HOMOEOPATHIC PERCEPTIONS OF GUT DYSBIOSIS AS A CLINICALLY SIGNIFICANT OBSTACLE TO CURE

By

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

I, Marizel Hendriks, do declare that this dissertation is representative of my own work in both conception and execution (except where acknowledgements indicate to the contrary)

	31 October 2023
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ABSTRACT

Echoing Hippocrates' notion that “All diseaes begin in the gut”, recent scientific research strengthens the connection between gut microbial health with overall well-being. This study delves into how South African homoeopathic practitioners address gut dysbiosis, a microbial imbalance within the gut linked to various chronic conditions.

Homoeopaths interviewed for this study observed a rise in gut dysbiosis, attributing it to factors like lifestyle choices and medication use. Their treatment approach emphasizes individualized remedies and therapies tailored to each patient's unique physical, mental, and emotional symptoms. Treatment plans often incorporate dietary modifications, alongside the use of probiotics and prebiotics to support gut health.

The study reveals gut dysbiosis as a significant obstacle to cure in homoeopathic treatment. The high cost of stool analysis tests restricts their use in assessing gut health, making it challenging for the interviewed homoeopaths to arrive at a diagnosis. Participants expressed a strong need for more comprehensive education on gut dysbiosis and bowel nosodes within the South African homoeopathic training curriculum.

In conclusion, this study suggests that gut dysbiosis presents a clinically significant obstacle to cure in homoeopathic treatment for chronic conditions. A holistic approach combining homoeopathic remedies with dietary and lifestyle changes appears to be effective. Further research is warranted to enhance homoeopathic education on gut health and its impact on chronic diseases.

Key words: Homoeopathy, Gut dysbiosis, Obstacles to cure, Bowel nosodes

DEDICATION

I dedicate this work to my God, the lover of my soul, for bringing me to and through this degree. For He is a Good and Faithful God. His grace is sufficient for me, and His power is perfected in my weakness. I will use my every work to glorify His Name now and for all of eternity.

ACKNOWLEDGMENTS

I would like to convey my sincere gratitude to the following people:

To my supervisor, Dr Shanaz Ghuman: Thank you for standing up and taking this challenge on with me. Your caring hand is what allowed this work to come to fruition. Your encouragement and speedy replies are something that I will always appreciate. I thank you for your expertise, feedback, time and moral support.

To the homoeopathic practitioners who participated in this study: Your input and experience are deeply appreciated, and I cannot wait to work beside such capable and passionate homoeopaths.

To my editor, Dr Sarah Tandy: Thank you for not merely being an editor but for going the extra mile in ensuring my dissertation ties together as a beautiful end product.

To my husband, Andrew: Your incredible love and support near the end of my degree has been the best surprise. Without you, I would not have been able to finish this work as strongly as I have. Thank you for being my reliable cheerleader. You are such a blessing.

To my loving parents: Thank you, pappa en mamma, for always standing by me. Your financial support, love and inclined ears are what allowed me to complete this study. I am forever indebted to you both for your guiding hand in my life.

To my two sisters: Thank you for all your love, silliness and support in my life. I would not have made it this far if it were not for you two.

To my friends: Thank you for your continued love, prayers, and motivation in my hope to finish this degree.

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GLOSSARY

Gut microbiome: The collection of bacteria and other microorganisms that inhabit the intestinal lumen and perform many physiological and metabolic functions in the human body (Singhvi *et al.* 2020: 26-36).

Gut dysbiosis: An unhealthy alteration in the microbiota that inhabit the gut lining, which may include the presence of pathological microbes, an imbalance in the composition or a lack of microbial diversity (Singhvi *et al.* 2020: 26-36).

Obstacles to cure: Anything in the diet, lifestyle or history that may extinguish or disturb the action of the homoeopathic remedy or interfere with the life force's ability to respond to or recognise it (De Schepper 2001: 266-285).

Clinically significant: The extent to which gut dysbiosis is judged to act as an obstacle to cure in relation to whether it is perceived to prevent treatment from reducing symptoms experienced by the patient (VandenBos 2007: 193).

Holistic: Holistic medicine views a human being in its entirety as more than just a physical body made of chemical substances. It considers the person’s material body, mind, emotions and spirit (Jayasuriya 2005).

Homoeopathy: A holistic and individualised form of medicine that uses specially diluted remedies made from different natural sources to encourage the body’s innate healing mechanisms (De Schepper 2001: 266-285).

Adjunctive therapies: Complementary approaches or treatments used alongside homoeopathic remedies to treat the patient best. In the context of this study, these therapies can include dietary changes, lifestyle modifications, exercise, western herbal medicines, supplementation or other holistic practices that aim to enhance the effectiveness of homoeopathic treatment (Levy 2015).

Western herbal medicines: The use of herbal medicines and mother tinctures derived from plant sources to address various health conditions. These medicines are made of plant sources but are not prepared in the same way as homoeopathic remedies. They are commonly incorporated by homoeopaths to aid the body on a physiological level in conjunction with homoeopathic treatment (Levy 2015).

Mother tincture: An extract derived from a macerated plant or herb, where the raw material is soaked in a solvent such as alcohol and water to extract important active ingredients from the plant or herb. Homoeopaths may prescribe a mother tincture to provide tissue support in conjunction with homoeopathic treatment (Levy 2015).

Miasm: A miasm can be inherited or acquired and can either be an active or dormant susceptibility to developing certain diseases in both the physical and mental spheres (Klein 2010)(Nayak, Nayak and Roja 2015).

Isotherapy: The practice of prescribing biotherapeutic remedies such as nosodes, sarcodes (healthy bodily secretions), allergodes (eg grasses, flowers etc) and tautodes (eg chemical substances) on the principle that “same treats same” (Jouanny 1991).

Nosodes: Nosodes are isopathic medicines that treats disease with the “same” substance and can be derived from diseased tissues, organs, disease products or causative agents such as bacteria, viruses, ova or parasites (Nayak and Varanasi 2020). Some nosodes, including bowel nosodes, have undergone homoeopathic "provings" and possess documented effects that are recorded in Materia Medicas. Homoeopathically prepared nosodes is what is referred to when the term “nosodes” are used in this study.

Bowel nosodes: Homoeopathically potentised remedies made from cultures of non-lactose fermenting bacilli (Sharma, Ambwani and Saraswat 2021: 11-15).

Simillimum: The homoeopathic remedy that best suits the patient’s totality of symptoms and is capable of eliciting the most curative effect on the patient (Jayasuriya 2005).

Constitutional remedy: A remedy tailored to the patient's individual characteristics, including their chronic symptoms, family history, personality, physical build, behaviour, lifestyle, and habits (Jayasuriya 2005).

Simplex remedies: The single remedy that most closely matches all of the patient's symptoms and would have the most significant therapeutic value, according to the Law of Similars (Jayasuriya 2005).

Complex remedies: A mixture of two or more homeopathic medicines, made from different sources and combined into a single dose (Swayne 2000). These remedies have not been proved together, as simplex homoeopathic remedies, but are used conjunctively with the generalised assumption that it would act similarly to the original provings of the individual remedies present in the complex.

Intercurrent remedy: A homoeopathic remedy prescribed to address the acute symptoms of patients on long-term treatment for a chronic condition. It is usually given between doses of other remedies (Boericke 2010).

Biopuncture: A technique that involves subcutaneous injections of a homoeopathic complex into specific trigger points, acupuncture points, or areas of the body to stimulate drainage and healing, or to alleviate pain (Kersschot 2004:14).

Organotherapy: Homoeopathic remedies made from healthy animal or human tissues and used to treat corresponding diseases of that organ or tissue (Levy 2015).

Gemmotherapy: A branch of homoeopathy that uses remedies made from the embryonic tissues of plants, such as buds and shoots, and is commonly used to drain and support certain tissues (Levy 2015).

Prebiotics: A substrate that undergoes selective fermentation by gut microbes, resulting in targeted modifications to the gut microbiota's composition and function, ultimately promoting host health and well-being (Prasanth *et al.* 2020).

Probiotics: A formulation or product containing a specific amount of viable, well-defined microorganisms designed to alter the host's existing microbial community through implantation or colonization within the gut, ultimately leading to positive health effects (Clauss *et al.* 2021).

