

# **EXPLORING THE PERCEPTIONS AND EXPERIENCES OF CHIROPRACTORS IN THE ETHEKWINI MUNICIPLAITY REGARDING INTERPROFESSIONAL REFERRALS**

**By**

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I hereby declare that this dissertation is a true representation of my own work in  
both its conception and execution, except where acknowledgments clearly indicate  
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## DEDICATION

I dedicate this dissertation to my late grandmother, Fatima Goga, whom I love and miss dearly.

*I live in the faith that there is a Presence and Power greater than I am that nurtures and supports me in ways I could not even imagine. I know that this Presence is All knowing and All Power and is Always right where I am.*

— Ernest Holmes

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# **ABSTRACT**

## **Background**

Interprofessional collaboration refers to the collaboration among various healthcare practitioners with the intention of providing patients with the most effective and appropriate form of care. These collaborations can be defined as interactions and relationships formed among various healthcare practitioners. This collaboration allows for improved patient outcomes, cost effective healthcare, allocation of resources, and improved satisfaction for the patient and practitioner. A referral among various healthcare practitioners can enable and facilitate interprofessional collaboration.

The perceptions and experiences of South African chiropractors needed to be explored and understood. Many studies have focused on how other healthcare practitioners view chiropractors and their perceptions and experiences from the collaboration. Referrals occur when healthcare practitioners interact with one another to provide their patient with the best possible care. Understanding interprofessional referral networks requires a comprehensive analysis of all parties involved in the referral process. The perspectives and experiences offer valuable insights into barriers and challenges encountered in the interaction and collaboration among healthcare practitioners. In South Africa, chiropractors are trained to diagnose any physical defect, illness or deficiency. The treatment for these conditions may be outside chiropractors' scope of practice, necessitating the use of the referral network. Exploring the perceptions and experiences of South African chiropractors facilitates the identification of potential barriers and challenges, as well as the development of solutions to address them.

## **Aim of the study**

The aim of this study was to explore the perceptions and experiences of chiropractors with respect to their interprofessional referrals to healthcare practitioners.

## **Methodology**

This study entailed a qualitative design, using an explorative study design. The study population was qualified chiropractors registered with the Allied Health

Profession Council of South Africa, in the location of the eThekweni Municipality, KwaZulu-Natal, South Africa. Purposive and snowball sampling strategies were used to recruit participants. A sample size of 13 participants was used and one-on-one interviews were conducted using a semi-structured interview guide. The interviews were approximately 30 to 40 minutes long and were transcribed verbatim. The transcripts were analysed and a list of topics were made. The topics were abbreviated into codes and these were arranged in alphabetical order. The codes that were similar and regular were grouped to form categories. Themes or concepts were made from the categories and a theoretical construct was formed. Thematic analysis was conducted using Tesch's method of thematic analysis.

## **Results**

The study identified four main themes, namely interprofessional collaboration and referral dynamic, patient perspectives on referral and continuation of care, challenges encountered in the referral process, and enhancement of the referral network. The participants expressed reasons for patient referrals in the chiropractic profession, as well as other professions. They emphasised their personal networks and expressed shared values on interprofessional interactions, with noted positive outcomes. The participants noted a correlation among patient preferences and their healthcare decisions. Obstacles encountered by patients impacted their referrals and the participants emphasised the relevance of these obstacles to patient care. A variety of obstacles encountered by the participating chiropractors were discussed, including stereotypes, misconceptions surrounding the chiropractic scope of practice, geographical location, communication barriers, chiropractic jargon, other practitioners age and sense of ownership, as well as the exclusion of chiropractic from the public healthcare system. Methods to improve interprofessional referrals and collaboration were then outlined and discussed in detail.

## **Conclusion**

This qualitative study explored the perceptions and experiences of chiropractors in eThekweni Municipality regarding interprofessional referrals and collaboration. This study emphasised the importance and value of referrals when patient care falls outside the scope of chiropractic and emphasised that positive working relationships facilitate evidence-based and patient-centred care. Several challenges to collaboration were found to be stereotyping, communication barriers, and exclusion

from the public healthcare system. This study outlined the need for better communication, new graduate guidance and clinical training to facilitate and improve the collaborative relationships among chiropractors and other professions. It offers insights from the perspective of South African chiropractors and recommends further investigative studies in other municipalities.

**Key words:** Chiropractic, referrals, interprofessional collaboration, experiences, perceptions

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## **LIST OF ABBREVIATIONS**

|        |                                                   |
|--------|---------------------------------------------------|
| AHPCSA | Allied Health Professions Council of South Africa |
| CAM    | Complementary and alternative medicine            |
| CASA   | Chiropractic Association of South Africa          |
| CT     | Computed tomography                               |
| CPD    | Continuing professional development               |
| DUT    | Durban University of Technology                   |
| GPs    | General practitioners                             |
| IREC   | Institutional Research and Ethics Committee       |
| KZN    | KwaZulu-Natal                                     |
| MRI    | Magnetic resonance imaging                        |
| X-ray  | Radiograph                                        |

# CHAPTER ONE: INTRODUCTION

## 1.1 INTRODUCTION

According to Gevers-Montoro *et al.* (2021: 2), chiropractic is a healthcare profession that focuses on the treatment of neuromusculoskeletal disorders with a focus on spinal disorders. Chiropractors utilise spinal manipulative therapy as their primary form of treatment. It involves a controlled high velocity, low-amplitude thrust force applied to specific spinal segments (Gevers-Montoro *et al.* 2021: 2). Chiropractors are not limited to spinal manipulative therapies but also utilise auxiliary therapies such as ultrasound therapy, dry needling, transcutaneous electrical nerve stimulation, and shockwave therapy. Chiropractors will often utilise referral networks to provide their patients with the best available healthcare.

A referral occurs when a healthcare provider lacks the resources required to manage a patient's conditions and requests another provider to assist in the co-management of the patient because they are better equipped and trained with the necessary resources or skills (Seyed-Nezhad *et al.* 2021: 4364). Interprofessional referrals are facilitated by interprofessional collaboration as they are interconnected with each other. According to Seaton *et al.* (2021: 217), interprofessional collaboration is defined as the relationships and interactions that exist among various practitioners with different healthcare backgrounds. Interprofessional collaboration facilitates these practitioners to achieve their shared goal of providing patients with safe and quality healthcare (Seaton *et al.* 2021: 217).

Chiropractors are often confronted with situations in which a patient's condition falls outside their scope of practice, necessitating the assistance of another healthcare practitioner with the appropriate skills and resources needed to manage the patient. For example, a patient who presented to a chiropractor with a distal radial fracture would need to be referred to an orthopaedic surgeon. Orthopaedic surgeons specialise in interventions such as surgery, brace prescription and casting (Austin-McClellan and Lisi 2021: 77). This is an instance in which chiropractors lack the resources to manage this kind of patient by themselves and would need to co-manage through a referral to an orthopaedic surgeon to provide the patient with the best possible care.

According to the World Health Organization, a collaborative healthcare system is comprised of various healthcare workers, the community, patients, and the patient's families and caregivers (Müller and Couper. 2021: 2). The goal of a collaborative healthcare system is to provide comprehensive healthcare services of the highest quality to all (Müller and Couper. 2021: 2). Chiropractors are part of the collaborative healthcare system and utilise referral networks to support interprofessional collaboration and co-management of patients. Understanding chiropractors' perceptions and experiences needs to be explored as it affects patients' outcomes and satisfaction.

South African chiropractors can perform physical, neurological, manual, and orthopaedic examinations as a way of formulating differential diagnoses (Ismail *et al.* 2021: 216). However, the treatment for the conditions diagnosed may not be part of the chiropractic scope of practice, and a referral would be required for the patient to receive the appropriate form of care. South African chiropractors are not part of the public health sector (Ismail *et al.* 2021: 216). South African chiropractors would have to overcome this challenge by forming their own referral networks in private practice.

This research endeavoured to provide insight into South African chiropractors' perceptions and experiences with regard to interprofessional referrals. The research has been conducted on chiropractors with the aim of improving working relationships among chiropractors and other healthcare practitioners. It places emphasis on the barriers and challenges experienced by chiropractors and enables the profession to understand their attitude about referral networks. The outcomes of the study can provide solutions to the barriers and challenges that inhibit the interaction and collaboration of chiropractors with other healthcare practitioners in South Africa.

## **1.2 CONTEXT OF THE STUDY**

Interprofessional relationships exist among chiropractors and other healthcare practitioners. Chiropractors do not practise in isolation as there are instances where they need to make referrals to other healthcare practitioners to ensure that their patients receive optimal care. Examples of healthcare practitioners who chiropractors may refer to are neurologists, orthopaedic surgeons, rheumatologists,

cardiologists, and general practitioners (GPs). According to Blanchette *et al.* (2021: 637), patients value the collaboration of GPs and chiropractors for their treatment programmes; therefore, it is important for chiropractors to build and grow their interprofessional relationships with other healthcare professionals. Interprofessional collaboration allows for optimal patient care as it allows for better use of resources, patient adherence and compliance with treatment programmes, improved pain relief, and improvement in patients' functional status (Blanchette *et al.* 2021: 637).

According to Silvano *et al.* (2013: 3), if chiropractors can establish a referral network built on professionalism and respect with other healthcare providers through a collaborative care model, patients are more likely to experience optimal benefits. If something is found in patients' case history or physical examination that is beyond the chiropractic scope of practice, it is important for the chiropractor to refer to another healthcare practitioner to assess and conduct the necessary investigation/s and further manage the patient. Thus, building interprofessional relationships with other healthcare practitioners is important for chiropractors.

Chiropractors are not part of the public health sector in South Africa and, as such, referrals to and from them are not conducted on a regular basis. Chiropractors in private practice must establish their own referral patterns because they are not included in the public health sector. According to Ismail *et al.* (2021: 216), South African chiropractors are primary contact practitioners who need to be able diagnose and refer accordingly to the relevant healthcare practitioners when necessary. Understanding the referral system along with the perceptions and experiences that chiropractors have with respect to referring to other healthcare practitioners has the potential to improve interprofessional communication. It also has the potential to improve interprofessional relationships and facilitate interprofessional referrals and possible co-management which can improve the holistic care of patients.

### **1.3 SIGNIFICANCE OF THE STUDY**

According to Seaton *et al.* (2021: 217), interprofessional collaboration refers to the collaboration among various healthcare practitioners with the intention of providing patients with the most effective and appropriate form of care. These collaborations can be defined as interactions and relationships formed among the various healthcare practitioners (Seaton *et al.* 2021: 217). Collaboration among various

healthcare practitioners allows for improved patient outcomes, cost effective healthcare, allocation of resources and improved satisfaction for the patient and practitioner. A referral among various healthcare practitioners can enable and facilitate interprofessional collaboration.

The perceptions and experiences of South African chiropractors need to be explored and understood. Many studies have focused on how other healthcare practitioners view chiropractors and their perceptions of and experiences with collaboration. Referrals occur when healthcare practitioners interact with one another to provide their patient with the best possible care. Understanding interprofessional referral networks entails understanding each side of the parties involved in the referral. Each perspective and experience offers an insight into the barriers and challenges of the interactions and collaboration of healthcare practitioners. In South Africa, although chiropractors are trained to diagnose any physical defect, illness, or deficiency, the treatment for these conditions can be outside chiropractors' scope of practice and the referral network would need to be utilised in this instance. Exploring the perceptions and experiences of South African chiropractors allows for the identification of potential barriers and challenges, enables the identification of potential barriers and challenges, as well as the development of solutions.

## **1.4 RESEARCH PROBLEM**

This study gives insight into the experiences and perceptions of South African chiropractors with respect to interprofessional referrals. There is a paucity in the literature that examines South African chiropractors' experience with interprofessional referrals as studies have focused more on other healthcare practitioners' experiences and perceptions with regard to referrals to chiropractors in South Africa. Consequently, chiropractors' perspectives are often underrepresented, highlighting the need to explore both their experiences and viewpoints. According to Seyed-Nezhad *et al.* (2021: 4364), a referral involves a healthcare provider requesting assistance from another healthcare provider to take over or co-manage the patient's case with the intention of providing the patient with the best form of treatment. Improving the referral network entails understanding the working relationships that exist among the healthcare practitioners. This study addressed the paucity in the literature and offers an insight into the perceptions and experiences of South African chiropractors with respect to interprofessional

referrals. This can allow for barriers and challenges that hinder interprofessional referrals to be identified and addressed further.

## **1.5 AIM OF THE STUDY**

The aim of this study was to explore the perceptions and experiences of chiropractors with respect to their interprofessional referrals to healthcare practitioners.

## **1.6 RESEARCH QUESTIONS**

1. What are the perceptions of chiropractors with respect to interprofessional referrals to other healthcare practitioners?
2. What are the experiences of chiropractors with respect to interprofessional referrals to other healthcare practitioners?

## **1.7 STRUCTURE OF DISSERTATION**

Chapter 1: This chapter provided an introduction to the study and its context. It also outlined the study's aims and research questions.

Chapter 2: This chapter provides a thorough review of the literature pertaining to the study.

Chapter 3: The methodology of the study is explained in this chapter. The research design is given and the research process from start to end is explained.

Chapter 4: This chapter presents the findings of the interviews conducted for the study.

Chapter 5: This chapter elaborates and explains the findings of the study. The findings are also related back to the study's aims and its relevance is discussed.

Chapter 6: This chapter provides a summary and conclusions of the research. This chapter also elaborates on the study's limitations and recommendations.

## **1.8 SUMMARY OF THE CHAPTER**

Chapter One served as an introductory chapter to the study. This chapter presented the study aims, research questions, rationale of the study, and the structure of the dissertation. The following chapter discusses the literature pertinent to the study.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 INTRODUCTION**

This chapter reviews the literature pertaining to the experiences and perceptions of chiropractors and other healthcare practitioners with regards to interprofessional referrals. The chapter highlights the paucity in literature pertaining to the experiences and perceptions of chiropractors in South Africa. The sources utilised in the literature review were accessed from PubMed, Google Scholar, ResearchGate and Science Direct.

### **2.2 INTERPROFESSIONAL REFERRALS AND HEALTHCARE**

#### **2.2.1 Definition of Interprofessional Referrals**

According to Doornebosch *et al.* (2022: 764), interprofessional collaboration within a healthcare setting is defined as the provision of a diversified quality of care to patients, their families, and caregivers through the integration of a variety of different healthcare professionals. Interprofessional collaboration can occur through an established referral network and, in these cases, patients can receive a higher quality of diversified care they would not have received if their healthcare provider chose to work in isolation (Doornebosch *et al.* 2022: 764).

According to Seyed-Nezhad *et al.* (2021: 4364), a referral is defined as a healthcare provider, with a lack of resources to manage patients' condition, who requests assistance of another provider who has the resources to either take over or co-manage the patient's case.

South African chiropractors rely on interprofessional referrals to engage collaboratively with other healthcare practitioners who have diverse skills and expertise, with the primary purpose of ensuring that their patients' needs are prioritized and that they have access to a wide range of resources and clinical expertise. An established referral network facilitates this process and enables chiropractors to provide a multimodal approach to healthcare. Understanding chiropractors' perceptions and experiences with such interprofessional referrals is therefore critical for identifying the facilitators and barriers that influence collaborative practice within the South African healthcare system, as their perspective are often underrepresented in the literature.

### **2.2.2 Indications for a referral**

According to the South African National Development plan for 2030, some indications for a referral are (Department of Health 2020: 5):

- The patient's medical condition requires urgent treatment or management.
- To seek the opinion from an expert on a patient's condition.
- The patient requires urgent care that cannot be performed by the referring party.
- The patient requires observation to reach a diagnosis.
- The patient requires an appropriate facility to provide continued management, palliative and rehabilitative care.
- The patient develops a life-threatening complication after receiving treatment at an initial facility.
- The patient is a victim of abuse (sexual or a child).
- Legal requirement for admission and involuntary treatment as per the Mental Health Care Act (no. 17, 2002).

Mo *et al.* (2021: 1659) assessed the referral criteria for patients with dementia to specialist palliative care. According to Mo *et al.* (2021: 1666), patients with medical complications from dementia, such as urinary tract infections, fractures, falls, decubitus ulcers and pneumonia, required referrals for hospitalisations or to a specialist palliative care team. These complications of dementia require urgent referrals to provide the patient with timeous treatment and management. According to Martin *et al.* (2021: 1), interprofessional collaboration has been indicated in improving patient health outcomes, providing management of chronic diseases, improving prescribing practices, reducing healthcare costs, reducing fall occurrences, strengthening the healthcare system, and its utilisation.

### **2.2.3 Challenges**

According to the South African National Development plan for 2030, the South African healthcare referral system is faced with the following challenges (Department of Health 2020: 5):

- Healthcare providers at all levels of the healthcare system provide inconsistent feedback among each other.
- Patients have been self-referring themselves directly to hospitals. This is appropriate if the patient has suffered major trauma. However, inappropriate self-referrals for cases of minor or chronic conditions and prenatal are inappropriate referral examples.
- There is a lack of human resources, transport, and approved referral policy.
- There is a weak relationship among public, private, community, and home-based care facilities or providers and this has yet to be defined.

Dreher-Hummel *et al.* (2021: 1368) outlined the experiences of nurses and physicians with interprofessional collaboration in an emergency department setting with older patients. The study found negotiating collaboration as the main hindrance to interprofessional collaboration. The participants experienced differences in establishing role perceptions and preferences for the triage system. These participants also experienced a challenge with their individual perceived time constraints (Dreher-Hummel *et al.* 2021: 1373). The teams needed to establish a mutual understanding of each other's roles because the nurses felt there was a significant power imbalance. The teams that negotiated their roles and agreed on them supported their performance throughout the collaboration.

According to Dreher-Hummel *et al.* (2021: 1374), mutual trust and respect are driving factors in supporting interprofessional collaboration. This study found that nurses felt unacknowledged by their team members and this affected their emotions and readiness to engage in collaboration. According to Dreher-Hummel *et al.* (2021: 1374), the contextual domain presented as a challenge to interprofessional teamwork because the participants displayed territorial behaviour in their professions or areas of expertise.

#### **2.2.4 Levels of Referrals**

Referrals occur at three levels and co-effective use of resources occur when these three levels have a close and effective relationship. The three levels of the South African health system are primary care, secondary hospital care and, lastly, specialised facilities (Seyed-Nezhad *et al.* 2021: 4364–4365). An established referral network allows patients to benefit from co-effective use of resources.

### **2.2.5 Triage System and Referrals**

Medical triage is defined as the process of prioritising patients in a systematic manner based on the anticipated resources needed and acuity (Mould-Millman *et al.* 2021: 2). Acuity is a term used in the emergency department to describe the patient's urgency for intervention, the general level of their condition, and the extent of resources needed (Yiadom *et al.* 2018: 66). The medical triage allows the patient to receive timeous, quality care that is the appropriate type of care in that present moment in time. The condition can be identified, and the care delivery system can be activated to provide the appropriate care to the patient while decreasing morbidity and mortality (Mould-Millman *et al.* 2021: 2). According to Wee *et al.* (2022: 1), similar to triage, referrals can be categorised into category one (urgent), category two (moderate emergency) and lastly, category three (non-urgent). Based on these three categories of urgency, the patient is scheduled to see the respective specialist for medical care (Wee *et al.* 2022: 1).

According to Khan *et al.* (2021: 67), referral triage is a crucial aspect of health services and is the most common entry pathway into providing patients with timeous care in an appropriate manner. The quality of the referral should be appropriate, necessary, timely, and performed with efficient communication, with the aim of ensuring efficient patient care (Khan *et al.* 2021: 67). The referral system is different to the triage system. However, both share fundamental factors of being efficient, timeous, appropriate, and involving proficient communication in providing the patient with the best outcome of care.

Patients' needs are prioritised in both in the referral and triage system. These two systems share the same purpose of efficiently directing patients to the most appropriate facility that can provide them with the most suitable and timeous form of care based on their condition.

## **2.3 BENEFITS OF INTERPROFESSIONAL REFERRALS**

### **2.3.1 Healthcare**

According to Binda *et al.* (2022: 2), interprofessional collaboration provides an opportunity for various healthcare disciplines to be educated, enhance their teamwork, and improve their shared decision-making with regard to patients' holistic care.

Interprofessional collaboration benefits medically complex patients experiencing financial hardships by reducing their need for frequent healthcare utilisation, which in turn reduces the burden on the healthcare system (Binda *et al.* 2022: 2). This is achieved by decreasing hospital admissions and visits to the emergency rooms (Binda *et al.* 2022: 2). The importance of interprofessional referrals is evident in its impact on interprofessional collaboration. Interprofessional collaboration can occur when there is an established referral network. Understanding the referral network along with the perceptions and experiences with respect to referrals has the potential to improve the healthcare system.

### **2.3.2 Patients**

According to Weaver (2015: 1076), evidence-based practice emphasises the knowledge and evidence that is obtained from clinical and scientific research. The practitioner's subjective experiences, judgements, and intuitions are not emphasised with evidence-based medicine (Weaver 2015: 1076). According to Ismail *et al.* (2023: 2), evidence-based practice is defined as the use of current evidence when providing healthcare. The current evidence is comprised of the patient's values, the practitioner's clinical expertise, and systemic research (Ismail *et al.* 2023: 2). Practitioners need to utilise evidence-based practice to ensure that their patients are receiving the most recent, up-to-date research and quality form of care. Evidence-based practice takes into consideration the patient's values and preferences. This creates a patient-centred approach and provides patients with the best form of care that aligns with their preferences and values.

According to Johnson (2016: 297), patient-centred care is defined as the providence of healthcare to a patient which conforms to their individual preferences and principles. It involves a mutually beneficial relationship among the healthcare professionals, the patients, and their families (Johnson 2016: 297). Ismail *et al.* (2023: 2) defined patient-centred care as an ethical approach that is accountable and receptive to the patient. According to Jardien-Baboo *et al.* (2021: 2156), patient-centred care relies on interactive conditions, the type of care, and the role of the healthcare systems involved. The interactions can involve individuals, healthcare professionals, and organisational connections (Jardien-Baboo *et al.* 2021: 2156).

Understanding the referral network, the perceptions and experiences with respect to these referrals also has the potential to benefit practitioners and their patients. The referral network allows for interprofessional collaboration to occur among practitioners, and enables them to provide their patients with a variety of resources for their conditions. According to Binda *et al.* (2022: 2), patients receiving an integrated model of care showed improvements in their self-reported pain and psychological symptoms. Improvements in patients' pain and symptoms allowed for a decrease in health service utilisation (Binda *et al.* 2022: 2).

According to Akter *et al.* (2023: 226), interprofessional collaboration requires patient involvement as it promotes patient-centred care. Interprofessional collaboration can facilitate patient involvement in decision making and treatment planning. Patient involvement can also improve patients' health outcomes, adherence to their treatment plans, and promote a greater quality of life and satisfaction (Akter *et al.* 2023: 226). A similar study by Ansa *et al.* (2020: 2) found that interprofessional collaboration provides practitioners with greater job satisfaction, role clarity, an established referral network, and improved collaboration with the patient in decision-making. This benefits patients' continuity and coordination of care (Ansa *et al.* 2020: 2).

The involvement of patients in interprofessional collaboration also improves communication among the different healthcare practitioners involved and promotes transparency (Akter *et al.* 2023: 226). Patients can attend and be involved in interprofessional meetings and be provided with essential information regarding care. These meetings also provide patients with an opportunity to raise questions (Akter *et al.* 2023: 226).

According to Akter *et al.* (2023: 227), patients' motivation, satisfaction, and attitudes towards their healthcare influences patient outcomes. Neglected health and missed appointments can occur when patients are dissatisfied with their healthcare. This can impact their outcomes and cause a decline in their health (Akter *et al.* 2023: 227). Patients with positive attitudes towards interprofessional collaboration are more likely to be compliant with their care recommendations and experience positive outcomes.

Patients place trust in their medical doctors and this trust is carried into their new doctor-patient relationship with the practitioner to whom they are referred. According to Mallard *et al.* (2022: 6), patients who are referred to a chiropractor by their medical doctors are often apprehensive of chiropractors and their treatment. This is mainly in cases when patients have no prior experience with a chiropractor and only trust the chiropractor and the treatment plan because their medical doctor referred them (Mallard *et al.* 2022: 7). This shows that a medical doctor's referral is often held in high regard and affects the experience of both the chiropractor and the patient.

