int/whr/2000/en/whr00_en.pdf?ua=1.
- World Health Organization. (2008). *World health report: Primary healthcare now more than ever*. Retrieved October 6, 2018, from <https://www.who.int/whr/2008/en/>.
- World Health Organization. (2010). *Benchmarks for training in traditional/complementary and alternative medicine: Benchmarks for training in naturopathy*. Retrieved March 26, 2019, from <http://apps.who.int/medicinedocs/documents/s17553en/s17553en.pdf>.
- World Health Organization. (2013a). *Global Action Plan for the prevention and control of non-communicable disease 2013-2020*. Retrieved September 24, 2019, from https://apps.who.int/iris/bitstream/handle/10665/94384/9789241506236_eng.pdf;jsessionid=373B1653BD74F015ED73E3C0F3735EEE?sequence=1.

World Health Organization. (2013b). *Traditional medicine strategy 2014-2023*. Retrieved October 5, 2018, from <http://apps.who.int/iris/bitstream/10665/92455/1/9789241506090eng.pdf?ua=1>.

World Health Organization. (2014). *Global status report on noncommunicable diseases*. Retrieved March 27, 2019, from https://apps.who.int/iris/bitstream/handle/10665/148114/9789241564854_eng.pdf?sequence=1.

World Health Organization. (2017a). *Noncommunicable diseases*. Retrieved September 5, 2017, from <https://communitymedicine4all.com/2017/04/11/who-updates-fact-sheet-on-non-communicable-diseases-ncds-10-april-2017/>.

World Health Organization. (2017b). *Together on the road to universal health cover: A call to action*. Retrieved April 8, 2019, from <https://apps.who.int/iris/bitstream/handle/10665/258962/WHO-HIS-HGF-17.1-eng.pdf?sequence=1>.

World Health Organization. (2018a). *Noncommunicable diseases: Country profiles*. Retrieved March 27, 2019, from apps.who.int/iris/bitstream/handle/10665/274512/9789241514620-eng.pdf?ua=1.

World Health Organization. (2018b). *Declaration of Astana. Global Conference on Primary Health Care*. Retrieved September 24, 2019, from <https://www.who.int/docs/default-source/primary-health/declaration/gcphc-declaration.pdf>.

World Health Organization. (2019). *Global report on traditional and complementary medicine*. Retrieved August 28, 2019, from <https://apps.who.int/iris/bitstream/handle/10665/312342/9789241515436-eng.pdf?ua=1>.

World Naturopathic Federation Report. (2015). *Findings from the 1st World Naturopathic Federation Survey*. Retrieved October 19, 2016, from [www.worldnaturopathic federation.org](http://www.worldnaturopathicfederation.org).

World Naturopathic Foundation. (2017). *White paper; Naturopathic philosophies, theories and principles*. Retrieved May 5, 2018, from [www.worldnaturopathic federation.org](http://www.worldnaturopathicfederation.org).

CHAPTER 9

INTEGRATION OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

9.1 Introduction

The current study aimed to develop a model for the training of naturopaths in South Africa. In order to achieve this, an exploratory qualitative methodological approach guided by an interpretivist paradigm was used. This led to a deeper understanding of the various factors which affect the training of naturopaths and the naturopathy profession in general. This approach was well suited to this study as research into naturopathy had not previously been undertaken in South Africa. In order to develop a model for training naturopaths the research had to be undertaken in four stages in order to gain the information needed to develop a model. The qualitative research design offered different methods of data collection - which included a document search, document analysis, a modified Delphi process, open-ended survey questions as well as semi-structured interviews. Through the application of these methodological processes the objectives of this study were achieved.

Chapters 4 to 8 addressed the objectives of the study and this present chapter provides a synthesis of the overall findings of the study in relation to the objectives set out at the start of the study. These objectives were:

- Objective 1: To explore the development of naturopathy in South Africa
- Objective 2: To explore the effect of legislation on the treatment practices and role of naturopaths in South Africa

- Objective 3: To review the scope of practice for the training of naturopaths in South Africa.
- Objective 4: To critically analyse and evaluate the current curriculum and training of naturopaths in South Africa.
- Objective 5: To develop a model for training naturopaths within the South African healthcare system.

9.2. Naturopathy as a system of complementary medicine

Traditional medicine has been used for centuries all over the world and its continued use makes it an important part of any country's healthcare system (WHO, 2013). Complementary medicine has its roots in ancient Greece and many of these complementary systems of medicine draw on the philosophy of Hippocrates, Plato, Galen and others (Hausser, 2018). Naturopathy, with its roots in ancient Greek medical philosophy and practice was later developed in Europe into a unique system of medicine. Although the 'Nature Cure' movement of the early nineteenth century has been identified as the starting point of naturopathy, the philosophy and some of the treatment practices can be traced back to eleventh-century Germany where the historical philosophical foundations were laid and later developed (Hausser, 2018). From Germany naturopathy spread to other European countries and different treatment practices were incorporated that resulted in those used by naturopaths expanding beyond that originally used by the nature cure practitioners (Baer, 2001). Today naturopathy is practised globally in over 30 countries (World Naturopathic Federation, 2016). Due to its eclectic nature, naturopathy has the ability to be adapted and integrated with traditional cultures within any particular country. One finds examples of this in India, where naturopathy has been infused with elements of the Vedic culture and there are many aspects of Ayurvedic practice that have been incorporated into naturopathic practice (Nair & Nanda, 2014). In New Zealand naturopathy has taken on

elements of the indigenous Maori culture as the traditional Maori philosophy of healing is incorporated in the curriculum (Hausser, 2018).

While there may be differences in training and treatment practices based on the country that naturopathy is practised in, research has shown that the philosophy which underpins this system of medicine and the principles which guide treatment practices in naturopathy is the same in all the 30 countries where the research was conducted (World Naturopathic Federation, 2016). The six core principles of naturopathy which guide naturopathic practice is based on the philosophy of vitalism and wholism taught and practiced by naturopaths globally (World Naturopathic Federation, 2016). These core principles, as mentioned in the first chapter, are first do no harm, the healing power of nature, treat the cause, treat the whole person, the naturopathic doctor as teacher, and disease prevention and health promotion (Pizzorno & Murray, 2006).

The last decade has seen the exponential growth of naturopathy globally and this has been accompanied by a growth in international organisations with the aim of uniting the global naturopathic community. The International Congress of Naturopathic Medicine (ICNM) hosted a congress in 2013 with the aim of bringing together experts in the field of naturopathic research and education in order to promote excellence in the field and encourage global co-operation between naturopathic institutions. Since then an international congress has been held annually with a focus on specific health issues which affects the global population. The 2019 theme was ‘Global patient care: Restoring health naturally’ (<http://icnmnaturopathy.eu/en/>). The World Naturopathic Federation (WNF) was formed in 2014 after a group of naturopaths met at the first ICNM congress and discussed the idea of an international body. The aims of the WNF are to support the international growth and diversity of naturopathy; to support the development of appropriate regulation for naturopathic medicine; to promote global accreditation for the naturopathic profession, establish a database of naturopathic organisation, to encourage

naturopathic research; and to work with the WHO, national governments and other agencies in order to promote the naturopathic profession (<http://worldnaturopathicfederation.org/mission-of-the-wnf/>). Up to now the WNF has produced the only research on the state of the global naturopathic profession in terms of numbers of practitioners, types of educational training programmes and the curriculum used as well as the global philosophical position underpinning the programmes used to train naturopaths. Since its inception membership of the WNF has grown with naturopathic organisations from thirty-three countries, on all continents being full members (<http://worldnaturopathicfederation.org/full-members/>).

9.3 Naturopathy and Complementary Medicine in South Africa

There is a correlation between the implementation of legislation which gradually eroded the practice of T&CM and the growth of allopathic medicine in South Africa. The impact of colonialism and apartheid served to curtail the growth of any forms of medicine that were different to the allopathic medical model.

The regulation of health practices was only introduced into the then Cape Colony in 1830 and by the mid-1800s hospitals had been established in the major centres. By 1883 the first Public Health Act was passed in response to a smallpox epidemic (Coovadia, Jewekes, Barron, Sanders & McIntyre., 2009). By 1946, an estimated ratio of 1: 2427 doctors existed with this ratio decreasing to 1:1721 in 1976. These numbers did not, however, take into account the rural areas and the former ‘homelands’ where it is estimated that the ratio was 1:22 000- 30 000 (Coovadia et al., 2009). Although traditional medicine (TM) has been practiced for thousands of years, the lack of medical practitioners and facilities in the nineteenth and early twentieth century allowed for T&CM to thrive in South Africa (Mothibe & Sibane, 2019; Prinsloo, n.d.) – especially in the rural areas (Prinsloo, n.d). Complementary medicine (CM) in the form of homeopathy was introduced into South Africa in the 1800s (Gouwer, 2013). After the Second

World War there was an increase in homeopaths, naturopaths and herbalists emigrating from Europe to South Africa (Pretorius, 2010). There was a demand for their services, especially in the rural areas which was underserved by allopathic doctors.

Although there was initial resistance to training black doctors (Phatlane, 2006), in 1941 black medical students were allowed into the medical programme at the university of Witwatersrand, followed shortly afterwards by the University of Cape Town (Mayosi, 2015). In 1952 the first segregated medical school for black students was opened in Natal (Coovadia et al., 2009) and in 1953 the Medical Association of South Africa declared alternative therapies illegal and unscientific and co-operation between allopathic medical practitioners and traditional and complementary medicine (T&CM) practitioners was prohibited in their medical codes (Hassiem, Haywood & Berger, 2007). The suppression of T&CM continued with the passing of the Witchcraft Suppression Act of 1957 and the Witchcraft Suppression Act in 1970 was followed by the Homeopaths, Naturopaths, Osteopaths and Herbalists Act 52 of 1974.

The counterculture of the 1960s to the early 1970s created an environment which allowed the 'alternative' movement to grow and spread - and this included the growth of CM (Baer, 2001). South Africa also experienced the increase in CM during these years and this period could be considered the 'golden' years of CM in South Africa. The passing of the Homeopaths, Naturopaths, Osteopaths and Herbalists Act 52 of 1974 brought an abrupt halt to the growth of the CM movement through the enforcement of registration and closing of training facilities. Although no accurate records could be found to determine the exact number of practitioners who were trained at the time, some of the participants in this research estimate the number to run into the thousands.

The history of naturopathy in South Africa has not been recorded prior to this research. This research has found that the history of naturopathy is intertwined with the history of CM until

the introduction of legislation in 1974. Prior to the introduction of legislation, the training of naturopaths covered a broad range of treatment modalities. These practitioners continued to use a wide range of treatment modalities in practice which overlapped with other CM professions. Naturopaths who were excluded from registration formed the South African Naturopathic Association in the early 1990's (Caldis, McLeod & Smith, 2001). They identified themselves as naturopaths and embarked on a campaign for recognition, the right to be registered and trained as naturopaths. As a direct result of the continued activism by naturopaths and other non-registered CM practitioners, the legislation was changed, resulting in legal recognition of the profession. This was a time of huge optimism for the non-registered tCM sector as it saw the legitimisation of these CM diagnostic professions through the opening of the registers for acupuncture, Ayurveda, naturopathy, osteopathy and phytotherapy as the start of a period of growth for these professions (Caldis, McLeod & Smith, 2001). While the change to a democratically elected government in South Africa made a change in legislation for T&CM possible, there is still legislation that needs to be repealed to allow for the integration of the allopathic and alternative forms of medicine.

9.4 A model for the training of naturopaths in South Africa

Different stages in developing the model were implemented in this research study. The model has been developed based on the findings on the first four stages. These findings indicate the manner in which the different stages are linked to each other. This was best expressed by using an ecological systems model since it assumes that there are multiple levels of influence in each system which are interactive, reinforce and influence each other (Goldin & Earp, 2012). The four different stages used in this research met the objective of the research but also uncovered other aspects which had not been anticipated.

9.4.1 A historical account of naturopathy in South Africa

Chiropractic, herbalism, homeopathy, naturopathy and osteopathy are the oldest CM professions in South Africa. These professions were unregulated and rapidly growing; but with the introduction of legislation they became highly regulated and growth slowed - and for naturopathy came to a halt. In understanding the history of CM one needs to understand the effect the enactment of various legislation had on CM - and currently still controls the training and practice of the recognised CM professions.

It was found that the history of naturopathy cannot be separated from the history and development of CM in the country until 1971 when the Chiropractors Act 76 of 1971 No. 1175 was passed, thereby forcing chiropractors to register. This was followed by the Homeopaths, Naturopaths, Osteopaths and Herbalists Act 52 of 1974 No. 4441 which forced these professions to register (see Appendix E for an example of the application form for registration).

It was found that the majority of practitioners chose to register in multiple disciplines with the majority choosing to register in homeopathy and naturopathy. The Minister of Health appointed an official from the Department of Health to keep a list of the names of those registered. This official worked with the South African Homeopathy Association as it was recognised as the association that would make recommendations as to who could be registered. The association was allowed to make rules, with the permission of the minister, as to the conditions which would allow practitioners' names to appear on the list and being listed, a practitioner was allowed to practice (Act 52 section 4(a)). See Appendix F for an example of the registration certificate issued. This situation potentially lent itself to corruption as it gave the power to decide who could be issued with a certificate to register in the CM professions to one group of CM professionals. Some of the participants interviewed made reference to the unfair manner in which registrations were handled. It also began to divide the CM professions as it gave power to one CM profession. The chiropractic profession had been lobbying the minister of

health and in 1980 had a meeting with the then minister of health, Dr Lapa Munnik, who in 1981 requested the South African Medical and Dental Council to take the professions of chiropractic and homeopathy ‘under its wings’ (<https://www.chiropractic.co.za/history-of-chiropractic/>, n.d.).

The passing of the Associated Health Service Professions Act 63 of 1982 allowed for the formation of the South African Associated Health Service Professions Board and subsequently the development of the SOP for the four CM professions which appear to favour the chiropractic and homeopathy professions

In the Act, the professions of chiropractic and homeopathy were granted the right to decide who would serve on the board. In chapter 1 of the Act it stated:

5. (1) The board shall consist of not less than 12 and not more than 15 members appointed by the Minister, of whom, subject to the provisions of subsection (3)

(a) one shall be an officer of the Department of Health and Welfare;

(b) five shall be practitioners whose names appear on a list of names of at least 15 practitioners, submitted by the Chiropractic Association of South Africa;

(c) five shall be practitioners whose names appear on a list of names of at least 15 practitioners, submitted by the South African Homoeopathic Association.

Dr W. J. van der Veen, a homeopath, became the first chairperson of the board. Although there have been claims by various participants in this study that Dr Van den Veen was specifically appointed by the state and he vigorously pursued CM practitioners selectively, no corroborating evidence could be found to directly support this claim although subsequent legislation favoured these two groups of professions to the detriment of the herbalism, naturopathy and osteopathy, a situation that continued until a democratic government was elected in 1994.

By 1984 the South African Associated Health Service Professions Board worked in collaboration with the health department on developing further regulations and the Chiropractic

Association of South Africa was unofficially informed in the same year that the legislation would be amended in 1985 to allow for the re-opening of registers ‘so that new chiropractors can start to practice, and that provision will be made to establish educational facilities’ (<https://chiropractic.co.za/history-of-chiropractic>, n.d).

According to Gower (2013), in 1984 the Human Science Research Council (HSRC) conducted a national survey on the public’s knowledge and interest in the five CM profession. It found that there was not much knowledge and demand for herbalism, naturopathy and osteopathy. It also found that the chiropractic course included elements of osteopathy and homeopathy included elements of herbalism and naturopathy – thus recognising the only ‘viable’ professions to be chiropractic and homeopathy. This finding does not reflect an understanding of the nature of the training which took place at the time and evidence suggest that there were more homeopaths with dual registration after the passing of Act 52 of 1974 than homeopaths with a single registration (Ericksen-Pereira, Roman & Swart, 2018). Given the political dynamics of the time, it appears to have been more beneficial to be registered as a homeopath than as a naturopath.

This research has found that historically practitioners were monitored to ensure that they abided by the law. If found to have practised without being registered they were dealt with in a heavy handed manner which resulted in older naturopaths becoming disenchanted and distrustful of the regulatory body. This research also found evidence to support accusations of selective and preferential deviation in implementing the regulations by members of the Professions Board. To illustrate this, the document search found documents which showed that some practitioners were registered as naturopaths after the closing of the registers in 1983 while others did not even produce certificates as evidence of their training (see Appendix G). Some practitioners who had indicated that they had studied at the Brantridge Forest College were allowed to register in 1982 and in 2001 allowed to sit the Council regulated exam (CRE) once they

produced evidence of their qualifications - even though the qualifications had been deemed unacceptable to the Council (Appendix H).

Overall, the document search indicated that there were many naturopaths who were registered with little or no evidence of the training they had received. The training of naturopaths only reopened after the passing of regulation 127 of 2001, yet there is documentary evidence of illegal colleges having been operating in South Africa prior to this (see Appendix H). This opened the regulating body up to allegations of corruption. A report published in 2006 supports this finding (Health e-news, 2006).

The passing of the Associated Health Service Professions Amendment Act 105 of 1985, Government Gazette No.9867 created further division in the CM arena as this legislation paved the way for the training of chiropractors and homeopaths. The results of the implementation of this Act are still evident today as the number of registered chiropractors and homeopaths are the majority group of practitioners registered with the AHPCSA. Through the use of legislation two CM professions were advanced at the expense of the rest. This Act, coupled with accusations of corruption and mismanagement eventually led to the formation of the Confederation of Complementary Health Associations of South Africa (COCHASA) which lobbied the health minister to launch an investigation into the council and eventually lead to the register being opened.