ABBREVIATIONS

ADHD: Attention Deficit Hyperactivity Disorder

AHPCSA: Allied Health Professions Council of South Africa

DUT: Durban University of Technology

ESR: Erythrocyte Sedimentation Rate

FODMAP: Fermentable Oligosaccharides, Disaccharides, Monosaccharides and Polyols

GALT: Gut-Associated Lymphatic Tissue

GFD: Gluten Free Diet

GI MAP testing: Gastrointestinal Microbial Assay Plus Testing

HMP: Human Microbiome Project

HSA: Homoeopathic Association of South Africa

IBS: Irritable Bowel Syndrome

IBD: Inflammatory Bowel Disease

IgG: Immunoglobulin G

MSG: Monosodium glutamate

SIBO: Small Intestinal Bacterial Overgrowth

UJ: University of Johannesburg

UTI: Urinary Tract Infection

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CHAPTER 1

INTRODUCTION

1.1. INTRODUCTION

Over 2,000 years ago, Hippocrates, the father of modern medicine, stated, "All diseases begin in the gut" (Lyon 2018: e20). Today, we are only beginning to fully understand this wisdom. Recent scientific investigations have revealed compelling links between the gut and various systemic diseases (Huidrom and Beg 2020: 66-71). Concepts such as the gut-brain axis (Anand, Gorantla and Chidambaram 2022: 54) that regulates psychological well-being and leaky gut syndrome that causes systemic inflammation (Shen and Wong 2016: e72) and many chronic diseases are shedding more light on the ever-important role of the gut. Many healthcare practitioners and medical studies have highlighted the significant correlation between an imbalanced gut microbiome, known as gut dysbiosis, and various chronic diseases (Huidrom and Beg 2020: 66-71). Some individuals have experienced unexpected relief from unrelated conditions once their gut dysbiosis has been addressed through interventions such as probiotics (Live microbes introduced to improve gut health), prebiotics (food for gut microbiota), or dietary and lifestyle changes (Sánchez 2017: 1600240).

Due to increased research on the gut, public awareness of the importance of maintaining a healthy gut microbiome has grown exponentially. Terms like ‘good gut bacteria’, ‘probiotics’, and ‘prebiotics;’ have become popular in the public domain, and this has led many patients to take their gut health into their own hands instead of bringing it to the attention of their primary practitioner. Despite extensive research, the precise role of the gut microbiome remains shrouded in mystery, and patients often fall prey to marketing schemes and homemade “remedies”. The question arises whether homoeopaths and other health care practitioners are considering the gut health of every patient who walks through their door. Is the knowledge of the critical role of the gut microbiome finding a place in the healthcare practices of South Africa?

Homoeopaths are known for their holistic approach to patient care as they view individuals as a whole and strive to establish logical connections through comprehensive case-taking (Adi, Adi and Reddy 2019: 1-5). However, it remains to be determined whether homoeopaths effectively incorporate their understanding of the gut's role in health and disease to their advantage. While homoeopaths may inquire about their patients' bowel movements and abdominal health, do they contemplate the active role played by the gut microbiome in their patients' diseased states? Do they consider treating the gut microbiome, or does focusing on it fail to bring much result in their practice?

These questions have led this research to explore the homoeopathic perspective on gut dysbiosis, particularly when a well-indicated remedy fails to yield the desired effect. Additionally, this study seeks to identify potential homoeopathic treatment strategies for gut dysbiosis. By addressing these aspects, it is hoped that this research will deepen our understanding of homoeopathic approaches to gut dysbiosis and improve overall patient care.

1.2. RESEARCH PROBLEM

Multiple recent studies regarding the gut microbiome's role in health and disease, have linked gut dysbiosis with illnesses of not only the digestive system, but also the immune system, nervous system, and metabolism. Diseases like Irritable Bowel Syndrome (IBS), depression, anxiety, Attention Deficit and Hyperactivity Disorder (ADHD), Alzheimer's disease, autoimmune diseases, type 2 diabetes, hypertension, cancer, and exacerbated Covid-19 symptoms have all been linked with gut dysbiosis (Qin *et al*. 2022: 433-447; Guo *et al.* 2021: 299-310; Wang, Peng and Du 2021: 609-626; Vignesh *et al.* 2021: 5; Verma *et al.* 2020: 405-419).

Homoeopathy, being a holistic medicine, considers all symptoms experienced by the patient , including the gastrointestinal health of patients who complain of unrelated chronic conditions (Adi, Adi and Reddy 2019: 1-5). Homoeopathy also regularly considers obstacles to cure, which is anything that prevents the patient from improving on the best-indicated remedy. With the knowledge of homoeopathy as a holistic medicine and increasing studies relating gut dysbiosis with chronic diseases

(Huidrom and Beg 2020: 66-71), it can be assumed that homoeopaths regularly consider the microbiome of the gut when treating patients and when facing obstacles to cure. However, there has been little to no research on the homoeopathic approach to gut dysbiosis and its ability to act as an obstacle to cure. There is also minimal direction in the homoeopathic treatment of gut dysbiosis. This qualitative research aimed to determine the clinical significance of gut dysbiosis as an obstacle to cure and to investigate homoeopathic treatment protocols relating to an imbalanced gut microbiome.

1.3. RESEARCH QUESTIONS

This study was guided by the following research questions:

- What are the experiences of homoeopaths with gut dysbiosis?
- How do homoeopaths perceive gut dysbiosis as an obstacle to cure?
- Do homoeopaths consider gut dysbiosis a factor when initial treatment fails?
- What treatment protocols do homoeopaths employ for patients with gut dysbiosis?
- What adjunctive approaches do homoeopaths recommend for patients with gut dysbiosis?

1.4. AIM

This study aimed to explore the South African homoeopathic perception of an imbalanced gut microbiome as a clinically significant obstacle to cure and to determine what homoeopathic treatment protocol exists for patients with gut dysbiosis.

1.5. SIGNIFICANCE OF THIS STUDY

There has been little research on the perception of the gut microbiome and how to approach it in homoeopathic practice. Whether homoeopaths know the critical role of

gut dysbiosis in disease and whether they consider it in approaching unrelated chronic complaints is still to be understood. Homoeopaths have a wide range of tools available in their treatment of the microbiome, such as bowel nosodes, organotherapy, gemmotherapy, biopuncture, and adjunctive treatments such as probiotics, prebiotics, supplementation, and western herbal medicines (Suchiang *et al.* 2021: 119-122) The preferred tools and approaches to treating gut dysbiosis remain unknown. This study, however, aimed to explore the tools and approaches to gut dysbiosis that a small sample of South African homoeopaths commonly use within their private practice. The results of this research will indicate whether the participating homoeopaths practice according to homoeopathic philosophy concerning the human microbiome. This study will provide some much-needed insight into whether a small portion of South African homoeopaths view gut dysbiosis as something that prevents cure, which will directly affect the treatment of their patients. Noting gaps in the homoeopathic perception of gut dysbiosis could encourage improving overall homoeopathic care. It will also provide a common treatment regimen followed by the participating homoeopaths, when approaching gut dysbiosis, which could aid others in the profession in successfully treating their suffering patients.

1.6. OUTLINE OF THE DISSERTATION

Chapter 1: In this chapter, the background, research problem, aim, objectives, and significance of the study are presented.

Chapter 2: A comprehensive literature review on the topic will be thoroughly discussed in the second chapter.

Chapter 3: This chapter will explain the methodologies used during this study, including the population, sampling process, data collection process, and data analysis. The trustworthiness of the study and ethical considerations will also be discussed.

Chapter 4: The results of the research will be depicted in this chapter.

Chapter 5: This chapter will analyse and discuss the results that were gathered.

Chapter 6: The last chapter will draw conclusions from this study and will recommend future studies.