### **2.3.3 Allied Health Professions Council of South Africa**

#### **2.3.3.1 Definition**

The Allied Health Professions Council of South Africa (AHPCSA) is a statutory health body whose purpose is to represent and control complementary and alternative medical (CAM) professions. These CAM professions include Chinese medicine, aromatherapy, Ayurveda, homoeopathy, acupuncture, chiropractic, reflexology, naturopathy, osteopathy, phototherapy, therapeutic aromatherapy, Unani Tibb, therapeutic reflexology, and naturopathy (AHPCSA 2020: 551).

#### **2.3.3.2 Chiropractic Profession and Its Scope of Practice**

The World Federation of Chiropractic (2001) defines chiropractic as a health profession that focuses on the musculoskeletal system and its disorders. Chiropractors diagnose, treat, and prevent mechanical disorders in relation to the musculoskeletal system (World Federation of Chiropractic 2001). According to Gevers-Montoro *et al.* (2021: 1430), chiropractors are healthcare professionals in the field of musculoskeletal health who are focused on spinal functions and disorders. Chiropractors utilise a variety of treatment approaches, such as spinal manipulative therapy. Spinal manipulative therapy involves a controlled force being applied to a specific spinal segment (Gevers-Montoro *et al.* 2021: 1430). In addition to spinal manipulative therapies, chiropractic treatments may also include dietary advice or supplementation, dry needling, therapies such as traction, thermal, vibration, immobilisation, exercise, neuro-muscular reflex, massage, electrotherapy, and hydrotherapy (AHPCSA 1982: 6).

According to Glucina *et al.* (2023: 75), since the inception of chiropractic, an internal divide has been experienced regarding its professional identity. This has led to

assumptions and misunderstandings. The disunity within the profession involves chiropractic philosophy and differing practice approaches. These approaches are vitalistic versus musculoskeletal approaches (Glucina *et al.* 2023: 75). This infighting perpetuates stereotypes, such as chiropractic being unscientific, which further tarnishes public trust and encourages misconceptions. Medical practitioners may criticise the chiropractic profession for its inconsistencies and lack of a unified professional identity.

#### **2.3.3.3 Legislation**

According to the Allied Health Professions Council of South Africa Act 63 of 1982, chiropractors can perform a physical examination of patients with the aim of diagnosing any physical illness, defect, or deficiency. This process may or may not involve the referral and the interpretation of X-rays (AHPCSA 1982: 6). The chiropractor may perform treatment for any physical illness, deficiency, or defect if it pertains to skeletal, spino-visceral, or general neuromuscular conditions (AHPCSA 1982: 6).

#### **2.3.3.4 Chiropractic Education**

The Durban University of Technology (DUT) and the University of Johannesburg are the two universities where chiropractic can be studied in South Africa. In alignment with the AHPCSA Act 63 of 1982, all chiropractors practising in South Africa are required to register with the AHPCSA. The chiropractic programme is a six-year course, and the qualifications are recognised internationally (DUT Faculty of Health Sciences 2023: 5).

The chiropractic programme at the DUT is broken into two qualifications. The Bachelor of Health Sciences in Chiropractic which is a four-year degree. Upon completion, the student can graduate with a bachelor's degree and can register for the Master of Health Sciences in Chiropractic (DUT Faculty of Health Sciences 2023: 8).

Chiropractic students complete diagnostic modules in their third and fourth year of their bachelor's degree (DUT Faculty of Health Sciences 2025: 14-15). This module educates students on various clinical conditions, presentations, treatment and management, and how to appropriately diagnose through special examinations. It involves a theory and practical component for examinations. Modules provide

chiropractors with the fundamental skills and knowledge in diagnosing patients. They are also taught to refer and assess investigative studies, such as blood tests. In addition, the students also complete anatomy, physiology, histology, biological sciences, chemistry, and physics, which are the foundations of their diagnostic skills. Diagnostic imaging is also taught to the students from the second year of the bachelor's degree up to and inclusive of the first year of the master's degree (DUT Faculty of Health Sciences 2025: 13-15, 22). This module teaches the students to evaluate x-rays, interpret the findings, and determine diagnoses.

Chiropractors' initial exposure to utilising the referral network occurs in the clinical setting while they are completing their clinical practicum. Chiropractic students work in a clinical setting under the supervision of a qualified clinical instructor, who reviews their referral letters and provides guidance to the students.

#### **2.3.3.5 Newly-Graduated Chiropractors**

A study by Hussein *et al.* (2025: 1) explored the readiness of underrepresented healthcare workers, such as chiropractors, to practise. This study by Hussein *et al.* (2025), was a scoping review that identified relevant clinical and non-clinical skills. The healthcare workers exhibited poor interpersonal skills, communication, cultural competence, and conflict management skills, which impacted healthcare delivery (Hussein *et al.* 2025: 6). Hussein *et al.* (2025: 8) highlighted hands-on learning and future training programmes to emphasise non-clinical and clinical skills. Newly-graduated chiropractors need assistance to help them establish and grow their practices. Helping them build their communication skills and referral networks can positively shape and influence their interprofessional collaborations and improve patient outcomes. Graduates are the future of the profession and the continuity of the profession relies on their capabilities to excel. If newly-graduated chiropractors are underprepared and lacking in skills, it reflects poorly on the chiropractic profession.

#### **2.3.3.6 Guidelines for Referrals**

According to the Code of Ethics section 54 (9) of regulations to the Allied Health Professions Council of South Africa Act, CAM professionals have a duty to their colleagues and other professionals with regard to referrals (AHPCSA 2015: 14). Additionally, CAM professionals have a duty to act in their patients' best interests

when referring them for treatment. They have a duty not to accept or ask for any incentives from other healthcare practitioners to whom their patients are referred. This may result in poor judgment or be viewed as impacting the judgement of the referring practitioner. Likewise, CAM professionals have a duty to fairly treat and manage patients received through the referral network (AHPCSA 2015: 15).

The AHPCSA safety guideline outlines instances for referrals with regard to dry needling for chiropractors and osteopaths. According to Navarro-Santana *et al.* (2022: 515), dry needling is defined as the use of a thin filament needle for the treatment of musculoskeletal disorders. It is a skilled technique that stimulates muscles, connective tissues, and myofascial trigger points through the insertion of the needle through the skin (Navarr Santana *et al.* 2022: 515). Travell and Simons (1992: 19) defined an active myofascial trigger as a hypersensitive point found in the skeletal muscle that is painful and has a pattern of pain referral. This can occur during rest and/or during movements that the muscle specifically performs.

The AHPCSA safety guidelines outlines that an immediate referral to the hospital emergency ward is warranted in the event where a pneumothorax, trauma to the internal organs, or a needle stick injury has occurred (AHPCSA 2020: 558). A pneumothorax is defined as air in the pleural cavity as a result of secondary aetiologies such as trauma, inflammation, or malignancy (Huan *et al.* 2021: 711). Chiropractors must take precautions when performing dry needling not to injure themselves or their patients. A pneumothorax, trauma to the internal organs, and needle stick injuries are medical emergencies that require chiropractors or osteopaths to be competent to determine that these instances have occurred, appropriately manage the patient, and refer them to the nearest emergency department (AHPCSA 2020: 558). The chiropractor or osteopath needs to be competent in using the referral network to provide their patients with timeous and appropriate care.

#### **2.3.4 Referrals Globally**

Chiropractors may need to refer a patient to other healthcare providers when a condition is outside their scope of practice. According to Chu *et al.* (2022: 6), a chiropractor's main role in the case of a patient presenting with prostate cancer is to diagnose and refer the patient. Prostate cancer is an example of a condition that

lies outside the chiropractic scope of practice as it requires an oncologist to perform primary treatment. In a case presentation documented in Hong Kong, a chiropractor had differential diagnoses of lumbar stenosis and malignancy for a patient presenting with constant low back pain and episodic left hip pain (Chu *et al.* 2022: 5). The chiropractor referred for a magnetic resonance imaging (MRI) scan and the results further prompted the chiropractor to refer to an oncologist (Chu *et al.* 2022: 5). Chiropractors need a referral network to refer their patients to relevant healthcare practitioners so that they can receive optimal and immediate care.

Seaton *et al.* (2021: 217) explored the perceptions of allied health professionals from different countries regarding interprofessional collaboration in a primary healthcare setting. This study involved a methodologically inclusive literature review that assessed 12 studies that included allied health professionals from Canada, Netherlands, Australia, Denmark, New Zealand and the United Kingdom (Seaton *et al.* 2021: 221–222). According to Seaton *et al.* (2021: 224), frequent, brief informal communication is viewed as an opportunity for interprofessional collaboration. However, the study found that referrals to allied health practitioners were limited and indirect in the private primary healthcare setting (Seaton *et al.* 2021: 224). Task interdependency affected the collaboration among allied health professionals and other health practitioners. Seaton *et al.* (2021: 224) further elaborated that defined roles, trust, shared leadership, and professional respect are supporting factors in patient referrals and facilitate the collaborative experience for all practitioners involved.

According to Seaton *et al.* (2021: 224), the proximity of CAM professionals to other healthcare practitioners affected their interprofessional collaboration. The frequency of informal communication among practitioners is higher among practitioners who share a co-location or are within the same physical space. This encourages the shift away from monodisciplinary to multidisciplinary models (Seaton *et al.* 2021: 224).

According to Doucet *et al.* (2022: 8), paediatric referrals to chiropractors were mostly from family members, followed by family physicians and, lastly, by other CAM professionals. This study was conducted in Quebec, Canada and the population was mostly children between six to 12 years of age (Doucet *et al.* 2022: 1). The referrals from other healthcare professionals showed that there is potential for interprofessional collaboration and co-management. Chiropractors need to

establish a referral network with other healthcare providers such as medical doctors to collaborate and provide their patients with the best care possible.

Fjaagesund *et al.* (2024: 1) conducted a study in Australia to explore the facilitators and barriers encountered by the chiropractic profession in co-located integration within primary healthcare settings focused on general practice. They noted a higher degree of provider satisfaction with integrated chiropractic care in primary care centres serving low-socioeconomic regions (Fjaagesund *et al.* 2024: 11). Exposure to onsite chiropractic care increased healthcare practitioners' confidence in its quality, as it was viewed as beneficial, produced positive patient outcomes, and encouraged future referrals (Fjaagesund *et al.* 2024: 11).

Similarly, Myburgh *et al.* (2022: 3) conducted a narrative review of interprofessional practice involving chiropractors across Canada, Denmark and the United States. While Fjaagesund *et al.* highlighted the benefits of integration, Myburgh *et al.* emphasized persistent barriers including professional mistrust, power dynamics, poor collaborative practices, and unclear roles, which hinder the integration of the chiropractic profession into professional settings (Myburgh *et al.* 2022: 9). Together, these studies illustrate that while integrated chiropractic care can improve provider satisfaction and patient outcomes, structural and relational barriers continue to challenge interprofessional integration.

Vogel *et al.* (2021: 14) explored the integration of chiropractic interprofessional care within the Canadian Armed Forces healthcare setting. Medical health professionals were found to gatekeep chiropractic referrals as they would rather refer a patient to a physiotherapist who costs less (Vogel *et al.* 2021: 23). Vogel *et al.* (2021: 26) suggested that negative stereotypes, misconceptions, and values surrounding the chiropractic profession have been shown to hinder interprofessional care.

A study by Salsbury *et al.* (2019: 299) reported on the attitudes of chiropractors towards integrative practice. Salsbury *et al.* (2019: 303) ascertained that chiropractors engaged in interprofessional co-management with various healthcare professions when older patients were involved. Salsbury *et al.* (2019: 303) further noted that chiropractors were more confident in the treatment capabilities of other manual therapists, namely other chiropractors. The perspectives and experiences of both chiropractors and other healthcare practitioners need to be assessed. This

will allow for establishment of better communication, a network of referral and trust among chiropractors and other healthcare professions to provide the patient with the best possible care.

### **2.3.5 Referrals in South Africa**

According to Matolengwe, Murray, and Okafor (2024: 855), the South African healthcare system can be improved by strengthening the referral system among different levels of healthcare. The South African healthcare system is divided into public and private health sectors. There are also three levels of healthcare in South Africa, which is the primary, secondary and tertiary levels of healthcare. The referral process begins at the primary healthcare level through community health centres, mobile clinics, community-based outreach teams, district hospitals and primary healthcare clinics (Matolengwe, Murray, and Okafor 2024: 856).

Patients who are referred by the community health centres and primary health clinics to district hospitals receive level one or generalist services (Matolengwe, Murray, and Okafor 2024: 856). The secondary healthcare level includes regional hospitals that provide specialised services, in-patient and out-patient care, paediatric care, obstetric care, and emergency services and treatment (Matolengwe, Murray, and Okafor 2024: 856). According to Megbowon *et al.* (2022: 2), tertiary healthcare involves specialised, complex care provided by specialists. This form of healthcare is only provided at tertiary hospitals and certain medical institutions (Megbowon *et al.* 2022: 2).

According to Matolengwe, Murray, and Okafor (2024: 860), ideally the referral process should be initiated from the primary care level to the higher levels; this will allow the healthcare system to function optimally without being overburdened. The referral process should begin with initiating the referral and moving the patient to the appropriate level of healthcare. The appropriate level could be either a higher or lower level of care, for which patients are evaluated at the receiving facility (Matolengwe, Murray, and Okafor 2024: 855).

According to the National Health Act 61, if the necessary treatment or care cannot be provided to a patient at a public health establishment, the patient must be referred to an appropriate public facility that is equipped to deliver the required treatment or care (South Africa, Department of Health 2004: 27). This Act provides a legal and

ethical framework for healthcare practitioners engaging with the referral network. It prioritizes the patient's clinical needs, enables the integration of services, and facilitates access to healthcare practitioners across the broader healthcare system.

The National Health Act 61 emphasizes the principle of ensuring that patients' clinical needs are prioritized and met. This principle is directly applicable to chiropractors, supporting their decision to refer patients whose conditions are beyond the chiropractic scope of practice. The Act provides a framework that enables chiropractors to engage and collaborate with other healthcare practitioners, such as general practitioners, to provide the patient with a multimodal approach to care.

South African chiropractors are not part of the public healthcare structure but are registered as primary contact practitioners and are trained to utilise a referral network for non-neuromusculoskeletal cases (Ismail *et al.* 2021: 216). Patients do not need a referral to be seen by chiropractors as they are primary contact practitioners. Chiropractors need to form close, effective relationships with all three levels of the healthcare system. A close, effective relationship enables chiropractors to refer and receive referred patients. There are instances where patients' conditions are outside chiropractors' scope of practice and the necessary referral must be made to benefit patients' health. According to Seaton *et al.* (2021: 217), interprofessional collaboration allows the best available resources to be utilised in the management of chronic diseases.

South African chiropractors can directly refer to a general practitioner for an MRI scan as there is no legislation to restrict this. However, South African chiropractors are limited to indirect referrals for advanced imaging, such as MRI and computed tomography (CT) scans, as some medical aid schemes will not cover the cost of scans based on a chiropractic referral. For example, in South Africa, Discovery Health Medical Scheme will only pay for a patient's MRI or CT scan if they were requested by a specialist or an accredited trauma general practitioner (Discovery Health Medical Scheme 2020: 3). This is a pragmatic limitation formed by the requirements of medical aid schemes in South Africa and is not based on legislature.

Chiropractors need a referral network to make an indirect referral for advanced imaging. Understanding the perceptions and experiences of chiropractors with

interprofessional referrals has the potential to improve interprofessional communication and collaboration. Boundaries and facilitators for interprofessional referrals can be identified and understood. In turn, this can improve the working relationships of chiropractors with other healthcare practitioners and improve the holistic care of patients.

According to Deodhar *et al.* (2022: 589), chiropractors encounter many patients in practice with low back pain and it is important for chiropractors to determine if patients have mechanical or inflammatory back pain. The treatments for these different types of low back pain will differ and it is important for the chiropractor to determine if the patient has a progressive condition such as axial spondyloarthritis (Deodhar *et al.* 2022: 589). Axial spondyloarthritis is an inflammatory arthritis that requires a referral to a rheumatologist to allow for timely diagnosis and management (Deodhar *et al.* 2022: 589). Chiropractors play an important role in differentiating inflammatory back pain from mechanical back pain by evaluating their characteristics and clinical features. Chiropractors need to refer their patients to rheumatologists in a timely manner to minimise the detrimental effects of axial spondyloarthritis and to improve patient outcomes (Deodhar *et al.* 2022: 593).

Sports chiropractors are chiropractors with a special interest or expertise in treating and managing sport-related injuries. According to Papadopoulou (2022: 1855), the International Federation of Chiropractic Sports offers chiropractors who have completed their undergraduate requirements to enrol and build on their existing knowledge and skill to become proficient, accredited sports chiropractors. In South Africa, chiropractors must become accredited to provide care at Sporting Federation Games. This is achieved through the International Federation of Chiropractic Sport which facilitates the process of completing the International Certificate in Sports Chiropractic. South African chiropractors who complete the certificate have an area of expertise in sport and may choose to work with athletes.

Chiropractors may encounter a sports-related concussion and need to be able to recognise it and refer the patient (Shannon and Patricios 2022: 2). According to McCrory *et al.* (2017: 839), sports-related concussion is defined as a traumatic brain injury with instant and transient presentations. Sports-related concussions are the result of a direct force to face, head or neck and it is a mild to moderate brain injury (Shannon and Patricios 2022: 2). According to the International Federation of Sports

Chiropractic, there are approximately one hundred and twenty-two members in South Africa (Shannon and Patricios 2022: 2). South African chiropractors may encounter patients with sports-related concussion in their practice. Patients with sports-related concussion can present with headaches, neck pain, and dizziness (Shannon and Patricios 2022: 2). The chiropractor needs to be able to recognise a concussion based on their patient's presentations, case history and physical examination. A referral to the emergency room may be necessary for further special investigations such as a CT scan.

Osteoporotic patients may be encountered in a chiropractic practice. The chiropractor would suspect the diagnosis of osteoporosis through clinical observations, evaluations and a detailed case history from the patient (Uhrenholt *et al.* 2024: 2). Osteoporosis is characterised by the deterioration of bone quality and reduction of bone mass in patients (Uhrenholt *et al.* 2024: 2). There is also an increased risk of bone fractures with age in osteoporotic patients. The complications associated with these fractures are significant changes in posture, pain, decreased physical ability, and early death (Uhrenholt *et al.* 2024: 2). In South Africa, chiropractors can refer their patients for x-rays to confirm the diagnosis of osteoporosis. The chiropractor may also utilise referral networks to refer patients to a rheumatologist for further management.

### **2.3.6 Communication**

Ismail *et al.* (2023: 2) found that 60.2% of chiropractors experienced poor interprofessional relationships and had barely received a referral from orthopaedic surgeons. According to Ismail *et al.* (2023: 2), communication was attributed as a limiting factor with respect to interprofessional collaboration among chiropractors and other healthcare professions. South African chiropractors experience hinderances in their interprofessional communication as they use chiropractic-related terms, which differs to the terminology used by other healthcare professions (Ismail *et al.* 2023: 2) (**Table 2.1**). Communication is vital in achieving effective interprofessional collaboration. Chiropractors define a subluxation as a misaligned vertebra that compromises surrounding nerves (Ismail *et al.* 2023: 3) (**Table 2.1**). While other healthcare professions have different definitions or meanings associated with the term subluxation. For example, other professions use

subluxation to refer to a bone that has been displaced from articulation, but a portion of the bone surface remains in partial contact with the cavity (Johnson 2011: 1).

According to Young and Theroux (2021: 16), the term adjustment (**Table 2.1**) used by the chiropractic profession is similar to the terms ‘manipulation’ or ‘mobilisation’ utilised by medical practitioners. For medical practitioners (such as general practitioners and orthopaedic surgeons) these terms are defined as manually creating movement within the joint (Young and Theroux 2021: 16). A study by Ismail *et al.* (2023: 7), found South African chiropractors showed a preference towards the use of the term adjustment in comparison to manipulation. This was attributed to the perception that the mechanical and neurological effects of adjustment have a specific purpose. The manipulation performed by other healthcare practitioners may lack these effects (Ismail *et al.* 2023: 7).

The term vitalism (**Table 2.1**), although shared by many professions, is used by a few chiropractors to describe their profession as alternative medicine (Young and Theroux 2021: 16). Daniel David Palmer, the founder of chiropractic, established vitalism as the core foundation of chiropractic, using vitalistic terms such as life force (Richards *et al.* 2023: 383). However, there is division within the chiropractic profession as many chiropractors disagree with the term vitalism as it is viewed as unscientific. This term is viewed by many chiropractors as a hinderance to the growth and acceptance of the profession (Richards *et al.* 2023: 383).

According to Ismail *et al.* (2023: 8), a lack of common science-based language by the chiropractic profession aggravates its relationship with conventional modern medicine. Consistent and accurate communication among chiropractors and other healthcare practitioners will benefit both the chiropractic profession and its patients.

**Table 2.1: Chiropractic-related terms and definitions**

| Chiropractic-related terms and definitions |                                                                                                                                                                                                                                                                               |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subluxation                                | The misalignment of a vertebra that places pressure on surrounding nerves and this leads to an eventual disease (Ismail <i>et al.</i> 2023: 3).                                                                                                                               |
| Adjustment                                 | A manual technique that is a controlled high velocity, low amplitude force directed at a spinal segment or joint (Ismail <i>et al.</i> 2023: 3).                                                                                                                              |
| Vitalism                                   | The theory that vital life force is greater than and different from physical and chemical forces. This vital life force is theorised to sustain all living organisms and can be conveyed as innate intelligence, Qi or universal intelligence (Coulter and Willis 2004: 587). |

A study by Ifrim *et al.* (2022: 41) aimed to improve communication skills of medical laboratory staff and the quality of health services. It offered an important viewpoint about the principles of communication and the need for trust in relationships (Ifrim *et al.* 2022: 42). According to Ifrim *et al.* (2022: 41), effective communication was vital in meeting the needs of patients and providing them with quality care. Various healthcare practitioners need to collaborate to ensure their patients receive accurate diagnoses with the appropriate care. Communication among these practitioners requires trust and shared understanding, which improves patient outcomes and allows interactions to flow. Effective communication is a necessity in the referral process as professionals need to communicate clearly and respectfully with each other.

## **2.4 THEORETICAL FRAMEWORK**

Ajzen's theory of planned behaviour and the Sunnybrook core competency framework guided this study in understanding chiropractors' interprofessional collaboration with other healthcare practitioners.

### **2.4.1 Ajen's Theory of Planned Behaviour**

A study by Zielińska-Tomczak *et al.* (2021: 2), used Ajzen's theory of planned behaviour to explore interprofessional collaboration among physicians and pharmacists. According to Zielińska-Tomczak *et al.* (2021: 2), the theory of planned behaviour is a theoretical framework that predicts a person's behaviour. The framework assumes that a causal relationship exists between a person's behaviour and intentions as seen in **Figure 2.1**. These intentions are determined by their attitudes, perceived behaviour control, and subjective norms (Zielińska-Tomczak *et al.* 2021: 2).

This study used Ajzen's theory of planned behaviour to evaluate chiropractors' intentions with regard to interprofessional referrals. These intentions were determined by their attitudes, perceived behavioural control, and subjective norms. This framework outlined the chiropractors' intentions and allowed for their behaviour towards interprofessional referrals to be predicted.