Even though all naturopaths agreed upon the importance of being registered, there was in general little positive that was said by all participants about the regulatory body. The older participants were suspicious of the motives of the body and the role that they played in regulating CM. Many of the older naturopaths reported incidents which involved themselves or their colleagues that speak of a draconian period in which only certain groups benefitted. As a result of the manner in which the council had operated in the past, its reputation has been

tainted to such an extent that many practitioners still do not trust the AHPCSA. There still persists much bitterness and distrust of the regulating body. Given the history of CM in South Africa, this attitude may be justified but it may impede the function of the body – to protect the public. The younger naturopathic participants did not see the purpose of the AHPCSA, other than it being the body with which they had to register. This latter group of naturopaths were of the opinion that the regulations which govern CM and the AHPCSA – as the body which implements the regulations – contributed to restricting the growth of the profession. The history of the manner in which the regulatory body operated which has resulted in suspicion and distrust of the regulatory body - perhaps suggests that there needs to be some oversight of the regulatory body.

Stage one not only revealed the history of the development of naturopathy but also revealed a complex history of CM where legislation was used to slowly erode the number of CM practitioners under the banner of regulation. The findings suggest that it was not only legislation which negatively impacted on the growth of some CM professions, but also the manner in which some members of the early council implemented the legislation, for this placed a cloud over the qualifications of the early naturopaths

9.4.2 An exploration of the effect of legislation on the treatment practices and role of naturopaths

Naturopathic training in South Africa started in the late 1950s and gained momentum to such an extent that there are claims of hundreds of naturopaths having been trained at various training schools and colleges as well as privately through a system of mentorship. Some of the practitioners had completed all the requirements set by legislation and had managed to obtain registration and maintain it despite changes in this legislation over the years. These practitioners were trained in a different time period and there is almost a 40-year gap in training

between the more experienced naturopaths and the graduates of the tertiary training programme. Given this huge gap in experience and level of training, this stage of the research revealed that, despite the differences in age, practice experience and training, all naturopaths shared four common treatment practices and a vision for the future role of naturopathy in the country. This is not unique to South Africa as research by the WNF (2016) found that these treatment practices are taught globally. However, the treatment practices used by the tertiary-trained naturopaths in South Africa are very limited and do not address the full range of treatment practices in the SOP. This can have a limiting effect when in practice as it will result in the naturopaths having a smaller range of treatments to offer patients.

All the participants cited various aspects of the naturopathic philosophical principles (Bradley, 2006) in defining naturopathy and, consequently, also their identity as a naturopath, although this definition was more in relation to what naturopaths do and how they practice. This is in keeping with what has been found with naturopaths globally (World Naturopathic Federation, 2015).

Naturopaths globally now define themselves as primary healthcare practitioners (Wardle & Adams, 2013) and it was found that the participants see a much larger role for naturopathy within the public healthcare system as they were all of the view that the training of naturopaths make them ideally suited to address the current health challenges of society. South Africa is not, however, unique in having naturopathy operating within the private healthcare system. Globally, naturopaths are not part of publically funded healthcare institutions (World Naturopathic Federation, 2017). The legislation which governs naturopathy affects all aspects of the training and practice of the profession and it is only with legislative changes that naturopaths can begin to work in integrative practices with other allopathic medical practitioners. This study has found that, while the introduction of legislation can be beneficial to naturopathy and the broader CM profession and the public in general, it can also have

inhibitory effects – especially when it limits the growth of a profession, or, as in the 1980's, discriminated against some professions while benefitting others.

9.4.3 A review of the scope of practice and the minimum competencies using a modified Delphi method

A modified Delphi process was used in this stage to review the SOP and minimum competencies to ensure that naturopaths who graduate are competent to practice in the South African healthcare system. Through the course of the Delphi process the differences in the differently trained naturopaths became more obvious and were related to an understanding of the legislation. A review of all the documents revealed that the SOP as established in Act 63 of 1982 is aligned with that benchmarked by the WHO (2010). It is in the wording used that the shortcomings of the SOP become evident. It was found to be unclear and open to different interpretations. This presents a problem as any different interpretations could lead to legal challenges from the AHPCSA who may have a different interpretation of the SOP. Further problems could arise with the training of naturopathic students as some treatment practices are not clearly specified. A case in point is the lack of definition of the term phytotherapy. In the SOP the word 'remedies' is used. There are many definitions of the term 'remedies'. It is only when legislation R127 of 2001 is read that it requires naturopaths to be trained in the 'major subject of phytotherapy' (5A X) that some of the remedies become clearer. Thus there is a need for the SOP to be re-evaluated, reworded and the legislation changed so that there is clarity as to what the treatment practices in the SOP are and the limits within which a practitioner may legally practice. Since the SOP is the product of legislation and determines the curriculum that is taught, it impacts on naturopathic practice and training.

After all the legal documentation of the AHPCSA was examined it was concluded that there are no minimum competencies that exist for the training of naturopaths in South Africa. Once

this was established a set of minimum competencies was developed using the core competencies of the Association of Accredited Naturopathic Medical Colleges (AANMC) 'for the graduating student's document. Agreement was reached through a process of discussion and consensus on the minimum competencies for the training of naturopathic students. Minimum competencies help to guide the training students - but more importantly, help to define the knowledge, skills abilities and attributes that are necessary to be a competent practitioner (Battel-Kirk, Barry, Taub & Lysob, 2009).

Core competencies can be defined as the successful demonstration of sufficient knowledge, skills, communication and attitudes to enable the performance of actions and specific tasks within a particular setting (WHO, 2011). The curriculum outcomes are guided by the minimum competencies. The AHPCSA does not have any minimum competencies document. This raises the question as to how training institutions determine the level of competency needed to educate students without the guidance of a legally prescribed set of minimum competencies. It is the responsibility of the regulatory body, in this case the AHPCSA, to provide and it is a shortcoming that needs to be addressed as legally the regulatory body approves the training programme of an institution. The lack of an accepted set of minimum competencies affects the further development and professionalisation of the naturopathic profession. This research developed a proposed set of minimum competencies for naturopathic training which could be critically discussed and evaluated by the tertiary training institution and the AHPCSA and used as a starting point to develop a legal set of minimum competencies for the naturopathic profession as these are at the core of training. It is determined by legislation, the SOP and the curriculum.

9.4.4 A comparative analysis and evaluation of the naturopathic curriculum

There were several areas which need to be addressed within the curriculum to ensure that all aspects of the SOP are taught. While the SOP guides the curriculum, it is much broader as it consists of both formal and informal components through which students are able to acquire the necessary knowledge, understanding, skills, attitudes, and values needed for competency in the profession (Rosenau, 2015). The curriculum flows from, and is guided by, the SOP.

In order to determine whether the curriculum is adequate to meet the SOP and minimum competencies required of a naturopathic graduate, it was reviewed in the fourth stage of research. Document analysis found that the current curriculum used for the training of naturopathic students compares well with that of naturopaths internationally (World Naturopathic Federation, 2016) and exceeds the minimum requirements set by the WHO (2010). However, this comparative analysis only looked at the subjects in the curriculum and did not consist of an in-depth analysis of the content of the subjects. The findings from the curriculum evaluation also suggest that there is a need to evaluate the teaching and learning component as well as the curriculum since it does not help if one part of the curriculum meets international standards but the content of the curriculum is inadequate to address the learning outcomes expected of the course and the quality of teaching and learning does not enable the development of the knowledge and skills required of the curriculum. Students' expectations of the course, their needs and specific learning styles, all impact on the learning situation (Hassel & Ridout, 2018). Hall (2014) suggests that an ongoing evaluation of the curriculum, its learning objectives and content is necessary in order to ensure that it remains relevant and responsive to practice needs.

There is a vast difference between the current curriculum and the original one proposed (see Appendix I). From the input received from the graduates and looking at this original curriculum

document, a review and re-structuring of the curriculum is necessary to ensure that the naturopathic subjects are taught in greater detail over a longer period of time to ensure a sound theoretical base for training. This is, in fact, what the original proposed curriculum suggested. Findings from this stage suggest that there is a need for the training institution and the regulatory body to work together in order to develop a more detailed curriculum to guide the training of naturopathic students. This is a complex process that will require a fresh perspective on the training of naturopaths informed by the societal changes that place different expectations and demands on the naturopathic practitioner (Iwasiw & Goldberg, 2015). However, it does provide an exciting opportunity to re-envision the way in which naturopaths are trained so that they will be more prepared to work within an integrated healthcare setting.

9.4.5 The contribution of the model

There is a global drive by naturopaths to be included into the public healthcare system. It is estimated that every year 41 million people die globally of NCDs with 15 million of these being deaths occurring in the 30 to 69-year-old age group, with the main causes of death being due to cardiovascular, diabetes, respiratory, cancer and mental health (WHO, 2019b). The effect of lifestyle on NCDs – especially cardiovascular disease, diabetes and certain types of cancers has been well documented. Behavioural risk factors which include unhealthy diet, lack of physical activity, harmful use of alcohol and tobacco are amongst the drivers of NCD (Tabish, 2017). Naturopaths practice lifestyle medicine which addresses the underlying causes of NCDs with the goal of preventing the development of chronic disease caused by lifestyle – this is one of the principles which guide naturopathic practice (Herman et al., 2014). Given the high rate of NCDs globally, naturopaths are ideally placed to contribute to addressing this challenge as part of the public healthcare system.

The WHO (2019a) recognised T&CM as part of any country's health system and sees it as a resource to be integrated into the public healthcare system as part of the drive to achieve UHC, particularly since as the global uptake of T&CM is steadily increasing. Integrating T&CM into the public healthcare system creates a people-centred approach to healthcare based on the needs of the patient and can ensure safe, affordable and timely access to healthcare for all (WHO, 2016). The potential for inclusion into the public healthcare system in South Africa exists as CM has been included in the NHI system as part of the drive to provide UHC for all citizens (Presidential Health Summit, 2019). While it is seen as being beneficial to the population to integrate the different systems of health, integration has to be structured in a way that allows the different systems of medicine to retain their unique philosophy of health and healing as well as the different approaches to patient consultation and treatment. This has to be done in a manner which does not impose a hierarchical system whereby the currently dominant biomedical system of medicine determines how the integration will take place. Currently, there is a lack of framework guidance on the measures that needs to be put into place to ensure that T&CM practitioners are sufficiently competent to fully participate within a country's UHC system. The WHO (2013, 2019) has provided recommendations on the various structures that need to be put into place to ensure integration – however, there is a no model which provides a systematic way of ensuring that the forms of CM introduced into the public healthcare is adequate to meet the challenges of public healthcare.

A model can serve as a framework to guide education and training (Kuss, Proulx-Girouard, Lovitt., Katz, & Kennelly, 1997). Through the research conducted in this study, a theoretical model for the training of naturopaths in South Arica was developed. This model was guided by a socio-ecological-systems approach as it recognises the complexity of healthcare systems and adopts a wholistic, integrative approach when looking at public healthcare (Stokels, 1996). The systems approach is also well-suited to naturopathy as it treats patients in a wholistic manner,

taking into consideration the effects of different systems such as the social, physical environment on the patient, past and present medical history, lifestyle, mental – emotional status as some of the factors to be considered when diagnosing and treating. Optimum functioning of a healthcare system requires all its components to be integrated into the system and act in concert with each other to provide the best outcomes for individuals and communities (Sturmberg & Lanham, 2014).

Drawing on research conducted in this study, the model provides the guidelines to structure the training of CM practitioners in a manner which will allow for competent graduates to participate in the broader healthcare system, bearing in mind the complexity of the public health system. This model proposes a framework for training naturopaths to ensure that naturopathic graduates will be competent to practice within a public healthcare system.

The foundation for the model is the legislation which regulates CM in a country. The WHO in 2013 called for the introduction of legislation to regulate CM. This study found that the effect of legislation on CM in South Africa impacts on all aspects of training and practice of naturopaths. The legislation provides a foundation for the development of the SOP. A SOP is important for all professions as it determines the range of practice which may be used (Schuiling & Slager, 2000). It provides the framework within which a practitioner may practice. While this study found the SOP to be benchmarked to international standards, it is nevertheless, important that the SOP be clearly and unambiguously codified as it could otherwise be open to misinterpretations which could undermine the legislation that controls the profession. The SOP is determined by legislation and this guides the curriculum.

The curriculum used in a training programme is important as it is not only a reflection of the institution of higher education that offers it, but of the student it will produce – a relevant curriculum will produce a student who is engaged with its content (Van Dijk, 2013). In this

study the curriculum was benchmarked in order to establish whether it measures up to international standards. Reviewing a programme through benchmarking is also means of evaluating it to ensure it remains relevant (Ellibee & Mason, 1997; Tasopoulou & Tsiotras, 2017) to the changing healthcare needs of the country and the programme trains students to develop the competencies needed to address those needs.

Developing a set of minimum competencies is core to the training of naturopaths as it provides the structure for the curriculum. A set of defined competencies guides the development of standards and systems of quality assurance and professionalism (Battel-Kirk et al., 2009). This development is based on the legislation, the SOP and the curriculum. It provides the guidelines for training and also ensures that the graduating student has developed the knowledge, skills, attitude and abilities necessary to practice as a healthcare practitioner within the public healthcare system (Jonsdottir et al., 2011).

This model is flexible and takes into consideration the changing healthcare landscape - and as legislation changes, the other components of the model can be adapted to meet the demands and so ensure that naturopathy training remains responsive and relevant. As there is a paucity of research on the education of naturopaths (Gray, Steel & Adams, 2019), this model provides a framework which can be adapted to other CM professions in South Africa as well as other countries in Africa where naturopathy is still a fairly new form of CM.

9.5 Study limitations

9.5.1 Sampling size

There are few registered naturopaths in South Africa and as a result the pool of possible participants in the survey was limited – there were 78 registered naturopaths in South Africa (AHPCSA, 2018). It can be seen from registration numbers that close to half of the registered

naturopaths were registered prior to the passing of Regulation 127 of 2001. Naturopaths are located all over South Africa, with 45 in the Western Cape Province.

9.5.2 Historical memory

Due to the lack of documents detailing the history of naturopathy in South Africa, the researcher had to rely on oral history as told by participants in the study. The number of participants varied in the different stages of this research, with the largest number of participants responding when they could submit their responses electronically. Although there were some participants who were willing to participate whenever they were approached, the majority of the older naturopaths were not willing to participate in the research. Upon investigating it became clear that the introduction of legislation heralded a dark period in the history of CM in South Africa. CM practitioners who trained or practised in that era were left deeply suspicious of anyone enquiring into their practice. A participant who was interviewed had been arrested and charged for practising illegally in the 1970s and more than 40 years later was still very fearful of identification, insisting that the interview not be recorded. This unwillingness of older naturopaths to divulge any information about their activities during that period can be understood as they still carry the suspicion, trauma and emotional scars of that period. The recreation of in-depth history of events that took place in that period is challenging, since many of the older practitioners have died, the memory of others is not as acute as it was before, and those who are willing to talk, share selected information. Triangulating information also proved to be a challenge and, as a result, any data gathered which could not be corroborated by another, independent source had to be discarded.

9.5.3 Confidentiality concerns

All the naturopaths who participated were generally concerned that their identity be kept anonymous for they did not want either the AHPCSA or former students in the training

programme to know what they had said since the naturopathic community in the Western Cape is a very small, closed community. For this reason, all measures were taken to protect the identity of the participants. This constraint did, however, affect the research process when in certain instances, data that would clearly have revealed the identity of the participant to anyone who is involved in the registered CM community, had to be left out or presented more generally so that the identity of the participants were protected.

9.5.4 Limited complementary medicine educational research

Peer-reviewed research into the field of naturopathy is growing (Steel, Bradley & Wardle, 2019) and there is a small but growing pool of researchers conducting research in various aspects of naturopathy internationally. There is, however, limited research available on the education (Gray, Steel & Adams, 2019) and treatment practices of naturopaths. The WNF has lead the field of research in this area and this researcher has drawn quite heavily on the research generated by this organisation and the various researchers associated with it.

This has meant that in reviewing literature the researcher has had a limited number of peer-reviewed research papers to draw from specifically in the field of education in naturopathy and therefore had to use research from other professions. Although this could be seen as a limitation, it did serve to broaden the scope of research beyond the field of CM and enriched the research. Research in the field of CM in South Africa on the whole is limited and research has not been conducted into the field of naturopathy. Available research tends to focus on the usage and effects of herbs, not on the education of CM professions – possibly because there is a larger pool of journals to publish the research in.

9.6 Recommendations for future research

The aim of the research was to develop a model for the training of naturopaths so that they would be competent to practice within the public healthcare system. The following recommendations are made following a reflection on the findings of the research.

9.6.1 Implications for practice

Findings from this research has shown that the legislation established between 1982 and 2001 lacks clarity in respect of the definitions in the SOP. For example, the exact parameters of a specific treatment practice are not stipulated in any of the legislation. This leaves the door open for naturopaths to practice a wide range of different therapies within one treatment practice. To illustrate: although electrotherapy is one of the treatment therapies in the SOP, there is no definition of what this therapy is and what forms of electrotherapy are allowed. Electrotherapy is defined as the ‘application of low-level electrical current to the peripheral nervous and musculoskeletal systems’ (<https://www.sciencedirect.com/topics/medicine-and-dentistry/electrotherapy/pdf>). There are different forms of electrotherapies, each with its specific frequencies and waveforms which produce specific effects on the body. Some of the more commonly used forms are the transcutaneous electrical nerve stimulators (TENS), percutaneous electrical nerve stimulation (PENS), electrical muscle stimulation (EMS), interferential current (IFC), pulsed electromagnetic field therapy (PEMF) and galvanic stimulation (GS) (<https://www.spine-health.com/treatment/pain-management/howelectrotherapy-works-ease-pain>). Without minimum guidelines for training this therapy could pose a risk to the health of the public.

This is one example of the treatment practices which lack clear definition and minimum requirements for competency. The AHPCSA needs to develop appropriate guidelines which

clearly define each treatment practice in the SOP and the minimum competency required in order to practice.