CHAPTER 2

LITERATURE REVIEW

2.1. INTRODUCTION TO GUT DYSBIOSIS

Before the completion of the Human Genome Project (HGP) in 2003, scientists predicted that the human genome consist of 100 000 genes (Turnbaugh *et al.* 2007: 804-810). This project, however, disappointingly indicated that the human body only consists of 20 000 genes. The question of, “What constitutes a human?” soon led to the consideration of the human microbiome. The microorganisms that inhabit the human body outnumber human cells ten to one. If these microorganisms were considered integral to human physiology, 100 000 genes responsible for human existence would be a significant underestimate. Researchers started considering the human body’s metabolic functions as a combination of microbial and human cell activities. Only after the realisation of the human ‘supra-organism’, a symbiosis of human cells and microorganisms, did the National Institute of Health launch the Human Microbiome Project (HMP) in 2007. This project was tasked to study the human microbiota of the mouth, vagina, and skin, but primarily focused their study on the gut microbiome. The human gut is home to 100 trillion microorganisms, which consist of bacteria, bacteriophages, viruses, protozoa, and fungi (Huidrom and Beg 2020: 66-71). The composition of microorganisms that inhabit the gut is relatively similar among healthy people over time, yet each person’s microbiome is as unique as their fingerprints (Anand, Gorantla and Chidambaram 2022: 54). The microbiome is constantly fluctuating and can differ greatly among individuals. The gut’s microbiota help digest food, synthesise vitamins and regulate the immune system – functions that the body cannot execute independently (Glowacki and Martens 2020: 1-5). Since the global curiosity into the microbiome, the HMP and multiple other studies have started understanding the gut’s silent yet substantial role in health and disease. Despite the knowledge provided by the HMP and Anand, Gorantla and Chidambaram (2022: 54), the South African population’s gut microbiome composition has not received much scientific interest. After many years of research, the gut is now being referred to as the ‘second brain’. This is because the important communication between the gut and the brain via the gut-brain axis is only now

being understood (Anand, Gorantla and Chidambaram 2022: 54). Without a healthy gut, the brain cannot be healthy, nor can the immune system or metabolism or many other systems within the body. Recent findings about the gut microbiome all point to its vital role in homoeostasis and the proper functioning of the human body (Anand, Gorantla and Chidambaram 2022: 54). Although the important connection between the gut and many other body systems have been made, the presentation of this connection in practice has not been explored. Do practitioners see the effect of the gut's role in health and disease? Research such as Anand, Gorantla and Chidambaram (2022: 54), highlights the gut's role in health and disease but it fails to find whether healthcare practitioners give it the consideration it is due. Homoeopathy, being a holistic form of medicine, should view the gut highly and consider it in every patient's case (De Schepper 2001: 266-285). This study aimed to investigate the practice of considering the gut microbiome in homoeopathic consultation rooms.

2.2. GUT DYSBIOSIS AND CHRONIC DISEASE

Gut dysbiosis can be defined as an imbalance in the microbiome of the gut that may present with increased growth of pathological bacteria, fungi, yeasts or parasites. An overgrowth or undergrowth of microbiota and poor microbial diversity may also be considered as gut dysbiosis (Gamble 2019: 128-134). When the gut microbiome is imbalanced, termed 'gut dysbiosis', diseases may follow. Since this global endeavour to understand the microbiome of the gut, many studies have linked gut dysbiosis with not only gastrointestinal diseases such as inflammatory bowel disease (IBD), irritable bowel syndrome (IBS), and celiac disease but also to diseases of the immune system, nervous system, and metabolism (Khan *et al.* 2019: 126; Ooi, Correa and Pak 2019: 73-80). Some studies have explored the link between gut dysbiosis and many other diseases outside of the digestive system like allergies, asthma, cardiovascular diseases, obesity, and many other chronic diseases (Ahmad *et al.* 2019: 1-11; Carding *et al.* 2015: 1651). A study by Falony *et al.* (2016: 560-564) found that gut dysbiosis is present in about 70% of chronic diseases in Belgium and the Netherlands. Little research has been done to connect the prevalence of gut dysbiosis and its connection with chronic diseases within South

Africa. However, a study by Pheeha *et al.* (2023: 2) found that Africa is one of the regions with the highest incidence of HIV, TB, hypertension, type 2 diabetes mellitus, and obesity. The study suggests that given the gut microbiome's critical role in immunity, the health of the gut microbiome will significantly affect the prognosis of TB and HIV, and may even provide early protection against Mycobacterium tuberculosis infection. The study speculated that the surge in the number of metabolic conditions in Africa, such as type 2 diabetes mellitus and obesity, is due to the adoption of Western diets and decreased levels of physical activity. Pheeha *et al*. (2023: 2) explain that although little research on the prevalence of gut dysbiosis has been conducted in South Africa, the high prevalence of HIV, TB, hypertension, diabetes, and obesity could be indicative of a high prevalence of gut dysbiosis. There is also very little research that has explored the differences in the gut microbial composition and prevalence of disease between different ethnicities within the culturally diverse South Africa (Miya *et al.* 2022: 4086). Studies done in America, however, can provide some insight to these differences. Hester *et al.* (2015: 2759-2769) found that healthy Non-Hispanic Blacks present with lower levels of butyrate, acetate, and total Short Chain Fatty Acid (SCFA) content than Non-Hispanic Whites, Hispanics and American Indians. Non-Hispanic Blacks also presented with lower levels of *Lachnospiraceae* and a higher ratio of *Firmicutes* compared to *Bacteroides*, which makes them more susceptible to obesity and various cancers. Another study, Farhana *et al.* (2018: 47-58) reported higher levels of *Bacteroides*, such as *Enterobacter* and *Fusobacterium nucleatuma*, in African Americans than Non-Hispanic Whites. Non-Hispanic Whites, however, presented with a decreased microbial diversity. Carson *et al.* (2018: 640-648), on the other hand, studied the link between psychological stress and the gut microbiome in a healthy sample of Black and White women and found more *Bacteroides* in African Americans than Non-Hispanic Whites. Yazici *et al.* (2017: 1983-1994) conducted colonic biopsies on the healthy intestinal mucosa of colorectal cancer patients and found a greater sulfidogenic abundance in Non-Hispanic Blacks than -Whites. *Pyramidobacter* and *Bilophilia wadsworthia species* were also higher in African Americans than other healthy controls. The differences found in the studies above could be due to different factors such as genetics and the diet commonly followed, but this was not explored in the mentioned studies. These findings show that there is a definite difference

between the healthy gut microbiome of different ethnicities. These differences could also shed light why certain ethnicities are more susceptible to certain diseases, but more research is needed within the South African context. The mechanisms of exactly how the gut plays a role in all of these diseases are still being studied. O'Hara and Shanahan (2006: 915-931) implies that the microbial layer in the gut forms a natural defence barrier that has protective, structural, and metabolic effects on the gut epithelium. Studies that looked at mice with and without any microbiota in their gut found that mice without a gut microbiome have a lowered immune system and are more susceptible to infection. Mice without any gut microbiota presented with a poorer blood supply to their gut, less digestive enzyme activity, and a thinner gut muscle wall (Shanahan 2002: 915-931). It was also found that the reintroduction of a single bacterial species into the gut of these mice would radically improve the nutrient uptake, metabolism, blood vessel production, the protective mucosal barrier, and the gut's nervous system (Xu and Gordon 2003: 10452-10459; Umesaki *et al.* 1995: 555-562). This suggests the important and indispensable role of microflora for the healthy functioning of the gut. Verma *et al.* (2020: 405-419) explained that gut microbes play an essential role in mental health through neural, neuro-endocrine and metabolic pathways commonly termed the gut-brain axis. Changes in the gut-brain axis could trigger IBS symptoms including abdominal pain, bloating, and changes in bowel movements. According to Rajilic-Stojanovic *et al*. (2015: 278), IBS is a common risk factor following acute gastroenteritis and the use of antibiotics. This points to the significant relationship between IBS and gut dysbiosis, shedding light on the possible need for microbiome-focused treatment to alleviate IBS-related symptoms. A change in gut microbial composition can also initiate and contribute to chronic inflammation and a dysregulated immune system (Shen and Wong 2016: e72), which may lead to inflamed bowels such as in the case of Crohn's disease and Ulcerative colitis (Gevers *et al.* 2014: 382-392; Shanahan 2002: 915-931). Gut microbiota and their metabolites could also impact the development and function of the immune system and its T-cell responses. This may be important in preventing infections and avoiding abnormal immune responses such as autoimmune conditions or systemic inflammation. It was also proposed that the metabolic activity of the gut microbiome also has an important role in cell differentiation and proliferation, which could lead to the development of cancer if diseased (Madhogaria,

Bhowmik and Kundu 2022: 180-189). Backhed *et al.* (2004: 15718-15723) suggests that gut dysbiosis requires a higher caloric intake, which may make it a culprit in obesity and fat deposition. The above studies do highlight the mechanisms in which the gut microbiome protects and serves the body, but it does not explore the practical implications of this in diseases and treatment.