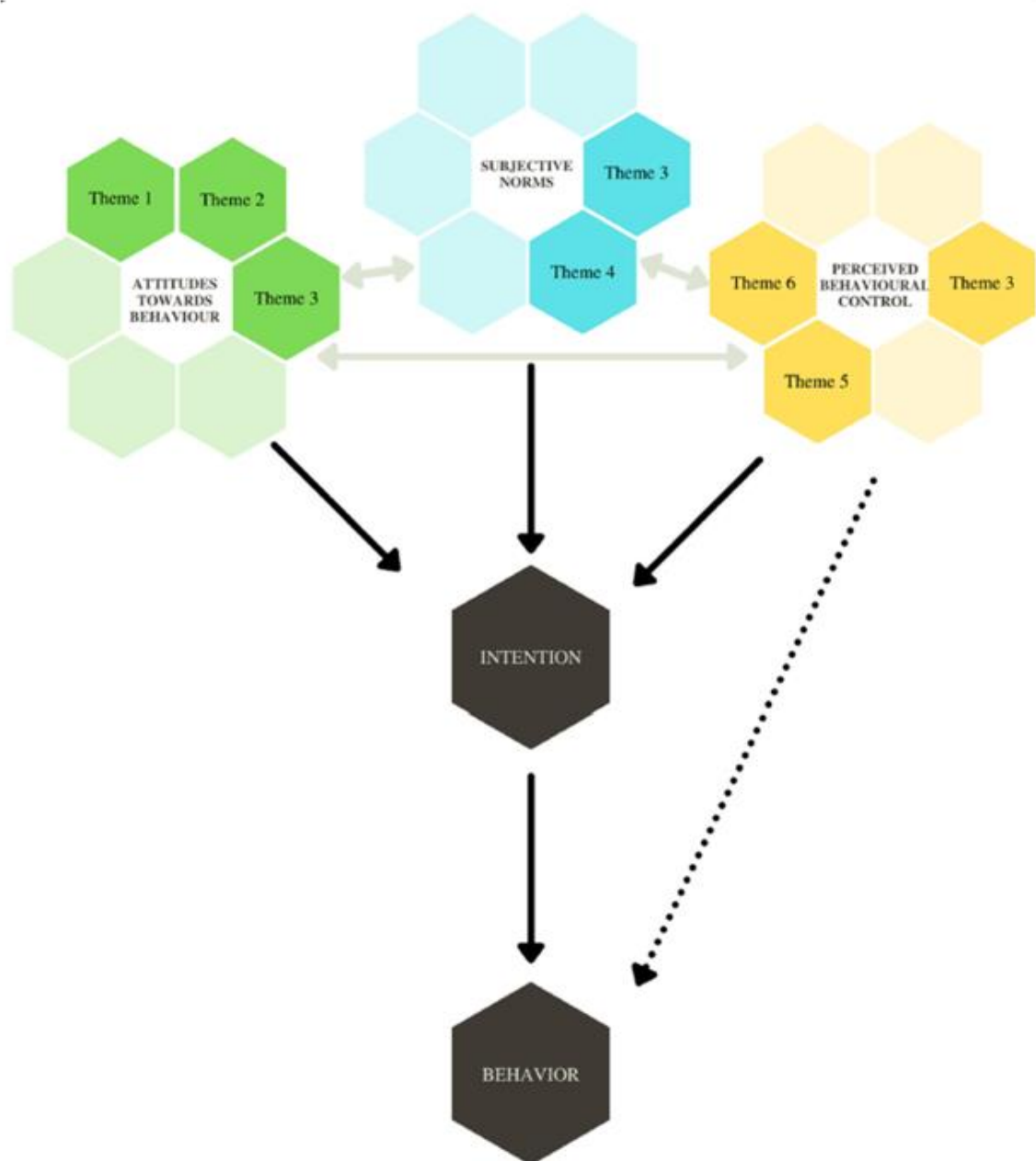


**Figure 2.1: Ajzen's theory of planned behaviour (Zielińska-Tomczak et al. 2021: 5)**

#### **2.4.2 Sunnybrook Core Competency Framework**

A study by McLaney *et al.* (2022: 112), utilised the Sunnybrook core competency framework with the intention of supporting interprofessional collaboration. This framework provided a common language and consistent expectations to promote collective collaboration (McLaney *et al.* 2022: 112) (**Figure 2.2**). Collective

competence is prioritised and promoted with the Sunnybrook competency framework rather than focusing on individual capabilities (McLaney *et al.* 2022: 112). This study utilised the Sunnybrook core competency framework to establish a common language for interprofessional collaboration regardless of the different professions, roles and settings that were involved.



**Figure 2.2: Sunnybrook core competency framework (McLaney *et al.* 2022: 1)**

## **2.5 SUMMARY OF THE CHAPTER**

This chapter examined the literature on interprofessional referrals and the benefits of referring patients. This chapter also outlined the chiropractic professions involvement in interprofessional referrals from both a global and South African perspective. This study addressed chiropractors' experiences and their perceptions in interprofessional referrals involving medical professionals, other healthcare providers and patients. This will help to improve the understanding of the dynamics involved in the relationship among these three groups of people and how it affects interprofessional referrals from the perspective of chiropractors.

## **CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY**

### **3.1 INTRODUCTION**

This chapter will discuss the research methodology utilised in this study. It will elaborate on the different aspects of the research plan, with an emphasis on the data collection and data analysis techniques.

### **3.2 RESEARCH DESIGN**

According to Abutabenjeh and Jaradat (2018: 238), a research design is a comprehensive method used to build an understanding on a topic through collecting and analysing data. The research process consists of three primary stages. The first stage involves posing a question that needs to be explored. The second stage is collecting data to reach an answer. The third stage is presenting the answer for the topic that is being questioned and explored (Abutabenjeh and Jaradat 2018: 238). This study utilised a qualitative design with an explorative study design. A qualitative design was best suited for this study as it aimed to study non-quantifiable phenomena, which was the individual experiences and perceptions of chiropractors (Bhangu *et al.* 2023: 39).

#### **3.2.1 Qualitative Research**

According to Bhangu *et al.* (2023: 39), qualitative research uses non-statistical and non-numerical approaches for data collection and analysis. Qualitative research allows for non-quantifiable phenomena to be studied, an example of which are individual experiences (Bhangu *et al.* 2023: 39). This study focused on the experiences and perceptions of chiropractors; a qualitative research design was an appropriate approach to study these non-quantifiable phenomena. The researcher studied the interpretations of the chiropractic participants at a specific point in time and context (Merriam 2002: 4).

#### **3.2.2 Explorative Research**

According to Brink (1998: 312), an exploratory design is used when a researcher is searching for a new understanding or knowledge on something that has not previously been studied before. An explorative research design allows a researcher

to study the phenomena and a population of interest (Brink 1998: 312). In this study, the population of interest were chiropractors in the eThekweni Municipality and the phenomena being studied were their perceptions and experiences.

### **3.3 RESEARCH SETTING**

The study population referred to qualified chiropractors registered with AHPCSA practising in the eThekweni Municipality. The location of the study was the eThekweni Municipality, located in the KwaZulu-Natal (KZN) province of South Africa. This municipality includes a range of healthcare facilities and practitioners across various disciplines, allowing for frequent opportunities for interprofessional interaction and referral.

The interviews were conducted in person at venues agreed upon by both the researcher and the participants. The venues selected by the participants were their practice settings, which offered privacy and confidentiality, thereby facilitating open and in-depth discussions of the participants' experiences and perceptions.

### **3.4 POPULATION SIZE**

The study population was qualified chiropractors registered with the AHPCSA, who practise in the eThekweni Municipality. The AHPCSA register of qualified registered chiropractors contains details such as their registration number, title, and their first, middle and last names. The register does not provide their practice locations. This register was compared with the Chiropractic Association of South Africa (CASA) database, to establish the practice locations of the chiropractors. According to the CASA database, an estimated 53 chiropractors practise within the eThekweni Municipality (CASA 2024). The CASA database was extensive in providing the chiropractors contact details and practice locations. However, some chiropractors may have not registered with CASA as it is voluntary and does not appear on the CASA chiropractic database.

### **3.5 SAMPLING PROCESS**

A purposive sampling strategy, together with snowball sampling, were utilised for this study. Purposive sampling allows a researcher to deliberately select participants who will provide the necessary and important information for the study (Taherdoost 2016: 23). Purposive sampling enables a researcher to include participants who

warrant inclusion as the information cannot be obtained from other choices (Taherdoost 2016: 23).

For this study, purposive sampling was used to recruit registered chiropractors in the eThekweni Municipality. Chiropractors registered with AHPCSA and practising in the eThekweni Municipality were contacted telephonically and invited to participate in the study. The contact details for the practitioners were found on the CASA database as the AHPCSA register does not provide this information.

The chiropractors who agreed to participate and fulfilled the inclusion criteria were interviewed. During the interview, a snowball sampling strategy was utilised to recruit participants from the chiropractic community for this study. Snowball sampling entails the use of a few participants to engage more participants into the study (Taherdoost 2016: 22). Participating chiropractors were asked to suggest colleagues within their professional networks who met the inclusion criteria and might be willing to participate. Referrals among chiropractors were managed in an ethical and structured manner. Participants were requested to share the researcher's contact details with potential participants rather than providing colleagues' contact information directly, thereby ensuring confidentiality and voluntary participation. Interested chiropractors then contacted the researcher voluntarily and were screened for eligibility before being invited to participate. This sampling strategy enabled the study to reach a larger number of chiropractors who were willing to participate in the research.

## **3.6 SAMPLE CHARACTERISTICS**

### **3.6.1 Inclusion Criteria**

- Participants who were registered as chiropractors with the AHPCSA.
- Participants who practised more than two interdisciplinary referrals.
- Interdisciplinary referrals such as, but not limited to, radiologist, laboratory (phlebotomist), and general practitioner.

### **3.6.2 Exclusion Criteria**

- Participants who practised chiropractic outside of the eThekweni Municipality, KZN.
- Participants who did not give informed consent to participate in the study.
- Participants who did not give consent to be audio recorded.

### 3.7 SAMPLE SIZE

In this study, an initial minimum sample size of 12 participants was anticipated for achieving data saturation. Data saturation was reached after the tenth interview, as no new themes or codes emerged from the data. To confirm that saturation had been achieved, an additional three participants were interviewed. These additional interviews did not yield new information, thereby verifying data saturation. Data saturation occurs when no further information can be obtained; sufficient information has been collected to allow replication; and further coding is no longer possible (Fusch and Ness 2015: 1408). According Fusch and Ness (2015: 1409), when no new themes are established, data saturation has occurred because no new codes or data are generated.

### 3.8 PARTICIPANT RECRUITMENT

The researcher and supervisor selected chiropractors who were registered with the AHPCSA and practised within the eThekweni Municipality. The participants who fulfilled the inclusion criteria were contacted telephonically by the researcher. The purpose and nature of the study were explained to the participants and their voluntary participation in the study was requested. The participants were provided with a letter of information (**Appendix A**) and informed consent (**Appendix B**) to complete prior to their interviews. The participants were informed of their right to exit the study at any time with no penalties. Upon agreement, the interview was scheduled with a date, time and venue that was ideal for both the interviewer and participant. After the interviews were completed, the participants were thanked for their participation in the study.

### 3.9 RESEARCH TOOL

A semi-structured interview guide (**Appendix C**) was used as a research instrument in this study. A semi-structured interview provides the interviewer with freedom to improvise follow-up questions based on the participants responses, which allows the participants more freedom to elaborate on their responses (Kallio *et al.* 2016: 2955). This study explored the perceptions and experiences of chiropractors and required the participants to be given freedom to express and elaborate on their responses. The semi-structured interview guide consisted of open-ended and

probing questions to encourage the participants to give their subjective responses and to elaborate on them.

The questions were directed at their experiences and perceptions with regard to interprofessional referrals. According to Guest *et al.* (2013: 1), one-on-one interviews allow an interviewer to analyse participants' body language, tone, and the content of their responses. A rapport is formed between the interviewer and participant and the interviewer will be able to empathise with the participant on sensitive topics (Guest *et al.* 2013: 1).

Pre-existing interview guides investigating perceptions and experiences of chiropractors were used to adapt the interview guide for this study (**Table 3.1**).

**Table 3.1: Examples of key questions used in previous studies**

| Questions                                                                                                                                                                      | Reference             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| What are your perceptions, with regard to paediatric patient management?                                                                                                       | Frederick (2019: 106) |
| Are there aspects that you suggest the chiropractic paediatric programme incorporate, or adjust, to improve the quality of paediatric education and therefore paediatric care? | Frederick (2019: 108) |
| Have you encountered any challenges or obstacles during your clinical practicum? Please elaborate.                                                                             | Ganesh (2017: 238)    |
| Suggestions to improve or enhance the management of an elderly patient during the clinical practicum for the future.                                                           | Naidoo (2021: 176)    |

A condensed summary of the semi-structured interview questions is provided in **Table 3.2**.

**Table 3.2: A summary of the main questions in the interview guide**

| Question number | Question                                                                                             | Facet of chiropractor perception                                                                 |
|-----------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Question 1      | What are your perceptions, with regard to interprofessional referrals?                               | Viewpoint of chiropractors with regard to their satisfaction in using the referral network.      |
| Question 2      | Describe your experiences with interprofessional referrals?                                          | Experiences of chiropractors with regard to interdisciplinary referrals in the practice setting. |
| Question 3      | What are some challenges that you have experienced with referrals to other healthcare practitioners? | Obstacles and challenges encountered with the referral network in the practice setting.          |

---

|            |                                                                                                                                                            |                                                                                                         |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Question 4 | Describe your experiences with co-managing a patient through a referral?                                                                                   | Viewpoint of chiropractors with regard to their satisfaction of co-managing patients through referrals. |
| Question 5 | What advice, if any, would you suggest to the chiropractic profession to help improve interactions with other healthcare practitioners?                    | Suggestions to enhance the chiropractic profession for the future.                                      |
| Question 6 | Based on your experiences, please explain if and why interprofessional referrals and communication should be included in chiropractic teaching programmes? | Suggestions to prepare and equip chiropractic students before they enter a practice setting.            |

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### 3.10 PRE-TESTING OF THE DATA COLLECTION TOOL

When full ethical approval was received from DUT Institutional Research and Ethics Committee (IREC) (**Appendix D**), potential participants for the study were contacted telephonically and invited to participate in the study. The participants who fulfilled the inclusion criteria for the study were invited to participate in either the main study or the pilot study.

A pilot study was conducted prior to the commencement of the main study interviews on two participants. According to In (2017: 601), a pilot study allows for the validity and the feasibility of study to be tested as it reflects the main procedures utilised by the researcher. This is accomplished by assessing the inclusion and exclusion criteria as well as the feasibility of the data collection method chosen (In 2017: 601). For this study, a mock interview was conducted on two chiropractors in the eThekweni Municipality who are registered with the AHPCSA and practised more than one interdisciplinary referral. This provided an assessment of the inclusion and exclusion criteria.

The pilot study participants were asked to provide feedback on the interview questions asked by the researcher. This helped to establish any potential problems with the interview questions and improvements that needed to be implemented to ensure its sustainability in the main study. No changes to the interview questions were suggested by the pilot study participants.

The pilot study participants were provided with a letter of information (**Appendix E**), a letter of informed consent (**Appendix F**) and a code of conduct (**Appendix G**) for completion prior to the commencement of their interview. The data collected from

the pilot study were not used as part of the data analysis as these participants were excluded from the main study.

### **3.11 DATA COLLECTION PROCESS**

The participants who were chosen and who fulfilled the inclusion criteria for the main study were met in person. The participants received a letter of information (**Appendix A**) and a consent form (**Appendix B**) to read, sign and return before the commencement of the interview. This informed them of the purpose of the study, their right to exit the study at any given point, and that their personal details would be kept confidential. The participants also had to consent to being audio recorded and for their responses to be used in the study. The participants were asked to fill out a demographic data sheet for basic demographic data collection (**Appendix H**).

One-on-one interviews were used to obtain the data in this study. According to Guest *et al.* (2013: 1), in person interviews allow for an interviewer to analyse participants' body language, tone, and the content of their responses. In person interviews also allow for a rapport to be formed between an interviewer and participant and being able to empathise with the participant on sensitive topics (Guest *et al.* 2013: 1). Each interview was recorded on an audio recorder. A semi-structured interview guide (**Appendix C**) of questions was used during the interviews to allow freedom in responses from the participants. Probing questions were used for the main questions to encourage more in-depth responses from the participants.

Upon agreement, the interview was scheduled with a date, time and venue that was ideal for both the interviewer and participant. A semi-structured interview guide (**Appendix C**) was used with probing questions and the participants' responses were audio recorded. Short notes were written or typed out during the interview and the participants set the pace for the interview with their responses.

Once the interview questions were completed, the participants were thanked for their participation and contribution to the study. The audio recorded responses were transcribed verbatim onto a Microsoft Word document and these were reviewed for any errors or omissions. The participants' names were kept confidential by each participant being allocated a code.

### **3.12 DATA ANALYSIS**

According to Creswell (2013: 246-247), an appropriate approach for data analysis is to employ a hierarchal approach by starting from specific to general. Creswell recommended the steps of transcribing, analysing, and coding the data. For this study, the audio recordings of the interviews were transcribed verbatim onto Microsoft Word documents. These were reviewed and compared with the audio recordings to identify any errors or omissions. These transcripts were analysed and coded. Coding is a process of organising the data into categories (Creswell 2013: 247).

Creswell (2013: 248) recommended the use of Tesch's steps for coding. According to Creswell (2018: 310), Tesch's steps are outlined into the following procedure. A researcher reads all the transcripts to gain familiarity of the content. A single transcript is selected by the researcher for emerging topics to be outlined. A list of the topics is created once all the transcripts have been read by the researcher. The topics that are similar are then be grouped together into columns and abbreviated into codes. Descriptive words are given to the topics and this creates categories. The codes are arranged in alphabetical order and an abbreviation is allocated to each category. A preliminary analysis is performed by the researcher and if necessary, the data are reassessed and recoded (Creswell 2018: 310).

According to Saldana (2013: 8), the primary content and essence of the data are represented through codes and are clustered together based on similarity and regularity to form a pattern. The codes are then grouped according to their similarity and regularity to establish a pattern and formed categories. If clusters of data existed within the categories, these were further broken down into subcategories (Saldana 2013: 12). Concepts or themes were made from the categories and are abstract constructs that are general and on a higher-level (Saldana 2013: 13). The researcher grouped similar themes together to form a higher-level theoretical construct (Saldana 2013: 176).

### **3.13 ETHICAL CONSIDERATIONS**

#### **3.13.1 Ethical Approval**

Ethical approval for this study was obtained from the IREC of DUT (Ethics Reference number: IREC 155/24) (**Appendix D**).

### **3.13.2 Ethical Principles**

The participants who met the inclusion criteria were given a letter of information (**Appendix A**), in person, prior to the interview and asked for their voluntary participation in the study. They were requested to read the letter of information (**Appendix A**) and sign for their informed consent (**Appendix B**). The letter of information contained information about the context of the research, the participants' permission to be interviewed and audio recorded and for their responses to be used in the study. The participants were informed of their right to exit from the study at any given time and that their personal details would be kept confidential. Only the researcher and supervisor could access the participants' audio recordings. The interview transcripts will be stored in the DUT Chiropractic Department archive for five years and destroyed after this period.

### **3.13.3 Autonomy**

Autonomy is the preservation of participants' human rights (Orb *et al.* 2001: 95). This involves protecting and upholding their rights to voluntarily accept or refuse to participate in the study, and their right to exit the study at any point without any penalties (Orb *et al.* 2001: 95). The purpose of the study and that their participation was completely voluntarily were explained to the participants. The participants were informed that their decision to participate or not participate in this study would not impact them negatively and hold no future implications. If a participant decided to participate, they were informed that they were able to exit the study at any point (Allmark *et al.* 2009: 49). An informed consent form (**Appendix B**) was given to the participants to sign and only upon completion were they eligible to participate in the study.

### **3.13.4 Non-Maleficence**

Non-maleficence refers to not doing harm to others and avoiding situations that may put others at risk of harm (Jiggins *et al.* 2016: 2). The supervisor monitored the researcher and the researcher upheld professional and ethical values. All personal details of the participants were kept confidential.

### **3.13.5 Beneficence**

According to Orb *et al.* (2001: 95), beneficence refers to preventing harm and doing good for the benefit of others. The chiropractic profession will be informed of the

findings of this study. The findings are intended to provide the profession with an outlook on their common experiences and perceptions with regard to interprofessional referrals. The research findings have the potential to provide chiropractors with information that could improve their future experiences with interprofessional referrals by addressing existing issues. The research findings would also assist with future exploratory research.

### **3.13.6 Justice**

According to Orb *et al.* (2001: 95), justice is to be fair and share equally. The key quality of this principle is to not exploit or abuse research participants (Orb *et al.* 2001: 95). The participants in this study were selected based on the research needs rather than researcher bias. All participants were asked the same interview questions to ensure reliability and equality. All participants had equal opportunities during the interview and were treated with fairness.

### **3.13.7 Confidentiality**

Information in the interview and reports were not linked to participants. Their details have been kept confidential and no direct attribution to them was made. All the participants were allocated a pseudonym to avoid mentioning their details. The participants received a pseudonym for their interview data responses and demographic data sheets. Their details were not published in any way or made known to the public (Allmark *et al.* 2009: 49). The data collected from the participants were kept on a password protected USB that only the researcher and supervisor could access. The data on the USB will be stored for a period of five years. After this period, the USB will be formatted to erase the information stored on it.

### **3.13.8 Trustworthiness**

Lincoln and Guba's parallel criteria is a paradigm specific criterion for establishing trustworthiness in qualitative research (Morrow 2005: 251). The four parts of the parallel criteria are credibility, transferability, dependability, and confirmability (Morrow 2005: 251).

### **3.13.9 Credibility**

According to Morrow (2005: 252), maintaining internal consistency and ensuring rigour throughout the research process allows for credibility to be upheld. The following was how credibility in this study was accomplished:

- Interviews were conducted until data saturation was reached, ensuring sufficient data were collected (Morrow 2005: 252).
- Thorough descriptions were used for the source data (Morrow 2005: 252).
- Chiropractors registered with the AHPCSA and practising more than two interdisciplinary referrals ensured the credibility of the participants.

### **3.13.10 Transferability**

Transferability is the ability of the research findings to be generalised and for the theory to have a general application (Morrow 2005: 252). Transferability was accomplished through adequate information provided to the reader on the context of the research, the number of participants, the researcher-participant relationships and processes, such as the inclusion and exclusion criteria, the data collection procedure and research instruments used (Morrow 2005: 252).

### **3.13.11 Dependability**

According to Morrow (2005: 252), dependability refers to the ability of the study to be the consistent regardless of the change in researchers, analysis methods, and period. The findings are repeatable and explicit (Morrow 2005: 252). Dependability was accomplished through the following:

- The research design was tracked by recording the research activities in chronological order as well as the influences on the data collection. Emerging themes, categories, and influences on the analysis and collection of data were also be tracked (Morrow 2005: 252).
- The research supervisor viewed and examined these records (Morrow 2005: 252).

### **3.13.12 Conformability**

Confirmability is the ability of the researcher to acknowledge and address the issue that research is never objective (Morrow 2005: 252). The research needs to be represented through the findings and not be based on the researcher's beliefs or

bias. The integrity of the data collected lies in the findings and, to confirm adequacy of the findings, the researcher must connect together the analysis, data, and findings (Morrow 2005: 252). Confirmability was accomplished by the following:

- The research supervisor oversaw the researcher and assisted in monitoring and managing the researcher's subjectivity (Morrow 2005: 252).
- The researcher was held accountable by keeping a detailed record of the research activities in chronological order as well as the influences on the data collection. Emerging themes, categories and influences on the analysis and collection of data were tracked (Morrow 2005: 252).

### **3.14 SUMMARY OF THE CHAPTER**

The research methodology utilised in this study was elaborated upon in depth in this chapter. Ethical considerations and trustworthiness of the research were expanded. The findings of this study are presented in the following chapter.

## CHAPTER FOUR: RESULTS

### 4.1 INTRODUCTION

The results obtained from the thematic analysis of 13 semi-structured interviews conducted on chiropractors in the eThekweni Municipality are presented in this chapter. The participant's age, gender and years in practice in this study are shown in **Table 4.1**.

**Table 4.1: Pertinent demographic data of participants**

| Participant Number | Age   | Gender | Years in Practice |
|--------------------|-------|--------|-------------------|
| 1                  | 20–29 | Female | <2                |
| 2                  | 30–39 | Male   | 5–6               |
| 3                  | 40–49 | Male   | 10+               |
| 4                  | 20–29 | Female | 2–4               |
| 5                  | 30–39 | Female | 7–8               |
| 6                  | 30–39 | Female | 10+               |
| 7                  | 30–39 | Female | 9–10              |
| 8                  | 30–39 | Female | 2–4               |
| 9                  | 50–59 | Male   | 10+               |
| 10                 | 40–49 | Female | 10+               |
| 11                 | 50–59 | Male   | 10+               |
| 12                 | 50–59 | Female | 10+               |
| 13                 | 20–29 | Female | <2                |

### 4.2 MAJOR THEMES

Upon analysis of the data, the following themes were outlined:

- Theme 1: Interprofessional collaboration and referral dynamic.
- Theme 2: Patients perspective on referral and continuation of care.
- Theme 3: Challenges encountered in the referral process.
- Theme 4: Enhancement of the referral network.

The four main themes and sub-themes outlined from the data are presented in **Table 4.2** with a synopsis.