There is no legal documentation to guide and inform the public clearly of the level of training competency expected from a naturopathic practitioner. The duty to provide this information resides with the legislative body, the AHPCSA, whose primary goal is to protect the public. The lack of these crucial documents ultimately affects the credibility of training of naturopaths in general as there are many unregistered CM practitioners who practise as naturopaths without any recognised qualifications.

9.6.2 Implications for education

Having established that there is a lack of clarity on the definitions used in the legal SOP, this research also found that the curriculum prescribed by Regulation 127 of 2001 is inadequate for it does not provide sufficient detail on its content. This, coupled with the lack of minimum competencies and clarity of definition of the SOP to guide the training in the naturopathic programme, has negative implications for the training of naturopaths. With no clear guiding documents, the curriculum content is left to the discretion of the naturopathic educators. From the input received from the graduate review, there is a clear need to redesign a curriculum which is informed and guided by clear legislation and by internationally benchmarked curricula adapted to the South African context, is evidence based, and meets the requirements of the healthcare system and the needs of the patient.

9.6.3 Implications for research

This study has found that further research into the following areas need to be conducted in pursuing the goal of training competent naturopaths who can participate in the NHI system. The areas for further research suggested below were not within the scope of this research - however, as a result of this research it has emerged as further areas to explore.

An in-depth exploration of the history of CM in South Africa needs to be conducted. The individual stories of practitioners at that time need to be recorded since this is a vital part of such a history that is being lost. Through the research conducted in this thesis it has become clear that there was no clear differentiation between the different professions in the early years of CM. Training at the time was diverse and, as a result, practitioners used a wide variety of treatment practices. Participants report CM practitioners being very busy providing healthcare services to both urban and rural areas in the period of the 1950's - 1970's. The contribution of CM practitioners to healthcare, especially in the rural areas during the apartheid era, needs to be documented so that the contribution of CM to the health system in South Africa can be recognised.

In developing a historical account of naturopathy in South Africa, the roots of the inter-professional tensions was also uncovered. Although CM is often thought as a homogenous entity, this research found that the manner in which legislation was introduced and implemented, clearly had an impact on the professions. Hierarchical ranking is present in the CM sphere as much as it is in the biomedical sphere (Saks, 2014). This unspoken ranking of professions is further exacerbated by gender, culture and race (Saks, 2014). In CM in South Africa chiropractic and homeopathy have historically been supported by state legislations which has placed them higher up the hierarchy than the rest of the registered CM professions. The impact of this on CM practice merits further research.

A comparative analysis of the curriculum was conducted. However, further in-depth research needs to be conducted into the curriculum content to establish whether it is benchmarked to international standards. Since this research has established that the SOP, curriculum, treatment practices and professional identity of naturopaths is comparable to the global naturopathic community, it is necessary to ensure that the curriculum content and teaching thereof meets this standard as well, since the curriculum taught impacts on the competency of the graduate.

This research found that the roots of the separation of biomedical practitioners and CM practitioners lie in the 1953 decision by the Medical Council and continues to be legislated today. The widespread use of CM globally has long been recognised by the WHO (2013; 2019a) and the South African government is beginning to acknowledge this as well (Presidential Health Summit, 2019). While this research has looked at the training of naturopaths, further research needs to be undertaken to explore ways in which naturopathy can be integrated into the NHI and the legislation which prevents naturopaths and other CM practitioners from practising in the public healthcare system needs to be repealed. Through further research exploring the public utilization of naturopathy, public perception of naturopathy and the reasons why people seek out the services of a naturopath would provide insight into how naturopaths sit in the broader health sector. This information could also assist in guiding curriculum development for the training of naturopaths and ensure that the curriculum remains relevant.

Follow-up research on the implementation of the model should be undertaken after a five- year period as this will determine whether the model proposed for the training of naturopaths has been successfully taken up by the relevant bodies and implemented within the training institution.

9.7 Conclusion

This chapter described the outcomes of the study based on the objectives set for the study. The findings of each stage in the study contributed to the development of the model. With the increase in an uptake of CM in South Africa and the more recent inclusion of CM into the proposed NHI, guidelines need to be developed to ensure that the various forms of CM included into the NHI is compliant with legislative requirements for the education and training of practitioners to ensure competency. This study has developed a model for training in

naturopathy, one of the oldest forms of CM in South Africa, it provides a template for the regulatory body and the training institution to guide the education of naturopaths to ensure that they are competent to practice within the proposed NHI system. While this model was developed for naturopathy, it can also be used as a template to guide the training of all other forms of registered CM in South Africa. On a global level there is a lack of research on the education of naturopaths and this research contributes to this field by proposing a model that could be used for training naturopaths to ensure that they have the necessary competencies to participate in the broader public healthcare system as advocated by the WHO.

9.8 References

- Allied Health Professions Council. Retrieved September 25, 2018 from https://ahpcsa.co.za/wp-content/uploads/2018/09/NATUROPATHY_SEP_2018.pdf.
- Baer, H. (2001). The socio-political status of US naturopathy at the dawn of the 21st century. *Medical Anthropology Quarterly*, 15(3), 329-346.
- Battel-Kirk, B., Barry, M.M., Taub, A. & Lysob L. (2009). A review of the international literature on health promotion competencies: identifying frameworks and core competencies. *Global Health Promotion* 16(2).
- Bradley R. S. (2006). Philosophy of naturopathic medicine. In J.E. Pizzorno & M.T. Murray (Eds.), *Textbook of natural medicine*. Vol 1, 3rd ed. St Louis Missouri, Churchill Livingstone Elsevier.
- Caldis, K.S., McLeod, H.D. & Smith, P.R. (2001). The fall of the bamboo curtain: A review of complementary medicine in South Africa. *SA Actuarial Journal*, 1; 63-93.
- Chiropractic Association of South Africa. (n.d.) *History of chiropractic*. Retrieved August 1, 2020, from <https://chiropractic.co.za/history-of-chiropractic>.
- Coovadia, H., Jewekes, R., Barron, P., Sanders D. & McIntyre D. (2009). The health and health systems of South Africa: historical roots of current public health challenges. *The Lancet*. 374.
- Electrotherapy definition*. Retrieved February 14, 2020, from <https://www.sciencedirect.com/topics/medicine-and-dentistry/electrotherapy/pdf>.
- Ellibee, M.A & Mason, S.A. (1997). Benchmarking for quality curriculum: The heart of school-to-work. *New Directions for Community Colleges*, 97, 15-21.

- Gray, A., Steel, A. & Adams, J. (2019). A critical integrative review of complementary medicine education research: Key issues and empirical gaps. *Biomed Central Complementary and Alternative Medicine* 19(73).
- Goldin, S.D. & Earp, J.L. (2012). Socio-ecological approaches to individuals and their contexts: Twenty years of health education and behaviour: Health promotion interventions. *Health Education and Behaviour*, 39(3), 364-372.
- Gower, N. (2013). *Homeopathy in South Africa: Homeopathy papers past and present*. Retrieved July 25, 2017, from <http://hpathy.com>.
- Hall, C. (2014). Toward a model of curriculum analysis and evaluation: A case study from Australia. *Nurse Education Today*, 34, 343-348
- Hassel, S. & Ridout, N. (2018). An investigation of first-year students' and lecturers' expectations of university education. *Frontiers in Psychology*, 8.
- Hassiem, A., Haywood, M. & Berger, J. (2007). *Health and democracy: A guide to human rights, health law and policy in post-apartheid South Africa*. Cape Town: Siber Ink.
- Hausser, T. (2018). Update on naturopathy in Europe: From its roots to global modern practice, *Naturopathic Doctor News and Reviews*. February. Retrieved April 4, 2019, from http://worldnaturopathicfederation.org/wp-content/uploads/2018/04/NDNR_February2018.pdf.
- Health E-News* (2006). New scandal hits alternative health council. 8 May 2006. Retrieved September 29, 2018, from <https://www.health-e.org.za/2006/05/08/new-scandal-hits-alternative-health-council/>.

Herman, P., Szcyrko, O., Cooley, K. & Seeley, D. (2014). A naturopathic approach to the prevention of cardiovascular disease: cost effective analysis of a pragmatic multi-worksite randomized clinical trial. *Journal of Occupational Environmental Health*, 56(2).

International Congress of Naturopathic Medicine. *Mission*. Retrieved October 21, 2019, from <http://icnmnaturopathy.eu/en/>.

Iwasiw, C. & Goldenberg, D. (2015). *Curriculum development in nursing education*, (2nd ed.). Burlington, Jones & Bartlett.

Jonsdottir, S., Hughes, R., Thordottir, I. & Yngve, A. (2011). Consensus on the competencies required for public health nutrition workforce development in Europe: The Jobnut Project. *Public Health Nutrition*, 14(8), 1439-49.

Kuss, T., Proulx-Girouard, L., Lovitt, S., Katz, C. & Kennelly, P. (1997). A public health nursing model. *Public Health Nursing*, 14(2), 81-91.

Mayosi, B. (2015). The first black doctors and their influence in South Africa. *South African Medical Journal*. 105(8), 635-636.

Mothibe, M. & Sibande, M. (2019). *African traditional Medicine: South African perspective*. Retrieved December 14, 2019, from <https://www.intechopen.com/books/traditional-and-complementary-medicine/african-traditional-medicine-south-african-perspective>.

Nair, P. M. K., & Nanda, A. (2014). Naturopathic medicine in India. *Focus on Alternative and Complementary Therapies*, 19(3), 140-147.

Phatlane, S.N. (2006). *Poverty, health and disease in the era of high apartheid: South Africa, 1948-1976*. Unpublished doctoral thesis. University of South Africa.

- Pizzorno, J. E. & Murray, M. T. (2006). *Textbook of natural medicine*. St Louis, Churchill Livingstone Elsevier.
- Presidential Health Summit Compact (2019). *Strengthening the South African health system towards an integrated and unified health system*. Retrieved April 22, 2020, from www.thepresidency.gov.za/download/file/fid/1650.
- Pretorius, E. (2010). Complementary/alternative and traditional healthcare in South Africa. In H.C.J. Van Rensburg (Ed.), *Health and healthcare in South Africa*. Pretoria, Van Schaik.
- Revord, J. (2017). How electrotherapy works to ease pain, *Spine Health*. Retrieved February 12, 2018, from <https://www.spine-health.com/treatment/pain-management/how-electrotherapy-works-ease-pain>.
- Rosenau, P., Watson, L., Vye-Rodgers, L. & Dobb, M. (2015). Educating for complexity in nursing practice: A baccalaureate curriculum innovation. *Quality Advancement in Nursing Education*, 1(3).
- Saks, M. (2014). Professions, marginality and inequalities. *Sociopedia.isa*, doi: 10.1177/205684601411
- Schuiling, K.D. & Slager, J. (2000). Scope of practice: Freedom within limits. *Journal of Midwifery and Women's Health*, 45(6).
- Steel, A., Bradley, R. & Wardle, J. (2019). Naturopathic research: prevalent, relevant, but largely hidden in plain sight. *Journal of Alternative and Complementary medicine*, 25(2), 123–124.

- Stokols, D. (1996). Translating socio ecological theory into guidelines for community health promotion. *American Journal of Health Promotion*, 10(4).
- Sturmberg, J. & Lanham, H.J. (2014). Understanding healthcare as a complex system: achieving best possible outcomes for individuals and communities by focussing on interdependencies. *Journal of Evaluation in Clinical Practice*, 20, 1005-1009.
- Tabish, S.A. (2017). Lifestyle diseases: Consequences, characteristics, causes and control. *Journal of Cardiology and Current Research*, 9(3), 00326.
- Tasopoulou, K. & Tsiotras, G. (2017). Benchmarking towards excellence in higher education. *Benchmarking: An International Journal*. 24(3), 617-634.
- Van Dijk, H.G. (2013). A theoretical understanding of student engagement in curriculum review and development. *Administratio Publica*, 21(1).
- Wardle, J. & Adams, J. (2013). Are CAM professions engaging in high-level health and medical research? Trends in publicly funded complementary medicine research grants in Australia. *Complementary Therapies Medicine*, 21, 746-749.
- World Health Organization. (2010). *Benchmarks for training in traditional/complementary and alternative medicine: Benchmarks for training in naturopathy*. Retrieved April 9, 2018, from <http://apps.who.int/medicinedocs/documents/s17553en/s17553en.pdf>.
- World Health Organization. (2011). *Core competencies in primary care*. Retrieved February 11, 2020, from https://apps.who.int/iris/bitstream/handle/10665/44507/9789241501002_eng.pdf;jsessionid=B52ABF7CD663D1A9DA1016FB6CA7D205?sequence=1.
- World Health Organization. (2013). *Traditional medicines strategy 2014–2023*. Retrieved December 9, 2016, from <http://apps.who.int/iris/bitstream/10665/92455/1/9789241506090eng.pdf>.

World Health Organization. (2016). *Strategizing national health in the 21st century*. Retrieved May 8, 2019, from <https://www.who.int/publications-detail/strategizing-national-health-in-the-21st-century-a-handbook>.

World Health Organization. (2019a). *Global report on traditional and complementary medicine*. Retrieved August 28, 2019, from <https://apps.who.int/iris/bitstream/handle/10665/312342/9789241515436-eng.pdf?ua=1>.

World Health Organization. (2019b). *WHO gets new advice on curbing deadly non-communicable diseases*. Retrieved June 3, 2020, from <https://www.who.int/news-room/detail/10-12-2019-who-gets-new-advice-on-curbing-deadly-noncommunicable-diseases>.

World Naturopathic Federation. (2015–2020). *The mission of the World Naturopathic Federation*. Retrieved October 21, 2019, from <http://worldnaturopathicfederation.org/mission-of-the-wnf/>.

World Naturopathic Federation. (2017). *Naturopathic roots report June 2016*. Retrieved May 9, 2019, from http://worldnaturopathicfederation.org/wp-content/uploads/2015/12/Naturopathic-Roots_final-1.pdf.

World Naturopathic Federation. *Full Members*. Retrieved April 28, 2020, from <http://worldnaturopathicfederation.org/full-m>

Appendix A



OFFICE OF THE DEAN DEPARTMENT OF RESEARCH DEVELOPMENT

14 January 2015

To Whom It May Concern

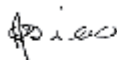
I hereby certify that the Senate Research Committee of the University of the Western Cape approved the methodology and ethics of the following research project by:
Mrs W Ericksen-Pereira (Social Work)

Research Project: A model for naturopathy within the South African healthcare system.

Registration no: 14/10/35

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.



*Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape*

Private Bag X17, Bellville 7535, South Africa
T: +27 21 959 2988/2948 . F: +27 21 959 3170
E: pjosias@uwc.ac.za
www.uwc.ac.za

A place of quality,
a place to grow, from hope
to action through knowledge

Appendix B

Information Sheet



Research Title: A model for naturopathy within the South African Healthcare system.

What is this study about?

This is a research project being conducted by Ms. Wendy Ericksen-Pereira who is registered at the University of the Western Cape. We are inviting you to participate in this research project because you are a registered practitioner and can make a valuable contribution to the research project. The purpose of this research project is to develop a model for naturopathy within the South African healthcare system.

What will I be asked to do if I agree to participate?

You will be asked to participate in an interview which will be conducted face-to-face or via electronic media such as Skype. The interview will take about 20 minutes. The interview questions will try to obtain information on the profession of naturopathy in South Africa, its history, development and practice as well as your perceptions on the role of naturopaths in the healthcare system.

Would my participation in this study be kept confidential?

Your personal information will be kept private and confidential. To help protect your confidentiality, your name will not be included on the questionnaires and other collected data. A coding system will be used on the questionnaires and other collected data. The researcher will be able to link your survey to your identity through the use of codes known by the researcher only. The information collected from you will be kept under lock and key cabinet

and only be accessible to the researcher. A password protected computer will be used to enter your data. If we write a report or article about this research project, your identity will be protected to the maximum extent possible.

What are the risks of this research?

You may experience minimal risks such as the interview taking some of your time and/or experience some discomfort from some of the questions during the interview process. Should you experience any discomfort please feel free to inform the researcher who will arrange for a referral to the counselling department of the university.

What are the benefits of this research?

This research is not designed to help you personally, but the results may help the investigator learn more about the development of naturopathy in South Africa as well as perceptions of practitioners in order to make suggestions for the revision of the scope of practice, minimum competencies and training of naturopaths in South Africa.

Do I have to participate in this research and may I stop at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. If you are negatively affected by participating in this study counselling will be provided to you at no cost.

What if I have questions?

This research is being conducted by Ms. Wendy Ericksen-Pereira in the Faculty of Community Health Sciences, Department of Social Work at the University of the Western Cape. If you have any questions about the research study itself, please contact the researcher:

Ms. Wendy Ericksen-Pereira
University of the Western Cape
Private Bag X17
Bellville 7535, South Africa.
Cell number: + 27 826633716
Email: gaiantmed@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Head of Programme: Professor Nicky Roman

University of the Western Cape

Department of Social Work

Private Bag X17

Bellville 7535, South Africa

Tel: +27219592970/2277

Cell: +27828776691

Email: nicoletteroman@gmail.com

Dean of the Faculty of Community Health Sciences: Professor José Frantz

University of the Western Cape

Private Bag X17

Bellville 7535, South Africa

Tel: +27219592631

Email: chs-deansoffice@uwc.ac.za

This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee.