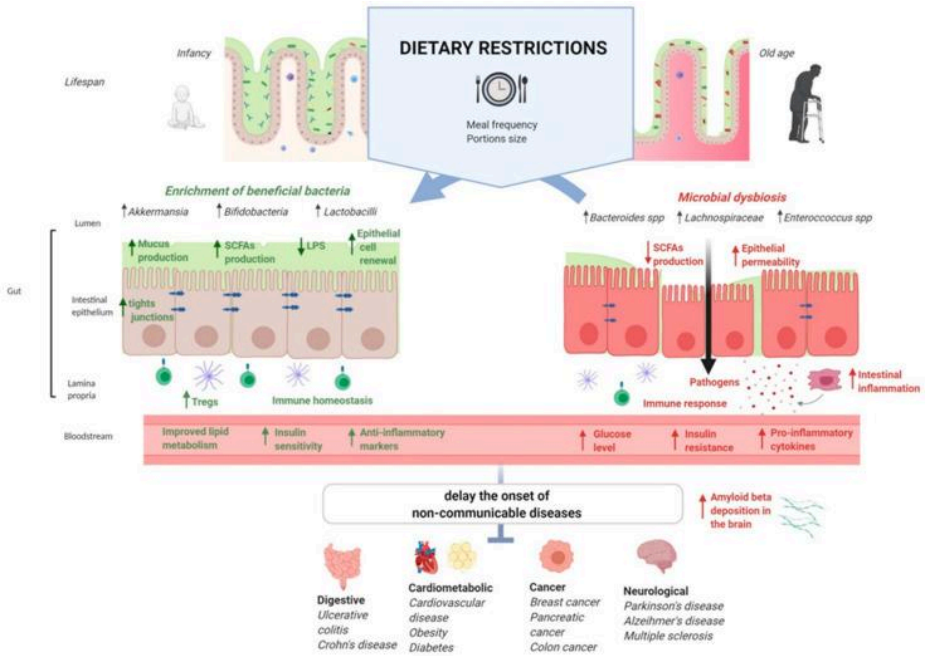

Figure 1: The possible role of gut microbiota in the interplay between dietary restrictions, gut barrier functions, health benefits, and non-communicable diseases (Rinninella *et al.* 2020:15).

Whether gut dysbiosis is the cause or the effect of chronic diseases is still debatable (Shen and Wong 2016: e72). However, studies such as Shanahan (2002: 915-931) have suggested that re-establishing the gut microbiome may significantly reduce symptoms experienced in chronic diseases. If this is the case, it is vital that physicians, including homoeopaths, understand dysbiosis as an exacerbating factor to disease and that they aim to treat it to alleviate symptoms produced by chronic disease.

2.3. CLINICAL PRESENTATION OF GUT DYSBIOSIS

As introduced before, gut dysbiosis is a complex condition that may present with a wide range of symptoms that extend beyond just gastrointestinal problems. The complexity of the gut microbiome's role in health and disease could make the clinical presentation of gut dysbiosis challenging for healthcare practitioners. Because of its confusing and discreet clinical presentation, symptoms of gut dysbiosis may easily be overlooked and attributed to other causes. Gastrointestinal symptoms of gut dysbiosis could include bloating, abdominal discomfort, diarrhoea, constipation, and increased flatulence (Lynch and Pedersen 2016: 2369-2379). These symptoms have been linked to altered gut motility, fermentation, and digestion processes caused by gut dysbiosis (Lynch and Pedersen 2016: 2369-2379). Some healthcare practitioners may only look for the gastrointestinal symptoms of gut dysbiosis and miss the systemic symptoms that gut dysbiosis is believed to produce.

Gut dysbiosis may commonly lead to the following systemic symptoms:

- Metabolic disorders: An altered gut microbiome has been shown to promote inflammation, influence insulin sensitivity, and affect energy extraction from the diet, and potentially lead to metabolic disorders such as obesity and type 2 diabetes (Tilg and Moschen 2014: 1513-1521).

- Food intolerances and sensitivities: It has been indicated that the gut microbiome plays a crucial role in digesting and absorbing nutrients that the human body cannot process independently (Glowacki and Martens 2020: 1-5). Dysbiosis could, therefore, lead to food intolerances and sensitivities when the microbiome becomes incapable of digesting and absorbing certain foods, as seen in lactose intolerance due to reduced lactase production (Deng *et al.* 2015: 8020-8035) and gluten sensitivity (Nobel *et al.* 2021: e00441; Bonder *et al.* 2016: 45).

- Lowered immunity and autoimmune diseases: Gut dysbiosis has been shown to make one more susceptible to infections, trigger an abnormal immune response and contribute to a loss of self-tolerance, which may lead to autoimmune diseases such as rheumatoid arthritis and systemic lupus erythematosus (Vaahtovuo *et al.* 2008: 1500-1505).

- Mental health disorders: The gut-brain axis could possibly be responsible for the bidirectional communication between the gut and the brain (Anand, Gorantla and Chidambaram 2022: 54). The communication may be disrupted in gut dysbiosis as an unhealthy gut microbiome has been associated with mental health disorders such as depression, anxiety, autism spectrum disorder, and Alzheimer's disease (Foster and McVey Neufeld 2013: 305-312).

- Skin conditions: Skin diseases have been implied to have a strong link with gut dysbiosis through the gut-skin axis and systemic inflammation. Gut dysbiosis has been shown to exacerbate skin conditions such as eczema, acne and psoriasis (Bowe and Logan 2011: 1-11).

- Respiratory conditions: The gut-lung axis is another complex communication system that could bridge the gap between the gut microbiota and the lungs and could explain the correlation between gut dysbiosis and multiple respiratory diseases (Enaud *et al.* 2020: 1-7).

Although gut dysbiosis has been correlated with the above health issues, the severity of these symptoms may vary among individuals. Some may only experience mild symptoms, while others could have severe symptoms that may significantly impact their quality of life. Given the complexity of gut dysbiosis, its wide range of symptoms, and its role in systemic functions such as inflammation (Shi 2019: 2287), may prove it necessary to consider the gut microbiome in all cases of disease. A holistic approach to treatment that addresses the underlying causes of gut dysbiosis is likely to be most effective.

2.4. PREVALENCE OF GUT DYSBIOSIS

The prevalence of gut dysbiosis has not been studied in South Africa or worldwide, leaving no evidence as to how often healthcare practitioners need to address gut dysbiosis as a factor to their treatment approach within practice.

However, the ever-growing list of diseases that have been associated with gut dysbiosis makes it evident that the prevalence of an imbalanced gut microbiome may

be much higher than initially believed (Falony *et al.* 2016: 560-564). Building on the observation by Pheeha *et al.* (2023: 2), the high prevalence of diseases associated with gut dysbiosis, such as HIV, TB, hypertension, diabetes, and obesity, in Africa suggests a potential high prevalence of gut dysbiosis itself within the African population. While Europe and North America have the highest diagnosed rates of IBD (Ng *et al.* 2017: 2769-2778), potentially reflecting underlying gut dysbiosis, the rising incidence in newly industrialized countries like Brazil and Taiwan suggests South Africa, on a similar industrialization path, could face a future or even current burden of both IBD and gut dysbiosis. Gaps in the knowledge of what a healthy South African gut microbiome looks like, however, could make it difficult to diagnose dysbiosis in practice and determine how common it is in the general population (Allali *et al.* 2021: 1-48).

2.5. CAUSES OF GUT DYSBIOSIS

The delicate ecosystem of the gut microbiome has been shown to influence a variety of factors that most of the modern population encounters on a daily basis. Turnbaugh *et al.* (2007: 804-810) suggests that the microbiome's diversity can be divided into the core microbiome and the variable microbiome. The core microbiome is expected to be similar in most humans, but the microbiota that inhabits each part of the intestines is still being investigated. The variable microbiome may be influenced by the host's genetics, physiology, environment, immune system, disease status, lifestyle, and short-lived microorganisms. This makes the individual's microbiome incredibly unique. It could also explain why specific populations are prone to certain diseases and how the gut microbiome can play a role in the development of these diseases (Turnbaugh *et al.* 2007: 804-810). Although everyone's microbiome is as unique as their fingerprints, a normal and healthy microbiome could possibly be identified by its diversity, richness, and the microbiota's resistance to change (Tuddenham and Sears 2015: 464-470). While Turnbaugh *et al.* (2007: 804-810) and Tuddenham and Sears (2015: 464-470) offer valuable insights into the core and variable human microbiome and characteristics of a healthy gut, they don't address the specific composition of the South African gut microbiome, including the key species, their ratios, and how these unique features develop.