**Table 4.2: Overview of major themes, sub-themes and their synopsis**

| Theme                                                        | Sub-Theme                                                                                                                                                                                                                                                                                                                                                                                                                    | Synopsis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1: Interprofessional collaboration and referral dynamic      | <ul style="list-style-type: none"> <li>• Chiropractic referrals.</li> <li>• Recipients of chiropractic referrals.</li> <li>• Reasons for referrals to chiropractors.</li> <li>• Working relationship.</li> <li>• Positive feedback and outcomes.</li> </ul>                                                                                                                                                                  | Chiropractic referrals are prominent in the multidisciplinary setting. Chiropractors are trained to diagnose conditions which may not be within their scope of practice and a referral is needed to another practitioner. Chiropractors select specific practitioners who they have a collaborative relationship with and can address a patient's specific condition. A positive working relationship among chiropractors and other healthcare practitioners is vital in the patient's continuity of care. Positive feedback and outcomes within the working relationship, influence a chiropractors' decision in selecting practitioners to refer their patients too.                                                                                                                                                                                                                                                                                         |
| 2: Patient perspectives on referral and continuation of care | <ul style="list-style-type: none"> <li>• Preferences influencing healthcare decisions.</li> <li>• Obstacles in the referral.</li> <li>• Significance of the referral.</li> </ul>                                                                                                                                                                                                                                             | Patient preferences influence their healthcare decisions, including their referrals to practitioners. Patient preferences such as opting for non-invasive treatments, trust in their provider and petrol expenses play a role in determining their decision to follow through with a referral. Patients also encounter obstacles in their referral process and this can limit their follow through and access to timeous care. The significance of referrals is in the patient's best interest of receiving timeous and appropriate care. Referrals can enhance a patient's continuity of care and improve their outcomes.                                                                                                                                                                                                                                                                                                                                     |
| 3: Challenges encountered in the referral process            | <ul style="list-style-type: none"> <li>• Stereotypes surrounding the chiropractic profession.</li> <li>• Lack of understanding or knowledge on the chiropractic scope of practice.</li> <li>• Geographical location.</li> <li>• Barriers in communication.</li> <li>• Chiropractic terminology, jargon and evidence-based practice.</li> <li>• Influence of age, ego and ownership.</li> <li>• Healthcare system.</li> </ul> | A variety of challenges limit the referral process and interprofessional collaboration for chiropractors. Stereotypes and a lack of understanding about the profession hinders referrals and reduces trust from other practitioners. This is further compounded by the limited awareness of the chiropractic scope of practice by other healthcare practitioners. Geographical location, age, ego and sense of ownership from surrounding healthcare practitioners negatively influence the referral relationship for chiropractors. Communication barriers, chiropractic-specific jargon and a lack of evidence-based practice within the chiropractic community also contributes to the challenges encountered in the referral process. From a broader perspective, the exclusion or lack of integration of chiropractic within the healthcare system poses as an obstacle to forming collaborative relationships and the provision of patient-centred care. |
| 4: Enhancement of the referral network                       | <ul style="list-style-type: none"> <li>• Methods of communication.</li> <li>• Clinical acumen and knowledge.</li> <li>• Guidance for new graduates.</li> <li>• Practitioner involvement.</li> <li>• Student perspective.</li> </ul>                                                                                                                                                                                          | The referral network for chiropractors can be improved despite its many challenges. Communication is the foundation of a referral network and collaborative relationships. It needs to be clear and consistent when building trust and relationships with other practitioners. Strengthening clinical acumen and knowledge will establish credibility and enhance evidence-based practice for the chiropractic profession. Guidance for new graduates and interprofessional exposure during student training can support early professional development and engagements. Practitioner involvement across all professions can also foster relationship-building and collaboration.                                                                                                                                                                                                                                                                              |

## 4.3 THEME ONE: INTERPROFESSIONAL COLLABORATION AND REFERRAL DYNAMIC

The participants noted the various reasons for patient referrals both within the chiropractic profession and to other various healthcare practitioners. They also noted from whom they often received referrals and outlined who they would utilise in their individual referral networks. Participants further expressed their opinions on their working relationships with other practitioners and the positive feedback and outcomes experienced.

### 4.3.1 Chiropractic Referrals

The participants perceived various reasons for referring patients to other healthcare practitioners, namely when the treatments fell outside of the chiropractic scope of practice. The following excerpts substantiate this statement:

*“I think it's extremely important, because there's things that fall out of our scope of practice that the patient will require further care for. They need to be referred to other types of healthcare practitioners, whether it's a GP or another specialist.”* (Participant 1)

*“...plenty of patients you'll see are fine to keep within chiropractic scope of practice, but quite frequently you'll see patients who need further help from outside of the profession.”* (Participant 2)

*“If I couldn't help the patient in a particular area or my knowledge was limited, or my skill set was limited, then I would refer that patient. It shouldn't be a matter of your ego and pride and things like that. If a patient requires treatment, and if you have the patient's best interest and heart, then as a practitioner, you will do the right thing and refer them.”* (Participant 12)

The participants expressed the value of referring patients onwards and prioritising their best interests.

*“Referrals are actually better than trying to hog and keep the patients, and then wasting the patient's money and time with no improvements. So not only are you hindering the patient's treatment plan, healing and recovery, but you're also giving a bad name to the profession. The*

*patient will say, they made me come see them for so many appointments, and I had no improvements. Rather just be honest and open. Explain to the patient that you want to give this a bash for one or two appointments and if there's no improvement, you will refer."*

(Participant 1)

*"It was in her best interest to refer her onward and that's what happened. She is doing a little bit better. You can't just say, oh chiropractic can fix everything. There's a limit to what we can and cannot do. That's also something to keep in mind."*

(Participant 6)

The participants emphasised the need to understand the criteria for a referral such as the reasons, expectations, and methods involved in referring patients to other practitioners.

*"...because of the nature of our scope of practice, there's so much we don't do. It's very important to understand what we don't or shouldn't be doing, when to refer and what is the best methods for referring."*

(Participant 2)

Participants noted the value of a referral for patients who present with complications.

*"It's nice to also get another set of eyes, particularly on a patient who might be a little bit more tricky or complicated, with a different opinion. It works very nicely."*

(Participant 2)

*"I've had patients referred to psychologists and to psychiatrists, because the condition has caused so many negative experiences in their brain and side effects like depression. A lot of conditions have side effects of depression and anxiety, let alone just the fact of living with the chronic illness."*

(Participant 13)

Some participants outlined the value of interprofessional referrals for the chiropractic profession.

*"I think interprofessional referrals is actually quite vital, especially in chiro. Being holistic practitioners, we are looking at different symptoms and the systems that are contributing to these symptoms. I think it is important to know, if we have dealt with the musculoskeletal stuff and*

*if there's another cause or referred issues, then obviously we have to refer out.” (Participant 4)*

*“I mean, as chiropractors, we cannot cure everything. We don't have the answers to everything. Our role in musculoskeletal or neuromuscular skeletal health is limited, as is in every other profession. So that's why interprofessional networking and collaboration is critical, because you as a practitioner cannot manage every facet of a patient.” (Participant 5)*

#### **4.3.2 Recipients of Chiropractic Referrals**

The participants identified the healthcare practitioners to whom they frequently made referrals. The main healthcare practitioners to whom the participants referred were GPs, orthopaedic surgeons, neurosurgeons, neurologists, physiotherapists, and biokineticists. The following excerpts substantiate this statement:

*“I would say the three most common would be to an orthopaedic surgeon, a biokineticist and a GP.” (Participant 2)*

Similarly, participants 1, 4, 9 and 12 made comparable statements.

*“So primarily orthopaedic surgeons and neurosurgeons, those are probably the biggest two. Occasionally, rheumatologists, psychiatrists, biokineticists, physiotherapists and I'm trying to think if there's any others. I had some unusual ones a while ago. Sometimes specialist physicians, if I'm uncertain, you know what the cause of the patient's condition is, if I think it's more a systemic condition.” (Participant 9)*

Some of the participants referred their patients for blood tests and determined a referral to the general practitioner was warranted for changes in the patient's medications.

*“You will get chronic neck pain patients, and you will find it's uncontrolled high blood pressure. You refer them to a good GP to get them medicated. They've had good outcomes, as well as your diabetic patients. Some of them have diabetic neuropathy symptoms, and it's because they have the incorrect medication, or they're taking their medication incorrectly. Once you get them to see a GP that they're*

*comfortable with, they have really good and favourable outcomes.”*  
(Participant 4)

*“I often refer to radiographers and radiologists. If a patient comes in with something that I feel needs x-ray of blood test referral then I do refer. When it comes to things like blood tests and if I feel that the patient might have something that's outside of my scope of practice. I would rather refer them back to a general practitioner to ensure they can be sent for the full panel of bloods if its needed and that might be outside of my scope. I've referred a couple patients to neurologist and to an orthopaedic.”* (Participant 13)

A participant expressed that they referred to a fellow chiropractor, with a specific interest in certain types of injuries.

*“I also refer to other chiropractors as well, not just other professions. I refer to other chiro's that are more specialised in whatever injury or I feel that maybe the patient needs to see often.”* (Participant 1)

In addition to referrals to other healthcare practitioners, chiropractors also refer for investigative studies such as x-rays, ultrasounds, blood tests etc. This is supported by the experts in the following statements:

*“I refer a fair amount to radiologists. I sent for a fair number of x-rays and ultrasounds, so those are definitely part of my healthcare referral network.”* (Participant 5)

*“It's usually for x-rays, ultrasounds, radiologists, neurosurgeons and orthopaedic surgeons.”* (Participant 6)

A minority of the participants mentioned referring patients to a gynaecologist, dentist, psychologist and homoeopath. This was previously not mentioned by the other participants.

*“... referrals to orthos, neuros, that's generally my referral base, and a lot of peads and gynae from my side.”* (Participant 10)

*“I refer to general practitioners, dentists for TMJ conditions and surgeons, mainly orthopaedic surgeons, neurosurgeons. I've sent to rheumatologists, neurologists, biokineticists, physiotherapists,*

*dietitians and all those people I spoke about. Even psychologists I have referred out to them and some to the state healthcare centres because they couldn't afford private practitioners.” (Participant 11)*

*“It would have been orthopaedic surgeons, GPs, biokineticists and I have referred patients to homeopaths as well. I have also referred patients to physiotherapists.” (Participant 12)*

Some of the participants mentioned using specific practitioners, namely orthopaedic surgeons and neurosurgeons, when referring their patients.

*“I do have a few practitioners that I refer to on a regular basis. I have specific orthopaedics, specific neuros and GPs.” (Participant 4)*

*“There's a specific neurosurgeon that I often refer to. He will often refer a patient that that needs operation, and then he'll give me a time frame say six weeks. Then I can treat the patient for six weeks and he will re-evaluate after. If the patient has improved enough, he won't operate but if the patient is still the same, he will operate. I think we've got a good relationship, and it works well.” (Participant 8)*

The distance of other healthcare practitioners from the participants, influenced their referral decisions.

*“I've got a shoulder orthopaedic surgeon who I prefer to refer to, depending if they're in the area. If you've got a knee issue, I'll send to someone different.” (Participant 2)*

*“I think working with, especially in close proximity to specialists, surgeons like orthopaedics, neurologists and neurosurgeons.” (Participant 3)*

#### **4.3.3 Reasons for Referrals to Chiropractors**

Many participants noted various reasons for receiving referrals from other healthcare practitioners. The following excerpts substantiate this statement:

*“...but there are a lot of doctors out there who are now very aware of chiropractic and the benefits of chiropractic and are willing to refer their patients. I get a lot of referrals from paediatricians. At a certain point, a colicky baby is not responding to treatment and then they will come*

*in. It's not totally doom and gloom when it comes to these interprofessional relationships, where they think chiropractic is horrendous. No, there are lots of doctors who are willing to refer onward.” (Participant 6)*

A participant perceived social media as informative platform that raised awareness among younger practitioners and influenced their referrals to chiropractors.

*“100% today, but the younger ones now. It is getting a little better, I suppose it is because of social media. So, you do get those who are like, oh I've seen chiros on TikTok. They have an idea of what you do, and not always be specific, but they do have an idea.” (Participant 7)*

Participants received referrals from other practitioners when conservative care was recommended for the patients before surgical interventions were considered.

*“The patient was sent back to me instead of her experiencing a spinal block, the injection, or whatever that they do for them. She sent her back to me for conservative care before trying that.” (Participant 6)*

*“I've had a patient's specialists who asked if I could carry on treating the patient conservatively for six more weeks, guide them in stretching, dry needling, mobilisation, soft tissue therapy. If that didn't work out, they would review the patient for me after the six-week period.” (Participant 9)*

The participants noted receiving referrals from GPs, often for patients who presented with headaches.

*“The GP will call you and say your patient came in today. Blood pressure was not so great, she complained of her headache and I sent her back to you. So those type of lines of communication that helps.” (Participant 7)*

*“...but the general practitioner has referred quite a few patients. She often had patients with headaches and found that some of her previous patients had great relief from chiropractors. This specific GP in my area that I refer to, she does refer back to me and it is great.” (Participant 13)*

#### 4.3.4 Working Relationship

Many participants expressed positive working relationships with other healthcare practitioners. The following excerpts substantiate this statement:

*“I’ve got one or two professionals in this area and we actually inter-refer quite often. It’s not everybody, but the ones that I do have, do refer. We work well together, and they keep me in the loop with what’s happening with the patient.”* (Participant 8)

Patients requiring conservative care were referred to the participants. The participants experienced positive working relationships in these situations as the referring practitioner trusted them to conservatively treat and manage the patient.

*“I manage with GPs and with specialists, etc. Sometimes they tell me to continue with the treatment until I’ve reached a certain point, or I feel the patient is not responding, or they’re getting worse, because we still feel that conservative is the way to go.”* (Participant 11)

The participants noted the influence of time and the awareness surrounding the chiropractic profession. They noted that, in recent years, other healthcare practitioners were more informed and aware of the chiropractic profession. Some participants expanded their referral networks gradually and developed their experiences. These participants were able to grow their professional relationships and foster collaboration, which improved their expertise and skills.

*“It seems quite good actually. I think as time has passed by, knowledge around chiropractic has increased. The awareness around it has increased a lot more with regard to specialists like radiologists, neurosurgeons and orthopaedic surgeons. They are more willing to work with chiro now.”* (Participant 6)

*“As the years have grown, you’ve met up with people, whether it be at congresses or in the passages the building. So now it’s gotten a whole lot better. I feel like with time and maybe with some experience added on to that, it definitely has gotten better.”* (Participant 7)

Some participants referred to practitioners who were recommended by fellow chiropractors. The recommended practitioners were receptive to the chiropractic

profession. The participants also referred to practitioners who they knew through their personal relationships with good reputations.

*“...doctors that are I know through my family, friends and personal relationships, if that makes sense. You get to know of good ones and their reputation. So, then you'll refer your patients to those that you know have a good reputation.”* (Participant 1)

*“The practitioners that I have referred to, have been recommended to me by other chiropractors that have previously referred patients there. Most of them are quite happy to take our referrals without any questions asked. I've got a great group of general practitioners that really like chiropractors and believe in what we do, so they are quite happy to. I haven't had any issues with radiologists, they've been very open to referrals from chiro.”* (Participant 13)

A participant further expressed their use of the referral network for patients who required a practitioner with a specific skill set or area of expertise.

*“There were certain practitioners that I would refer patients to, not with any remuneration, but simply because certain practitioners were known for being adept in certain fields.”* (Participant 12)

#### **4.3.5 Positive Feedback and Outcomes**

Many participants expressed experiencing positive outcomes with other healthcare practitioners. Participants also outlined receiving feedback from other practitioners which positively influenced the referral relationship. The following excerpt substantiates this statement:

*“I think the more you refer and are open to discussing with those doctors, the more they are then willing to refer patients to you. It creates that professional relationship.”* (Participant 1)

A participant outlined a positive experience with a practice receptionist:

*“I've found going through the receptionists is sometimes better. They tell the doctor that they haven't called back.”* (Participant 1)

Two participants received feedback from the practitioner and the patient. The participants were more inclined to use the practitioner for future referrals, based on their patients' positive experience and feedback.

*"Typically, it's very good. I haven't put enough effort into developing a very strong relationship with other professions. Usually when I refer, I get feedback from both the patient and other profession."* (Participant 2)

*"I've had feedback from patients, where I might have referred them to someone, and the experience was an overall good. I make a note of this and keep that in mind for future referrals as well."* (Participant 11)

The participants' personal relationships with other practitioners provided them with the opportunity to learn from them. Some participants also preferred to refer to practitioners with whom they are familiar as there was better communication and feedback.

*"I'm fortunate enough to have a lot of friends who are medical doctors. I have a friend who is a medical doctor as well as a chiropractor. I have a friend who's a neurosurgeon and another whose an orthopaedic surgeon. I take the opportunity to learn from them. And I think that's the main takeaway from it, that you have to be willing to also learn from them."* (Participant 6)

*"I use the same doctors and they do provide feedback reports. It takes a while for them to do it, but I always get a feedback report from the doctors that I always use. If it's a new doctor or a doctor that I don't often use, I don't get reports back unless I ask. You can ask, and they will accommodate you."* (Participant 8)

The participants expressed receiving feedback through written reports, emails, and telephone calls. A participant received a letter of thanks from the practitioner to whom they had referred a patient. Another participant noted the return of their patient for chiropractic treatment based on the advice of the practitioner to whom they were originally referred.

*"She actually appreciated that I took the time to make such a detailed report, because they sometimes they aren't aware of the fact that we*

*are capable of that level of writing a medical report to them. She reciprocated by sending a report back to me regarding the patient, and even suggested that the patient continues with chiropractic care over surgical intervention.” (Participant 6)*

*“I have received written information, phone calls and emails, with an assessment and what's going on. That's always reassuring and a good thing. It also helps me to track my patients in terms of how they are advancing in their care.” (Participant 11)*

*“Some of them would actually respond by writing a letter back to you, stating a letter of thanks that you referred your patients to them.” (Participant 12)*

A participant noted receiving excellent feedback from another chiropractor and a government hospital.

*“The best feedback I get is from a referral to another chiro in a different area. I always get, as we are taught, beautiful report feedback about your patient. The only places where I have received very good feedback is through fellow chiros and the government, believe it or not. If I have a patient that's been seen and treated at Albert Luthuli, Albert Luthuli is amazing, I will get a detailed five-page summary of what's happened with that patient and how things are.” (Participant 10)*

A participant had good feedback and outcomes with clinic sisters, when co-managing a paediatric patient.

*“There's more co-management, particularly with a paediatrician or with clinic sisters. Clinic sisters are very interactive and give good feedback.” (Participant 10)*

#### **4.4 THEME TWO: PATIENT PERSPECTIVES ON REFERRAL AND CONTINUATION OF CARE**

Participants expressed the belief that patient preferences influenced their healthcare decisions and any obstacles encountered by the patient negatively influenced the referral process. Participants also expressed the value and importance of the referral regarding their patients.

#### 4.4.1 Preferences Influencing Healthcare Decisions

Many participants noted the influence of patient's preferences on their healthcare decisions and their outlook on referrals. The following excerpts substantiate this statement:

Participant expressed patient preferences for conservative treatment influenced their healthcare decisions.

*"Sometimes you don't always hear from them once you refer, like it's done there. If we get the referral back that they want to try conservative treatment before the op. or what not, then you do."*  
(Participant 1)

A participant expressed patient preferences for quick access to healthcare services and found that barrier to entry was an inhibiting factor for patients.

*"So, I think a lot of patients can get appointments. They know we can have a quick entry. There's no barrier into entry. So, they can get a quick entry to see someone, especially in acute cases. They can have imaging, assessments and possibly surgery, if need be, and that's all within at least a week or two."* (Participant 3)

The participants noted that their patients were happy to be referred to receptive practitioners, despite the cost it might have entailed.

*"They don't mind if it's conservative, which some of them hope for. Even if it's surgery, depends on the nature of the injury or ailment, if they're seen to by a receptive professional. They're very happy to pay prices, even though maybe expensive, they just want good quality care. Whether it's a local hospital or it happens to be out of town. They just want good care and most of doctors we have referred to, do give them the best care that they can."* (Participant 3)

In comparison, some participants noted that their patients were dissatisfied with the referral as the referring practitioner was not empathetic or receptive to their needs.

*"You don't want someone to go there and then experience someone who is cold and uncaring or comes across as that. That's a fair thing,*

*you can't please everyone. If that happens, I just make a note, or I at least try to find out what exactly happened and why.” (Participant 11)*

*“A lot of patients that I see don't want to be referred to other practitioners. They have had bad experiences and those sorts of things. The patients that have agreed to have referrals are normally the ones with no other options.” (Participant 13)*

The participants took into consideration the proximity of other healthcare practitioners to patients. They noted patients' preferences for healthcare practitioners within a close proximity and took into consideration the cost of petrol for travel.

*“I'm also on the lookout for new people, expertise, knowledge and new ways that they may be able to treat the patient. Also, what's convenient for their patient as well. It's no point sending someone quite far unless there's no one else available. Then all of those factors have to be taken into consideration. Sometimes it's what the patient prefers as well, in who they want to see.” (Participant 11)*

*“It was also dictated by the proximity to the patient's place of residence as well. That was important a lot of the time for the patient. It makes sense, petrol is expensive so that's the premise on which I used to practice.” (Participant 12)*

#### **4.4.2 Obstacles in the Referral**

Many participants noted obstacles such as limited funding and healthcare costs as obstacles that patients would encounter in the referral process.

*“When the patient has no funds, or their medical aid has run out or the facilities are too far for the patient and so forth. In that case, I clearly explained to the patient why I'm sending them to whoever, and ultimately, it's a patient's decision on whether to follow that through or not.” (Participant 11)*

Some of the main issues encountered include waiting periods, failure to make a diagnosis, candidacy for surgical interventions, and negative interactions with other practitioners. The following excerpts substantiate this statement:

*“When you refer a patient, sometimes they have to wait weeks to months before they can actually get an appointment. It's almost like they're hanging in limbo until they can see the professional.”* (Participant 4)

*“I think sometimes the patients get disappointed when there isn't a diagnosis, a definitive diagnosis, and they've had a lot of testing, but that's a phenomenon that we do understand.”* (Participant 9)

*“Sometimes we discuss whether a patient is a surgical candidate or not, because it does become tricky, especially if the patient is in severe pain or she's got some other clinical features. You have to discuss this with the practitioner and the surgeon, because you have to convey that to the patient, who's obviously very nervous and anxious as to what's going to happen.”* (Participant 11)

*“Patients will come to me and they say, this was my issue with so and so. I make a note, just so that I know what a patient's been through, I know that it doesn't always apply and there's three sides to every story. There will be the patients, the practitioners, and then the actual truth.”* (Participant 13)

#### **4.4.3 Significance of the Referral**

Many participants reported significance of referrals from the perspective of their patients and prioritising their patients' best interests. The following excerpts substantiate this statement:

*“For the utmost importance of the patient number one, ease of access to these doctors is very well received by them. They can find a specialist and they can get an appointment, whether they've seen a chiropractor or not. Obviously, it helps to have seen a professional like us. I think you need to make sure that you can get them sent off as quickly as possible and get some kind of resolution for the patient, whether it's conservative or surgical.”* (Participant 3)

*“I think we need to do what's in the best interest of the patient. If I can't do the job, I'm going to refer to a physio if they can do a better job than me.”* (Participant 12)

Some participants outlined the need for collaborative care in ensuring their patient receives the best form of treatment available.

*“It's everybody coming together for the good of your patient. Everybody using their skill set and knowledge to help that patient, whether it's alternative or mainstream medicine. You come together, you put your skills together and be willing to listen and learn from each other.”* (Participant 6)

*“Sometimes practitioners feel that if you refer your patient to another healthcare professional, your patient will look at you as if you don't know enough, and they may never come back to you. However, I found that is not how it works out in real life. I have that perception in my mind, and maybe other students or new practitioners may feel that way, but in fact they respect you. People respect you more because you know your limitations and you have their best interest at heart to be able to refer. That particular patient will come back to you for other issues.”* (Participant 12)

A participant expressed the utilisation of collaborative and conservative care approaches before considering surgical procedures for their patients.

*“I have had patients, for example, where the surgeon would have referred to me before doing the surgery to see if we can prevent it or delay the surgery, and it usually works out good.”* (Participant 11)

#### **4.5 THEME THREE: CHALLENGES ENCOUNTERED IN THE REFERRAL PROCESS**

The participants were of the opinion that stereotypes surrounding the chiropractic profession, lack of understanding or knowledge of the chiropractic scope of practice, geographical location, barriers in communication, chiropractic terminology, jargon, and lack of evidence-based practice, presented as unique challenges to their referral network. The participants also outlined different challenges they encountered within the healthcare system. They also voiced the influence of age, ego, and sense of ownership from other healthcare practitioners and the negative implications it had on their referral relationship.