Appendix C

Consent Form



Consent form

Title of research project: A model for naturopathy in the South African healthcare system

Name of researcher: Wendy Ericksen-Pereira

Student number: 9083095

Position: PhD Student in Child and Family Studies, University of the Western Cape

	Tick
I confirm that I fully understand the explanation that the researcher gave me about the above study, and have had a chance to ask questions. I have read and understood the information sheet.	
I understand that the aim of the study is to develop a model for naturopathy within the South African healthcare system.	
I understand that the findings from this study could contribute to the revision of the curriculum for the Naturopathy qualification at the University of the Western Cape.	
The researcher regards the proposed study to have minimal risk to the participants. The researcher also explained that I may receive counselling at no cost to myself, if I may experience any discomfort as a result of questions asked.	
I am fully aware that the information I will provide will remain confidential and that my personal details will not be made known.	
I understand that my participation is voluntary.	

I agree to take part in the above study in an interview (either one-on-one or electronically).	
I agree that the interview may be recorded.	

I agree that old letters, documents, minutes of meetings which I may have in my possession may be used in the study.	
--	--

.....

Participant's Name and Surname

Signature

Date

.....

Researcher's Name and Surname

Signature

Date

Appendix D

Focus Group Confidentiality Binding Form



UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-959 2760, Fax: 27 21-959 3683

FOCUS GROUP CONFIDENTIALITY BINDING FORM

Title of Research Project: 'A Model for Naturopathy for the South African Healthcare System

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits. I understand that confidentiality is dependent on participants' in the Focus Group maintaining confidentiality. I hereby agree to the following:

- I agree to uphold the confidentiality of the discussions in the focus group by not disclosing the identity of other participants or any aspects of their contributions to members outside of the group.
- I agree that I will not discuss the topics raised within the focus group with any members of the focus groups outside of the group.

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study supervisor:

Professor E. C. Swart

Deputy Dean of Teaching and Learning

Faculty of Community and Health Sciences

Private bag X17

Bellville

7535

Participant's name.....

Participant's signature.....

Date.....

Appendix E

Details of 2002 Application for Registration

Year of Registration	No registered	Year of completion of studies	College qualification was obtained at.
1980	1	1972	Naturopathic College of SA.
1982	22	1954, 1957,1958,1961, 1962, 1963, 1964,1967,1969,1970 (x2),1972,1973 (x2), 1974(x4), 1976, 1980	Lindlahr College, Canyon College , College of Natural Sciences, Naturopathic College of South Africa, Lindstrom, SA Faculty of Naturopathy and Osteopathy.
1983	6	1969, 1974, 1972,1974 (x2), 1975	Canyon College, College of SA, Lindlahr College, Naturopathic Association, SA Foundation of Natural Therapies/
1984	5	1967, 1972,1974	Lindlahr College, SA Faculty of Homeopathic Medicine.
1985	8	1965, 1972,1974	College of SA, Naturopathic Association of South Africa, SA Faculty of Homeopathic Medicine.
1987	1	1967	Lindlahr College
1990	2	1973, 1975	College of Natural Sciences, SA Institute of Homeopathy.
1993	1	1974	Canyon College.
1996	23	1957, 1971, 1973 (x2), 1974 (x7), 1976, 1982, 1989, 1993(X7)	African Herbal College, Bantridge Forest School, Transkei, Lindlahr College, SA Foundation of Natural Therapies, SA Homeopathic Association, World Correspondence College
1997	7	1973, 1974, 1995	College of Natural Therapy, College of Natural Science, Lindlahr College, Naturopathic College of SA.
1999	2	1978, 1981	Naturopathic College of South Africa, Bantridge Forest School.
2000	1	1972	Naturopathic College of South Africa.
2001	3	1973, 1991	Lindlahr College, South Africa, College of Herbalism

The number of registered naturopaths totalled 100. However, not all on the registration list recorded the year of completion of training or the institute at which the training was undertaken.

Appendix F

Application Form for Registration 1974

SUID-AFRIKAANSE HOMEOPATIESE VERENIGING
SOUTH-AFRICAN HOMOEOPATHIC ASSOCIATION

AANSOEK VIR REGISTRASIE INGEVOLGE WET NO. 52 VAN 1974
APPLICATION FOR REGISTRATION IN TERMS OF ACT NO. 52 OF 1974

(Voltooi in blokletters en maak 'n kruis in die toepaslike blokkies.)
(Complete in block letters and place a cross in the appropriate blocks.)

1. Moet deur alle aansoekers voltooi word.
To be completed by all applicants.

1.1 Familiennaam
Surname [REDACTED]

1.2 Voornaam/namie
First name/s [REDACTED]

1.3 Woonadres en telefoonnommer
Residential address and telephone number
[REDACTED] "GREEN TREES"

1.4 Professionele adres (nie 'n posbusnommer nie)
Professional address (not a P O Box number) .. A.S. above ..

1.5 Posadres en poskode
Postal address and postal code .. A.S. above ..
Postal Code 2146

1.6 Datum, plek en land van geboorte
Date, place and country of birth .. 17-10-1922 ..
SOUTH H.A.M.P.T.O.N. .. ENGLAND ..

1.7 Bevolkings- en etniese groep
Race and ethnic group .. WHITE .. EUROPEAN ..

1.8 Nasionaliteit
Nationality .. South African ..

1.9 In watter kategorie vra u registrasie?
In which category do you request registration?

1.10 Is u 'n Suid-Afrikaanse burger?
Are you a South African citizen?

1.11 Identiteitsnommer
Identity number .. 901 / [REDACTED]

1.12 Indien u Suid-Afrikaanse burgerskap deur naturalisasie verkry het meld datum en nommer van naturalisasiesertifikaat
If you are a South African citizen by naturalization give date and number of naturalization certificate .. 1974 March 1968 ..
No. R 29917

Behalwe vir die kruis van die blokkies, moenie agter hierdie lyn skryf nie
Except for the crossing of the blocks, do not write behind this line.

	AD	KR
H	X	X
N		
O		
K/H		

ONREGISTREERBAAR
UNREGISTRABLE

(ART. 52/1974 ACT. 52/1974)

OPM./NOTE
How is your name written in your passport.
Datum/Date

STUDENT	A
PRAKTISYNER	B
JA/YES	C
NEE/NO	D


**IONS TO
ISHBABY INN**

Watermeyer offramp om
ramp after the N1
e direction Pretoria
from the Pretoria-side
offramp into Water
ght and over the bridge
(bank side) and immerse
venue, which will take you
on Pretoria. Turn right
at the first street.
shbaby Inn is the first

os Drive, Lydiana, Pretoria
9239 / 804 2379
071
8793
bushbabyinn.co.za
bushbabyinn.co.za

APPENDIX F


Example of a registration certificate in accordance with 1974
legislation



Civitas Building
Private Bag X88
0001 Pretoria
Republic of South Africa

Telegrams:
Health
Telephone:
48-2851

Verwysing Reference 14/2/5

Lysnr. / List No. 

Hierby word gesertifiseer dat die naam van:

It is hereby certified that the name of:

HEIDI MARIELOUISE RETTER

op die lys soos bed [redacted] in the list as mentioned in section 3 of the Homeopaths, Naturopaths, Osteopaths and Herbalists Act, 1974 (Act 52 of 1974) in respect of the following practice(s):

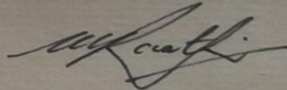
NATUROPATIE

NATUROPATHY

Hy/Sy is geregtig om die bogenoemde praktyk(e) ingevolge die bepalings van bogenoemde Wet te beoefen.

He/She is entitled to pursue the above practice(s) in terms of the provisions of the above-mentioned Act.

Beampte deur die Minister van Gesondheid aangewys
Officer designated by the Minister of Health



Datum / Date 1 NOVEMBER 1978

Hierdie dokument vervang alle vorige dokumente van hierdie aard.

This document supersedes all previous documents of this nature.

Appendix G

Registration post 1983

Reg No	Date of Reg	Profession	Initials	Surname	Qualification	Institution	Date of Qual
[REDACTED]	12-02-96	Naturopathy	TF	[REDACTED]	Homeopathy & Naturopathy – No Certificates	Brantridge Forest School, World Correspondence College & Hannemann Institute	None
[REDACTED]	12-02-96	Naturopathy		[REDACTED]	Certificate: Course Attendance	SA Homeopathic Association	27/02/1993
[REDACTED]	12-02-96	Naturopathy		[REDACTED]	Homeopathy & Naturopathy – No certificate	Brantridge Forest School	None
[REDACTED]	22-04-85	Naturopathy		[REDACTED]	Naturopathic V – No Certificates	The Naturopathic College of SA & The Academy for Holistic Health	11/06/1972
[REDACTED]	01-01-83	Naturopathy		[REDACTED]	No certificates	SA Foundation of Natural Therapies	09/09/1974
[REDACTED]	12-02-96	Naturopathy		[REDACTED]	No certificates	SA Foundation of Natural Therapies	None
[REDACTED]	01-01-83	Naturopathy		[REDACTED]	No certificates	SA Foundation of Natural Therapies	01/10/1970
[REDACTED]	01-01-83	Naturopathy		[REDACTED]	No certificates	College of South African	01/10/1973
[REDACTED]	30-04-02	Naturopathy		[REDACTED]	No certificates		01/10/1969
[REDACTED]	01-01-99	Naturopathy		[REDACTED]	Certificate: 20 Session Course Training in Nature Cure	SA Ayurvedic Medicine Association	14/03/1972
[REDACTED]	01-01-82	Naturopathy		[REDACTED]	Certificate: 20 Session Course in Herbalism	Ayurvedic Practitioner, Nature Cure 1988, Wholistic Health Centre	August 1988
[REDACTED]	01-01-82	Naturopathy		[REDACTED]	Diploma in Natural Therapies	Herbalism Course	October 1989
[REDACTED]	30-01-00	Naturopathy		[REDACTED]	Doctor of Homeopathy and Naturopathy	Naturopathic Association of SA	
[REDACTED]				[REDACTED]	Doctor of Homeopathy and Naturopathy	Lindlahr College	1974
[REDACTED]				[REDACTED]	Doctor of Homeopathy and Naturopathy	Hannemann Institute	1973
[REDACTED]				[REDACTED]	Doctor of Homeopathy and Naturopathy	Lindlahr College	1962
[REDACTED]				[REDACTED]	Doctor of Homeopathy and Naturopathy	The Naturopathic College of SA	1972/1973
[REDACTED]				[REDACTED]	Doctor of Homeopathy and Naturopathy	SA faculty of Homeopathic Medicine	
[REDACTED]	01-01-85	Naturopathy		[REDACTED]	Doctor of Homeopathy and Naturopathy	Lindlahr College (No Certificates)	19/01/1971
[REDACTED]	12-02-96	Naturopathy		[REDACTED]	Certificate of Homeopathy and Naturopathy Certificate	Academy of the Science of Man	02/10/1977
[REDACTED]	21-09-87	Naturopathy		[REDACTED]	Doctor of Homeopathy, Naturopathy and Osteopathy	World Correspondence College	
[REDACTED]	19-02-01	Naturopathy		[REDACTED]	Doctor in Naturopathy.	Lindlahr College (No Certificates)	None
[REDACTED]	01-01-83	Naturopathy		[REDACTED]	No certificate	Naturopathic College of SA	1977
[REDACTED]	01-01-80	Naturopathy		[REDACTED]	No certificate	Naturopathic Association of SA	Dec 1974
[REDACTED]	08-05-99	Naturopathy		[REDACTED]	Doctor of Homeopathy	Naturopathic Association of SA	1957/1965
[REDACTED]	03-05-96	Naturopathy		[REDACTED]	Doctor of Homeopathy, Naturopathy and Osteopathy	Brantridge Forest School World Correspondence College Lindlahr College (No Certificate)	1978/1979 1968

Appendix H

Application to sit CRE in 2001 Approved with Conditions

39	[REDACTED] ANNEXURE G	<p>(1) Stellenbosch University: Bsc Hons 1995 No apparent Naturopathy qualification. To sit Council Registration Exam (CRE) provided that:</p> <ul style="list-style-type: none"> • proof of qualification and subjects passed is submitted; • subjects meet the requirements stated in the Regulations.
40	[REDACTED] ANNEXURE G	<p>Traditional Healer No apparent Naturopathy qualification To sit Council Registration Exam (CRE) provided that:</p> <ul style="list-style-type: none"> • proof of qualification and subjects passed is submitted; • subjects meet the requirements stated in the Regulations.
41	[REDACTED] ANNEXURE G	<p>(1) Potch University: HED 1975 (2) Hoasa School of Herbalism: Certificate in Practical Herbalism 1998 (3) SA College of Natural Medicine: Certificate of Herbal Medicine 2001 (4) SA College of Natural Medicine: Diploma of Naturopathic Medicine 2001 Various subject certificates Traditional Healer To sit Council Registration Exam (CRE) provided that:</p> <ul style="list-style-type: none"> • proof of qualification and subjects passed is submitted; • subjects meet the requirements stated in the Regulations.
42	[REDACTED] ANNEXURE G	<p>(1) Brantridge Forest School (UK): Diploma in Diet and Nutrition 1983 (Not acceptable to Council) (2) Brantridge Forest School (UK): Diploma in Naturopathy 1987 (Not acceptable to Council) To sit Council Registration Exam (CRE) provided that:</p> <ul style="list-style-type: none"> • proof of qualification and subjects passed is submitted; • subjects meet the requirements stated in the Regulations.
43	[REDACTED] ANNEXURE I	<p>(1) Marlana Institute of Academic Prosperity: Certificate in Naturopathy 1988 (2) Transkei Association Upgrading Certificate Homoeopathic Medicine 1991 To sit Council Registration Exam (CRE) provided that:</p> <ul style="list-style-type: none"> • proof of subjects passed is submitted; • subjects meet the requirements stated in the Regulations.
44	[REDACTED] ANNEXURE G	<p>(1) SA College of Naturopathic Medicine: Diploma of Naturopathy 1994 To sit Council Registration Exam (CRE) provided that:</p> <ul style="list-style-type: none"> • proof of subjects passed is submitted; • subjects meet the requirements stated in the Regulations.

Appendix I

Proposal for a Naturopathic Curriculum in South Africa

The document below was provided by one of the participants in the research process. It is one of the minutes of a meeting which took place in 2000.

My apologies for not being able to attend. I am roughly familiar with the purpose of tonight's meeting, I hope my written contribution is appropriate to the matters at hand.

I fully support the move to forming a 4-year B.sc Naturopathy degree course similar to that existing at Portland Oregon and Basytyr University in the USA. This course should combine premed subjects already existing, with Natural Medicine subjects to be developed.

If Naturopathy is to have a valid and credible position and influence on future primary healthcare in South Africa, as a registered profession bearing the title Dr, then nothing less is acceptable.

We are fortunate that the new NQF and imminent opening of the register create situation in which **university institutions are obliged to consider and facilitate such a course.**

It is my suggestion that the **Naturopathic Association mandates an interim committee** to bring certain educational objectives to fruition

The objectives are:

1. The creation of a **standard of education** for naturopathy.
2. The development of a **core syllabus** with nominated subjects and content.
3. The launch of a **BSc Naturopathy degree at a public University in South Africa by 2001**
4. The **staffing of the departments offer and maintenance** of that degree,
5. The **launch of a second degree** in a second major center in South Africa by 2002,
6. The **promotion of the core course, examination and educational standard to suitable level face to face education providers** so that learning opportunities become widespread.
7. To **motivate all naturopathic bodies and associations under a uniformly accepted standard of education with a uniform standard of examination.**
8. To **address present education levels** in naturopathy and **facilitate existing students who want to convert to full time study.**
9. To **raise bursary funds** for the Naturopathy degree,

It is my feeling that the persons who take on this responsibility are partially **remunerated and are allowed to raise funds for their own reasonable remuneration as well as costs of development.** These will be audited and administered as with any other Association matter. Reasonable consideration should be given to the **temporary or permanent changing of status of the Naturopathic Association** to allow unbiased but professional service to the professional and its members

I am **not in favour of correspondence or private education** as the main means of education. Any courses that run, must still fully facilitate the practical aspects of the degree. Examination standards must be the same if qualifications are the same.

Whilst I understand that the NQF and outcomes based concepts that are the principles of future education in South Africa, must be adhered to I would like to say that **step by step education should not be contrived.** Creating lesser qualifications that do not serve sufficient functional purpose in health care serve only to dilute the potential of the profession and create further confusion in public health care. This can be addressed by those involved in setting up the course syllabus and its outcomes.

I believe **various competencies or 'subjects' are being suggested.**

At Dr [REDACTED] request I have prepared some material on course structure, content and competencies, and would be glad to present it at the relevant time.

In short my suggestions are as follows.

The course would **contain already existing pre medical subjects being offered at the university** such as biochemistry, anatomy, physiology etc.

The **first year** would be focused upon teaching basic philosophy, some basic skills such as massage and nutritional counseling, assessment skills and theoretical background.

The **second year** would focus toward skill development, introduction of competency/ modality subjects as well as practices system by system.

The **third year** would introduce specialization, field work and focus on bringing together knowledge into practice

The **fourth year** would involve a communal practice year as well as a thesis

Suggested additional competencies or areas of study that may not be included yet

Counselling and communication including:

Aspects of attitudinal and humanistic healing

Intention and intuitive healing

Communication skills

Public speaking,

Crises and trauma situations

Development of empathy and problem solving

'Exercise' as therapy

Different modalities/ philosophies and practices

Including, postural and breath work, manipulation and mobilization

Exercise/ activity for special populations

Activity as medicine

Looking at different modalities, Rolfing Feldenkrais, etc

'Exercise' for optimum health

Health based activity promotion

Development of skills, character, life enrichment and positive sense of well-being through activity

Including rest and relaxation and 'soft' exercise

Psychobiology

The integration of mind and body in healing practice

Research and application

Environmental and communal health

Sustainable development and consumerism practice

Environmental health

Pollutants

Food technology

Future societal development

A suggested website is www.naturalhealers.com

I would be interested in contributing further to this process, and have experience in these matters on all levels. I would be willing to work on further proposal and development of the degree as well as the raising of funds.