2.5.1. Diet

The famous proverb “Let food be thy medicine, and medicine be thy food” could provide insight into the role that diet plays, not only in health but also in the microbiome of the gut. David *et al.* (2014: 559–563) revealed the gut microbiome's remarkable responsiveness to dietary shifts, demonstrating that even short-term changes in food intake can rapidly influence its composition. David *et al.* (2014: 559–563) also found that plant-based diets increased the beneficial microorganisms, such as *Roseburia intestinalis, Eubacterium rectale*, and *Ruminococcus bromii.* Animal-based diets, on the other hand, promoted the abundance of harmful microorganisms such as *Alistipes, Bilophila*, and *Bacteroides species*. David *et al.* (2014: 559–563), favour plant-based diets for gut microbiome health, but it also highlighted that those who incorporated both plant and animal foods in their diet showed a readily changing microbiome. Although David *et al.* (2014: 559–563), shared insights on plant- and animal-based diets, their study did not explore the specific role of dietary fiber in influencing the gut microbiome. A study by De Fillippo *et al.* (2010: 14691–14696), however, of the microbial differences between children living in Burkina and children living in Florence discovered that a diet high in fibre, carbohydrates and non-animal protein had greater microbial richness, a greater abundance of the beneficial *Prevotella* bacteria and less harmful *Bacteroides*. The children in Burkina also showed a greater capability of digesting fibre, starch, oligosaccharides and carbohydrates than the children in Italy, whose diets were high in sugar, starch, animal protein, animal fat, and low in fibre (De Filippo *et al.* 2010: 14691–14696). Similar results were found when comparing the microbiome of children in Bangladesh to children in the United States (Lin *et al.* 2018: 1-15). While De Filippo *et al.* (2010: 14691–14696) and Lin *et al.* (2018: 1-15) suggest a link between plant-based, high-fiber, and high-carbohydrate diets and a healthier gut microbiome, their research doesn't address the specific effects of the South African diet on its gut microbiota. Oduaran *et al.* (2020: 1-14) suggested that the South African diet has moved away from the traditional hunter-gatherer, pre-agricultural diet as more areas are urbanizing and following a Westernised diet. The Western diet of processed, energy-dense foods such as fast food items, sugary drinks and packaged

snacks has been shown to have a pronounced outcome on gut bacteria (Shi 2019: 2287). The consumption of processed foods with their acellular nutrients, food additives and pathogen-associated molecular patterns has been shown to initiate an immune response and inflammation within the gut (Shi 2019: 2287). A study done among the Spanish population by Cuevas-Sierra *et al.* (2021: 2710), suggests that the consumption of more than five servings of processed foods could lead to an altered microbiome of increased harmful and decreased beneficial microbiota in the gut. Shi (2019: 2287) and Cuevas-Sierra *et al.* (2021: 2710) convincingly demonstrate the detrimental effects of a Western diet rich in processed foods on gut health. However, their focus doesn't extend to exploring the specific impact of preservatives, a common concern in modern food consumption. The preservatives included in food may also affect the microbiota's health and functioning. A recent study by Cao *et al.* (2020: 295-310) found that preservatives directly alter the diversity of the gut microbiome. They found benzoic acid was beneficial to the microbiome, increasing certain *Bacteroides*, *Blautia, Ruminococcus, Oscillospira* and *Dorea* species. Potassium sorbate and Sodium nitrate, on the other hand, decreased the diversity of microbiota and increased harmful species such as *Parabacteroides, Adlercreutzia, Firmicutes, Turicibacter,* and *Alkaliphilus.* While Cao *et al.* (2020: 295-310) shed light on the effects of individual preservatives on the gut microbiome, their research doesn't delve into the most commonly used preservatives in our food supply.

2.5.2. A Sedentary lifestyle

Monda *et al.* (2017:1-5) suggests that the commonly followed sedentary lifestyle slows bowel mobility and increases the contact time between the stool and the gut lining. If the stool remains in the bowels for a prolonged period, it could make the gut vulnerable to possible pathogens and gut dysbiosis (Monda *et al*. 2017: 1-5). Monda *et al.* (2017: 1-5) propose regular low-to-medium intensity exercise as a potential strategy to influence the gut microbiome. However, their study doesn't explore the underlying mechanisms by which exercise, or conversely, a lack of exercise, impacts the gut microbial composition.

2.5.3. Stress

Humans are exposed to stress daily, which significantly affects the gut microbiota and our overall well-being. Hantsoo and Zemel (2021: 113474) suggests that stress can impact not only the gut microbiota of stress-induced rodents but also the gut microbiome of humans. They've also shown stress to bring adverse short- and long-term changes to the gut microbiome. While Hantsoo and Zemel (2021: 113474) highlight the potential link between stress and gut dysbiosis, they don't pinpoint the exact mechanisms at play. However, their research suggests generalized inflammation as a possible culprit.

2.5.4. Genetics

Singhvi *et al.* (2020: 26-36) observed similarities in the gut microbiome of relatives, suggesting a potential influence of genetics on gut microbial composition. Supporting this notion, Goodrich *et al.* (2014: 789-799) demonstrated that twins share more similar gut microbiomes compared to non-twins, further suggesting a genetic influence. They also found that the newly discovered *Christensenellaceae* bacteria family is highly hereditary (Goodrich *et al.* 2014: 789-799). These findings imply that the gut's microbial composition is not only affected by different lifestyle factors but strongly influenced by an individual's genes.

2.5.5. Age

Age has been noted as a factor contributing to the gut microbiome's composition. An infant's gut microbiome is largely influenced by their mode of delivery and feeding method. Caesarean sections have increased in prevalence worldwide and have become one of the biggest causes of gut dysbiosis in infants (Naidoo and Moodley 2009: 254-258). However, breastfeeding as the primary feeding source is found to still be the best method to increase microbial diversity (Hoang, Levy and Vandenplas 2020: 60-67). An infant's microbiome comprises bacteria that specialise in the

digestion of milk. As solid foods are introduced, and the child reaches the age of 3 years, the microbiome changes to look similar to that of the adult. The elderly individual's microbiome has been proven to have a relative proportion of different bacterial species, but it tends to present as pro-inflammatory. This pro-inflammatory gut is noted by their decreased vitamin B12 synthesis, increased DNA damage, stress response and weakened immunity and could explain the elderly's tendency to multiple chronic diseases (Tuddenham and Sears 2015: 464-470).

2.5.6. Antibiotics

With the increasingly common prescription of antibiotics in today's age, it is possible that almost every healthy adult has been on antibiotic treatment at least once during their lifetime (Ramirez *et al.* 2020: 1-8). Patangia *et al.* (2022: 1-12) found that the gut microbiota is responsible for the host's metabolism and immune functions, including cell signaling, immune development, and colonization resistance. They also found that frequent antibiotic use can cause many disturbances and therefore advocate for the careful use of antibiotics and the need to find alternative treatments. Similarly, Ramirez *et al.* (2020: 1-8) found that antibiotic use can have multiple negative effects on the delicate balance of gut microbes. They identified that antibiotics reduce diversity, alter metabolic activity, and cultivate antibiotic-resistant organisms. Additionally, they found that early childhood exposure to antibiotics can lead to various gastrointestinal, immunological, and neurocognitive conditions. Both Patangia *et al.* (2022: 1-12) and Ramirez *et al.* (2020: 1-8) emphasize the changes antibiotics elicit in the gut microbiome, but they do not address the duration of these negative effects. Jernberg *et al.* (2010: 3216-3223) demonstrated that antibiotic administration can decrease gut microbiome richness and diversity within 3-4 days. While these changes are short-term, Jernberg *et al.* (2010) found that even short courses of antibiotics can have more prolonged effects, potentially leading to an altered microbiome for up to 18 months. A greater focus on properly restoring the gut microbiome after antibiotic use may be necessary to prevent gut dysbiosis from potentially leading to chronic diseases.

In conclusion, the delicate ecosystem of the gut microbiome may be influenced by diet, a sedentary lifestyle, stress, genetics, age, and antibiotics. The above studies show the possible need to consider all of the above causes in the perception and management of gut dysbiosis and chronic diseases.