#### 4.5.1 Stereotypes surrounding the chiropractic profession

Many participants reported stereotypes encountered from other healthcare practitioners and its negative impact on the referral relationship. The following excerpts substantiate this statement:

*“I think that could be like a stereotype, the feeling that chiropractors can't really diagnose or how do they actually pick this up.”* (Participant 4)

*“They think we just going to like, click and crack. They don't know how holistic we are.”* (Participant 4)

*“We're already seen as: chiros think they know it all, whereas they're just bone doctors, which obviously we are not.”* (Participant 7)

A participant noted that the opinion of other practitioners influenced the patient decisions in seeking chiropractic treatment. Other healthcare practitioners with negative perceptions of chiropractic advised their patients to not seek chiropractic care and described it as dangerous.

*“There have been incidences where a patient would come in and say; my neurologist or neurosurgeon or my orthopaedic said absolutely no chiropractic adjustments, or my rheumatologist said no chiropractic adjustments. In some cases, it's warranted because there are contraindications and in other cases, it's just a case of opinion. Don't go to chiropractors. They are rough. They are very vigorous and aggressive in their management. They can hurt you, which doesn't do the profession any favours.”* (Participant 5)

*“There's the stereotype that what we do is dangerous, and so you know, don't send the patient there in a hurry.”* (Participant 12)

Another participant noted that the perceptions surrounding the chiropractic profession are historical and began when chiropractic was first conceptualised.

*“Stereotypes and chiropractic very rife. It's very historical, this has been the perception since the inception of the profession. It's very difficult to navigate in terms of creating better public opinion and*

*promoting better awareness because there is a lot of negativity and there's a lot of stereotypes around the profession.” (Participant 5)*

#### **4.5.2 Lack of Understanding or Knowledge on the Chiropractic Scope of Practice**

A lack of understanding or knowledge of the chiropractic scope of practice was presented as a challenge for chiropractors when referring patients. The following excerpts substantiate this statement:

*“I think that's one of the reasons why that limits the referral of patients to us, because they aren't aware of our scope of practice.” (Participant 12)*

Participants experienced situations where they diagnosed or referred their patients with heart related conditions and encountered negative perceptions from other healthcare practitioners due to these practitioners not being aware of the chiropractic scope of practice and having a limited understanding of the profession.

*“A patient came in with neck pain, jaw pain, shoulder pain. It was actually a typical MI patient, which I then referred to the GP, down the corridor. They did the ECG to confirm and we sent him off to hospital. There was actually the onsite doctor who was like, wow, did the chiropractor uh actually pick this up, you know in a way that they felt like chiro's couldn't.” (Participant 4)*

*“...sent her off, and then an incidental finding was, hectic calcification of her aorta. I was like, okay, I'll send you back to your physician so that they can work you up and all of that. Before I did, I sent her for an abdominal ultrasound and I attached that to the referral. The guy was like, but that's not within your scope of practice, and I was like it actually is.” (Participant 7)*

Participants expressed concern about the lack of awareness and understanding among healthcare practitioners. These healthcare practitioners often assume that chiropractic and physiotherapy profession are the same. A participant noted that a lack of understanding among other healthcare practitioners negatively affected their value of the chiropractic profession and what it has to offer their patients.

*“They almost associate us with physios. They assume we do the same as physios and they don't necessarily see us as primary caregivers”*  
(Participant 8)

*“The understanding of what chiro is, I think there's a huge lack of education in other professions on what we do as opposed to a lack of education from our perspective on what they do and the value that they have for our patients. So unfortunately, our value is not received well. I still believe by vast majority of other professionals.”* (Participant 10)

The lack of understanding surrounding the chiropractic profession was emphasised by a participant, who noted that other professions often assume chiropractors only treat and manage spinal conditions. These practitioners were unaware of the full scope of chiropractic practice, which includes the treatment of extremities.

*“One of the biggest challenges is they don't know what chiros do. So, when they do refer, or they don't know when or how to refer, as well to say that. Say I do a referral for an extremity, and I refer to the ortho. He will ask, why did the patient come to see me for an ankle, if it's not, for example, back related. So, I think that was quite frustrating and it's happened more than once.”* (Participant 8)

Participants found the historical teachings of chiropractic such as subluxation theories, as the reasons for not receiving referrals from other healthcare practitioners.

*“A lot of specialists, that I do speak to, are still under the impression that chiropractic is still being taught based on the old subluxation theories and not an evidence-based route.”* (Participant 13)

#### **4.5.3 Geographical Location**

Differing views were expressed by the participants about their geographical location and its effect on their referrals. While some stated that they benefited from their practice location, others felt it offered little to no benefits with regard to their referrals and professional interactions.

The following participant expressed positive views regarding their practice location and that their interprofessional relationships benefited from it.

*“I don't think there's been much challenges. I think it's also being based in a medical centre. It's better because obviously other practitioners know about you and they know what you do.”* (Participant 4)

Participants were based in different geographic locations throughout their years in practice and had mixed experiences.

*“...then it was also geographically, what's the word inclined or whatever? Because when I was in Overport, that was hectic. It was difficult to refer to people and not so keen to send people over either. But when I was in Al-Kadi, I found that that was much easier. I suppose, because the network of doctors is within that same place, so positive and negative in that sense that I think area does contribute towards. The perception of the people in the different areas themselves counts to whether they will refer to you and if they'll take your referrals in reverse as well.”* (Participant 7)

*“Being able to get my patient to see that healthcare professional in a timeless manner. In fact, it's impossible in Durban. So, if I want a specific professional to see a patient, invariably, like an orthopaedic or something. It's super difficult and I understand it might be because they're super busy but that's one of the big differences that I found from Pietermaritzburg. In Pietermaritzburg, the neuros and the orthos were far more accommodating to be able to see a patient on an emergent basis. Whereas I find that in Durban that doesn't happen. It's very different. You end up having to refer the patient through the ER, and then they get to see whoever's on call, which is a negative.”* (Participant 10)

The following participants did not experience any benefits based on their practice locations and had no increase in receiving referrals from other healthcare practitioners. There were no improvements in their interprofessional relationships with their surrounding practitioners.

*“If they were really, really forced to, then they would refer patients. But one has to take into consideration the timeline in which I was practising. It was 2003 till about 2020 that I was in Shallcross. It was the early part of 2000’s so a lot of them are unfamiliar with chiros and very stuck in their ways as well.”* (Participant 12)

*“I am situated in an area that has multiple GPS around and there are quite a few on the adjacent roads. Initially, when I had started my practice, I approached these practitioners and I said I'm a chiropractor. This is what my work is about. If you ever have these types of cases, please refer them to me so that I can manage them. But in all honesty, the times that has happened has been few and far between, and I think that I would have liked to see a little bit more collaboration in that case, because the practitioners are then happy to give them pain medication and not educate the patient that there are other options available in pain management.”* (Participant 5)

#### **4.5.4 Barriers in Communication**

The participants perceived barriers in communication in their interactions with other healthcare practitioners. This was a challenge for the participants to overcome. The following excerpts substantiate this statement:

*“Sometimes, once you've referred, you don't hear back on what the care was. You know, what happened? What investigations did they do? What was their treatment? What was the outcome? So sometimes it then just stops there.”* (Participant 1)

The participants encountered gate keeping behaviours from administrative staff. This hindered the participants ability to communicate directly with the other practitioner.

*“There's a lot of gatekeeping in the medical profession through receptionists and administrative staff. Unless you have that doctor's personal contact or direct contact line, if you phone and ask or leave a message with a receptionist to please, ask the doctor to call back. It doesn't always happen and that level of gatekeeping and inaccessibility to the healthcare practitioner directly, specifically, if you*

*don't know them, but you need their opinion or their services, that's definitely a barrier in communication.” (Participant 5)*

Some participants did not encounter gate keeping behaviours from the secretaries but found it challenging to relay information to them instead of directly with the practitioner. A participant encountered a receptionist who did not know what a chiropractor was.

*“The barrier is that I often speak to the secretaries, they're fantastic, but they don't always communicate the right message and sometimes it takes quite a while for a doctor to get back to you.” (Participant 8)*

*“Some of the receptionists of medical professionals, did not know what a chiropractor was” (Participant 13)*

The participants noted that they received feedback mainly from their patients and received little to no feedback from the practitioners to whom they referred. This represents a breakdown in communication, as patients may not fully explain what transpired among them and the other healthcare practitioner.

*“So not with the orthopaedics and the neuros. Once a patient has seen them, and if they feel they're not ready for surgery, or they still have a few more months of rehab before they consider surgery, they don't really give you a feedback report backwards. The patient will come back and say: Okay, this is what the ortho said, or the neuro said.” (Participant 3)*

*“There's very scant feedback, or no feedback at all, which I feel if you've referred a patient for specific reason, there should be acknowledgement. It's a report back, I can note it down, or I can know what happened with that patient. With regard to referrals to other healthcare practitioners, that very rarely happens, and I have to get the information straight from the patient about what happened in that consultation.” (Participant 5)*

The participants reported a challenge in receiving timely feedback reports. They expressed that the feedback they received often arrived after that had seen their patients.

*“They’re not very timeless. They normally take two to three months and by that time you’ve seen the patient after their visit with this specialist.” (Participant 3)*

#### **4.5.5 Chiropractic Terminology, Jargon and Evidence-Based Practice**

Some of the participants expressed dissatisfaction towards the use of non-scientific terms, chiropractic jargon, and terminology. They emphasised the need for the chiropractic profession to uphold evidence-based practice and to maintain its professional image. The following excerpts substantiate this view:

*“We can use the words evidence based and stuff, but they need to actually see it that we are actually using evidence based and we’re being held to a higher standard than previously before the research had been done. Chiropractic is a legitimate profession, but a lot of the specialists have been jaded by it, and a lot of them were jaded by it from their varsity days when they are told about other professionals, they are told this is what chiropractors do, and this is why it’s incorrect, and they don’t look at anything else chiropractors do. They’ll just go, they manipulate, and that’s it.” (Participant 13)*

The participants expressed disapproval towards the term “subluxation”, noting its various meanings in the medical and chiropractic context. They viewed this term as unscientific and expressed concern that its use may lead to misunderstandings among the other healthcare professions.

*“Subluxation is not a scientific term, so I never use that. I stick to purely to the scientific stuff, which is the language of all talk. They understand what a manipulation is. They understand that I’m not manipulating a patient. It’s purely a mobilisation technique. It’s not to put bones back in place, or I’ve tried to eliminate all those sorts of things. So that we take a purely scientific based approach. If you start talking about a subluxation, they’ll misunderstand you, because for them, it’s a partial dislocation. In the medical field, I feel it’s a non-entity. In chiropractic, it’s a non-entity. It’s something that should have died long ago.” (Participant 9)*

Some participants remarked about American chiropractors practising in Durban and expressed concern regarding their style of practise. They commented on the specific approach taught and used by American chiropractors is viewed to be controversial by other healthcare professions.

*“If you come from a different background, with different ideas. I think you might find a bit of reluctance to work with you, or a bit of pushback, or sort of fight, resistance to get involved with some specialists.”*

(Participant 3)

*“Unfortunately, there are some chiropractors that are still practising the original methods. Some chiropractors that practice in Durban are from America, and they were taught at Palmer College. Unfortunately, they are still practising a lot of the straight chiropractic methods, which is what the physicians, specialist physicians seem to have an issue with because of the contradicting evidence that has come out since.”*

(Participant 13)

A participant outlined that social media has hindered the acceptance and receptivity of chiropractic as it displays the manipulation of a patient and not the full extent of chiropractors' examination and scope of practice.

*“I find what doesn't really help are these videos that go around on YouTube, like chiropractors just adjusting people willy-nilly. What happens is people or medical professionals just see the adjustment, and they don't realise the backstory. They don't realise that you have taken the time and due diligence with that patient in order to be able to adjust and ensure that there are no contraindications, etc. They just see some person and it's usually a model, a paid actor, or someone that's made to sit there and get adjusted. It's the ASMR kind of thing and it's not doing a good service to the profession.”* (Participant 6)

#### **4.5.6 Influence of age, Ego and Ownership**

Participants reported that the age, ego and a sense of ownership of other practitioners presented as a challenge and influenced the receptivity of the chiropractic profession. These factors reflect broader power dynamics and professional hierarchies existing within the healthcare system, where authority,

legitimacy and decision-making are often concentrated within medically dominant professions.

Some participants encountered interactions with other healthcare practitioners who were not receptive to the chiropractic profession and its scope of practice. A participant described the interactions as “unilateral,” noting that they rarely received referrals in return. These accounts suggest an imbalance of professional power in which chiropractors frequently refer patients but seldom receive reciprocal referrals. This is supported by the following excerpts:

*“Other practitioners being receptive and giving me a chance, which hasn't happened. If they made that referral and asked their patient for feedback, it would have improved. The person is getting results. They're not getting hurt and they're not getting worse. They are getting better. So that's one aspect of it, the receptivity of the other person.”*  
(Participant 5)

*“...very unilateral, non-reciprocal. I have been in practice for eight or nine years, and it's very rare for me to get a referral from someone else”* (Participant 5)

The participants noted a perceived sense of ownership or superiority from other healthcare practitioners. One participant described encountering a practitioner who was notably condescending, reflecting entrenched professional hierarchies that marginalise the chiropractic profession within the healthcare system. These attitudes were attributed to a lack of awareness or understanding regarding the chiropractic scope of practice.

*“A lot of the specialists still have a little bit of a superiority complex when it comes to chiropractors, and they automatically assume you don't know what you're talking about.”* (Participant 6)

*“There was one GP in the area, although he used to refer patients, he was a little difficult. The few times I spoke to him on the phone, he came across as condescending, difficult, rude and patronising.”*  
(Participant 12)

Some participants observed that the older generations of healthcare practitioners were more resistant to the chiropractic profession, with some viewing chiropractic

treatment as potentially dangerous. A participant expressed that these practitioners frequently preferred to refer their patients to colleagues of a similar age. They equated age with experience and this influenced their trust in the clinical care provided.

*“The older type guys are like, oh no chiro, you guys just crack bones. Oh, you guys give patients strokes. So, you do battle quite a bit with the older ones. I found with the older generation, they stick to their age bracket as well with referring because they see it more as the older person would have more experience.”* (Participant 7)

*“With a lot of the older practitioners, there is still this mindset that chiropractic is dangerous, so we are seen as a last resort profession.”* (Participant 12)

In comparison, a participant expressed positive receptivity from the younger generation of healthcare practitioners, suggesting a potential shift in professional attitudes and interprofessional norms.

*“The younger GPs were more familiar with complementary healthcare and would refer more easily. The older GPs were kind of stuck in their ways and referring for them, I found was a little bit more difficult. They wouldn't refer easily.”* (Participant 12)

Some participants expressed the view that chiropractors are viewed as competition by other healthcare practitioners. In this context, chiropractors were viewed as threatening established patient-care pathways and professional territories, further reinforcing hierarchical boundaries within the healthcare system.

*“I think more than anything, it then becomes a sense of you being some sort of competition.”* (Participant 7)

*“...because the GPs are not going to refer in a hurry to you. You have to do a lot of the work on your own. It's not that a lot of them don't want to refer, but rather it's competitive. I mean if they can help a patient with voltaren and tablets, you are a competitor. I'm not saying it's right, but that's often how we are seen, as a competitor. So, they would rather give the patient tablets and medication and if that doesn't work, then they would refer to physio or chiro.”* (Participant 12)

#### 4.5.7 Healthcare System

The participants noted a lack of integration of the chiropractic profession in the public healthcare system negatively influenced their referrals and relationships with other healthcare practitioners. The following excerpts substantiate this statement: A participant expressed dissatisfaction with the healthcare system, commenting that their patients struggle with long waitlists and receiving care from other practitioners within an appropriate time frame. Participant 3 described how delayed appointments in orthopaedic departments demonstrate the ways in which professional hierarchies can translate into inequities in patient care. The exclusion of the chiropractic profession from hospital-based practice and its limited recognition within the public system not only affect professional identity but also have consequences for patients, who experience longer waiting times and restricted access to integrated care.

*“...ease of appointment time, getting appointments and it's making sure they can be seen adequately. Some of the orthopaedics, they take two to three months on the waiting list, which is not optimal or feasible for us.”* (Participant 3)

A participant commented on the perception within the healthcare system that views the chiropractic profession as inferior. This perception contributes to ongoing challenges in achieving recognition for the chiropractic profession and in building professional relationships. The participant's account highlights the marginalisation of the chiropractic profession within the South African healthcare system. This marginalisation reflects broader professional hierarchies in which medical practitioners and specialists hold dominant positions of authority, influencing access to resources, patient pathways, and interprofessional collaboration.

*“I think we have this perception that medical doctors are superior. They have also created this perception within the community that they're superior to you and you need to know your place and stay there.”*  
(Participant 6)

Some participants expressed dissatisfaction with the exclusion of the chiropractic profession from the public healthcare system. They noted the difficulty in gaining professional recognition and emphasised on their limited interactions with hospital-based practitioners.

*“What has been difficult is sometimes they don't take you seriously as a chiropractor because you're not part of the HPCSA (Health Professions Council of South Africa).” (Participant 1)*

*“I think we are a profession that's a bit isolated because we're not part of the mainstream, like the hospital care system. Even while studying, we are not a part of the major health fields out there.” (Participant 4)*

*“If I was given hospital access, I could have interacted with the specialists more on a one-on-one level.” (Participant 9)*

A participant expressed frustration with medical aid schemes that do not accept chiropractic referrals for MRI scans. They explained that coverage is primarily granted if the referral was made by a general practitioner or an orthopaedic specialist. This reflects a systemic barrier that constrains chiropractors' ability to provide timely care. Participant 10's frustration with MRI referrals illustrates how institutional rules favour the authority of medical practitioners in accessing diagnostic tools, thereby reinforcing existing structural inequities in patient care.

*“I'm currently finding that MRI referrals become difficult because medical aids are not accepting our codes to cover them from a medical aid perspective, which I find frustrating. So, if you want to send a patient for an MRI of late, I have found that they need to get a referral from either an orthopaedic specialist, or even a GP referral is better, and that I find frustrating.” (Participant 10)*

## **4.6 THEME FOUR: ENHANCEMENT OF THE REFERRAL NETWORK**

The participants were of the opinion that the referral network could be enhanced by addressing communication barriers, involving practitioners, educating chiropractic students, and offering guidance to newly-graduated chiropractors. They also outlined the value of clinical knowledge and acumen in enhancing their referrals to other practitioners.

### **4.6.1 Methods of Communication**

Participants outlined different methods of communication that could assist the referral process and improve interactions with other healthcare practitioners. The participants expressed concern for the use of the term “adjustment” in the referral

letters. The preferred the term “manipulation” as it is widely understood across all healthcare professions as a grade five mobilisation, which prevents any misunderstandings from occurring. This is supported by the following excerpts:

*“I don't use the word adjustment. I use the word manipulation because that's more across the board. People are more likely to know what it is than an adjustment, which is more chiropractic specific. I try to not to use those terminologies and I haven't really had to. The referral is a diagnosis which is usually well known to the doctors. The investigation findings, physical examination, history, all of that speaks to the medical terminology across the board.”* (Participant 11)

*“If I mentioned adjustments, I would normally use the word manipulation. Most of them knew it, because a lot of the medical practitioners work with physiotherapists who use mobilisations, and they understand that a grade five mobilisation is a manipulation.”* (Participant 13)

A participant advised the chiropractic profession to avoid using the term “subluxation” as it holds a different definition in other healthcare fields. This may undermine the credibility of the profession.

*“Even when writing a report to whoever, you do have to choose your words wisely, especially with orthopaedic surgeons. If you say subluxation for them, it means dislocation. If you say that, they expect something different than what it is.”* (Participant 8)

Some participants outlined how the referral letters should be written and what should and should not be included.

*“...report writing, brief report writing, sometimes you may put too much information down, but basic and brief history taking. What's also required by the surgeons. What are they wanting, most importantly, out of the thing? And what do you expect from them, in terms of primary care practitioner, how would you prefer them to get back to you?”* (Participant 3)

*“I don't just send my patient off with a little note. I do a proper medical report, patient came in complaining of this and this, these are tests*

*done. I think that's the difference for me personally, even when I send for x-rays. I don't just say c-spine x-ray. I'll stipulate what view I want and what are my differentials. I'll stipulate that this is the history and I'll help the radiologist understand why I'm sending for that particular test. It also helps your patient not feel like you're ordering unnecessary tests. I think that's another thing that's important to me, be very thorough in everything you do.”* (Participant 6)

The participants expressed the importance of using medical terminology and following standard medical principles. A participant noted its importance in ensuring that other healthcare practitioners can understand the referral letter. This also builds and maintains the chiropractic profession's credibility.

*“Going back to being professional, using medical terminology, making sure you've written up a proper referral letter with all the relative negative and positives. I think the medical community will respect you as a medical professional.”* (Participant 9)

*“Make sure that you follow mainstream medical principles. Don't use chiropractic jargon. Stick to medical sort of terminology.”* (Participant 9)

*“You have to watch what you say. We're trying to put it across to them in a language that they would actually understand, because often they don't know what you are talking about.”* (Participant 12)

#### **4.6.2 Clinic Acumen and Knowledge**

The participants noted that their clinical acumen and knowledge within the profession was good and enhanced their referral relationship with other healthcare practitioners.

A participant noted the importance of knowing anatomy, physiology and clinical procedures when treating patients and making referrals to other practitioners. This knowledge is vital for establishing credibility and fostering trust with other healthcare practitioners. The following excerpts substantiate this statement:

*“It's been good so far. Provided you know what you are talking about. You have to know basic things like your anatomy, physiology and basic*

*procedures that would be used to treat that condition. You have to know what you are talking about. If you don't, it raises red flags, and that's when they start to get a little bit antsy.” (Participant 6)*

A participant noted the misconception among other healthcare practitioners regarding the chiropractic curriculum and scope of practice. The misconception is that chiropractors are not evidence-based and still follow the historic practices from the early days of the profession. However, the participant explained that the curriculum is evidence-based, and historical practices are taught for context. This explanation was met with receptivity from other healthcare practitioner.

*“We are taught about the history of chiropractic and how we got here, but it is an evidence-based course. They are very strict on keeping us up to date with evidence-based information, and they change their whole attitude when they hear that.” (Participant 13)*

Some participants commented on the capabilities of chiropractors to diagnose patients effectively and refer accordingly when the condition fell outside their scope of practice.

*“If there are healthcare practitioners in your area, I would suggest that you go out to speak to them. Bearing in mind the other points that I mentioned, discussing your scope of practice, the subjects you have been exposed to and are familiar with. For example, anatomy, diagnostics, physiology, you did all those things. You're allowed to diagnose and send for investigations. They don't know what your scope of practice is. Those are the things you may think that are basic and they should know but you need to actually bring it to their awareness.” (Participant 12)*

*“As chiropractors, we are taught during diagnostics how to pick up so many different conditions. We have a very broad diagnostic scope but that does not mean it is within our scope to treat.” (Participant 13)*

#### **4.6.3 Guidance for New Graduates**

Participants expressed how newly-graduated chiropractors can be guided in creating and building their referral networks. Some participants advised that newly-graduated chiropractors should introduce themselves to other healthcare

practitioners. This will help them start building their professional relationships as early as possible. A participant expressed the importance of persistency in fostering connections and finding receptive practitioners. The following excerpts substantiate this statement:

*“Be a pro at being proactive and being persistent, it can help us go a long way. Some of us, if you get that smack in the face from that one practitioner we tend to go back into our shells. We need to be more persistent. If it's not that person then find the next person.”* (Participant 7)

*“Make a note of the possible referral pathways would you need and where these people are. How you can find them and establish a report. Introduce yourself. Say, I'm Dr so and so. I've just opened a practice here in whichever town it is, and I've come across your name. If it's okay with you, we can perhaps meet for a short while and do a personal introduction. That's always a good thing. Then in that introduction, explain what the expectations are. I'll send patients to you. You can do so for me and this is what I do. This is what I treat. This is my area of expertise, and so forth.”* (Participant 11)

Some participants advised that newly-graduated chiropractors ensure that they use medical terminology and avoid chiropractic terminology or jargon.