Yours in Health
[REDACTED]

Appendix J

Review Process: Response to reviewers - The history and development of naturopathy in South Africa

Dear Reviewers

Your comments and constructive feedback is appreciated. Please see the list of corrections and responses tabled below. During the process of revision significant changes occurred within the manuscript.

Recommendation	Response	Where correction has been made
Reviewer 1		
Title		
<ul style="list-style-type: none"> Does not correlate with content. 	Changed title.	Cover page.
Abstract		
<ul style="list-style-type: none"> Rephrase line 6-9 in abstract. 	Done.	Abstract.
Introduction and body of manuscript		
<ul style="list-style-type: none"> Lacks a clear definition of term CAM and naturopathy and its legislated scope and practice in S.A. 	Definitions of CAM and naturopathy have been inserted. However, it is not within the scope of this article discuss the scope of practice of naturopaths. This will be dealt with in a separate article.	Introduction.
<ul style="list-style-type: none"> Correct CAM: Complementary and alternative medicine. 	Corrected.	Title, throughout document.
<ul style="list-style-type: none"> The use of the keyword 'diagnostic'; is inappropriately selected. 	Replaced with the word 'regulation'.	Keywords.
<ul style="list-style-type: none"> Gower correct spelling throughout document as well as title in the reference. 	Corrected.	Throughout document.
<ul style="list-style-type: none"> Page 4, para. 2, last sentence – need supporting reference 	Corrected. Moved the sentence.	Results.
<ul style="list-style-type: none"> Page 5, para. 1, no supporting reference. 	Done.	Introduction.
Methodological issues		
<ul style="list-style-type: none"> Inclusion and exclusion criteria need to be clearly defined, especially regarding recruited/enrolled for interviews. 	Done. This has been expanded on.	Methodology.

<ul style="list-style-type: none"> Semi-structured interviews- no mention of the themes covered, explored. 	Done. This has been expanded on.	Methodology. Results.
<ul style="list-style-type: none"> No mention of data analysis, identification and interpretation of current and emergent themes were determined. 	Done. This has been expanded on.	Methodology. Results.
<ul style="list-style-type: none"> How was data obtained from interviews and extrapolated. 	Done. This has been expanded on.	Methodology. Results.
<ul style="list-style-type: none"> Lack of discussion regarding ethics pertaining to recording and safe-keeping of the interview material 	Done. Ethics was expanded on.	Methodology.
<ul style="list-style-type: none"> Don't think it was appropriate to use the emailed participants response as it lacks data rich collection and observational information obtained through personal interviews. 	Only 1 participant emailed a response. While it may have lacked the observational information obtained through personal interviews, the responses to questions was detailed. Given the small number of participants it was felt that the comprehensiveness of the emailed responses added to the historical narrative being researched. This is addressed in the results and discussion sections.	Results and discussion.
<ul style="list-style-type: none"> Last paragraph of methodology section should be phrased: 'a history of Naturopathy in South Africa'. 	Done.	Methodology.
Results		
<ul style="list-style-type: none"> First sentence results section – rephrase 'The first step of the process was to look through the naturopathic practitioner files and...;. 	This paragraph has been moved to the methodology section.	Methodology.
<ul style="list-style-type: none"> Page 10, para. 1 – facts as presented are confusing 	Paragraph rephrased.	Results.
<ul style="list-style-type: none"> Page 11, 3.1.2, para. 1 – add supporting reference 	Done.	Results.
<ul style="list-style-type: none"> Page 14, para 1, last sentence: 'council-regulated examination. can be abbreviated to CRE 	Done.	Results.
Discussion		

<ul style="list-style-type: none"> There is a lack of expansion of information from results to discussion. Two sections seem disjointed with no chronological progression of a discussion around the findings, lacking inquiry and exploration of the results into the discussion. 	The results section has been revised to reflect a chronological exploration of the findings. In the discussion the results is critically explored.	Results and discussion.
<ul style="list-style-type: none"> Para. 1, line 2: replace with 'are now deceased. 	Done.	Discussion.
<ul style="list-style-type: none"> Para. 1, line 12: 'disposed of was kept. 	Sentence rephrased.	Discussion.
<ul style="list-style-type: none"> Page 16, para 1, last paragraph needs amendment – How did he help get them registered? 	Rephrased sentence on order to explain how he helped.	Discussion.
<ul style="list-style-type: none"> Page 18 (and abstract) clarify terms: professional body, association. Does not identify who the current largest association for naturopathy is. 	The terminology used has been corrected to reflect the difference between the professional body and an association. The naturopathic association has also been identified.	Done.
<ul style="list-style-type: none"> Page 19, last paragraph – inappropriately placed – should be contained in abstract and introduction and then be referred to in this section. 	Done.	Done.
<ul style="list-style-type: none"> Where history of naturopathy is mentioned – support with references. 	Done.	Introduction & discussion.
Reviewer 2		
Recommend revision of title or restructure content so that Naturopathy stands out.	Changed title.	Cover page.
Revise dates from sources e.g., chiropractic and homeopathic training for both courses started in 1989 at the 'Technikon Natal'.	Done.	Discussion.
Elaborate on conclusions to better support the data	Adjustments have been made.	Conclusion.

We would like to thank you for your considered input.

Sincerely

Wendy Ericksen-Pereira

Nicolette Roman

Rina Swart

Appendix K

Editors' Decision: 'The History and development of Naturopathy in South Africa'

HSAG - 1078: Manuscript Accepted for Publication, Sent to Editing

aosis@hsag.co.za

Tue, Apr 24, 2018, 1:43 PM

Ref. No.: 1078

Manuscript title: An overview of the history and development of naturopathy in South Africa

Journal: Health SA Gesondheid

Dear Dr Wendy G. Ericksen-Pereira

You will be pleased to know that your manuscript has been accepted for publication on 18-04-2018.

We would like to confirm that your manuscript has now been sent to our publishing department for finalisation.

Kindly note:

1. If you need to make contact with the publisher during the finalisation stage of your manuscript, kindly contact us per email or phone. Your new publisher contact will be Chantal Parkins, email: publishing@hsag.co.za and telephone extension: 510.
2. The finalisation procedure works as follows:
 - (a) The first stage is the language editing that is returned to the corresponding author for review. This will be the final opportunity for the corresponding author to make text changes to the manuscript.
 - (b) At a later stage, the editorial staff will send the corresponding author

one set of galley proofs, at which time the author will have two working days to mark any typographical errors.

3. Manuscript tracking is available on the submitting authors' journal profile. The submitting Author could visit their home page frequently to assess the stage of the manuscript.

Kind regards,

Tanien Botes: AOSIS Submissions and Review

Phone +27 021 9752602

submissions@hsag.co.za

Appendix L

Published Article

Health SA Gesondheid
ISSN: (Online) 2071-9736, (Print) 1025-9848



Page 1 of 8 Original Research

An overview of the history and development of naturopathy in South Africa



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Background: A huge growth in complementary and alternative medicine (CAM) took place in South Africa in the 1960s which paralleled what was happening in other parts of the western world. Naturopathy has been practised in South Africa for over 60 years, and the history of naturopathy is entwined with the broader history of CAM. No laws existed at that stage to regulate the curriculum, education and training of CAM practitioners. With the passage of time, various statutes were introduced which eventually led to changes in legislation and the establishment of a recognised training programme. Naturopathy became a legally regulated profession, the full history of which has never been documented.

Objective: This article explores the history of naturopathy in South Africa.

Method: A two-phase qualitative research design was used, consisting of a document search and semi-structured interviews with key informants who were identified through a process of snowballing. Information collected from the naturopaths who participated in the interviews was triangulated with documentation uncovered in the archives of the Allied Health Professions Council of South Africa (AHPCSA) and other literature available.

Results: The result is a history of events which took place and reveals the effect of various legislations on the profession.

Conclusion: Changes in the political system paved the way for changes in legislation which allowed for the registration and training of naturopathic practitioners. However, the lack of a functioning association and the small number of naturopathic graduates have hampered the growth of the profession, preventing it from becoming a significant contributor to the health care system.

Introduction

The emerging trend is to use the term 'traditional and complementary medicine (T&CM)' as it encompasses the practices, practitioners and products of both traditional and complementary medicine (WHO 2013). For the purposes of this research, the term 'CAM' has been used as research by Ng et al. (2016) shows that CAM is the most commonly used term to describe complementary medicine. Complementary and alternative medicine (CAM) has been identified as 'a group of diverse medical and healthcare systems, practices and products that are not presently considered to be part of conventional medicine' (National Library of Medicine 2010).

The last few decades have seen exponential growth in the use of CAM products and therapies, with Fischer et al. (2014) suggesting that CAM will play an important role in addressing the rise in chronic diseases because of ageing in Europe. The reasons for this shift towards CAM have been proposed as growing disillusionment with the biomedical model of medicine (Reilly 2001), over-prescription of drugs and the impersonal approach to patients within western medicine, together with the inability of the mainstream biomedical model to successfully treat chronic diseases (Chitindingu, George & Gow 2014). South Africa has also experienced a growth in the use of CAM. In 1999 it was estimated that turnover from the use of CAM products was R1.29 billion (Caldis, Mcleod & Smith 2001). In 2014 this figure was estimated to be R8 billion (MCC listens to CAMS concerns 2014; Traditional and Natural Health Alliance 2014).

The history of CAM in South Africa goes back centuries. The early Dutch settlers brought their traditional medicines with them. By the 19th century, there was a small number of CAM practitioners (Gower 2013), but after World War II, South Africa experienced an increase in immigrants, and among them were CAM practitioners. Old Dutch medicines and homeopathic remedies were already in use in the country, but the new wave of immigrants – especially those

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from Germany – used homeopathy, naturopathy and herbal medicines to treat various illnesses (Pretorius 2010).

Medical practitioners began to campaign against the growing number of CAM practitioners, and this resulted in the Medical Association of South Africa declaring CAM to be ‘illegal and unscientific’ in 1953 (Pretorius 2010:525) and any cooperation between allopathic and CAM practitioners was prohibited in their medical code (Hassim, Haywood & Berger 2007). This meant that CAM practitioners could not share premises with biomedical practitioners, nor refer patients to them. CAM practitioners were therefore excluded from the public health care system. Thus, all CAM modalities were forced into a private health care setting (Pretorius 2010). *The Health Professions Act 56* (South Africa) 1974 No. 31825 was amended in 2009 with the insertion of rule 8A which states that practitioners are only allowed to share rooms with others who are registered under the Act. Thus, through regulation, all CAM practitioners were legally prevented from working in or making a contribution to the public health care system.

As a system of CAM, the history of naturopathy is reflected in the history of CAM in South Africa. Dr Lilley immigrated to South Africa from the United Kingdom and in 1951 started training the first group of homeopaths (Gower 2013). He was instrumental in establishing Lindlahr College which trained homeopaths, naturopaths and osteopaths (Gower 2013; Prinsloo n.d.). He was one of the founders involved in the formation of the South African Naturopathic and Homeopathic Association (Gower 2013; Prinsloo n.d.); this was the start of the training of naturopaths in South Africa.

Naturopathy in South Africa is defined as a ‘system of healing based on promoting health and treating disease using the body’s inherent biological healing mechanisms to self-heal through the application of non-toxic methods’ (Regulation 127 of 2001). Naturopathic medicine is viewed as a system of primary health care based on the philosophy and principles of naturopathy (Fleming & Gutknecht 2010; Wardle & Oberg 2011). These principles are the healing power of nature, the naturopathic doctor as teacher, finding the root cause of an illness, treating the patient holistically, health promotion and prevention of disease, and encouraging overall wellness (Hausser et al. 2017). As a system of medicine, it is well suited to address the disease challenges of the 21st century as it focuses on preventative medicine through the use of education. By empowering patients to understand the cause of their illness, it encourages a change in lifestyle. Treatment is non-invasive and can be low cost. Naturopaths are well placed to participate in and contribute to the public health care system on a primary health care level. However, at present, the small number of registered naturopathic practitioners, together with the legislature, present a challenge for integration. To understand the current situation, it is necessary to trace the history of naturopathy in South Africa to comprehend how a once burgeoning CAM

profession was prevented from training new practitioners for close to 30 years owing to legislative enactments. It is the objective of this article to document the history of naturopathy in South Africa, for it is a story which has never been fully explored.

Methodology

In order to research the history and development of naturopathy in South Africa, a qualitative design was employed with the research being divided into two phases. The first phase consisted of a document search, while the second phase consisted of interviews with practitioners who were either students during the early years of naturopathy in South Africa or were practising at the time.

Phase 1: Document search

Permission was obtained from the registrar of the Allied Health Professions Council of South Africa (AHPCSA) to search their archives as per a request for Access to Record of Public Body (section 18[1] of the *Promotion of Access to Information Act 2* [South Africa] 2000 No. 20852).

Available records were accessed on 3–5 May 2015. The researcher had access to all documents available at the AHPCSA office up to the period that the current registrar took over in 2009, which consisted of over 30 files and record books. Records included registration documents as well as minutes of meetings. It should be noted that there might be gaps in information owing to old documents which had not been accessed for many years by the AHPCSA having been disposed of during a recent move to new premises. Registration records of people deceased or deregistered for longer than 10 years were among the documents not retained, although the original registration applications along with identity document copies were retained. Documentation of all active registrations, regardless of the duration of registration, was also retained.

Documents were separated into the two main themes which emerged. The first theme was registration, as it involved the files of the first practitioners registered as a result of the implementation of the *Homeopaths, Naturopaths, Osteopaths and Herbalists Act 52* (South Africa) 1974 No. 4441. The second theme was that of minutes of meetings of the different boards within the AHPCSA, starting with the establishment of the first council to regulate natural medicine in South Africa in 1983.

Phase 2: Interviews

Inclusion criteria for the interviews were determined to include all naturopaths who are currently registered with the AHPCSA or had been registered as a naturopath between the period of 1974 and 2005. Any other registered CAM practitioner who had been registered at any point between 1974 and 1983 was also considered, because of the overlaps in training that took place in the 1960s and 1970s. All naturopaths

who graduated from the tertiary training institution after the passing of Regulation 127 of 2001 were excluded.

The researcher went through the list of registered naturopaths on the AHPCSA website and listed all naturopaths with the earliest registration numbers which started with double zero (00). This process was repeated for registered chiropractors, homoeopaths, osteopaths and phytotherapists to establish whether multiple registrations were held. A list was then compiled of the naturopaths who had registered under Act 52 of 1974. By searching the internet – including the Medline directory and the Therapists Online site as well as the telephone directory – the contact details of these early naturopaths were obtained. Contact was made telephonically or via email. The purpose of the communication was explained, and the naturopaths were asked if they were willing to participate in the research project. Five people were identified, of whom four were contacted telephonically. One refused to be interviewed, one agreed to be interviewed, while the receptionists at the practices of the other two advised that the request be sent via email. The fifth person was not contactable via telephone and was emailed. However, none of the emails was responded to. As a result of this low response, a snowball sampling technique was used to identify further participants for the research; this resulted in a total of eight people being interviewed. One person was no longer registered and another was not a naturopath, but, because of their involvement in the 1960s and 1970s, they were interviewed in order to develop a history of CAM in South Africa. Semi-structured interviews were conducted as this allowed the interviewer the opportunity to explore responses in greater detail – this being a necessary consideration, given the age of some of the key informants. Interviews were conducted at the convenience of the participants. Three interviews were conducted face-to-face, three were conducted via skype, one telephonically and one requested the interview questions and provided a written response to the questions via email. All interviews except for one were recorded.

They were then transcribed verbatim, and along with the response received electronically, were thematically coded based on the interview questions and analysed manually (Braun & Clark 2006).

The information sheet, ethics clearance document as well as the interview questions were emailed to the participants before the interview. The identities of the participants were protected through the use of a coding system known only to the researcher. All information gathered in the process of research was securely kept in a password-protected computer and a back-up external hard disk, which, along with other documents collected, is kept under lock and key and is accessible only to the researcher.

Through triangulation of the interviews with the document search and available literature, a history of naturopathy in South Africa was constructed.

Results

The following themes and sub-themes emerged:

- *Phase 1: Document Search* – registrations and minutes of meetings
- *Phase 2: Interviews* – early history, effect of legislation, activism

Document search

Registrations

Act 52 of 1974 was promulgated in Parliament on 16 October 1974. Section 3(a) of this Act required practitioners to register within a 6-month period from the date of publication of the gazette with the Department of Health. It allowed for the registration of CAM practitioners who were already in practice, provided that they could show proof of their training in the form of a certificate issued by a training institution. Students who were still studying and provided proof of the institution they were studying at were registered as students. Foreign practitioners were in addition required to submit proof of permanent residency or proof that they were 'capable of acquiring South African citizenship' (Act 52 of 1974 3[b i]). Failure to register either as a practitioner or as a student meant that the practitioner would not be allowed to continue practising or the student would not be allowed to register once they had completed their studies.

A summary of practitioners who registered with the Department of Health as a result of the promulgation of Act 52 of 1974 is provided in Table 1.

Table 1 is not conclusive as it could not be ascertained if all the applications had been forwarded to the Council by the Department of Health in 1983 or if any of the files were disposed of by the AHPCSA. Gower (2013) puts the number of registered homeopaths at 350. It should be borne in mind that these files only recorded practitioners and not students. The registration process divided applicants into two groups: practitioners and students. Students were allowed to continue with their studies and were registered after 1974 if they had registered as students in 1974.

The data available indicate that the majority of the practitioners who were registered in 1974 were South African, confirming the presence of training institutions in South Africa for each of these professions at the time. It must be noted that multiple registrations predominated, with practitioners registered for homoeopathy and naturopathy being the most common combination (26.9%), followed by homoeopathy, naturopathy and osteopathy (23.9%). The various combinations with naturopathy account for 53.2% of registrations, whereas registration for naturopathy alone accounts for only 2.9%. The number of homeopaths who registered only for homoeopathy was 37.4%. From these figures, it can be seen that the number of homeopaths registered were in the majority.