2.6. DIAGNOSTIC TOOLS FOR GUT DYSBIOSIS

There are a variety of methods for assessing gut microbial composition, including breath testing, next-generation sequencing (NGS) and quantitative polymerase chain reaction (qPCR) testing (Casen *et al.* 2015: 71-83). Breath testing methods involve measuring the concentration of gases produced by gut bacteria during fermentation processes in order to identify the bacteria present. NGS relies on the genetic material of stool samples without the need for microbial culturing. NGS may provide valuable insights into a wide range of microbiota, providing a more comprehensive analysis. NGS may use one of two methods to analyse stool samples: 16S rRNA gene sequencing and whole metagenomics sequencing. 16S rRNA gene sequencing targets a specific gene, whereas whole metagenomics sequencing finds the entire genetic sequence of the tested microbiota. Although the use of 16S rRNA testing is commonly used in research, the use of it in South African practices is still unknown. qPCR testing is another diagnostic tool available. This test targets specific microbial groups or genes associated with certain pathologies in a stool sample (Platts-Mills, Liu and Houpt 2013: 876-885). qPCR amplifies the DNA of targeted microbiota and measures the fluorescence emitted by specific probes or dyes. The Gastrointestinal Microbial Assay Plus (GI MAP) test is a qPCR test designed to easily be incorporated into private practice (Frey 2019: 6). By identifying multiple targeted microbiota, the GI MAP test may add considerable value to the treatment of gut dysbiosis. Despite research by Casen *et al.* (2015: 71-83) and Platts-Mills, Liu and Houpt (2013: 876-885), the use of breath testing, NGS, and qPCR to understand the gut microbiome's role in disease and the clinical implementation of these diagnostic tools remains unknown. Different blood tests may also be used to identify gut dysbiosis. Calprotectin and Immunoglobulin G (IgG) levels may indicate inflammation in the bowels (Konikoff and Denson 2006: 524-534)(Lin *et al.* 2018: 1-15), whereas melatonin can assess gut mobility, inflammation, and pain (Chen *et al.* 2011:

3888-3898). Another diagnostic tool that may be used by some allied health professionals that is not specific to gut dysbiosis is kinesiology. Although there is little research on kinesiology, some practitioners may use it as a valuable tool in their practice (Auer 2022). Kinesiology is based on the Traditional Chinese Medicine philosophy that each muscle relates to a different organ (Auer 2022). Kinesiologists or other allied health professionals would test a patient's muscles to identify where possible imbalances lie within the body. Through this testing, a possible gut issue and the treatment needed to restore the detected imbalances may be identified (Auer 2022). While the studies above explore the effectiveness of various techniques like NGS, qPCR, breath tests, and blood tests in assessing the gut microbiome, they don't delve into the practical considerations of implementing these methods in clinical settings. Gut dysbiosis is a dynamic condition that could change over time, therefore, regular assessments of the gut microbiome may be needed to track microbial changes and to adjust treatment if necessary, but this has not been explored in previous studies.

While the potential for barriers in healthcare practitioners' and homeopaths' use of gut dysbiosis diagnostic tools exists, this area has yet to be thoroughly investigated. Barriers may include a lack of awareness and knowledge about gut dysbiosis testing and the limited availability and appropriate clinical guidelines for these tests in South Africa. Some healthcare practitioners and homoeopaths may not be aware of the implications of gut dysbiosis or the different diagnostic tools available. South Africa may have limited availability to laboratories that offer effective gut dysbiosis testing, and the cost of these tests may discourage the use of these tools. A possible lack of consensus on what constitutes a healthy South African gut microbiome may make it difficult for physicians to interpret the results of gut dysbiosis tests. Further research is needed to understand South African homoeopaths' perception, experience and implementation of gut microbial diagnostic tools.

De Schepper (2001: 266-285), a well known modern homoeopath, does provide some of his views regarding the use of diagnostic tools for the diagnosis and management of gut dysbiosis. He believes that the bacterial content of the gut microbiome changes too quickly for stool cultures to provide accurate results. Additionally, he argues that testing for gut dysbiosis is unnecessary because most

homoeopathic remedies already have a symptom picture that does not rely on diagnostic testing. Instead, De Schepper (2001: 266-285) suggests that remedies should be prescribed based on visible symptoms rather than testing. The effectiveness of the remedy can be evaluated by observing improvements in symptoms. The practising South African homoeopath's view on De Schepper's (2001: 266-285) comments and the need for diagnostic tools for gut dysbiosis still needs to be explored.

2.7. GUT DYSBIOSIS AS AN OBSTACLE TO CURE

Samuel Hahnemann, the father of Homoeopathy, discovered with his experimentation certain factors that can prevent a homoeopathic remedy from provoking the desired effect. He termed these factors "Obstacles to cure", which can be anything that prevents the patient from healing even when the most appropriate remedy has been administered. Hahnemann (2017: 54) explained in his Organon of Medicine's aphorism three that "… the physician must know the obstacles to recovery in each case and be aware of how to clear them so that the restoration of health may be permanent." He mentions many possible reasons why a patient may be failing to recover. In his Organon, Hahnemann (2017) listed the following obstacles to cure:

- Certain foods and drinks: coffee, tea, beer, liqueurs, chocolate, colognes, perfumes, strongly scented flowers, tooth powders, cakes, frozen goods, raw medicinal herbs, vegetable dishes with herbs, hop sprouts, all vegetables with medicinal powers, old cheeses, putrid meats, and foods with medicinal side effects.
- Excessive amounts of sugar, salt, and alcohol.
- Heated rooms, wool clothing, a sedentary lifestyle, long afternoon naps, uncleanliness, unnatural voluptuousness, masturbation, incomplete coition, abstinence from coition.
- Anger, grief, vexation, passionate play, mental or bodily overexertion, dwelling in marshy regions or stuffy rooms, and poverty.

From the above list, it seems nearly impossible for homoeopaths to advise patients to avoid all possible obstacles to cure. After his extensive list, Hahnemann cautioned against forbidding too many things that would make the patient's diet and lifestyle unnecessarily difficult (De Schepper 2001: 266-285). Removing obstacles to cure is, therefore, a process of individualisation for each patient (De Schepper 2001: 266-285). The homoeopath may need to discern what in the patient's life, whether food or drinks, the environment or emotions, may be acting as an obstacle to cure and remove the obstacles that can be removed. Homoeopaths may not always be able to remove emotions, poverty, the environment, or even the food their patient consumes, but they may find it helpful to advise the patient accordingly.

De Schepper (2001: 266-285) believes that all homoeopaths should be familiar with obstacles to cure, as it often occurs in chronic cases that seem incurable. In some instances, the obstacle to cure may not lie in the patient's life. De Schepper (2001: 266-285) explains Hahnemann's Organon in his book "Hahnemann Revisited" and mentions the following factors that may act as obstacles to cure:

- Modern times (foods, pollution, vaccinations, x-rays, antibiotics and barbiturates)
- Lifestyle factors, drugs and alcohol
- Excessive use of medications
- Incurable diseases
- When the body is too weak to react to the remedy
- The patient is withholding information
- The patient is giving a confusing or inadequate report
- The patient fails to take the remedy correctly
- Negative influences from other people
- Limited knowledge of the Materia Medica
- Lack of proven remedies
- Mistakes in the homoeopath's prescribing

The practising homoeopath's consideration of De Schepper's (2001: 266-285) list of obstacles to cure and their approach to presenting obstacles remain limited.