*“I think if you speak the language that we've taught it at the tech or any varsity, they understand it's the same language across all platforms. If you speak the right language and be professional and be courteous and be polite to these professionals, they will give you the time of day.”* (Participant 3)

*“Look at the language you use and make sure that it is medically accepted over all the professions. I think also keep it short and sweet. I don't think any practitioner has hours and hours of time to read referral letters.”* (Participant 8)

Some participants expressed the importance of explaining what chiropractors are and the scope of practice in South Africa.

*“When we are out in practice, get to the practitioners that are nearby, go introduce yourself, tell them exactly what chiropractors do. A lot of them only know what Google offers them. They don’t really know how we practice in South Africa.” (Participant 4)*

*“I would recommend that our graduates visit the place you're choosing to practice and the healthcare professionals in the area. In that process, don't simply tell them that you're practising here, explain to them what you do, what's your scope of practice so that they fully understand what you do. A lot of them simply do not know. That is where the fear comes in with the misinformation. You're considered dangerous because they are unaware.” (Participant 12)*

Some participants expressed that newly-graduated chiropractors should attend seminars hosted by other healthcare practitioners and undertake educational presentations about the chiropractic profession. They also outlined that this would also allow newly-graduated chiropractors to establish a network with other practitioners in different professions.

*“Try to build your network as early as possible. When we go for these talks and stuff, be brave and introduce yourself. Especially if you know this is an area you can be practising in. Introduce yourself once you're qualified. I would say you should make yourself known and drop off cards.” (Participant 7)*

*“Chiro's that are coming out of school, they need to be brave enough to be able to actually go to, as we have our CASA meetings, these meetings hosted by GPs in KZN. They need to present and talk, even when you're going to see these people in their practices.” (Participant 12)*

A participant provided advice on writing a referral letter for a newly-graduated chiropractor.

*“It's good to use a letterhead with your details and your qualifications because it speaks to your credentials. Make sure it's dated correctly and that you provide a good summary of the patient's medical record with a history or examination findings with the standard medical*

*terminology. If you do use chiropractic terminology, you must explain what that is and it is important to mention why you're referring this patient and the expectations. Mention if are you referring to them for an assessment and management. If you're referring to them for management, be very clear about what it is that you want.”* (Participant 11)

Some participants expressed ideas that universities could implement to help chiropractic students build their referral network. The participants expressed that assistance at a student level would have been beneficial in their initial years of starting a practice.

*“While in the chiropractic programmes, we are taught what we do and how we operate. If they had taught us more, in our programme, about other professionals, when and how to refer to other professionals that would have made the transition so much easier when you initially start to practice.”* (Participant 8)

*“I think at varsity, they should have taught us how to better interact or refer to other practitioners. I don't think we've got exposure to that in varsity.”* (Participant 8)

*“I think the university does need to somehow figure out a way, to make sure we know, when we graduate, who to refer to for what condition. They could provide us with a resource list of who we can contact. They could also help us write a couple of referral letters in clinic. Possibly assist with writing different referral letters for different conditions.”* (Participant 13)

#### **4.6.4 Practitioner Involvement**

The participants outlined the importance of involving and educating other healthcare practitioners about the chiropractic profession and care with the intention of positively impacting the referral relationship. Several participants noted that increasing awareness of the chiropractic scope of practice amongst other healthcare practitioners may improve professional relationships and foster interprofessional collaboration. The following excerpts substantiate this statement:

*“I hope that we can educate all practitioners on what we actually do and give them more information on how we do it. Especially the practitioners that are scared to refer to chiro because they think that we will injure or paralyze or do anything like that to them.” (Participant 8)*

*“...if they were educated, are aware of our studies, what our syllabus is and the amount of information that we are privy to. There would be less fear and ignorance, which would be a plus for the profession. Maybe if, as a new practitioner, you're going out to speak to people, you need to talk about that as well. This is what we studied. This is part of the subjects we studied. This is what our knowledge is, and this is what our scope of practice is. Those things are very important because they are simply unaware. Some perceptions and people aren't going to change but there are other practitioners such as the younger practitioners, who are more willing to refer to us. Sometimes, when speaking and explaining things to the older guys, some are capable of change.” (Participant 12)*

The importance of cross-disciplinary continuing professional development (CPD) was expressed by some of the participants. Cross-discipline CPD, together with education and social events such as seminars or lectures, could encourage professional interactions among chiropractors and other healthcare practitioners.

*“... that kind of CPD which is outside our scope, but we're interacting on that level with professionals across the board. I think we need to do more of. We need to do more cross-discipline type of CPD, education, interaction and socialisation. In opposition to being polarised and it's just chiro. Whether it's going to a lactation presentation that's done by journal of nursing, council or something, you're with nurses, paediatricians and paediatric, bariatric surgeons or whoever. All of us together, opens up much more of a scope for other professionals to see us as opposed to just sticking to ourselves” (Participant 10)*

A participant emphasised the value of interdisciplinary meetings and conferences. These events provide opportunities for all practitioners to be involved and interact with each other.

*“I think a good way to start is to try and get interdisciplinary meetings, get-togethers and conferences. Where specialists see what chiropractors do, how we treat and what we focus on. I really think that it's a lot broader of a scope than they realise, and most people are not practising in the traditional history methods that chiropractic was based on.”* (Participant 13)

#### **4.6.5 Student Perspective**

The participants outlined various suggestions for incorporating interprofessional referrals and communication into the chiropractic teaching programmes. There was a consensus among participants regarding the benefits of its inclusion for the future of the profession and professional relationships. The following excerpts substantiate this statement:

A participant emphasised the value of a short courses on communication, emphasising its value in providing students with interactive skills while remaining professional.

*“I think a short course in communication, especially with other practitioners. How do you approach them? What should you approach them with? What content do we actually give them to make them aware of what and how we do it and just introducing ourselves to them.”* (Participant 4)

A participant suggested organising professional social interactions among chiropractic and medical students. This form of engagement could help the students develop a foundation for interprofessional collaboration. Another participant suggested the students observe other healthcare practitioners as part of an assignment. This assignment can assess the students understanding of healthcare roles, practices, and provide an opportunity for them to socialise.

*“My suggestion would be to have chiropractic and medical students at a very basic and grassroots level, interact with each other. Whether it's in courses that they do together, or modules that are designed to sort*

*of foster relationships, so that while you're a student and studying, you can understand what chiropractic is and what it entails, so that you grow up having this idea of what chiropractic is. Maybe the chiropractic department could invite medical students, maybe fifth or sixth year, for chiropractic treatment and they can have a first-hand experience. Once you're a fully established professional, and you have your set preconceived ideas about this profession and that profession, it's very hard to change them. If we start at a student level, and we have a relationship that may be beneficial to the lifelong relationship and referral patterns between other healthcare practitioners. It's not specific to doctors. It could include occupational therapists and biokineticists. Maybe the universities could do these collaborative efforts to try and help foster relationships.” (Participant 5)*

*“As students, we need to be given certain projects as an assignment. Maybe your assignment is to spend some time with the biokineticist and give them and find out what they do. It may be an assignment of sorts, but you will be interacting with people. I mean, there's quite a few chiros. One year, there were 60 of us as students. If each of them went to different practitioners and spent a little bit of time with them and spoke about what we do, you would be educating them.” (Participant 12)*

Some participants expressed the value of completing the Allied Health Professions portfolio as it requires the students to observe different healthcare practitioners. These observations are critical in allowing students to learn about other professions and provides them with an opportunity to start building their interprofessional relationships.

*“One of the requisites of getting this degree is doing the Allied Health internship portfolio, which requires you to shadow certain practitioners and observe. The student is left to fend for themselves. The university doesn't really do much to create these referral pathways, whereas if they did it on behalf of the student, it would make it a lot easier for these channels of communication to be open. Even exposure to other healthcare practitioners, maybe even including a few clinicians or*

*lecturers that are not chiropractors, from other professions. Medical doctors, maybe a biokineticist can come in for rehab modules, so that we have exposure to these professions. They get to know the students and the university. If one of our graduates then approaches them, they already have some kind of basis to work off.” (Participant 5)*

*“When I did observations for my internship, I managed to talk with other healthcare professionals and they started to understand what chiropractors are doing. That was only a handful of practitioners, there's so many out there, and to change their minds is going to be long, hard work.” (Participant 13)*

Some participants emphasised the importance of having guest lecturers who can present various topics to the students. They also expressed the need for the university to assist the students in building their communication skills.

*“Currently, the students are left to fend for themselves. If we don't go into hospitals or clinics, or have guest lecturers, or examiners who are in other professions. How are we ever going to get exposure? How are we going to meet people? How are they going to get used to us as chiropractors? This is important, because it does start quite early on, trying to build these relationships. I think the university needs to do more in assisting students, not only to train them on how to approach and how to communicate with your colleagues, but also providing some of them to be in our you know in our orbit, so that we can we can learn about them and learn to work with them.” (Participant 5)*

Some participants noted the similarities between a referral letter and a case summary, which the students are required to write after treating a new patient during their clinical practicum. They emphasised its value and importance in equipping the students with the necessary skills to write appropriate referrals that includes the relevant clinical information. It provides the students with an opportunity to practise, learn and develop their communication skills under the guidance of a supervising chiropractic clinician.

*“Your case report should pretty much be the same as what you do for a referral. As far as practise goes, you can make it part of a referral.*

*When you go to the clinician, they can sign it off as part for every patient that comes in. You can say, there's my referral to you and these are my findings. That's pretty much what you're doing when you're sitting with your clinician, for each patient. That for me is your verbal communicative skill, sitting in front of your clinician. But then you can say, write a referral for half of those patients instead of presenting it verbally. These are my findings and it can be a referral letter to that to the clinician. It gives you an opportunity to write a referral note or letter without feeling intimidated by referring out to another practitioner.”*  
(Participant 10)

*“The students do write case summaries and the occasional referral letter to practitioners. I've always considered it very important. One of the reasons is because opportunities were offered to me simply through my letter writing. Personally, I've always gone that extra mile to assist students with it. I always used to harp on the nitty gritty because of the positive experience I've had through my letter writing.”*  
(Participant 12)

A participant noted that during the diagnostics modules, students can learn which practitioners are appropriate for different referrals reasons.

*“It's really important to know who the best people are, which type of professional is the best to refer for certain types of conditions. This can start back in diagnostics. They can start talking about this when they're going through different types of conditions and how to diagnose them. It can be integrated in there. It doesn't have to be a whole separate module, would be great if it was, but they can start introducing it in there. They can say these are who we would recommend you refer x, y and z to this type of practitioner and these are the good practitioners that are out there currently.”* (Participant 13)

## **4.7 SUMMARY**

This chapter presented the findings of the study. Excerpts from the interview transcripts were used to substantiate the themes and their associated sub-themes. In the following chapter, the findings are discussed in relation to the findings from previous and similar literature.

## **CHAPTER FIVE: DISCUSSION**

### **5.1 INTRODUCTION**

In this chapter, the findings of the study are presented and discussed. There is a paucity in the literature exploring South African chiropractors' experiences with interprofessional referrals. Although Seyed-Nezhad (2021) emphasised various factors affecting the effective implementation of the referral system, no current South African studies have provided an appraisal from the perspective of chiropractors. As a result, constructing a comparative critique of chiropractic referrals from the relevant studies proved challenging. This discussion refers to literature from various studies relating to other healthcare professions and builds on what participants have stated in the interviews.

### **5.2 OVERVIEW OF THE RESEARCH DISCUSSION**

The aim of this study was to explore the perceptions and experiences of chiropractors with respect to their interprofessional referrals to healthcare practitioners. The four main themes that were identified are:

Theme 1: Interprofessional collaboration and referral dynamic.

Theme 2: Patients perspectives on referrals and the continuation of care.

Theme 3: Challenges encountered in the referral process.

Theme 4: Enhancement of the referral network.

The themes and their sub-themes are discussed with pertinent and relevant literature to substantiate.

### **5.3 THEME ONE: INTERPROFESSIONAL COLLABORATION AND REFERRAL DYNAMIC**

It is imperative to gauge chiropractors' experiences and perception with regard to interprofessional collaboration and their referral dynamic. Optimal healthcare is achieved through a multidisciplinary setting. Chiropractors need to work and co-exist with other healthcare professions. They cannot practise in isolation as there are instances where a patient requires a referral to another healthcare practitioner for further management or treatment. Participants were asked a range of questions on

their referral experiences and working relationships. The participants described them as “good experiences” and found that they “work well together”.

### **5.3.1 Chiropractic Referrals**

The participants expressed that the indications that prompted a referral to another healthcare practitioner was when the condition was outside of the chiropractic scope of practice. The participants also outlined their need to prioritise patients’ best interests and the necessity of providing them with timeous and effective care. These findings aligned with the indications for referrals in the South African National Development Plan for 2030 (Department of Health 2020: 5), particularly in regard to the following:

- The patient’s medical condition requires urgent treatment or management.
- To seek the opinion from an expert on a patient’s condition.
- The patient requires urgent care that cannot be performed by the referring party.
- The patient requires observation to reach a diagnosis.

Similarly, Martin *et al.* (2021) indicated that interprofessional collaboration is necessary for improving patient health outcomes, providing management of chronic diseases, improving prescribing practices, reducing healthcare costs, and strengthening the healthcare system and its utilisation.

A study by Mo *et al.* (2021) assessed the referral criteria for dementia patients to specialist palliative care and emphasised the need for timeous treatment and management. Chiropractors need to apply a referral criterion to any patient who is at risk of complications and requires treatment that is outside of the chiropractic scope of practice. This ensures timely care is provided to patients and prevents comorbidities or serious complications from occurring.

### **5.3.2 Recipients of Chiropractic Referrals**

The participants agreed on the healthcare practitioners to whom they frequently refer. The most prominently outlined practitioners were GPs, orthopaedic surgeons, neurologists, neurosurgeons, biokineticists, physiotherapists. Participants also noted referring patients for investigative studies, such as X-rays and blood tests. A few participants further outlined referrals to endocrinologists, occupational therapists, orthotists, rheumatologists, dieticians, podiatrists, psychologists,

dentists, and homoeopaths. The case presentation conducted by Chu *et al.* (2022: 6), in Hong Kong, supported the role of chiropractors in diagnosing and referring their patients. This case presentation emphasised prostate cancer and the chiropractor's referral for an MRI scan, which prompted a referral to an oncologist. Many conditions can present as low back pain and although chiropractors can differentiate different diagnoses, it may not necessarily be in the scope of practice for treatment. The Allied Health Professions Council Act 63 of 1982 corroborates this and stipulates that chiropractors can perform a physical examination of patients with the aim of diagnosing any physical illness, defect or deficiency. Chiropractors may perform treatment for any physical illness, deficiency or defect if it pertains to skeletal, spino-visceral or general neuromuscular conditions (AHPCSA 1982: 6).

The findings of this study emphasised the capabilities of chiropractors in recognising patients' conditions based on their presentation, case history, and physical examination, resulting in the referral to necessary practitioners for further management. This is congruent with Deodhar *et al.* (2022), Shannon and Patricios (2022) and Uhrenholt *et al.* (2024).

A study by Salsbury *et al.* (2019: 299) reported on chiropractors' attitudes towards integrative practice and noted that chiropractors were more confident in the treatment capabilities of manual therapists, namely other chiropractors. In accordance, a participant expressed their use of a fellow chiropractor with an area of expertise.

### **5.3.3 Reasons for Referrals to Chiropractors**

The participants expressed having received referrals from other practitioners when conservative care was needed by the patients before attempting surgical interventions. The chiropractic profession is focused on the musculoskeletal system and its disorders. The World Federation of Chiropractic (2001) defined the chiropractic profession and outlined its scope of practice. This federation acknowledges the chiropractic profession proficiency and knowledge in diagnosing, treating, and preventing mechanical disorders in relation to musculoskeletal care.

Some participants received referrals from GPs, who referred patients with migraine or chronic headache for treatment and management. This shows an awareness among other health practitioners regarding chiropractors and that they would refer

their patients for conservative, holistic care and management. Conservative care encompasses, but is not limited to, dry needling, soft tissue therapy, manipulation, mobilisation and stretching, as outlined by the participants.

Some participants also received paediatric referrals for colic from paediatricians. Doucet *et al.* (2022) found paediatric patients were referred to chiropractors by family members, followed by family physicians, and lastly by other CAM professionals. This study was performed in Quebec, Canada with patients between the ages of six to 12 years old. In contrast, an older study by Salsbury *et al.* (2019) in the United States, found chiropractors engaged in interprofessional co-management when older patients were involved. Regardless of the age of patients, chiropractors are equipped with the expertise to treat and manage conditions of the musculoskeletal system and receive referrals from other practitioners for patients who would benefit from chiropractic care.

This study found conflicting perceptions from the participants regarding social media as an informative platform for the public and other practitioners, with regard to spreading awareness on the chiropractic profession. Some participants noted its detrimental effects such as only showing patients being manipulated and not the thorough assessments and case history taken prior. However, some participants viewed it as an informative platform that spread a general conception of what chiropractors do. Social media platforms play an indirect role in influencing referrals to chiropractors as it creates awareness about chiropractic care, which may prompt viewers such as other healthcare practitioners to refer patients to chiropractors for treatment. It also educates individuals who may request for their primary practitioner to refer them to a chiropractor.

#### **5.3.4 Working Relationship**

Participants expressed their preference for referring patients to practitioners with good reputations and were often recommended by fellow chiropractors. The CASA KZN WhatsApp group is a platform that chiropractors, within KZN, utilise to enquire about recommended practitioners with specific skill sets and their practice locations. This platform enables chiropractors to build their referral network based on the recommendations from colleagues.

The participants displayed preferences for practitioners within proximity to their patients and for practitioners who showed more receptivity towards the chiropractic profession. The cost of travel between patients' residence and other healthcare practitioners was taken into consideration by the participants, as prioritising the best interest may also extend beyond clinic presentations to include patients' economic, social, and living situations. This consideration ensures access to timely healthcare.

Some participants found the receiving practitioner to be receptive to chiropractic and advised the patient to continue conservative treatment before considering surgical interventions. Interprofessional referrals among chiropractors and other healthcare practitioners allows patients to receive diversified care that is tailored to their condition. Similarly, Seaton *et al.* (2021) outlined the significance of interprofessional referrals in providing the best available resources for the management of chronic diseases.

Participants also reported forming close relationships with other practitioners on whom they could rely to receive urgent referrals. They also reported treating other healthcare practitioners as patients, which proved to be an informative experience for both practitioners. Binda *et al.* (2022) viewed interprofessional collaboration to be an opportunity for practitioners to be educated, for teamwork to be enhanced, and for improved shared decision making regarding patients' healthcare. This also decreased the burden on the South African healthcare system as practitioners share responsibilities and provide patients with efficient and appropriate care.

### **5.3.5 Positive Feedback and Outcomes**

Participants who received feedback through a written report, email or telephonically had positive experiences with their referrals. This enabled the participants to be updated on their patients' outcomes and advancements in care. Most participants encountered practitioners who would provide feedback in-person and update them on any new findings. Ansa *et al.* (2020) noted the benefits of interprofessional collaboration for practitioners such as greater job satisfaction, role clarity, and an established referral network. This further improved patient involvement in decision making and improved their continuity and coordination of care. Akter *et al.* (2023) also emphasised patient involvement because it boosts adherence, quality of life, and satisfaction for patients.

Through Ajzen's Theory of Planned Behaviour, these positive referral experiences can be better understood. According to Zielińska-Tomczak *et al.* (2021), this theory proposes that behaviour is influenced by attitudes, subjective norms, and perceived behaviour control. In this study, positive feedback and reciprocal communication appeared to strengthen chiropractors' attitudes towards interprofessional collaboration, increase their perceived behavioural control in engaging in referrals, and reinforce supportive professional norms, which encouraged continued collaborative referral behaviour.

The practitioners who were receptive to chiropractic would often refer their patients back to the participants for continuation of conservative care before attempting surgical interventions. Patients place their trust in their medical doctors and this is carried forward into the new doctor-patient relationship (Mallard *et al.* 2022). Patients are apprehensive of new practitioners and will hold their referral in high regard as they are trusting their referring practitioner's recommendations. Patients rely on their practitioner to refer them to a similar practitioner who understands their individual needs and preferences. In this instance, the receiving practitioner's values align with the patient's value for conservative care before attempting surgical intervention and, as such, respecting their individualist needs and preferences. This emphasises the need for a patient-centred approach as it requires the receiving practitioner to be receptive to the patient's needs. Conversely, referrals to practitioners who do not uphold a patient-centred approach may result in a breakdown in the continuation of care and lead to patient dissatisfaction.

Specialists, clinic sisters, fellow chiropractors, and government hospitals were found in this study to provide good feedback reports and this helped create amicable working relationships. Despite gatekeeping barriers from secretary staff, a participant outlined a positive experience with a secretary who followed up on their behalf with the practitioner for feedback on the patient. Chiropractors need to be more open to discussions with other practitioners and exhibit a professional and respectful tone in their referral letters. This is possible if chiropractors listen to the doubts or criticisms other practitioners have towards the profession and actively engage with them to address any misconceptions. Chiropractors can avoid using chiropractic jargon and tailor their explanations to the practitioner's background. Chiropractors could also become more actively involved in different healthcare

seminars and invite other practitioners to attend chiropractic seminars. Similarly, Seaton *et al.* (2021) found defined roles, trust, shared leadership, and professional respect to be supporting factors in facilitating collaborative experiences for practitioners involved.

## **5.4 THEME TWO: PATIENT PERSPECTIVES ON REFERRAL AND CONTINUATION OF CARE**

A range of opinions were voiced by the participants regarding their patients' perspectives and their follow through with care. Patients who encountered obstacles or barriers in their referrals were less likely to follow through and seek care. Breakdowns in patient follow-through and continuity of care can occur when patients lose motivation due to long waitlist periods, travel distance, cost of procedures and consultations, and unreceptive practitioners. These obstacles are difficult to overcome for patients who are in pain, with absent definitive diagnoses, and who are not financially stable. In addition, patients' personal life may be challenging and the burden of healthcare barriers, such as long waitlists, can then dissuade them from continuing with care. Patient preferences should be prioritised to ensure continuity of care.

The sub-themes discussed in the following section are preferences influencing healthcare decisions, obstacles in the referral, and significance of the referral.

### **5.4.1 Preferences Influencing Healthcare Decisions**

Patient preferences were found to influence their healthcare decisions, while obstacles encountered by patients would negatively influence their adherence to healthcare decisions. The participants identified patient preferences such as electing for conservative care before surgical intervention. When referring a patient, participants had to consider the practitioners proximity to the patient. Petrol and travel distance would deter patients from following through with referrals, and the participants recognised this to be barriers to healthcare. Barrier to entry and being placed on waitlists were additional barriers that influenced patients' follow through with referrals. The participants recognised their patients' need for a receptive practitioner and their willingness to pay expensive rates if it ensured good quality care from a receptive, welcoming practitioner. Patients who experienced cold, unreceptive practitioners reported negative experiences to the participants. The

participants reported gaining respect from their patients when they acknowledged when the patients' condition was not within the scope of chiropractic practice and were open to receiving co-management care.

Chiropractors need to be evidence-based in practice and use recent, updated research to provide patients with quality care. Evidence-based practice also requires a patient-centred approach and provides patients with the best form of care that is tailored to their individual needs. As previously defined by Johnson (2016) and Ismail *et al.* (2023), patient-centred care is the providence of care that is in alignment with the patient's specific preferences and principles. It is an ethical approach that is accountable and receptive to patients' individualistic values and preferences. Patient-centred care also relies on interactive conditions, type of care, and the role of the healthcare systems involved (Jardien-Baboo *et al.* 2021). Similarly, Akter *et al.* (2023) emphasised that interprofessional collaboration requires patient involvement, which promotes a patient-centred approach.

Ajen's theory of planned behaviour predicts a person's behaviour based on their intentions, which is determined by their attitudes, perceived behaviour control and subjective norms (Zielińska-Tomczak *et al.* 2021). This framework can be applied in this study to predict a practitioners' behaviour towards interprofessional referrals and patient care. Practitioners with negative attitudes, such as disregarding their patients' preferences, may not uphold a patient-centred approach. Conversely, practitioners who respect their patients' autonomy, include them in decision making, and display empathy towards them are more likely to value a patient-centred approach.

Practitioners with minimal perceived behaviour control may adopt an inconsistent approach. This may be due to time constraints, limited training, and experiences. A patient-centred approach is generally favoured within the broader healthcare system. However, its consistent implementation is often challenged by time limitations and efficiency demands. There may also be reluctance towards the chiropractic profession due to misconceptions and perceived stereotypes, which can affect the acceptance of chiropractic referrals.