TABLE 1: 1974 practitioner registrations.

Age group: Year born	Naturopathy	Homeopathy	Osteopathy	Herbalism + Homeopathy	Naturopathy + Osteopathy	Naturopathy + Homeopathy	Naturopathy + Herbalism	Homeopathy + Osteopathy	Naturopathy, Homeopathy + Osteopathy	South African	Foreign
Up to 1910	-	5	1	-	1	6	-	1	1	11	4 (American, British + German)
1911–1920	3	18	-	-	-	8	-	4	10	38	6 (British, Cyprian, German, Indian, Irish, Italian)
1921–1930	1	20	-	-	1	17	1	-	11	40	11 (British, Dutch, German, French, Portuguese, Rhodesian)
1931–1940	1	16	1	1	-	12	-	3	14	40	8 (American, Dutch, German, Greek, Indian, Swiss, Portuguese)
1941–1950	-	5	-	-	-	3	-	-	5	12	0
Total	5	64	2	1	2	46	2	8	41	142	29
Percentage	3	37.4	1.2	0.6	1.2	26.9	1.2	4.7	24	83	17

Minutes of meetings

The Chiropractors, Homeopaths and Allied Health Service Professions Council became the Allied Health Professions Council of South Africa in 2000 (Caldis et al. 2001; Gower 2013). The Chiropractors, Homeopaths and Allied Health Service Professions Amendment Bill was first published in Government Gazette No. 21825 of 2000 and later promulgated as the *Allied Health Professions Act 63 (South Africa) R127 2001 No. 22052*. This provided for the establishment of professional boards which enabled naturopaths and other diagnostic and therapeutic professions to be registered with their respective professional boards. As no specific system had been used to sort through the files before discarding them, the files which were available were not in chronological order. Minutes of the meeting of the Public Board of Homeopathy, Naturopathy and Phytotherapy (PBHNP) ranged from 2002 to 2005. One of the major issues which appeared most on the agendas of the PBHNP meetings was the registration of naturopaths and phytotherapists. At one PBHNP meeting in 2002, the list of registered naturopaths was tabled. The registration list contained the names, colleges trained at, year of completion of studies and year of first registration as naturopaths. At least 18 naturopathic training colleges existed in the 1960s and 1970s (Appendix 1) with 100 registered naturopaths at the time.

From the minutes of PBHNP meetings held in May 2003, the outcome of applications from naturopaths for registration was tabled. Of the 76 applications, 3 were approved to sit the Council Regulated Examinations (CRE) and 73 were conditionally approved to sit the examination – on condition of submission of proof of a certificate that the naturopathic studies were completed. Not all documents indicated the place of study of the applicants. However, the known institutions of training are summarised in Table 2.

Of this list of applicants who were conditionally approved to write the CRE, no further minutes were found relating to the number who finally wrote the examination or the

outcome of these examinations. However, in minutes tabled in 2003, concerns were raised about the legitimacy of some of the documents that had been submitted.

Interviews

Early history

A detailed history of the early years of naturopathy was developed as a result of the input from all participants. One participant chose to email the response because they did not wish to be recorded and was only prepared to divulge certain information. However, the information which was provided corroborated the information provided by other participants.

The period from the 1950s to 1974 showed rapid growth and training of CAM practitioners in the areas of chiropractic, homeopathy, naturopathy and osteopathy. Private training colleges flourished as there was no control over the registration of these colleges or the curriculum taught. Of the more highly regarded training facilities at the time was the Lindlahr College in Johannesburg. The college offered training in homeopathy, naturopathy and osteopathy (Gower 2013). Naturopaths trained at the Lindlahr College, and records indicate that by 1957, naturopaths were graduating from the college (Prinsloo n.d.). By the 1960s, many training schools of varying quality were flourishing all over the country. One of the interviewees referred to these as the 'fly by night' schools.

Interviewees report that many practitioners were trained through 'apprenticeships' with other practitioners. Evidence also suggests that there were a number of practitioners from England who either came over for periods of time to teach or settled in the country. In the Cape Town area, Dr Oliver Lawrence, who was a British naturopath, set up a practice at his home, where he taught his students after hours and over weekends. He taught the same curriculum as at Lindlahr College which included subjects such as anatomy, physiology, hygiene theory and homeopathy, among others. Dr Stanley

TABLE 2: Training institutions.

Name of training institution	Medical doctors	Heilpraktiker (Germany)	Belcher College (USA)	Clayton College of Natural Health (USA)	South African College of Herbal Medicine	South African College of Natural Medicine	South African College of Naturopathic Medicine	Webber Natural Medicine Institute	World Correspondence College
Number of graduates	2	2	2	2	3	8	11	4	5

Dean was a herbalist who had a practice on the Foreshore in Cape Town in the late 1960s and he taught the herbal component of the course. All the interviewees agree that there was an abundance of training facilities available at the time. There was a considerable degree of overlap in the training of students in homeopathy, naturopathy, herbal medicine as well as osteopathy; this explains why the early practitioners had a broad range of modalities which they used in practice, and it is the reason for such a high number of dual or multiple registrations (Table 1). On qualification, many of these practitioners went on to establish training centres where they in turn trained other practitioners.

Effect of legislation

With the introduction of Act 52 of 1974, all CAM training facilities were to be phased out and shut down. Practitioners were given a period of 6 months to register with the Department of Health. Students who were still training also had to register as students and were allowed to register on completion of their studies. As a result of this Act, hundreds of practitioners were not registered, either because they were not aware of the legislation or because their applications were not approved owing to lack of certification to prove training.

Absence of registration did not stop people from practising, and interviewees confirm that, with the appointment of the first chairperson of the Chiropractors and Homeopaths Association, a serious effort was made to clamp down on unregistered practitioners in practice. If any practitioner was reported to the chairperson, the chairperson reported to the police to follow up. If practitioners were caught in the act, they were arrested and charged with practising unlawfully. This punitive measure did not stop many practitioners who used euphemisms for their practices rather than the term 'naturopath', although in essence they still continued to practise as naturopaths. This is evidenced by the number of applicants who applied for registration as a result of the passing of Act 40 of 1995. If there was a lack of certification, it meant they could not write the CRE and were still excluded from the registration process.

The Associated Health Service Professions Act 63 (South Africa) 1982 No. 8160 made provision for the establishment of the Associated Health Services Professions Board. As a result of the passing of this Act, all practitioners who had registered in 1974 were required to register again. However, no new registrations were allowed; according to the legislation, there were to be no new registrations of naturopaths after 1982, whereas the register was opened to chiropractors and homeopaths with the establishment of the *Associated Health Service Professions Amendment Act 105 (South Africa) 1985 No. 9867*. This Act also gave the new board the power to

control and regulate the education of allied registered practitioners. According to minutes from 1987, training for chiropractors and homeopaths was approved by the Minister of Education in 1987 and courses officially started in 1989 (Chiropractic education in South Africa 1993). No other training institutions for other professions were allowed.

Activism

The situation caused dissatisfaction among the other professions and led to the formation of the Confederation of Complementary Health Associations of South Africa (COCHASA). The South African Naturopathic Association (SANA) was formed in the early 1990s and lobbied as one of the members of COCHASA to open the register. In 1994, after the first democratic South African elections, there was a re-examination of laws in the country, including health care laws. This created an opening for COCHASA to lobby the Minister of Health to launch an investigation into the Chiropractors, Homeopaths and Allied Services Professions Council. As a result, the *Chiropractors, Homeopaths and Allied Health Service Professions Amendment Act 40 (South Africa) 1995 No. 16643* was enacted which allowed practitioners who had previously not been able to register, to apply for registration. This led to the institution of what was termed the 'grandfather' clause which allowed practitioners to undergo a 2-year period of training to upgrade their training to a level determined to be acceptable to the Council. They then wrote a council regulated examination (CRE) and, if they passed, they were registered.

The Chiropractors, Homeopaths and Allied Health Service Professions Second Amendment Act 50 (South Africa) 2000 No. 21825 led to the establishment of the Chiropractors, Homeopaths and Allied Health Service Professions Interim Council which operated from 1995 to 2000. Despite these concessions, COCHASA continued to lobby for the opening of the register which would effectively mean that the training of naturopaths and other allied diagnostic professions would become a possibility. Members of COCHASA presented their case in November 2000 to the Parliamentary Portfolio Committee on Health, who subsequently voted for the registers to be opened. This led to the promulgation of Regulation 127 of 2001 which provided for the opening of the register for the diagnostic professions of ayurveda, Chinese medicine and acupuncture, naturopathy, osteopathy, phytotherapy and unani tibb.

SANA members became actively involved with the AHPCSA to determine the scope of practice, and through a comparative analysis of established international training institutions, drew up the curriculum required for the training of naturopaths. They also sought to actively engage with

tertiary institutions to establish training facilities for naturopaths and other diagnostic professions which were not offered in South Africa. A School of Natural Medicine which offered training in naturopathy, phytotherapy, traditional Chinese medicine and unani tibb was opened at a tertiary institution in the Western Cape in 2002 and provides currently what is still the only training for these diagnostic professions in South Africa.

Discussion

This article explores the development of naturopathy as a system of CAM in South Africa. The findings show that the history of naturopathy is closely aligned with the history of CAM in this country. One of the challenges experienced in conducting this research was finding participants who met the inclusion criteria. Naturopaths who either practised or studied between the 1950s and 1974 are now few in number as many are now deceased, or no longer in practice, or were unwilling to speak about this period, especially the period after the passing of Act 52 of 1974. It was found that participants remembered the events that took place but might have forgotten the precise dates when these occurred. Through the process of triangulating, the validity of the information was established (Carter et al. 2014).

The years after the passing of Act 52 in 1974 have had a long-term effect on practitioners. One of the participants chose to respond to the interview questions via email so that the content of the response was controlled by the participant. Others asked questions about confidentiality, and the researcher had to explain in detail the ethical and confidentiality procedures. There still exists a sense of distrust and fear of being identified by peers.

No documentation of the number of practitioners who registered as a result of this Act could be found. The original registration forms were kept by the Department of Health, and with the establishment of Act 63 of 1982, the documentation was sent to the Council. AHPCSA disposed of some of the archived documents. This decision was made on the basis of the legal precept that permits documentation older than 5 years to be destroyed. No record was kept of which documents were disposed of, so there is no exact record of the numbers of practitioners who were registered. Information provided by the interviewees suggests that the number ran into the thousands. One of the shortcomings in this research is the lack of certainty of the exact numbers of practitioners registered in the years leading up to the establishment of the AHPCSA in 2000.

After 1982, the records show that 17 naturopaths were registered between 1984 and 1996. Nine of these had dual registration as homeopaths and naturopaths, two had dual registration as osteopaths and naturopaths, and five were only registered for naturopathy. Missing information on the CRE and registration, discrepancies in registration numbers and years of qualification appear to confirm allegations by some practitioners of selective and preferential deviations

from the regulations. The document search supports some of these claims. Act 63 of 1982 made provision for the establishment of the South African Associated Health Service Professions Board (Gower 2013) which had several objectives – the most important was to ‘assist in the promotion and protection of the health of the population of the Republic’ (1[3a]) and to ‘control the registration of persons in respect of any profession and to set standards for the training of intending practitioners’ (1 [3c]). The evidence available appears to suggest that this council failed in fulfilling these objectives. Practitioners were registered with a minimum of training as doctors and allowed to legally practise.

Act 40 of 1995 allowed for the ‘grandfather’ clause which made provision for practitioners who had not previously been registered to undergo a 2-year period of training to upgrade their training before writing a CRE. The qualifications of some of the applicants are of concern because there was no clear indication that they studied any naturopathy courses. There was no minimum criteria set for entry into the CRE and one sees training colleges springing up to provide this training. This undermined the objective of the council to set appropriate standards for the training of practitioners which would safeguard the health of the public.

According to some of the interviewees, it was after the establishment of the naturopathy training course in 2002 that SANA gradually became less functional. By the time naturopathic students graduated, they found themselves with no functional association able to support and guide their professional development, which has had an adverse effect on the growth of the profession. Drawing from the North American situation, one finds organisations such as the Canadian Association of Naturopathic Doctors actively promoting and advocating for the professionalisation of, and regulatory changes for, naturopathy (National Associations for Naturopathic Doctors n.d.). This activism has resulted in an increase in the number of naturopathic students. In 2009, this advocacy resulted in registered naturopaths being granted the right to prescribe certain categories of pharmaceuticals (Eggertson 2010) which essentially placed them on the same level as general practitioners. In 2016, naturopathic graduates become actively involved in relaunching SANA; this may herald the start of another chapter in the history of naturopathy in South Africa.

Conclusion

The history of naturopathy in South Africa has not been recorded prior to this article. This research has revealed a period of rapid growth of CAM in the period from 1950s to 1974 which was abruptly halted through the introduction of legislation. As a direct result of continued activism by naturopaths and other CAM practitioners, legislation was changed and has led to legal recognition. This was a time of huge optimism for the CAM sector as it saw the legitimisation of CAM professions through the establishment of the AHPCSA as the start of a period of growth for these professions. This in turn resulted in establishing training programmes at tertiary institutions.

However, this has not resulted in an increase in numbers of registered naturopaths. If naturopaths are to make a significant contribution to the health care system, there has to be a substantial increase in the number of naturopathic graduates as well as a strong association to promote public awareness of naturopathy. Growth and professionalisation of the profession should ultimately lead to a change in legislation.

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Competing interests

The authors declare that they have no financial or personal relationships which may have inappropriately influenced them in writing this article.

Authors' contributions

W.E-P. wrote the draft. All three authors contributed equally to writing this article.

References

- Braun, V. & Clark, V., 2006, 'Using thematic analysis in psychology', *Qualitative Research in Psychology* 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Caldis, K.S., McLeod, H.D. & Smith, P.R., 2001, 'The fall of the Bamboo Curtain: A review of complementary medicine in South Africa', *South African Actuarial Journal* 1, 63–93. <https://doi.org/10.4314/saaj.v1i1.24491>
- Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J. & Neville, A.J., 2014, 'The use of triangulation in qualitative research', *Oncology Nursing Forum* 41(5), 545–547. <https://doi.org/10.1188/14.ONF>
- Chiropractic education in South Africa, 1993, *Dynamic Chiropractic*, 11(18), viewed 24 March 2018, from <http://www.dynamicchiropractic.com/mpacms/dc/article.php?id=42496>
- Chitindingu, E., George, G. & Gow, J., 2014, 'A review of the integration of traditional complementary and alternative medicine into the curriculum of South African medical schools', *Biomed Central Medical Education* 14, 40. <https://doi.org/10.1186/1472-6920-14-40>
- Eggertson, L., 2010, 'Naturopathic doctors gaining new powers', *Canadian Medical Association* 182(1), 109–3112. <https://doi.org/10.1503/cmaj>
- Fischer, F.H., Lewith, G., Witt, C.M., Linde, K., von Ammon, K., Cardini, F. et al., 2014, 'High prevalence but limited evidence in complementary and alternative medicine: Guidelines for future research', *BMC Complementary and Alternative Medicine* 14, 46. <https://doi.org/10.1186/1472-6882-14-46>
- Fleming, S.A. & Gutknecht, N.C., 2010, 'Naturopathy and the primary care practice', *Primary Care: Clinics in Office Practice* 37(1), 119–136. <https://doi.org/10.1016/j.pocp.2009.09.002>
- Gower, N., 2013, *A brief look at the history of homeopathy in South Africa: Homeopathy papers past and present*, viewed 25 July 2016, from <http://hpathy.com/homeopathy-south-africa/>
- Hassim, A., Haywood, M. & Berger, J., 2007, *Health and Democracy: A guide to human rights, health law and policy in post-apartheid South Africa*, Siber Ink CC, Cape Town.
- Hausser, T., Lloyd, I., Yanez, J., Cottingham, P., Turner R.N. & Abascal, A., 2017, *WNF white paper: Naturopathic philosophies, principles and theories*, viewed 02 February 2018, from www.worldnaturopathicfederation.org
- MCC listens to CAMS concerns, 2014, *Medical Chronicle*, viewed 08 December 2016, from <http://www.medicalchronicle.co.za/mcc-listens-cams-concerns/>
- National Associations for Naturopathic Doctors (n.d.), *The Canadian Association of Naturopathic Doctors*, viewed 19 December 2016, from <https://aanmc.org/national-associations/>
- National Library of Medicine, 2010, *Definition of CAM*, viewed 23 March 2018, from <https://www.nlm.nih.gov/tsd/acquisitions/cdm/subjects24.html>
- Ng, J.Y., Boon, H.S., Thompson, A.K. & Whitehead, C.R., 2016, 'Making sense of "alternative", "complementary", "unconventional", and "integrative medicine": Exploring the terms and meanings through textual analysis', *BMC Complementary and Alternative Medicine* 16, 134. <https://doi.org/10.1186/s12906-016-1111-3>
- Pretorius, E., 2010, 'Complementary/alternative and traditional healthcare in South Africa', in H.C.J. van Rensburg (ed.), *Health and Healthcare in South Africa*, pp. 506–560, Van Schaik, Pretoria.
- Prinsloo, J.P., (n.d). *History of homeopathic training in South Africa*, viewed 21 March 2018, from http://www.biocura.co.za/homeopathy/history_homeopathic_education_in_south_africa.html
- Reilly, D., 2001, 'Comments on complementary and alternative medicine in Europe', *Journal of Alternative and Complementary Medicine* 7(Suppl), 23–31. <https://doi.org/10.1089/107555301753393779>
- Traditional and National Health Alliance, 2014, *Your right to choose natural health products is under threat*, viewed 28 July 2016, from www.naturalhealthalliance.co.za/DraftAmendmentCommentDec2014.htm
- Wardle, J. & Oberg, E., 2011, 'The intersecting paradigms of naturopathic medicine and public health: Opportunities for naturopathic medicine', *Journal of Alternative and Complementary Medicine* 17(11), 1079–1084. <https://doi.org/10.1089/acm.2010.0830>
- World Health Organization 2013, *WHO traditional medicine strategy: 2014–2023*, Geneva, viewed 26 March 2018, from <http://www.who.int/medicines/publications/tmstrategy1423/e>

Appendix starts on the next page →

Appendix 1

Details of 2002 registration:

Year of registration	No registered	Year of completion of studies	College's qualification was obtained at
1980	1	1972	Naturopathic College of South Africa
1982	22	1954, 57, 58, 61, 62, 63, 64, 1967, 1969, 1970 (x2), 1972, 1973 (x2), 1974 (x4), 1976, 1980	Lindlahr College, Canyon College, College of Natural Sciences, Naturopathic College of South Africa, Lindstrom, South African Faculty of Naturopathy and Osteopathy
1983	6	1969, 1974, 1972, 1974 (x2), 1975	Canyon College, College of South Africa, Lindlahr College, Naturopathic Association, South African Foundation of Natural Therapies
1984	5	1967, 1972, 1974	Lindlahr College, South African Faculty of Homeopathic Medicine
1985	8	1965, 1972, 1974	College of South Africa, Naturopathic Association of South Africa, South African Faculty of Homeopathic Medicine
1987	1	1967	Lindlahr College
1990	2	1973, 1975	College of Natural Sciences, South African Institute of Homeopathy
1993	1	1974	Canyon College
1996	23	1957, 1971, 1973 (x2), 1974 (x7), 1976, 1982, 1989, 1993 (x7)	African Herbal College, Brantridge Forest School, Transkei, Lindlahr College, South African Foundation of Natural Therapies, South African Homeopathic Association, World Correspondence College
1997	7	1973, 1974, 1995	College of Natural Therapy, College of Natural Science, Lindlahr College, Naturopathic College of South Africa
1999	2	1978, 1981	Naturopathic College of South Africa, Brantridge Forest School
2000	1	1972	Naturopathic College of South Africa
2001	3	1973, 1991	Lindlahr College, South African College of Herbalism

Note: The number of registered Naturopaths totalled 100. However, not all on the registration list recorded the year of completion of training or the institute at which the training was undertaken.