An imbalanced gut microbiome was never considered by Hahnemann or the homoeopaths of his time as a possible obstacle to cure. Bach and Wheeler (1925) were some of the first to explore the gut microbiome's involvement in disease through the concept of toxaemia. They believed certain microbiota could have a toxic effect on the body if present for a long time. Their works were years ahead of their time and healthcare professionals are only starting to discover the truths of their discovery in recent years. According to Bach and Wheeler (1925), an imbalanced gut microbiome is not only an obstacle to cure but the causative agent in chronic disease. Hahnemann (2017: 54) states in Aphorism four that the homoeopath is "likewise a sustainer of health if he knows the things that disturb health, that produce and maintain disease, and is aware of how to remove them...". According to aphorism four, gut dysbiosis may be considered as an obstacle to cure since it has the ability to disturb health and possibly produce and maintain disease. Dr Russel Malcom believes that a case with gut dysbiosis is a blocked case (Penrose 2019: 12-18). He is convinced that gut dysbiosis's physiological and immunological disruption makes it impossible for the body to respond to the homoeopathic remedy. However, it remains unclear whether South African homeopaths share this belief, as research on their perspectives regarding gut dysbiosis as an obstacle to cure is currently lacking. De Schepper (2001: 266-285) believes that lifestyle changes and probiotics can bring temporary relief but that only a homoeopathic remedy which specifically addresses gut dysbiosis can bring a longer-lasting cure. Gamble (2008: 128-134) agrees with Dr Russel Malcom (Penrose 2019: 12-18) that gut dysbiosis can act as an obstacle to cure. He examined IBS and how gut dysbiosis could be the possible cause of the patient's symptoms. According to Gamble (2008: 128-134), the patient will continue to be tormented by their IBS symptoms until their gut microbiome is restored. Suchiang *et al.* (2021: 119-122) offer a contrasting view, suggesting that all homeopathic remedies can influence and restore the gut microbiome. This perspective implies that gut dysbiosis might not be a barrier to successful homeopathic treatment. However, Suchiang *et al.* (2021: 119-122) have found that patients with chronic diseases should first make dietary changes to regain a healthy gut microbiome. Although they have found that homoeopathic remedies would act on the gut microbiome, it still indicates that an unhealthy diet could contribute to gut dysbiosis that may act as an obstacle to cure if no dietary changes

are implemented. Despite the exploration of gut dysbiosis' role in chronic disease and homoeopathic literature on gut dysbiosis and obstacles to cure, the perception of gut dysbiosis as a clinically significant obstacle to cure is still unknown. There has been little research in homoeopathy on the importance of the gut microbiome in treating chronic disease.

2.8. HOMOEOPATHIC TREATMENT

Homoeopathy was first founded by Dr Samuel Hahnemann in 1796, during a time when bloodletting, purging and the use of leeches was the best medicine could offer. Homoeopathy aims to treat the patient holistically, considering every physical, mental and emotional symptom as a part of a larger picture that needs to be considered (De Schepper 2001: 266-285). Homoeopaths take time with the patient to find a remedy and treatment approach that is specifically individualised to them. A remedy is selected on the principle of 'Like Cures Like'. This principle, also known as the 'Law of Similars', concludes that a medicinal substance will cure the symptoms it produces in a healthy individual. Homoeopathic remedies can be made from plants, animals, minerals, fungi and protista. These materials are carefully diluted and succussed (vigorously shaken) in a process called potentization. Remedies are commonly potentised according to the decimal (DH, 1:10), centesimal (CH, 1:100), and 50 millesimal (LM, 1:50 000) scale. This dilution and succussion is what makes homoeopathic remedies unique from any other natural medicine (Hahnemann 2017). The remedy would either be prescribed orally in a liquid base or as granules or pillules and is absorbed by the mouth's mucous membranes. Dysbiosis may not affect the absorption of homoeopathic remedies, but it may interfere with the homoeopathic remedy's action once absorbed. But gut dysbiosis' effect on the absorption of remedies is still being debated.

The homoeopathic consultation normally aims to take a detailed case and to find the most fitting remedy that will stimulate the body's healing mechanisms to bring healing on a physical, mental and emotional level (De Schepper 2001: 266-285).

Two main treatment approaches exist in the homoeopathic toolbox - constitutional treatment and clinical treatment. Constitutional treatment, sometimes called the

‘Classical’ approach, aims to find a single remedy that best suits the patient’s totality of symptoms, including their physical, mental and emotional symptoms. The remedy prescribed in this manner can be referred to as a ‘simplex’ remedy or the ‘simillimum’. The clinical approach to homoeopathy places greater importance on the pathology and physical symptoms than on the mental and emotional symptoms. Homoeopaths following the clinical approach may prescribe a simplex remedy or a complex remedy that contains a combination of different remedies specific to their pathology (Fisher 2012: 1669-1682). Different tools available in clinical treatment approaches include organotherapy, isotherapy, gemmotherapy and biopuncture. Organotherapy uses remedies made from healthy human or animal secretions, whereas isotherapy uses remedies that are made from unhealthy secretions containing the causative agent in certain pathologies. Gemmotherapy uses remedies that are made from the embryonic tissues of plants. Biopuncture is the use of injectable homoeopathic remedies to manage and treat symptoms (Kersschot 2004). Hahnemann would only prescribe a single remedy at a time, but since his great works, the use of complex remedies made from multiple remedies has become popular. According to Abermann (2017:222-234), clinical remedies should only be given in acute disease, unusual local pathologies, ailments associated with a stage of life (e.g. menopause and teething), and when there is an unremarkable constitutional picture. He also believes that homoeopaths should use both constitutional and clinical treatment approaches, as both are needed to treat various cases. He also believes that some cases may even require different approaches at different times of their treatment. Abermann (2017: 222-234) states that it is up to the discretion of the homoeopath, based on their knowledge of disease and homoeopathic philosophies, to determine which approach will be best suited. This makes homoeopathy a very individualised treatment modality. Despite the significant variation in treatment approaches, how South African homoeopaths approach gut dysbiosis has not yet been determined.

2.9. THE BOWEL NOSODES

A miasm is an acquired or inherited predisposition to certain diseases that may be active or dormant (Hahnemann 1991). Galande (2020: 101-103) suggests that

homoeopaths may need to prescribe nosodes when an active miasm is preventing the patient from improving on the carefully selected remedy. Nosodes are homoeopathic remedies made from pathogenic organs or tissues, disease products or causative agents such as bacteria, fungi, ova, parasites, virus particles and yeast (Nayak and Varanasi 2020). Constantine Hering believed that nosodes are useful as intercurrent remedies, given between other remedies, to remove a miasm or obstacle to cure and to move a case forward (Galande 2020: 101-103). There is no specific miasm related to gut dysbiosis, but Dr Edward Bach found the effects of an imbalanced gut microbiome to be similar to the psoric miasm introduced by Hahnemann (Combrink-Potter 2020: 1-189; De Schepper 2001: 266-285). Bach believed gut dysbiosis to be an obstacle to cure through the harmful metabolites that unwanted gut bacteria would release into the bloodstream, a concept known as toxaemia. He believed toxaemia, induced by gut dysbiosis, was the cause of chronic diseases. Based on this belief, Bach and Wheeler (1925) developed autogenous vaccines made from non-fermenting bacilli in the 1930s to treat chronic diseases that failed to improve on other treatments. Dr Thomas Dishington and Dr John Paterson later developed and prescribed the bowel nosodes (Penrose 2019: 12-18). These new nosodes were homoeopathically potentized remedies made from Bach and Wheeler's vaccines, cultures of non-lactose fermenting bacilli, to treat and remove dysbiosis as an obstacle to cure (Sharma, Ambwani and Saraswat 2021: 11-15). De Schepper (2001: 266-285) believes that lifestyle changes and probiotics will improve some symptoms of gut dysbiosis but that it is the use of a bowel nosode that will encourage a proper cure. As clinically tested homoeopathic remedies, bowel nosodes cover the totality of the patient's mental, emotional, and physical symptoms (Creedy 2019: 19-25). Like other nosodes, the bowel nosodes have a constitutional picture, making it valuable as a simillimum, but it may also be prescribed as part of a layered protocol. Creedy (2019: 19-25) often prescribes another remedy first and only uses a bowel nosode if the patient fails to improve. Whereas John Saxton (2008) uses the homoeopathic bowel nosodes to treat a range of acute and chronic diseases, including digestive disorders, skin and autoimmune diseases. Learning the affinities of particular bowel nosodes may be essential, as they may be indicated at times, even when specific bowel symptoms are absent. De Schepper (2001: 266-285) suggested the use of bowel nosodes when the best-indicated remedy fails

despite an increase in potency or when the vital force (life power) is too weak to produce symptoms. Bach (1925) and Paterson (1950) advocated for the prescription of a bowel nosode as they believed it may move a case forward or allow the following prescription to act more favourably. While Creedy (2019: 19-25), John Saxton (2008), De Schepper (2001: 266-285), Bach (1925) and Paterson (1950) advocate for the use of bowel nosodes, a unified perspective on the bowel nosodes' application within the South African context remains unknown. All bowel nosodes have been associated with other common homoeopathic remedies (Paterson 1950). These associations help homoeopaths to identify the necessary bowel nosode if the need for it has been recognised. While Paterson (1950) recommends using bowel nosodes based on their connections to other common homeopathic remedies, the current approach of South African homeopaths towards bowel nosodes and their prescribing practices remain unclear. De Schepper (2001: 266-285) suggests high potencies like 1M (1000CH) when mental symptoms align with the remedy picture, while Combrink-Potter (2020: 1-189) recommends lower doses (6CH) for cases matching the remedy's physical pathology. Additionally, De Schepper (2001: 266-285) suggests a 30CH potency for simultaneous acute and chronic conditions. However, the applicability of these principles to bowel nosodes remains uncertain. Frequency and dosage of bowel nosodes are somewhat more established. While dependent on the homoeopath's experience, Paterson (1950) and Bach (1925) advise repeating a bowel nosode only until its positive effects are no longer seen. In chronic cases, they recommend a lower potency, repeated no more often than every three months (Combrink-Potter 2020: 1-189; Paterson 1950; Bach 1925).