Interprofessional collaboration can facilitate patient involvement through decision making and treatment planning. This can improve patient outcomes and increases

adherence to treatment plans, ensuring a greater quality of life and satisfaction (Akter *et al.* 2023).

#### **5.4.2 Obstacles in the Referral**

The obstacles encountered by patients were recognised in this study and its detrimental effects on patients' continuation of care. Patients experience shortfalls in referrals such as being wait listed by the receiving practitioner. This delays their access to timeous assessment, treatment, and management and can result in worsening outcomes. Frustrations may also arise when patients are unable to obtain a diagnosis, especially after investing significant money in diagnostic testing. Patients also experienced the challenge of surgical candidacy as some may hope to receive surgery and, when there is no agreement on it, it causes anxiety and frustration for the patient. Another obstacle encountered by patients was limited funds and this impinges their ability to afford another practitioner or have investigative studies performed. Medical aid funds may also be limited in this regard. Chiropractors may refer patients without medical aid to public healthcare facilities. However, the South African public healthcare system is burdened by insufficient resources, long waiting periods, overcrowding, staff shortages, and limited government funding. This adversely contributes to the obstacles faced by patients and reduces their access to timely care.

Some participants reported that their patients had negative experiences during their interactions with other practitioners. These experiences involved cold, unreceptive and practitioners who lacked empathy. In addition, the patients may have experienced dissatisfaction from long waiting periods, rushed consultations, lack of proximity to the practitioner's practice, and \ accumulating healthcare costs. These types of experiences impact future referrals, as patients may lose trust in the practitioners to whom they are referred, leading to potential breakdowns in continuity of care. In agreement, Akter *et al.* (2023) reported patients' motivation, satisfaction and attitude affects their health outcomes. This study noted that patients who were dissatisfied would have negative health outcomes and they would also miss their scheduled appointments. Alternatively, patient compliancy and attitude can positively affect their health outcomes.

The Department of Health (2020), in its National Development Plan 2030, outlined the challenges created by patients self-referring themselves to hospitals for minor or chronic and pre-natal conditions. Patients create their own obstacles in their continuity of care by self-referring to a hospital. They can experience increased waiting periods at the hospitals with overcrowding of patients and higher costs from hospital bills. There is also a fragmentation and reduction in continuity of care because the patient is not seeing a regular practitioner. The Department of Health (2020) also noted a lack of human resources, transport, and approved referral policy. A lack of human resources such as a staff at healthcare facilities can increase waiting periods and reduce the amount of care that can be provided. Limited transport, as mentioned, can decrease patients follow through on referrals, especially those in rural areas. Patients in rural areas may struggle to access timely care, as they are typically located on the outskirts of cities, where public healthcare facilities may be scarce, poorly funded, and lacking the appropriate resources needed. This can limit patients' follow through on referrals, as transportation may be expensive and many rural inhabitants lack the funds to afford, this in addition to their healthcare costs.

#### **5.4.3 Significance of the Referral**

The participants outlined the significance of referrals for patients and its impact on the chiropractic profession. Referring patients to other practitioners allows for collaborative care because practitioners have various skills, knowledge, and expertise to offer the patient. Binda *et al.* (2022) found that patients who received integrated models of care experienced improvements in pain and psychological symptoms. This also led to a decrease in health service utilisation by patients, which decreased the burden on the healthcare system.

The Sunnybrook core competency framework supports interprofessional collaboration by establishing a common language and promoting consistent expectations (McLaney *et al.* 2022). This framework encompasses shared decision-making, role clarification, communication, and interprofessional values and ethics (McLaney *et al.* 2022). It is applicable to this study, as it aligns with need for interprofessional collaboration within the healthcare system. Role clarification, clear and consistent communication supported by common language use, and shared decision-making among healthcare practitioners can provide patients with an

integrated model of care, while reducing the burden on the healthcare system (Binda *et al.* 2022).

Referrals also provide patients with the options to decide between conservative or surgical interventions, which leads to a timeous resolution of their pain. Wee *et al.* (2022) categorised referrals into urgent, moderate, and non-urgent, which allows for patients to be efficiently directed to an appropriate facility for care. Mould-Millman *et al.* (2021) and Khan *et al.* (2021) defined medical triage as a crucial entry pathway that prioritises the patient based on the anticipated resources required to provide the patient with timeous and appropriate care.

The medical triage system guides the referral pathway and prioritises patients based on urgency and severity. Patients can be referred for either conservative or surgical intervention based on their classification in the referral system. Patients requiring surgical intervention will be directed to specialist practitioners and prioritised based on urgency. This can optimise waiting periods, and patients can receive care that is tailored to their needs, which optimises patient-centred care.

The participants also expressed concern that patients might regard them negatively for referring, as they may perceive it as a sign of incompetence or lack of knowledge or skill. In South Africa, there is a perceived hierarchy in the healthcare system. Medical practitioners are generally perceived as occupying the highest status, while alternative practitioners are lower in status. Additionally, patients may be reluctant and mistrusting of the broader healthcare system, mainly public hospitals. This may be due to past negative experiences with long waitlist periods and rushed care from unreceptive practitioners. However, the participants experienced more respect from their patients as they felt their needs were prioritised and they respected the participants for knowing their limitations.

## **5.5 THEME THREE: CHALLENGES ENCOUNTERED IN THE REFERRAL PROCESS**

The obstacles and challenges encountered during the referral process by chiropractors in the eThekweni Municipality are emphasised and discussed in this section. The seven main challenges expressed by participants included: stereotypes surrounding the chiropractic profession; lack of understanding or knowledge on the chiropractic scope of practice; geographical location; barriers in communication;

chiropractic terminology, jargon; and evidence-based practice and healthcare system.

#### **5.5.1 Stereotypes Surrounding the Chiropractic Profession**

The participants were in consensus regarding stereotypes surrounding the chiropractic profession and those misconceptions negatively affected their referral relationship with other practitioners. The participants reported stereotypes such as that chiropractors are considered to be aggressive in management, are unable to diagnose, and have limited medical knowledge. Conversely, South African chiropractors are trained to diagnose any physical illness, defect or deficiency through physical examinations and investigative studies such as x-rays (AHPSCSA 1982). They are skilled, evidence-based practitioners with proficient knowledgeable on musculoskeletal disorders. Some participants expressed being labelled as 'bone doctors' by other practitioners and the misconception that chiropractors only perform manipulations on patients. There are historical stereotypes surrounding the chiropractic profession and many practitioners still perceive the profession to be based on pseudoscience and that chiropractic care has a placebo effect on patients.

According to Glucia *et al.* (2023), since the inception of the chiropractic profession, there has been an internal divide regarding its professional identity, which has perpetuated misconceptions. This internal division has also encouraged stereotypes such as chiropractic being unscientific and lacking clinical skills. These stereotypes and misconceptions hindered the participants' interprofessional relationships and referrals. This is in alignment with Vogel *et al.* (2021), who suggested that negative stereotypes, misconceptions, and values surrounding chiropractic have hindered interprofessional care.

#### **5.5.2 Lack of Understanding or Knowledge on the Chiropractic Scope of Practice**

The study participants noted a lack of awareness, understanding and knowledge among other healthcare practitioners with regard to the chiropractic profession and its scope of practice. Many practitioners were unaware of the extent of the chiropractic scope of practice and the capabilities of chiropractors to diagnose. The participants attributed this to ignorance and a sense of superiority from other practitioners, which impacted their professional relationship. In South Africa, some

medical practitioners have a limited understanding of the chiropractic profession and its scope of practice. There is a lack of awareness and exposure to chiropractic, especially since it is not part of the public healthcare system. The scientific validity of chiropractic is also questioned by South African medical practitioners, and some view chiropractors as potential competitors.

Chiropractors are cable of diagnosing conditions that are outside their scope of practice with respect to management and have an ethical and moral duty to refer the patient to the correct facility or practitioner who can provide the patient with the necessary care required. AGPCSA (2015) stipulated that it is practitioners' duty to act in patients' best interest when referring them for treatment. They have a duty to fairly treat and manage patients received through the referral network and not ask or accept incentives from other practitioners to whom they refer patients.

The participants also noted that other practitioners mistook chiropractic care as spinal specific and were not aware that chiropractors can treat the extremities. Other practitioners associate chiropractors with physiotherapists and some are still under the impression that chiropractors practise historical subluxation theories and do not follow an evidence-based approach. In comparison to physiotherapists, chiropractors treat patients using spinal and extremity manipulative therapy, in addition to soft tissue therapy. Physiotherapists are part of public and private healthcare settings and register with the Health Professions Council of South Africa. They do not perform manipulative therapy, but they do treat and manage patients with mobilisations in addition to soft tissue therapy. It is important for other healthcare practitioners to distinguish these two professions because it ensures accurate referrals, effective treatment planning, and supports a multidisciplinary approach.

The AHPCSA (2020) is a statutory body that represent and controls CAM, such as chiropractic, homeopathy and Chinese medicine. South African chiropractors are held accountable to this statutory board and have the responsibility to provide professional and ethical care.

### **5.5.3 Geographical Location**

The participants expressed different experiences with the geographical location of a practice and their proximity to other healthcare practitioners. Some of the

participants experienced no benefits such as an increase in the number of referrals from their surrounding practitioners. In comparison, some participants who were based in medical centres were able to establish and build their relationships with their fellow healthcare practitioners in the same location. Similarly, Seaton *et al.* (2021) noted the positive influence of informal communication among practitioners in a shared co-location or physical space and its positive shift away from a mono-disciplinary to a multi-disciplinary model. In South Africa, a multi-disciplinary model is supported as it may reduce the burden on the primary healthcare setting. It offers a community of practitioners within a shared location to support patients' needs, optimise resources and provide holistic care, which promotes better health outcomes. The Sunnybrook core competency framework supports a multi-disciplinary approach by prioritising the collective competency of practitioners rather than focusing on individual abilities (McLaney *et al.* 2022).

The demographics of the study participants were outlined in **Table 4.1**. There was a total of nine female and four male participants. In terms of experience, two participants had less than two years of experience, six had more than 10 years of experience, and the remaining participants had between two to 10 years of experience. The participants' years of experience may have influenced their clinical confidence and their ability to communicate within professional networks. Experienced chiropractors, especially those practising in a constant practice location, may have fostered stronger referral relationships with surrounding practitioners because they are familiar with the local healthcare community, making interactions more feasible. In contrast, participants with fewer years of experience, and who were new to a practice location, may have struggled to establish a presence within an existing healthcare community and to build professional relationships.

#### **5.5.4 Barriers in Communication**

The participants expressed encountering gatekeeping behaviours from secretaries or administrative staff of other healthcare practitioners. The participants noted instances where a secretary did not know what a chiropractor was and what the chiropractic scope of practice entailed. They also expressed encountering time delays in communicating with practitioners and a lack of prioritisation in their attempts to collaborate. However, gatekeeping from secretaries or administrative

staff is necessary in ensuring the practitioners efficiency, prioritisation of tasks and controlling access where it is warranted. Comparably, a study by Vogel *et al.* (2021) made note of chiropractors experiencing gatekeeping behaviours from medical healthcare professionals. These medical healthcare professionals were a part of the Canadian Armed Forces healthcare and showed a preference for physiotherapists because as they were more affordable. In South Africa, chiropractors are excluded from primary healthcare settings, such as hospitals. Conversely, physiotherapists are part of primary healthcare settings and can interact with medical practitioners within hospital settings. This facilitates interactions among healthcare practitioners and encourages a preference towards physiotherapy over chiropractic care.

The participants also noted the absence of feedback reports and collaboration from other practitioners. They received little to no communication about their patients once the referral was made. Some participants further noted that they received their feedback through the patient, after their appointment with the other practitioners. This negatively implicates the referral process as communication needs to be direct and the patients may not be able to fully communicate feedback. This creates a failure in information handoff and disrupts the inter-provider communication. The participants who formed or built personal relationships with other practitioners, were able to bypass their secretaries and communicate directly. This also assisted in influencing the receiving practitioner to provide a feedback report and maintain their professional, personal relationship with the chiropractor.

Seaton *et al.* (2021) had similar finding in a methodically inclusive literature review of 12 studies that included allied health professionals from six countries. Seaton *et al.* (2021) noted the positive influence of frequent, brief informal communication in a primary care setting. However, Seaton *et al.* (2021) also found referrals to allied health practitioners in the private healthcare setting to be limited and indirect. This was shown by the participants' experiences with failed information hand-offs and inter-provider communication.

In South Africa, there may be a breakdown in information hand-offs due to fragmented communication, use of paper-based records and lack of resources and funding to maintain healthcare facilities. Barriers in communication may exist as South Africa has 12 official languages.

### 5.5.5 Chiropractic Terminology, Jargon and Evidence-Based Practice

Chiropractic terminology, jargon, and lack of evidence-based practice was recognised in this study as a challenge in the referral process for chiropractors. The participants encountered reluctance from other practitioners with regard to collaboration and referrals as they perceived chiropractors as unscientific and limited in medical knowledge. **Table 2.1**, presented in Chapter Two, shows the different chiropractic-related terms and their definitions. The study by Ismail *et al.* (2023) noted that orthopaedic surgeons were reluctant to refer and collaborate with chiropractors. Ismail *et al.* (2023) attributed this to the use of chiropractic-related terms, which differs to the medical terminology used by other practitioners.

According to Ismail *et al.* (2023), the chiropractic profession defines subluxation differently to other healthcare professions and view it as a misalignment. In comparison, Johnson (2011) defined subluxation differently to the chiropractic profession as a bone displaced from its articulation with partial contact within the cavity. The participants of this study emphasised their avoidance of the term subluxation, especially when communicating with other professions. The participants expressed the confusion surrounding this term and the importance of using medically accepted terminology as it impacts the perceptions, attitudes, and knowledge surrounding the chiropractic profession.

The participants also avoided the term adjustment and preferred to use the term manipulation, which is a grade five mobilisation technique and is understood by other healthcare professions. Young and Theroux (2021) study noted the similarity between chiropractic term adjustment and the term manipulation or mobilisation used by medical practitioners. Ismail *et al.* (2023) found that South African chiropractors preferred the term adjustment over manipulation as they perceived it to have a specific purpose and effect. In contrast, the participants of this study preferred the term manipulation as it is more accepted in the medical profession. Ismail *et al.* (2023) recognised the lack of common science-based language by the chiropractic profession and its detrimental effect on their relationship with conventional modern medicine.

The participants articulated the need for the chiropractic profession to be viewed as legitimate and for it to shift away from chiropractic specific terminology and jargon.

The participants referred to chiropractors who studied in America and are now practising in South Africa. They expressed dissatisfaction in their use of the historical methods and teachings as there is a lack of evidence to support it, which perturbs professions other than chiropractic. Vitalism was established to be the core foundation of chiropractic by Daniel David Palmer (Richards *et al.* 2023). American chiropractors practising in South Africa may follow these historical teachings and beliefs. South African chiropractic students are taught about the historical foundation of chiropractic, which includes the concept of vitalism. However, the practice of vitalism is discouraged among South African chiropractors, as they are educated and trained within a scientific framework. This is also upheld and maintained by regulatory bodies such as the AHPCSA. In Richards *et al.* (2023) study, chiropractors viewed the term vitalism as unscientific and a hinderance to the growth and acceptance of their profession.

Social media was also noted to be a hinderance for the profession's acceptance by other professions. The participants described how social media only shows the manipulation aspect of chiropractic. The viewers typically see someone posing as a patient for manipulation, without witnessing the thorough assessment conducted prior. This compounds the misconception of chiropractic not being an evidence-based profession with no healthcare background.

#### **5.5.6 Influence of Age, Ego and Ownership**

This study found a lack of receptivity, unilateral and hostile behaviour, and attitudes from other healthcare practitioners towards chiropractors. Other healthcare practitioners displayed a lack of awareness towards the chiropractic profession and favoured referring and collaborating with physiotherapists. Some practitioners preferred to refer to fellow practitioners within the same age bracket. Their age is viewed to be proportionate to their years of experience in practice and accumulation of knowledge. In comparison, some participants reported the younger generation of practitioners to be more approachable with chiropractic and receptive to complementary healthcare.

The participants also reported that they were viewed as competition by other practitioners and this limited their interactions, referrals and collaborations. Dreher-Hummel *et al.* (2021) emphasised challenges in establishing role perceptions,

preferences, negotiating collaboration, and power imbalances among nurses and physicians. The practitioners with established and agreed upon roles performed well throughout the collaboration (Dreher-Hummel 2021). The findings of this study displayed the power imbalances, hostility, and territorial behaviour of other practitioners towards chiropractors. There needs to be mutual trust and respect, as iterated by Dreher-Hummel (2021), to support interprofessional collaboration among the various professions.

### **5.5.7 Healthcare System**

The participants conveyed a lack of integration of the chiropractic profession in the public healthcare system of South Africa and exclusion from the Health Professions Council of South Africa (HPCSA). This is consistent with Ismail *et al.* (2021), who described chiropractors as primary contact practitioners independent of the public healthcare system. The participants felt isolated from mainstream medicine and, in turn, this also affected their patients. Their patients would often experience being wait listed and difficulty in ease of appointments when referring to other healthcare practitioners such as orthopaedic surgeons.

The profession is also not granted hospital access in South Africa, and this limited participants from being able to interact on a one-on-one level with other practitioners and build a collaborative relationship. The study by Matolengwe, Murray, and Okafor (2024) recognised that strengthening referrals among the different levels of the healthcare system could lead to improvements, with the referral being initiated at a primary level to decrease the burden on the healthcare system.

Some participants explained their frustrations of medical aids not accepting their coding for MRI or CT scans and not funding the patient based on a referral from a chiropractor in South Africa. The South African medical aids prefer a referral from an orthopaedic surgeon or general practitioner over that of a chiropractor. These findings were previously iterated by Discovery Health Medical Scheme (2020) and it is a pragmatic limitation formed by the requirements of medical aid schemes. Chiropractors are not restricted by legislature when referring patients for MRI or CT scans. However, this may not be ideal for patients who are members of medical aid schemes, as the MRI or CT scan may not be paid for by the patient's policy. In the

best interest of these patients, the chiropractor would need to refer them to another practitioner, who is accepted by the medical aid scheme.

The National Health Act 61 of 2003 establishes a legal and ethical framework that prioritizes patient's clinical needs and ensures they are referred to an appropriate facility equipped to deliver the required treatment or care (South African, Department of Health 2004). It also enables the integration of services and facilitates access to healthcare practitioners across the broader South African healthcare system. While the Act provides guidance for referral practices, the South African chiropractic profession faces systemic exclusion from public healthcare facilities and received limited recognition. The practical implementation of the Act for chiropractic patients is limited as chiropractors are often unable to refer patients directly within the public system or gain reciprocal referrals from other healthcare practitioners.

Fjaagesund *et al.* (2024) found that co-located chiropractic care in Australian primary care displayed an increase in provider confidence, improved patient outcomes, and encouraged referrals. However, Myburgh *et al.* (2022) noted persistent barriers in Canada, Denmark, and the United States, including professional mistrust, hierarchical dynamics, and unclear roles. Similarly, in South Africa, although the National Health Act 61 provides a legal framework for referrals, hierarchical perceptions, limited hospital access, and medical aid restrictions constrain chiropractors from fully utilising referral pathways. These findings highlight that legal frameworks alone are insufficient, systemic support and professional recognition are essential for effective interprofessional integration.

## **5.6 THEME FOUR: ENHANCEMENT OF THE REFERRAL NETWORK**

The need to enhance the referral network was expressed by many participants. The participants expressed the following areas that could be improved upon: methods of communication, clinical acumen and knowledge, guidance for new graduates, practitioner involvement, and student perspective.

### **5.6.1 Methods of Communication**

This study found various methods to improve and assist interactions with other practitioners, as recommended by the participants. A study by Ifrim *et al.* (2022) found effective communication among healthcare practitioners to be vital in providing patients with quality care and for their needs. Practitioners require mutual

trust, receptivity, and effective communication to ensure their patients receive the necessary care. Patient involvement in their healthcare is also necessary to ensure effective collaboration and communication. A study by Akter *et al.* (2023) noted patient involvement during interprofessional collaboration could improve communication among the different practitioners and promote transparency.

The participants outlined the importance of using medically accepted terminology and avoiding chiropractic terminology or jargon in referral letters. As previously mentioned, medical terminology is understood by all professions, while the use of chiropractic jargon further isolates the chiropractic profession and compounds misconceptions. Chiropractors use an evidence-based practice approach and have a responsibility to use evidence-based terms that are accepted across all medical professions. Terminology such as subluxation and adjustments should not be used by chiropractors in their referral letters. They should rather use the term manipulation, which is understood to be a grade five mobilisation.

Some participants recommended the inclusion of relevant orthopaedic tests and the pertinent findings of these tests. According to the South African National Development Plan for 2030, healthcare providers at all levels of the healthcare system provide inconsistent feedback among each other (Department of Health 2020). In contrast, the participants experienced successful referral relations when they remained opened to discussions or opinions, expressed confidence, were accepting of constructive feedback, and were consistent with communication.

### **5.6.2 Clinical Acumen and Knowledge**

The consensus among the participants regarding the clinical acumen and knowledge of the chiropractic profession was proficient and exceptional. The participants expressed that their knowledge, clinical acumen, and expertise allowed them to enhance their referral relationship. The foundation of the chiropractic profession is formed in the early years of university with anatomy, diagnostics, and physiology, in conjunction with chiropractic specific modules. The participants noted their capabilities to diagnose, investigate, and provide conservative management, while at the same time maintaining and upholding an evidence-based approach. Ismail *et al.* (2023) and Weaver (2015) defined evidence-based practice as the use of current clinical and scientific research. Evidence-based practice enables the

chiropractic profession to provide patients with the most recent, up-to-date research and quality care. The AHPCSA (1982) provides the different treatment approaches that South African chiropractors can utilise within their scope of practice. The South African chiropractic scope of practice is multifaceted and broad. Chiropractors need to fully maximise this by demonstrating proficient clinical acumen, knowledge, and expertise.

### **5.6.3 Guidance for New Graduates**

The participants expressed the value of guiding and assisting newly-graduated chiropractors to build and establish referral networks. They recommended new graduates to start as soon as possible with fostering relationships and building trust. Hussein *et al.* (2025) performed a scoping review of literature exploring the readiness of underrepresented healthcare workers, such as chiropractors, to practise. Hussein *et al.* (2025) found hands-on learning, future training programmes, internships, and mentorships as opportunities to equip healthcare workers before they start to practise.

Ideally, new graduates should refer patients to practitioners aligned with the chiropractic profession as they will be more receptive. However, this is not always possible, and the participants recommended graduates manage their expectations. Newly-graduated chiropractors were advised to attend seminars hosted by other healthcare practitioners and to undertake education presentations on the chiropractic profession. This would enable them to interact, educate, and spread awareness among the other professions and encourage future referrals. The participants also expressed the need for new graduates to be proactive and persistent when interacting with other practitioners. As previously mentioned, the participants advised new graduates to avoid chiropractic jargon and maintain the use of medical terminology in their referral letters. The referral letters should include letterheads and correct spelling and grammar as the letter reflects the referring practitioner.

The participants recommended creating a list of possible referral pathways and the use of the CASA KZN WhatsApp group chat for recommendations on practitioners such as homoeopaths, GPs or orthopaedic surgeons. The new graduates should

also introduce themselves to practitioners in the surrounding area and explain what chiropractic entails and its scope of practice in South Africa.

Some participants noted that assistance with referrals at a student level by the university would have been beneficial. A module or a short course on building referral networks, referral letter writing, and communication skills would have been beneficial. Students working at the DUT Chiropractic Day Clinic could also receive assistance from their clinicians, who are qualified chiropractors with a minimum of three years practice experience. These clinicians can help students reach out and foster relationship with practitioners they have used themselves for their patients. This study was based within the eThekweni Municipality context, and these clinicians can help students foster interprofessional relations with practitioners to whom they have personally referred patients within this shared location.