Appendix M

Response to Reviewers: An Exploration of the Professional Identity, Treatment Practices and Role of Naturopaths in the South African Healthcare System

██████████ (Reviewer 1): Thank you for the opportunity to read this article. I am providing a number of comments and suggestions that I hope will support the authors in strengthening their paper.

1. Background: The first paragraph seems very definitive (i.e., this IS the professional identity of naturopaths in South Africa) which seems at odds with the aim of the paper stated at the end of the background section with is to 'describe the professional identity...'. I would recommend revising the framing in the first paragraph to make it clear that this is what official texts/documents/policies say.

This change has been made.

2. Background: most of the background is about the history of the regulation of naturopathic medicine in South Africa which I found very interesting and helpful to understand the study. I wonder if a regulation/policy lens is a better framework for the overall study than 'professional identity' which is only mentioned in the last paragraph of the background section. If the aim of the study is truly to explore the "professional identity" then the background needs a section summarizing the key literature on professional identity of health professionals in general (e.g., Freidson, E. (1970) *Professional Dominance: The Social Structure of Medical Care*. New York: Atherton; Burke, P. (2004) Identities and social structure: The 2003 Cooley-Mead Award address. *Soc. Psychol. Q.* 67,5–15; Tajfel, H. & Turner, J. The social identity theory of intergroup behaviour. In: Worchel, S. & W Austin *Psychology of Intergroup Relations*. Chicago: Nelson-Hall; 1986; Gecas, V. & Burke, P.J. (1995) Self and identity. In: Cook K.S., G.A. Fine & J.S. House (eds) *Sociological Perspectives on Social Psychology*. Needham Heights, MA: Allyn and Bacon, 336–338), some of which has been applied to naturopaths and other CAM practitioners such as Cant, S. & Sharma, U. (1996) Demarcation and transformation within homeopathic knowledge: A strategy of professionalisation, *Social Science and Medicine*, 42, 4, 579– 88.; Welsh, S.,

Kelner, M.J., Wellman, B. & Boon, H. (2004) Moving forward? complementary and alternative practitioners seek self-regulation *Sociology of Health and Illness*. 26(2), 216–241; Saks, M. (2000) Professionalization, politics and complementary and alternative medicine. In M. Kelner, B. Wellman, B. Pescosolido & M. Saks (eds) *Complementary and Alternative Medicine: Challenge and Change*. Amsterdam: Harwood Academic) and an explicit discussion of the theoretical lens the authors are using for this study.

Having re-read the article I am in agreement with the reviewer. The necessary changes have been made to the article starting with a change in its title to better reflect the regulatory framework of the research.

3. Methods: It is unclear what ontological paradigm guided this study – it would be helpful if the authors clearly stated their perspective.

This was completed.

4. Methods: Page 7, line 141: ‘Participants were purposively sourced...’ I cannot find any description of how participants were purposefully chosen – it appears that the authors contacted ALL naturopaths who could be identified with contact information from the register.

I am in agreement. The word purposively has been removed.

5. Methods: Sample size: It is not clear why ALL naturopaths were contacted as this sample seems high for a qualitative study. How was the sample size determined?

In order to ensure that the qualitative sample represented the full diversity of naturopaths, all naturopaths contactable were sampled as there was no way of determining from the registration list the training or practice experience of the participants.

6. Methods: Data collection: why did you choose to do the electronic survey instead of interviewing everyone? This design choice limited your ability to delve more deeply into emerging themes as they emerged from the data.

This was identified as a limitation. The reason for allowing this was explained in the limitations section.

7. Methods: Analysis: why was the analysis conducted AFTER all the data were collected? Many qualitative methodologies recommend iterative analysis and data collection which would have been possible with at least the interview component of the data collection. This process of reading through the data and interpreting them continues throughout the project. The analyst adjusts the data collection process itself when it begins to appear that additional concepts

I agree that qualitative data analysis is an iterative process. The process of analysis was an on-going one as the data was transcribed and summarised after each participant responded. Reading through the data and interpreting it continued throughout the data collection process. However, only once all the data was collected did the final data analysis take place. Throughout this process the researcher was very mindful of remaining open to all the themes which emerging from the analysis process.

8. Results page 9, lines 183–187: There is a statement that the naturopaths who were willing to answer questions via email did so because of a ‘level of trust’ – how do you know this? Did you ask them? Could it not simply have been because they found it more convenient – or for some other reason?

Through the editing process this statement was removed.

9. Results - Profession Identity section - this section has some really interesting findings about the practitioners' feelings about the changes in regulation, but doesn't appear to contain that much about professional identity per se (at least not as identity has been discussed traditionally in the literature see point #2 above).

There appears to be a lot of concern about the costs associated with registration but it is not clear how this is linked to professional identity.

If registration fees are not paid, then the title of naturopath may not be used. Since naturopaths have title protection, no one may claim to be a naturopath or use the term if they are not registered with the regulatory body. The history of naturopathy has shown that practitioners are legally charged for using the title without being registered.

How is regulation itself actually linked to identity as a naturopath (see page 13 lines 280–289)?

Legislation defines what naturopathy is, the SOP and the remedies that may be used.

Did they not identify as naturopaths when they were not registered? *See explanation above.*

Page 14 lines 317–318 seems to suggest that identity is independent of registration which is interesting and could be developed more.

This section has been re-structured, which makes the relation between registration and identity a clearer. This is also taken up again in the discussion.

Also on Page 14 –how is the changing definition of naturopathy linked to professional identity?

While the changing definition is taught in the naturopathic programme, it is not the official definition and it is the official definition which still defines naturopathy. The legislation regarding the definition of naturopathy has not changed since 1982. The identity of

naturopaths is aligned to the narrow legislative definition. Naturopaths have to work within the legal framework or run the risk of being charged with unprofessional behaviour.

The section at the top of page 15 including the quote from a practitioner working in public health is very interesting re the enduring identity of ‘always being a naturopath’ and discussion of this could be expanded.

This was further expanded on. This needs to be understood within the regulatory context of naturopathy in South Africa. All participants in this study were legally registered at the time. Therefore, despite the fact that some were not in practice, they can use the title and be legally recognised as naturopaths as long as they remain registered – hence they will ‘always be a naturopath’ as long as registration remains valid.

10. Discussion - the discussion does not really discuss the findings nor situate them within the ample literature on the topic of professional identity. Page 20 lines 462-464 focuses on the role of the regulations on the naturopathic profession in South Africa. This was not identified as a goal or aim of the paper, but I wonder if this should be? Many of the results shed light on this issues (in many cases they are more relevant to this topic than to professional identity).

The title of the article has been changed to reflect the focus on the effects of legislation rather than on professional identity.

11. Conclusion: first line of the conclusion states that ‘South African naturopaths share a common professional identity...’ does not really seem to be well supported by the findings/analysis. I don't see an analysis or discussion of the professional identities of the participants and how they are same or different which would be needed to support this conclusion.

The conclusion has been edited to reflect the focus on the legislation.

The authors have collected some very interesting data, but I wonder if the paper needs to be re-framed to focus on how the changing regulatory structures have impacted the profession instead of the current focus on professional identity as the findings seem more focused on the form

I am in agreement with the reviewer and have made the recommended change.

PhD (Reviewer 2): General advice:

Please make the writing slightly more concise, as suggested throughout.

Try to amalgamate and abbreviate sentences when there is repetition.

Include all Acts in the references list, with URL if available, so that readers can look them up if possible.

All of the above has been attended to.

Swap the location of sections 1.1 and 1.2.

This has been done.

Include more participant quotes, especially in the Types of Practices section.

This has been done.

Move general info from the Discussion section into an appropriate place in the Background - History of South Africa section, so that the Discussion is about the implications of the data rather than providing new info.

Completed.

PLEASE check very carefully for errors in your references list, and correct them.

The reference list has been revised.

Explain terms about the healthcare system succinctly as suggested in comments.

A new sentence explaining the healthcare system was inserted.

Address other comments as provided on the text of the attached document. Please do not overlook this as the paper is not quite ready to be published in its present form and needs an overall re-write consisting of many fine edits, and some restructuring and further explanation.

All editorial corrections and suggestions as suggested have been revised except for the following:

Line 106: 'And could not provide documentary evidence of training' – omit

This line cannot be omitted as it would then not accurately reflect the process. Applicants who did not provide documentary evidence of training were not allowed to write the exams.

Line 384: Explain why naturopathy would be considered a burden: The participant stated that naturopathy could help to lessen the burden of chronic illness on the healthcare system.

Good luck and best wishes.

Appendix N

Response to Reviewers 2: The Effect of Legislation on the Treatment Practices and Role of Naturopaths in South Africa

I would like to express my sincere thanks to the reviewers for all the work they have put into reviewing this article. It has been encouraging to find that there is interest in this body of research by others outside of South Africa.

██████████ (Reviewer 1): Thank you for the opportunity to review a revised version of this paper. The authors have addressed many of my original comments and suggestions; however, there several issues that require clarity in the paper. I hope the following points are helpful:

1. General: The focus on professional identity remains under-developed throughout the paper. It is not clear that the methods used allow for an in-depth exploration of professional identity. Given the exploratory nature of this work, and that this appears to be the first study of this group in South Africa, perhaps the focus of the paper should simply be on the descriptive findings which provide an important baseline for future studies.

The point made by the reviewer is accepted and all reference to professional identity has been removed and the article adjusted accordingly.

2. Title: includes 'professional identity', but this is not really developed in the findings (could perhaps be removed)?

The title has been changed to reflect the recommendation of the reviewer.

3. Background: Please define what is meant by complementary medicine in the first line (there are many definitions in current use).

This has been inserted in the introductory paragraph of the background section.

4. Methods: The authors indicate they did a purposive sample and so the criteria upon which the 91 names of registered naturopaths from the registry were selected needs to be provided. However, it appears later in the methods that ALL the practitioners on the registry were selected which is confusing because that would by definition not be a purposive sample. In fact, it would not be a sample at all if the authors contacted everyone in the population that met the inclusion criteria for whom they could find contact information. This needs to be clarified.

The methodology section was edited and changed based on the previous input. Hence the word 'purposive' has been removed. From the list of 91 practitioners, the authors contacted only those whose contact details could be traced – resulting in a sample size of 64. This is clarified in the methods section.

5. Results

a. The Tables did not seem to be included in this version of the paper so I have not been able to review them again.

This was changed based on the first input by the reviewer and uploaded with the reworked article.

b. Naturopathic Registration: This section focuses on the fact that registration is needed to legally practice. Those not in current practice appear to stay registered for practical reasons to make it easier to return to practice in the future. This section does not explore how registration is related to identity which is a key theme that would need to be developed further if the authors wish to maintain this as a key focus for the paper.

The reference to professional identity has been removed from this section.

6. Discussion: Page 24 has the following quote 'Despite the challenges some participants experienced with registration, being registered affords naturopaths title protection and is an important part of the professional identity of naturopaths'. But as noted in the comments regarding the results section above - the results do not discuss how registration is related to professional identity. In fact there is little mention of the professional identity in the results at all. The topic of professional identity could be very interesting if you have the data to develop this further (in both the results and the discussion). Or this could be removed from the paper.

The point made by the reviewer has been understood. Hence the title of the article and the theme of professional identity have been removed from the article.

██████████, PhD(Reviewer 2): Dear Authors,

I have very much enjoyed re-reading your paper about legislative impacts on naturopathy practice in South Africa, and believe it is much better and almost ready for publication. I have provided a detailed list of minor edits I would like you to make, after which - given that all three of your authors will carefully re-read and check for errors and correct grammar - I believe it can be accepted for publication.

Well done, best wishes.

All changes recommended by the reviewer have been effected.

Appendix O

Editor's Response to Re-submission: The Effect of Legislation on the Treatment Practices and Role of Naturopaths in South Africa

Your submission to BMC Complementary Medicine and Therapies - BCAM-D-19-01601R2

BMC Complementary & Alternative Medicine - Editorial Office

<em@editorialmanager.com>

Fri, Mar 27, 2020 at 9:02 PM

Reply-To: BMC Complementary & Alternative Medicine - Editorial Office

<jeanelle.depadua@springernature.com>

To: Wendy Ericksen-Pereira <wericksenpereira@gmail.com>

BCAM-D-19-01601R2

The effect of legislation on the treatment practices and role of naturopaths in South Africa

Wendy Ericksen-Pereira; Nicolette Roman; Rina Swart

BMC Complementary Medicine and Therapies

Dear Dr Ericksen-Pereira,

Your manuscript "The effect of legislation on the treatment practices and role of naturopaths in South Africa" (BCAMD-19-01601R2) has been assessed by our reviewers. Based on these reports, and my own assessment as Editor, I am pleased to inform you that it is potentially acceptable for publication in BMC Complementary Medicine and Therapies, once you have carried out some essential revisions:

1. Please ensure you address Reviewer 1's comments at the foot of this email in your revised manuscript.
2. Please reformat your manuscript to exclude the spacing between letters.
3. Please remove the response to reviewers from the file inventory, as it is no longer needed at this stage of the editorial process.
4. When submitting your revised manuscript please ensure you do so as a single clean copy without any tracked changes, colored or highlighted text, as these are no longer required at this stage of the editorial process.

Their reports, together with any other comments, are below. Please also take a moment to check our website at <https://www.editorialmanager.com/bcam/> for any additional comments that were saved as attachments. Please note that as BMC Complementary Medicine and Therapies has a policy of open peer review, you will be able to see the names of the reviewers. Once you have made the necessary corrections, please submit a revised manuscript online at: <https://www.editorialmanager.com/bcam/> If you have forgotten your password, please use the 'Send Login Details' link on the login page at <https://www.editorialmanager.com/bcam/>. For security reasons, your password will be reset.

A point-by-point response letter must accompany your revised manuscript. This letter must provide a detailed response to each reviewer/editorial point raised, describing exactly what amendments have been made to the manuscript text and where these can be viewed (e.g. Methods section, line 12, page 5). If you disagree with any comments raised, please provide a detailed rebuttal to help explain and justify your decision.

At this stage, we ask that you submit a clean version of your manuscript and do not include track changes or highlighting. Please also ensure that your revised manuscript conforms to the journal style, which can be found at the Submission Guidelines on the journal homepage.

Please note, if your manuscript is accepted you will not be able to make any changes to the authors, or order of authors, of your manuscript once the editor has accepted your manuscript for publication. If you wish to make any changes to authorship before you resubmit your revisions, please reply to this email and ask for a 'Request for change in authorship' form which should be completed by all authors (including those to be removed) and returned to

4/16/2020 Gmail - Your submission to BMC Complementary Medicine and Therapies - BCAM-D-19-01601R2 <https://mail.google.com/mail/u/2?ik=0d2307578c&view=pt&search=all&permthid=thread-f%3A1662344945485268870&simpl=msg-f%3A1662344...> 2/4

this email address. Please ensure that any changes in authorship fulfil the criteria for authorship as outlined in BioMed Central's editorial policies (<http://www.biomedcentral.com/about/editorialpolicies#authorship>).

Once you have completed and returned the form, your request will be considered and you will be advised whether the requested changes will be allowed.

By resubmitting your manuscript you confirm that all author details on the revised version are correct, that all authors have agreed to authorship and order of authorship for this manuscript and that all authors have the appropriate permissions and rights to the reported data.

Please be aware that we may investigate, or ask your institute to investigate, any unauthorised attempts to change authorship or discrepancies in authorship between the submitted and revised versions of your manuscript.

A decision will be made once we have received your revised manuscript, which we expect by 10 Apr 2020.

We look forward to receiving your revised manuscript and please do not hesitate to contact us if you have any questions.

Best wishes,

Kate Gaines

BMC Complementary Medicine and Therapies

<https://bmccomplementalalternmed.biomedcentral.com/>

Appendix P

Editors' Decision: The Effect of Legislation on the Treatment Practices and Role of Naturopaths in South Africa

Decision on your submission to *BMC Complementary Medicine and Therapies* -

BCAM-D-19-01601R3

BMC Complementary & Alternative Medicine - Editorial Office em@editorialmanager.com

Thu, Apr 2, 2020 at 5:50 PM

Reply-To: BMC Complementary & Alternative Medicine - Editorial Office

<jeanelle.depadua@springernature.com>

To: Wendy Ericksen-Pereira <wericksenpereira@gmail.com>

BCAM-D-19-01601R3

'The effect of legislation on the treatment practices and role of naturopaths in South Africa'

Wendy Ericksen-Pereira; Nicolette V Roman; Rina Swart

BMC Complementary Medicine and Therapies

Dear Dr Ericksen-Pereira,

I am pleased to inform you that your manuscript 'The effect of legislation on the treatment practices and role of naturopaths in South Africa' (BCAM-D-19-01601R3) has been accepted for publication in *BMC Complementary Medicine and Therapies*.

If any final comments have been submitted from our reviewers or editors, these can be found at the foot of this email for your consideration. Before publication, our production team will

also check the format of your manuscript to ensure that it conforms to the standards of the journal. They will be in touch shortly to request any necessary changes, or to confirm that none are needed.

Articles in this journal may be held for a short period of time prior to publication. If you have any concerns, please contact the journal.

Please do not hesitate to contact us if you have any questions regarding your manuscript and I hope that you will consider BMC Complementary Medicine and Therapies again in the future. If you wish to co-submit a data note to be published in BMC Research Notes (<https://bmccresnotes.biomedcentral.com/about/introducing-data-notes>) you can do so by visiting our submission portal <http://www.editorialmanager.com/resn/>. Data notes support open data (<https://www.springernature.com/gp/openresearch/open-data>) and help authors to comply with funder policies on data sharing. Please note that this additional service is entirely optional.

Best wishes,

Kate Gaines

BMC Complementary Medicine and Therapies

<https://bmccomplementalmed.biomedcentral.com/>

Appendix Q

Response to Reviewers: A Comparative Analysis and Evaluation of the Naturopathic Curriculum in South Africa

Firstly, I would like to take the opportunity to thank the reviewers for their constructive input in reviewing this paper. It is encouraging to find that there is interest in the research being conducted. Much has been learnt from responding to and reworking the paper based on your input. I thank you for the time taken to review this research paper.

Relevance to HPE audience: Broad interest to all health professionals

Reviewer #1: Analysing the SA naturopathic curriculum using a sequential two-stage qualitative methodology was valuable. I can see it being a worthwhile exercise in other countries. I agree with the author that it is challenging when relying on comments from email submissions, but the comments listed are similar to those that we hear in other countries that are undergoing curriculum review.

Thank you. It is interesting to note the similarities in comments in the different countries.

Reviewer #2: This article will be of interest to all health professionals as it describes the educational content of the only naturopathic programme in South Africa and how it compares to global standards. It will inform people of the surprising depth and breadth of education these providers receive (it includes three years of undergraduate education followed by two years of graduate training). The article also illustrates a willingness to adopt some of the best-practices in higher education in assessing the relevance and quality of a program by conducting a graduate survey and using the findings to improve the programme. Taken together, these findings convey a level of professionalism that may help facilitate more opportunities for inter-professional collaboration and inter-professional education between naturopathic doctors and other healthcare providers, which ultimately benefits patient care in

South Africa.

It is gratifying to receive feedback of this nature which supports the researcher's rationale for conducting the study.

Scientific rigour: Appropriate design, methods, instruments and data analysis procedures; explicit ethical review board approval; accurate, appropriate and complete results

Reviewer #1: The methodology and review was appropriate for the analysis. If it had been possible to follow up with some of the respondents personally it may have helped to flush out some of the sections as it seemed that many of the comments came from the same couple of respondents.

While all the responses received provided commentary on the curriculum, the depth of the comments was not the same for all the respondents. Hence quotes were chosen which best expressed the general view of the respondents. However, this aspect was identified as a limitation in the study.

In a follow-up study which should consist of a programme evaluation, there could be a follow-up on the comments made in order to fully arrive at the various components of the programme which could be improved on as some of the comments appear to suggest that it is not just the curriculum that needs to be evaluated.

Reviewer #2: The design of the research study consisted of a two-step process. The first step consisted of conducting a comparison of the programme to both the WHO and the World Naturopathic Federation standards. It would have been useful to have articulated the criteria for the comparison more clearly in the Methodology section. Was it going to be an exhaustive list of courses or only major course categories/course?

The distinction has now been clarified in the methodology and is set out in Table 1.

The analysis of results similarly could be more detailed. It would be valuable to analyse where courses/categories differed and the rationale for that difference. What was the percentage overlap between the categories? Where did they differ and why? There may be an opportunity to then describe why the South African curriculum differs in some key areas, such as modalities.

This has now been addressed in the results and discussion.

It would have been valuable to have included a number of the key comparisons that were part of the original WNF *Roots Survey*, as they may have yielded more robust recommendations for improvement. This would include hours/percentage time spent on basic clinical science, clinical science, naturopathic history and philosophy, naturopathic disciplines and practical components. It would be particularly informative to understand how the programme compared to the standards in the practical component, as this is one of the most important parts of the education where students integrate classroom learning with the patient care.

The hours spent on each component has been included in the summary table.

Naturopathic history, philosophy and practical treatment practices are examined in a research article which is currently under review.

The second part of the research study collected the opinions of graduates – from between 2007 and 2016 – on all subjects in the programme of and also on what can be improved. It was not clear if this was the exact wording, so I would recommend a copy of the survey wording is included as an appendix.

This has been appended.

In the methods section it would be useful to remind readers what constituted a theme. Was it the frequency of mentioning the topic or another approach?

This has been expanded on.

A number of good points made in the discussion section. First, there was important information highlighted on the importance of consulting with graduates to ensure the programme is teaching relevant material for the practice of naturopathy. Also of importance was the conclusion that to enhance learning there needs to be a better integration (both horizontal and vertical) of courses/content in the curriculum. Finally, in the section assessing the critique of graduates on the relevance of certain subjects, there was insightful commentary on why certain courses were included (e.g., Computer Literacy was there to support learners who may have come more disadvantaged backgrounds).

Thank you for the positive commentary

The author acknowledged that a significant challenge with the study include the small sample size of only 18 practitioners. This is difficult to overcome given how small the profession is in South Africa.

Thank you – I concur

Ethics review was obtained for the study.

Novel – Did you learn anything new?

(New knowledge, new application, new method)

Reviewer #1: I have used a two-stage qualitative analysis when analysing naturopathic programmes, but I had not seen it written up in this way. It worked well for this type of analysis.

Thank you

Reviewer #2: This study highlighted that the general content of the SA naturopathic curriculum does compare favourably with international benchmarks and confirms that this a rigorous professional programme. The richness of the feedback was valuable and revealed

significant opportunities for improving the content and curriculum design (horizontal and vertical integration) of the programme. It highlighted that the SA curriculum included courses considered important in supporting learners from different backgrounds (e.g., Computer Literacy and English for Educational Development). There may be opportunities to develop additional approaches to support learners who need more assistance so that they can more easily enter the programme and be academically successful.

Thank you. The researcher is involved with the institution's teaching and learning committee in developing and implementing additional support strategies to ensure student success.

As a result of the findings of this study the naturopathy curriculum is being critically reviewed.

Quality of academic writing - Language, grammar, spelling

Reviewer #1: Strong. No suggestions.

Thank you

Reviewer #2: The quality of academic writing is strong and clear. There are no concerns regarding language, grammar and spelling.

Thank you

Reviewer #1: Overall the paper is strong. I have only a few minor comments:

Introduction:

Naturopathy is a system of traditional medicine in Europe and complementary medicine (CM) in all other countries. We (the WNF) try and ensure that we recognise that it is a form of traditional medicine.

Prevention and self-healing are key aspects of naturopathy. The other key aspect that is often highlighted is focus on treating the whole person.

Line 41: I recommend adding 'through education, lifestyle and dietary changes primarily

using . There are some aspects of naturopathic practice that would not be considered 'low tech.'

The phrase 'using a low technological approach' has been deleted.

- line 106: recommend that 'was' be changed to 'were'.

subject-verb agreement lends itself to the use of the verb 'was'.

Line 136: not sure that the word 'functional' is correct here. In nutrition we refer to clinical nutrition (diet modification and regimen) and applied nutrition (the use of nutraceuticals).

This is a quote from one of the participants. I agree that the use of the word 'functional' is inappropriate, however, it is a direct quote and is perhaps an indication of the participant's exposure to functional medicine which has become very popular in South Africa with many individuals signing up for the course and practicing as 'functional medicine practitioners' without being registered with the legislative, controlling body. This undermines the registered naturopathic profession as they have to adhere to the legal scope of practice when registered.

Reviewer #2: Congratulations on conducting this important study. You have raised the awareness of the rigour of naturopathic education in South Africa and also shown a willingness to reflect on areas of challenge and how to improve on them. I have conveyed some suggestions on conducting some more comparisons between the SA curriculum and the international standards. I am hoping this could be done without too much additional effort and would yield some additional recommendations for improvement. For the graduate survey, I believe you have highlighted some common areas of concern that are seen in naturopathic programmes around the world.

Thank you. It is encouraging to know that South Africa is not the only country that experiences these problems. The suggestions made have been implemented.

An additional suggestion would be to describe the range of different measures commonly used to assess and improve a programme (measures of programme assessment) and what role the graduate survey plays in it. It was not clear at the beginning of the study what the relevance of a graduate survey was to quality improvement and why you chose to do it. There may be literature on quality assurance in professional programs that articulates the role different stakeholders have in assessing the outcomes and relevance of a programme.

The focus of the research paper was to review the curriculum for the purpose of benchmarking it and to determine whether it meets the needs of graduates. Doing a programme evaluation requires a more in-depth process that uses a different methodological approach. In view of the graduate responses to the curriculum, there is an indication for the need to conduct a programme evaluation in the long term. This could be a separate research process which can be guided by the demands of the relevant legislation.

I have listed some future research ideas for consideration. First, the conducting of a practice audit to better define what is being practised in the field (Praxis) which would then provide valuable guidance into programme design and ensure that graduates are meeting the needs of patients in South Africa.

A research paper on this topic is currently under review.

Secondly, evaluate the academic resources you are providing to learners who need additional support and whether your courses/programmes are meeting their needs. This is an area many programmes struggle with and it would be incredibly valuable to learn of any innovation in teaching and learning that could be supportive.

The lead researcher is currently working closely with the faculty's teaching and learning committee and this year various strategies have been implemented to better support students academically.

Finally, it would be invaluable to conduct an assessment of the relevance of naturopathic medicine to the healthcare concerns of all of South Africans. Is it being used as form of healthcare/primary care for citizens who live in underserviced areas of the country? Is it an approach that could provide culturally relevant primary care that could help address some of the shortages in healthcare providers in the country?

As the naturopathic students are involved in community clinics, data is currently being collected with the aim of demonstrating the value of naturopathy in underserviced communities.

Thanks again for doing this important work.

Appendix R

Editor's decision on: 'A comparative analysis and evaluation
of the naturopathic curriculum in South Africa'

AJHPE <em@editorialmanager.com>

Mon, Jul 27, 1:08 PM

(13 days ago)

CC: "Nicolette V. Roman" nroman@uwc.ac.za, "Rina Swart" rswart@uwc.ac.za

Ref.: AJHPE1276R1

A comparative analysis and evaluation of the naturopathic curriculum in South Africa
African Journal of Health Professions Education

Dear Ms Pereira,

We are pleased to tell you that your work has now been accepted for publication in
African Journal of Health Professions Education.

For those who have submitted articles after Jan 2019, a separate email with payment
information will follow.

Thank you for submitting your work to the journal.

Best wishes

Ntombifikile Sithole Mtshali, PhD

Associate Editor

African Journal of Health Professions Education

Appendix S

Graduate Review: Naturopathy Curriculum in South Africa

As a graduate of the Naturopathic Programme, it would be appreciated if you could reflect on your training and provide some commentary on the courses in the programme. If you are of the opinion that any of the courses could be improved upon, please expand on your comment.

Many thanks

B.Sc. (Complementary Health Science)

Subject	Credit	Comment
Level 1		
Chemistry 116	15	
Chemistry 126	15	
Medical Bioscience (M.BS) 111	15	
Medical Bioscience (M.BS) 121	15	
Physics for CHS	15	
Life Science 141	15	
Principles of Natural Healing 111	5	
Primary Health Care	10	
Computer Literacy 121	5	

Electives (choose 1)		
English for Educational Development	10	
Intro to Xhosa	10	
Intro to Afrikaans	10	
Level 2		
Biotechnology 216	20	
Medical Bioscience (M.BS) 231	20	
Medical Bioscience (M.BS) 232	20	
Medical Microbiology 251	20	
Medical Microbiology 252	20	
Nutrition 211	10	
Nutrition 221	10	
Complementary Healing Systems 201	10	
Interdisciplinary Health Promotion	10	
Level 3		
Pharmacology 204	20	
Study of Human Development 211	10	
Health Psychology 224	5	
Nutritional Medicine 315	10	

Pathology 311	10	
Pathology 321	10	
Herbal Pharmacognosy 312	10	
Herbal Pharmacognosy 322	10	
General Medicine 301	30	

Further Comments:

Complementary Medicine (Naturopathy)

Subject	Credit	Comment
Level 1		
Clinical Practice 404	10	
Treatment Modalities 411	20	
Treatment Modalities 421	20	
Research Methods 421	20	
General Medicine 401	30	
Clinical Diagnosis 402	20	
Differential Diagnosis 403	10	
Ethics, Jurisprudence and Practice Management 501	10	

Level 2		
Clinical Practice 504	40	
Treatment Modalities 511	20	
Treatment Modalities 521	20	
Research Project 508	20	
Counselling Skills 410	10	
Emergency Care 409	10	

Further Comments:

Appendix T

Editors' Report



Tanya Barben t/a Language Matters & Indexing Services (Pty) Ltd

11 August 2011.

60 Vredehoek Avenue

Vredehoek

Cape Town 8001.

To whom it may concern

I hereby acknowledge that I have edited Wendy Ericksen-Pereira's Doctor of Philosophy thesis, 'A model for naturopathy within the South African healthcare system'.

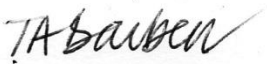
Before commencing work on the thesis I sent my editing brief to Ms Ericksen-Pereira. My role as editor of a thesis is, among others, to ensure that the writing flows, that grammar, punctuation and spelling are correct and applied consistently. Although I do not format in the formal sense, I ensure (as best as possible) that the formatting of headings is applied consistently and with as little 'flourish' as possible and I check for any spelling or grammar errors in them. I use South African editing rules: -isa and -ise and not -ize and -ize, single quotation marks rather than double (except when quoting within a quote) and standard South African English grammar rules, consulting aids such as *Oxford Style Manual*, *New Hart's Rules*, Judith Butcher's *Copy-editing* (2nd ed.), among others, and standard English dictionaries as well as a number of electronic resources. I edit using Tracked Changes and

review comments and expect the student to accept or reject the changes, and, preferably, to send the work back to me for a final 'cleaning up', as did Wendy Ericksen-Pereira.

The List of References was edited and the citation style required by the University of the Western Cape's Faculty of Community and Health Sciences applied. I ensure that the works cited in the text appear in the references and vice versa.

It was with the above considerations in mind that I edited Ms Wendy Ericksen-Pereira's doctoral thesis.

Yours sincerely

A handwritten signature in black ink that reads "Tanya Barben". The signature is written in a cursive style with a long, sweeping underline.

Tanya Barben

Appendix U

Plagiarism report: Turnitin

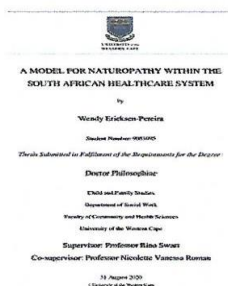


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A model for Naturopathy

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10 Hannah Appelbaum Belisle, Monique Hennink, Claudia E. Ordóñez, Sally John et al. "Concurrent use of traditional medicine and ART: Perspectives of patients, providers and traditional healers in Durban, South Africa", *Global Public Health*, 2014
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6 Danielle A. Millar, Sandra Bowles, Shantal Lynn Windvogel, Johan Louw, Christo J. F. Muller. " Effect of Rooibos () extract on atorvastatin-induced toxicity in C3A liver cells ", *Journal of Cellular Physiology*, 2020
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7 Scheepers , Christo Abraham | Bayat , Mohammed Sayeed. "Evaluation of the Factors Impacting Entrepreneurial Sustainability of Tibb Healthcare Practitioners in Cape Town \ \ Singaporean Journal of Business , Economics and Management Studies .- 2013 , Vol. 2 , No. 3 , pp. 94 - 111.", Singaporean Journal of Business, Economics and Management Studies, 2013
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8 Stephen F. Gambescia, Linda Lysoby, Michael Perko, Jiunn-Jye Sheu. "Experience Documentation in Assessing Professional Practice or Work Experience: Lessons From Granting Advanced Certification to Health Education Specialists", *The Journal of Continuing Higher Education*, 2016
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14 Wardle, Jon, and Jon Adams. "Naturopaths: Their Role in Primary Health Care Delivery", *Primary Health Care and Complementary and Integrative Medicine Practice and Research*, 2013.
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19 Jon Adams, Amie Steel, Janet Schloss, Wenbo Peng. "Coordination, Collaboration and Capacity <1%