#### **5.6.4 Practitioner Involvement**

A study by Doornebosch *et al.* (2022) defined interprofessional collaboration as the provision of diversified quality of care through integration or co-management by various healthcare professionals. This enables patients to receive a better, diversified quality of healthcare that would not have been possible without the involvement of different healthcare practitioners (Doornebosch *et al.* 2022). Similarly, Seyed-Nezhad *et al.* (2021) defined a referral as a healthcare provider who lacks the necessary resources to manage a patient condition and requests assistance from a provider who is equipped to take over or co-manage the patient. The participants of this study outlined the importance of involving other practitioners in achieving interprofessional collaboration. Other practitioners need to be involved and educated on the chiropractic profession. Many practitioners are unaware of the chiropractic scope of practice and view the profession as dangerous. Practitioners can be involved through cross-discipline CPD points and through educational social events such as seminars, interdisciplinary meetings and conferences. Some participants expressed the involvement of practitioners by asking them to present on various topics at chiropractic seminars, while opening this seminar to all professions.

The Sunnybrook core competency framework aligns with the importance of collective engagement among healthcare practitioners. This framework emphasises

collective competence over individual professional capabilities (McLaney *et al.* 2022). It promotes shared language, role clarity, and consistent expectations to support effective interprofessional collaboration across different professions and practice settings. Applying this framework may assist in addressing misunderstandings of the chiropractic scope of practice and facilitate more structured, reciprocal, and respectful referral relationships.

#### **5.6.5 Student Perspective**

The participants agreed that interprofessional referrals and communication must be included in the chiropractic curricula. They suggested a variety of methods of inclusion such as short courses, students shadowing other practitioners for portfolio hours or as an assignment, and practising mock referral letters in the clinic under supervision. These mock referrals can involve a mock case presentation, where the student must determine the appropriate practitioner to whom to refer and draft a referral letter. In addition, students are required to complete case summaries following consultations with new patients. These case summaries are vital in teaching students' foundational skills for referring patients, as they must learn to prioritise relevant clinic information and present it in a clear and professional manner.

Some participants recommended that lecturers from other healthcare professions educate and lecture the students for certain modules. For example, philosophy and psychopathology can be taught by a psychologist with clinical experience to offer the students a deeper understanding of the topic. Guest lecturers, such as a gynaecologist, could be invited to teach the students on a section pertaining to female reproductive health.

The DUT already exposes its chiropractic students to various practitioners within the Basic Medical Sciences Department, such as an anatomist for anatomy modules. However, the university can increase its frequency of guest lecturers with clinical experience, include more case-based workshops, and offer a variety of topics that can be presented by practitioners or academics from other healthcare fields.

The participants recommended that universities facilitate more interaction among chiropractic and medical students. This could be possible through anatomy or physiology modules, where the students are part of the same class and are provided

with the opportunity to study, interact, and be assessed together. The participants noted that this could also include group assignments or case discussions, which would promote collaboration among the students. This would allow for students to interact and have immediate exposure to a different profession.

A participant recommended that universities educate the students during diagnostic modules on other specialist practitioners. However, in the new chiropractic curriculum at DUT, this topic is now taught to the students within the Philosophy and History of Medicine modules. This addition represents the progress in the chiropractic curriculum over recent years. This participant may have had limited exposure to referral education during their time as a student.

Chiropractic students need to be trained and equipped, before graduating, to foster relationships with other healthcare practitioners. The baseline of communication with other practitioners begins through the referral of a patient who lies beyond the chiropractic scope of practice.

The clinical practicum at the DUT Chiropractic Day Clinic involves students working in a clinical setting under the supervision of a qualified clinical instructor. This is a chiropractor's initial exposure to patient interactions, treating, diagnosing, and referring patients. The supervising clinician reviews a patient's referral letter drafted by the student and provides guidance. Through hands-on learning, a student learns how to write a referral letter and communicate effectively with another practitioner. The students also write case summaries which, in turn, provides them with the foundation for drafting a referral letter.

## **5.7 CONCLUSION**

This chapter discussed the findings of the study and showed the perceptions and experiences of chiropractors with regard to interprofessional referrals in the eThekweni Municipality. In this study, most of the results coincided with the findings of relevant studies, which pertained to interprofessional collaboration, referral networks and communication within a healthcare setting. This study also explored the perceptions of patients, barriers encountered by chiropractors, and recommended improvements to the referral process, which are concepts vaguely explored from the perspective of chiropractors in South Africa. The following chapter provides the strengths, limitations and recommendations of the study.

# **CHAPTER SIX: SUMMARY, STRENGTHS AND LIMITATIONS OF THE STUDY, RESEARCHER'S REFLECTIONS, RECOMMENDATIONS AND CONCLUSION**

## **6.1 INTRODUCTION**

This chapter reiterates the intention of this study and addresses the research questions outlined at the onset of the study. This chapter also presents the study's strengths, limitations, the researcher's reflections, and recommendations to the chiropractic profession.

## **6.2 SUMMARY OF THIS STUDY**

The aim of this study was to explore the perceptions and experiences of chiropractors with respect to their interprofessional referrals to healthcare practitioners. The following research questions were proposed to meet the aim.

### **6.2.1 Research Question 1: What Are the Perceptions of Chiropractors with Respect to Interprofessional Referrals to Other Healthcare Practitioners?**

The participants had positive perceptions of their referrals to other practitioners. They expressed the value and importance of recognising patients' conditions which lie outside the chiropractic scope of practice and the need for referral to relevant practitioners. The patients' needs for efficient, quality, and necessary healthcare were prioritised by the participants. Interprofessional referrals were perceived by the participants as vital and they emphasised the need for chiropractors not to practise in isolation.

### **6.2.2 Research Question 2: What Are the Experiences of Chiropractors with Respect to Interprofessional Referrals to Other Healthcare Practitioners?**

Most of the participants had positive experiences with respect to interprofessional referrals. Many participants received feedback reports and had phone calls with the practitioners directly. The participants experienced positive working relationships and interactions with receptive practitioners. The participants also reported greater patient satisfaction following the referral to another practitioner.

In general, the participants also reported experiencing challenges during the referral process. The participants mentioned that stereotypes and a lack of understanding regarding chiropractic scope of practice were the main hinderances encountered. Participants were disadvantaged by geographical location, age, and perceived ego or sense of ownership from other practitioners. From a broader perspective, the exclusion of the chiropractic profession from the public healthcare system in South Africa also proved challenging. Some participants noted difficulty in referring for MRI or CT scans, as South African medical aids would not cover the costs if the referral was made by a chiropractor.

### **6.3 STRENGTHS OF THE STUDY**

This qualitative study enabled the researcher to contribute to the broader body of chiropractic-related literature. This study has offered insights into South African chiropractors' perceptions and experiences regarding interprofessional referrals, which has been a previously unexplored area. Additionally, the study provided a greater understanding of the limited field of chiropractic and its relevance within the broader healthcare system in South Africa. Furthermore, the study was based in the eThekweni Municipality in KZN and utilised a unique cohort.

### **6.4 LIMITATIONS OF THE STUDY**

This study was conducted on a specific cohort of qualified chiropractors in the eThekweni Municipality. The experiences and perceptions of chiropractors in eThekweni Municipality may differ from those in other areas across South Africa. The professional working relationships among chiropractors and other healthcare practitioners may differ based on geographical location and proximity. Therefore, caution is advised against generalisation of the results of this study. However, the findings may serve as a guideline for improving communication, collaboration and interprofessional referrals.

Additionally, this study explored the perceptions and experiences of qualified chiropractors, such as their communication skills, professionalism and knowledge in relation to referrals; however, it did not use methods to objectively assess this. The participants' subjective experiences may have introduced biases towards certain professions. Some participants selectively engaged with receptive practitioners, which may have influenced some positive findings.

## **6.5 RESEARCHER'S REFLECTIONS**

A researcher's reflection provides a subjective insight into their thoughts and perceptions throughout the research process. In this study, interacting with fellow chiropractors was a rewarding experience and allowed the researcher to develop and expand their professional network. The researcher was pleased to enhance their interpersonal and communication skills during the data collection. However, the researcher encountered difficulty in obtaining relevant chiropractic-related literature, particularly within the South African context, regarding chiropractors and referral practices in published literature.

## **6.6 RECOMMENDATIONS**

It is the responsibility of the chiropractic profession and regulatory bodies to address the obstacles and limitations in the chiropractic referral networks, as reported by the participants of this study. The recommendations to improve the referral network for chiropractors is described in the following sections.

### **6.6.1 Recommendations for the Chiropractic Profession**

- It is suggested that communication needs to be clear, detailed, and outline relevant information, especially in written reports or referral letters. Chiropractors are advised to avoid chiropractic jargon and terminology when communicating with other healthcare practitioners. Clear and consistent communication will allow trust to be fostered and for professional credibility to be achieved.
- The involvement of practitioners from chiropractic and other professions through seminars, lectures, and social events may provide valuable opportunities, such as for chiropractors to educate others about their profession and foster professional relationships through collaboration.
- Chiropractic students and students from other healthcare professions can be brought together by their universities to collaborate on case studies. This can be facilitated through the involvement of chiropractic and other healthcare practitioners, providing students with a team-based learning experience that encourages a multidisciplinary approach. These types of interactions allow for both the practitioners and students to gain greater insight and respect for each other's professions.

- Chiropractors need to update and maintain their knowledge, clinical skills, and competency continuously. Healthcare services need to be evidence-based and patient-centred, which ensures patients' needs are prioritised. Continuous professional development provides individual competence while also establishing credibility for the profession. This allows practitioners to be receptive of current best practices.
- Newly-graduated chiropractors need guidance and assistance from more experienced practitioners to grow and develop their referral network. Assistance from early on will allow newly-graduated chiropractors to build strong and reliable professional relationships and referral networks.
- Starting at an educational level, chiropractic students can be taught how to write referral letters, guided on which practitioners are most appropriate to refer, and instructed in appropriate methods of communication. This can take place through a short lecture prior to the commencement of the students' clinical practicum. During the clinical practicum, the students could also practise writing referral letters and presenting them to their supervising chiropractic clinician. This provides an opportunity for the students to receive guidance and develop their communication skills. Early exposure to this assistance can support the development of interprofessional communication skills, referral practices, and professional working relations.

### **6.6.2 Recommendations for Further Research**

A comparative study is recommended to be conducted in other South African municipalities to determine the similarities, differences, and further recommendations to enhance interprofessional referrals and relationships for chiropractors. The findings of these studies may contribute to the chiropractic profession by assisting in improving working relationships with other professions in South Africa. Additionally, this study investigated the perceptions and experiences of qualified chiropractors, such as their communication skills, professionalism, and knowledge in relation to referrals. However, no methods were employed to objectively assess this. Therefore, further quantitative research is suggested to be conducted to assess communication skills, professionalism, and knowledge of chiropractors in relation to referrals. A quantitative study design may be considered to obtain generalisable data.

## **6.7 CONCLUSION**

This qualitative study explored the perceptions and experiences of chiropractors in the eThekweni Municipality. The findings indicate that chiropractors view the referral network and interprofessional collaboration as significant aspects of chiropractic care. When patient needs lie outside the chiropractic scope of practice, they recognise the importance of utilising the referral pathways.

Positive working relationships, feedback, and outcomes within these working relationships enable chiropractors to provide patient-centred and evidence-based care. Patient perspectives on referrals influenced their continuation of care. Several obstacles presented as hinderances to patient follow-through for care, including problems related to referrals. Referrals are vital in ensuring patients receive timeous and appropriate care.

This study emphasised several challenges faced by chiropractors in the referral relationship, including stereotypes, misinformation, communication barriers, the use of chiropractic jargon, a sense of ownership from other professions, and exclusion of chiropractors from the public healthcare system. Clear communication and enhanced clinical expertise are necessary for improving chiropractic referral networks and fostering collaboration. Involvement from all healthcare professionals and guidance for new graduates will strengthen collaborative efforts and relationships.

This research is among the few studies related to chiropractic referrals and interprofessional collaboration. Most of the findings in this study exhibited similarities to previous studies, but few explored these themes from the context of the chiropractic profession in South Africa. This study adds valuable insights into perspectives and experiences of South African chiropractors regarding interprofessional referrals and collaboration. Further investigations are needed in other South African municipalities on chiropractors' experiences and perceptions.

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# APPENDICES

## Appendix A: Letter of Information



### LETTER OF INFORMATION

**Dear Participant**

**Welcome to my study.**

**Title of the Research Study:** Exploring the perceptions and experiences of chiropractors in the eThekweni Municipality regarding interprofessional referrals.

**Principal Investigator/s/researcher:** Ms Amina Kolia (BHSC Chiropractic)

**Co-Investigator/s/supervisor/s:** Dr D. Varatharajulu (PhD: Health Sciences; M.Tech: Chiropractic; Adv. Dip.: Business Administration)

**Brief Introduction and Purpose of the Study:** This study will explore the perceptions and experiences of chiropractors with regard to interprofessional referrals in the eThekweni Municipality. Participants will be interviewed on their perceptions and experiences in order to build a foundation of knowledge on interprofessional referrals and how it affects the chiropractic profession. The data will be collected by conducting interviews that will be audio recorded and each interview will be approximately 30-40 minutes. Any chiropractor working in the eThekweni Municipality and has been in practice for more than one year is eligible for the study.

Dear Participant,

I am a registered chiropractic student at DUT and I am conducting research for my masters in chiropractic. I would like to invite you to participate in my research. Your co-operation is much appreciated.

**What is Research:** Research is a systematic search or enquiry for generalised new knowledge.

**Outline of the Procedures:** An interview will be arranged if you meet the inclusion criteria, have signed the consent form and voluntarily wish to participate. The interview will approximately be 30-40 minutes in duration and will take place in person or online.

**Risks of discomforts to the participant:** There is no identified risk of discomfort in this study.

**Reasons of Potential Withdrawal from the Study:** You may withdraw from this study at any point without consequence, if you wish too. The research may be terminated early in particular circumstance for example non-compliance. The researcher may, under certain circumstance, decide to withdraw the participant from the study.

**Benefits:** The findings of this study will add to the foundation of knowledge on interprofessional referrals from the perspective of chiropractors which may have an impact on the chiropractic profession and its working relationship with other health care practitioners. This study will hopefully improve the working relationship and communication between chiropractors and other health care practitioners, this may indirectly benefit you as a participant of this study.

**Remuneration:** There will be no remuneration for your participation in this study.

**Costs of the Study:** There will be no cost involved in your participation in this study.

**Confidentiality:** All participant information will be kept confidential. A pseudonym will be allocated to each participant to keep their identities confidential.

**Results:** The results of the research will be made available to the public as a journal article and dissertation.

**Research-related injury:** There is no risk of research-related injury in this study

**Storage of all electronic and hard copies including tape recordings:** Interview data will be stored on hard copy and in an electronic format with password protection for five years at the DUT Chiropractic Department. After this period, the data will be shredded or deleted.

**Persons to Conduct in the Event of Any Problems or Queries:**

Please contact the researcher Amina Kolia on 074 412 4678, my supervisor Dr D. Varatharajullu on 031 373 2533 or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the DVC: Research, Innovation and Engagement Prof. S. Moyo on 031 373 2577 or [moyos@dut.ac.za](mailto:moyos@dut.ac.za).

## Appendix B: Letter of Informed Consent



### LETTER OF INFORMED CONSENT

**Full Title of the Study:** Exploring the perceptions and experiences of chiropractors in the eThekweni Municipality regarding interprofessional referrals.

**Names of Researcher/s:** Ms Amina Kolia and Dr D. Varartharajullu

#### Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, \_\_\_\_\_ (Amina Kolia), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: 155/24.
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth and initials will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

\_\_\_\_\_

**Full Name of Participant    Date    Time    Signature/ Right Thumbprint**

I, \_\_\_\_\_ (Amina Kolia) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

\_\_\_\_\_  
**Full Name of Researcher    Date    Signature**

\_\_\_\_\_  
**Full Name of Witness    Date    Signature**  
(If applicable)

\_\_\_\_\_  
**Full Name of Legal Guardian    Date    Signature**  
(If applicable)

## Appendix C: Interview Guide



**Participant number:**

**What are your perceptions, with regard to interprofessional referrals?**

Probes: Which healthcare practitioners do you often make referrals to? Do you have an established referral network to use for your patients?

**Describe your experiences with interprofessional referrals?**

Probes: Have you experienced any opportunities through your referrals?

**What are some challenges that have you experienced with referrals to other healthcare practitioners?**

Probes: Do other healthcare practitioners provide feedback reports on the patients you have referred to them? Have you experienced any barriers in communication with other healthcare practitioners? Did you encounter any stereotypes when you made your referral to another healthcare practitioner?

**Describe your experiences with co-managing a patient through a referral?**

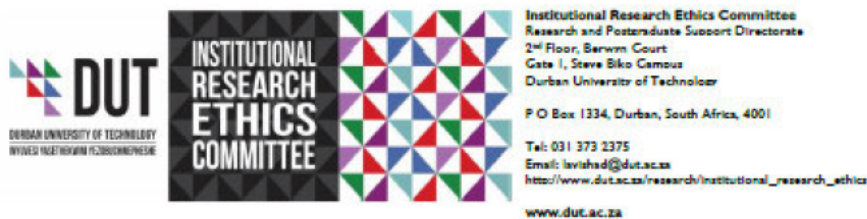
Probes: Have your patients expressed any improvements since their referral to another practitioner?

**What advice, if any, would you suggest to the chiropractic profession to help improve interactions with other healthcare practitioners?**

Probe: How do you think your experiences could have been improved? Do you have any advice on making referrals for newly graduated chiropractors?

**Based on your experiences, please explain if and why interprofessional referrals and communication should be included in chiropractic teaching programmes?**

## Appendix D: Institutional Research Ethics Committee Clearance Certificate



24 January 2025

Ms A Kolia  
46 Margaret Maytom Avenue  
Durban North  
4051

Dear Ms Kolia

**Exploring the perceptions and experiences of chiropractors in the eThekweni municipality regarding interprofessional referrals**  
**Ethics Clearance Number: IREC 155/24**

The DUT-Institutional Research Ethics Committee acknowledges receipt of your notification regarding the piloting of your data collection tool.

Kindly ensure that participants used for the pilot study are not part of the main study.

Please note that **FULL APPROVAL** is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the DUT-IREC according to the DUT-IREC SOP's.

Please note that any deviations from the approved proposal require the approval of the DUT-IREC as outlined in the DUT-IREC SOP's.

It is compulsory for a student or researcher to apply for recertification on an annual basis. The failure to do so will result in withdrawal of ethics clearance. It is the responsibility of the researcher and the supervisor to apply for recertification.

Please note that you are required to submit a Notification of Completion of Study form together with an abstract to the **DUT-IREC** office on completion of your study.

Yours Sincerely

Professor P Mashau  
Chairperson: DUT-IREC

## Appendix E: Letter of Information for the Pilot Study



### LETTER OF INFORMATION FOR THE PILOT STUDY

Dear Participant

Welcome to my study.

**Title of the Research Study:** Exploring the perceptions and experiences of chiropractors in the eThekweni Municipality regarding interprofessional referrals.

**Principal Investigator/s/researcher:** Ms Amina Kolia (BHSC Chiropractic)

**Co-Investigator/s/supervisor/s:** Dr D. Varatharajullu (PhD: Health Sciences; M.Tech: Chiropractic; Adv. Dip.: Business Administration)

**Brief Introduction and Purpose of the Study:** This study will explore the perceptions and experiences of chiropractors with regard to interprofessional referrals in the eThekweni Municipality. Participants will be interviewed on their perceptions and experiences in order to build a foundation of knowledge on interprofessional referrals and how it affects the chiropractic profession. The data will be collected by conducting interviews that will be audio recorded and each interview will be approximately 30 to 40 minutes. Any chiropractor working in the eThekweni Municipality and has been in practice for more than one year is eligible for the study.

Dear Participant,

I am a registered chiropractic student at DUT and I am conducting research for my masters in chiropractic. I would like to invite you to participate in my research. Your co-operation is much appreciated.

**What is Research:** Research is a systematic search or enquiry for generalised new knowledge.

**Outline of the Procedures:** An interview will be arranged if you meet the inclusion criteria, have signed the consent form and voluntarily wish to participate. The interview will approximately be 30 to 40 minutes in duration and will take place in person.

**Risks of discomforts to the participant:** There is no identified risk of discomfort in this study.

**Reasons of Potential Withdrawal from the Study:** You may withdraw from this study at any point without consequence, if you wish too. The research may be terminated early in particular circumstance for example non-compliance. The researcher may, under certain circumstance, decide to withdraw the participant from the study.

**Benefits:** The findings of this study will add to the foundation of knowledge on interprofessional referrals from the perspective of chiropractors which may have an impact on the chiropractic profession and its working relationship with other health care practitioners. This study will hopefully improve the working relationship and communication between chiropractors and other health care practitioners, this may indirectly benefit you as a participant of this study.

**Remuneration:** There will be no remuneration for your participation in this study.

**Costs of the Study:** There will be no cost involved in your participation in this study.

**Confidentiality:** All participant information will be kept confidential. A pseudonym will be allocated to each participant to keep their identities confidential.

**Results:** The results of the research will be made available to the public as a journal article and dissertation.

**Research-related injury:** There is no risk of research-related injury in this study

**Storage of all electronic and hard copies including tape recordings:** Interview data will be stored on hard copy and in an electronic format with password protection for five years at the DUT Chiropractic Department. After this period, the data will be shredded or deleted.

**Persons to Conduct in the Event of Any Problems or Queries:**

Please contact the researcher Amina Kolia on 074 412 4678, my supervisor Dr D. Varatharajullu on 031 373 2533 or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the DVC: Research, Innovation and Engagement Prof. S. Moyo on 031 373 2577 or [moyos@dut.ac.za](mailto:moyos@dut.ac.za).

## Appendix F: Informed Consent for the Pilot Study



### INFORMED CONSENT FOR THE PILOT STUDY

**Full Title of the Study:** Exploring the perceptions and experiences of chiropractors in the eThekweni Municipality regarding interprofessional referrals.

**Names of Researcher/s:** Ms Amina Kolia and Dr D. Varartharajulu

#### Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, \_\_\_\_\_ (Amina Kolia), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: 155/24.
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth and initials will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

\_\_\_\_\_  
**Full Name of Participant    Date    Time    Signature/ Right Thumbprint**

I, \_\_\_\_\_ (Amina Kolia) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

\_\_\_\_\_  
**Full Name of Researcher    Date    Signature**

\_\_\_\_\_  
**Full Name of Witness    Date    Signature**  
(If applicable)

\_\_\_\_\_  
**Full Name of Legal Guardian    Date    Signature**  
(If applicable)

## Appendix G: Code of Conduct and Confidentiality Statement



This form is to be completed by the pilot study participants prior to the commencement of their interviews.

I, a participant of this study, agree to abide by the following terms:

1. Any research information and data will be kept confidential and private. The identities of the pilot and main study participants will be kept confidential and anonymous.
2. No information from the study may be discussed with outside parties or individuals. The information may only be discussed with the supervisor and the researcher.
3. The study will be made available to the public in the form of journal articles and as a dissertation.
4. The interviews will be audio recorded and transcribed verbatim. This information will be stored on a USB by the DUT Chiropractic department for a period of five years. Thereafter, this information will be deleted from the USB and any paperwork will be shredded.

---

Full name of participant

---

Signature

---

Full name of witness

---

Signature

---

Full name of researcher

---

Signature

---

Full name of supervisor

---

Signature

## Appendix H: Demographic Data Sheet



|                          |         |       |        |       |          |        |     |
|--------------------------|---------|-------|--------|-------|----------|--------|-----|
| <b>Age</b>               | 20-29   | 30-39 | 40-49  | 50-59 | 60-69    | 70-79  | 80+ |
| <b>Sex</b>               | Male    |       | Female |       | Other:   |        |     |
| <b>Race</b>              | African | White | Indian | Asian | Coloured | Other: |     |
| <b>Years in practice</b> | 2-4     | 5-6   | 6-7    | 7-8   | 8-9      | 9-10   | 10+ |

## Appendix I: Editor's Certificate



**Helen Bond**  
IMPELA EDITING SERVICES  
impelaediting@gmail.com  
079 395 5873

3 September 2025

### CERTIFICATE

Amina Kolia

Dear Amina

Thank you for using Impela Editing Services to edit your Master's thesis entitled *"EXPLORING THE PERCEPTIONS AND EXPERIENCES OF CHIROPRACTORS IN THE ETHEKWINI MUNICIPALITY REGARDING INTERPROFESSIONAL REFERRALS"*.

I have proofread for errors of grammar, punctuation, spelling, syntax and typing mistakes. I have formatted your work and checked the references (this means checking the formatting) according to the DUT Library's version of Harvard referencing.

Please note that Impela Editing accepts no responsibility for work changed after issuing this certificate.

I wish you the very best in your submission and your career.

Kind regards

Helen Bond (Bachelor of Arts, HDE)