Combrink-Potter (2020:1-189) explains that the understanding and incorporation of bowel nosodes in the past was limited. Sankaran (1984: 1) shared the following comment regarding bowel nosodes:

"Many of my homoeopathic colleagues, I am sad to see, do not utilise the bowel nosodes. This may be due to the lack of awareness of their usefulness or due to a spirit of conservatism of the colleagues. I can assure them that these remedies though recently introduced into our field – and in spite of the fact that their indications have not been discovered through regular provings – have fully proved their value.

Those who do not use them are indeed missing something very valuable, something which might come to their rescue in many awkward situations."

Sankaran's (1984: 1) comment may have highlighted the bowel nosodes' importance, but its use in the homoeopathic practices of South Africa remains understudied. This study aimed to investigate how South African homoeopaths perceive and integrate bowel nosodes into their treatment plans.

2.10. ADJUNCTIVE APPROACHES TO GUT DYSBIOSIS

The gut microbiome is influenced by a wide variety of factors. Therefore, a patient with gut dysbiosis may benefit from different treatments or lifestyle changes. Incorporating a healthy diet, exercise, stress management, western herbal medicines, referrals and other adjunct therapies may be helpful in treating an imbalanced gut microbiome. This study seeks to find the standard treatment protocols implemented in homoeopathic practice.

2.10.1. Diet

The common Western diet is known for its high consumption of energy-dense and processed food, fat and sugar with a low intake of fruits, vegetables and fibre. Shi (2019) suggests that the Western diet disrupts the gut microbiome, potentially leading to chronic inflammation and an increased risk of chronic diseases.

The Mediterranean diet, which consists of whole grains, fruits, vegetables, legumes, nuts, olive oil, fish, chicken and eggs, has been shown to positively affect the microbiome. According to a study by Nagpal *et al.* (2019: 1-18), a Mediterranean diet can encourage healthy gut microbiome diversity by increasing *Bacteroidetes, Lactobacilli, Bifidobacteria, Faecalibacterium, Oscillospira, Roseburia, Ruminococcus,* and *Clostridium cluster XIVa*. A Mediterranean diet has also shown to decrease *Firmicutes* and *Proteobacteria,* which are often associated with diseases. According to this study by Nagpal *et al.* (2019: 1-18), re-establishing a healthy gut microbiome through the Mediterranean diet can indirectly reduce

symptoms of metabolic syndrome, obesity, type 2 diabetes, cardiovascular diseases, bowel diseases, colorectal cancers and neurodegenerative disorders. While Nagpal *et al.* (2019: 1-18) demonstrated an increase in microbial diversity associated with the Mediterranean diet, the long-term stability of this positive change remains unclear.

In search of answers, Barone *et al.* (2019: e0220619) investigated the influence of the Paleolithic diet on the gut microbiome, offering valuable insights into its effect on microbial diversity and stability. The Paleolithic diet is based on the hypothesis that the human genome has not adapted to the foods of agriculture. It mainly consists of meat, fish, eggs, nuts, fruits and vegetables and excludes processed foods, grains and dairy (Genoni *et al.* 2020: 1845-1858). According to Barone *et al.* (2019: e0220619), the Paleolithic diet is associated with a greater gut microbial diversity that encourages healthy competition between microbiota and improved stability in the microbial ecosystem. Although these results are promising, some concern is raised by the increased abundance of bile and fat-loving microbes that may be detrimental long-term (Barone *et al.* 2019: e0220619). Barone *et al.* (2019: e0220619) therefore advise that the Paleolithic diet should only be considered on a short-term basis.

Another diet that may be beneficial on a short-term basis, rather than long-term, is the low FODMAP (Fermentable Oligosaccharides, Disaccharides, Monosaccharides and Polyols) diet. The low FODMAP diet restricts the intake of short-chain carbohydrates that ferment in the bowels and cause discomfort in those with abdominal hypersensitivity (Ooi, Correa and Pak 2019: 73-80). When symptoms are reduced, some tolerable FODMAP carbohydrates are reintroduced to achieve long-term symptom control. Much research has been done on improving symptoms in the low FODMAP diet, but more research needs to explore the reintroduction of FODMAP foods, which leaves the usefulness of this diet questionable (Ooi, Correa and Pak 2019: 73-80). Many FODMAP foods are considered as important prebiotics needed for maintaining a healthy gut microbiome. Without these prebiotics, beneficial microbiota are starved, leading to gut dysbiosis (Hill, Muir and Gibson 2016: 36-45).

Dairy foods have been shown to be necessary for maintaining a healthy microbiome. Eid *et al.* (2014: e46) showed that a diet high in glucose, fructose and sucrose beneficially increased *Bifidobacteria* and reduced certain *Bacteroides*. Similar positive improvements in the gut microbiome, with a decrease in *Clostridia* species associated with IBS, were seen in a study on lactose in the gut (Jeffery and O'Toole 2013 561-573; Francavilla *et al.* 2012: 420-427). Lactose supplementation has also been found to increase faecal concentration of beneficial short-chain fatty acids (Francavilla *et al.* 2012: 420-427). These results contradict the belief that lactose may act as a gastrointestinal irritant. The relationship between gluten and the gut microbiome is complex and poorly understood. Studies remain contradictory, with results showing that gluten may have no impact, a negative impact or a positive impact on the gut microbiome. Nobel *et al.* (2021: e00441) found that the exclusion of gluten from the diet in patients with celiac disease (CD) or non-celiac gluten sensitivity (NCGS) brings no change to the microbiome composition of the gut. Bonder *et al.* (2016: 45) noted that a gluten-free diet (GFD) does bring change in the bacterial species that metabolise carbohydrates and starch, but it did not reduce the inflammatory biomarkers in the gut of healthy individuals. Whether gluten acts as an important prebiotic is still debated (Di Stasi and Han 2020: 18-23). More research is needed to understand its effect on the gut microbiome better. Although some of the above mentioned studies show that the inclusion of lactose and gluten improve gut microbial composition, excluding it may prove necessary in cases of gut hypersensitivity and immune overreaction. Yet, some study results indicate that excluding lactose and gluten from the diet needs to be carefully considered.

Some practitioners may advocate the inclusion of fermented foods into the diet to replenish beneficial gut microbiota. Fermented foods or beverages are made by using enzymatic action to encourage controlled microbial growth within the food or beverage (Marco *et al.* 2017: 94-102). Although fermented foods have been indicated to contain similar microbes to some probiotic strains, their usefulness in gut dysbiosis has not been established by research (Dimidi *et al.* 2019: 1806).

Research on different diets shows that although many diets aim to improve symptoms experienced by the gut, there is little consideration of how these diets

affect the gut microbiome. The effect of diet on the microbiome needs to be explored further before being advocated by healthcare practitioners.

2.10.2. Exercise

Exercise has been shown to improve the diversity of the microbiome and the *Bacteroidetes to Firmicutes* ratio (Monda *et al.* 2017: 1-5). Exercise may increase the bacteria that strengthen the immune system and the barrier functions of the gut. It may also stimulate the growth of bacteria that help protect against gastrointestinal disease and colon cancer (Monda *et al.* 2017: 1-5). Boytar *et al.* (2023: 1-27) suggest thirty to ninety minutes of medium-to-high-intensity exercise three times per week for maximum effect on the microbiome. Regular exercise may, therefore, be considered as an inexpensive and easy form of treatment for gut dysbiosis, but the implementation of this in practice remains unknown.

2.10.3. Stress Management

The strong bidirectional relationship between the gut and the brain makes the gut vulnerable to stress. Verma *et al.* (2020: 405-419) found that many mental disorders could be treated with different psychobiotics (probiotics designed to improve mental symptoms) based on the microbial imbalance commonly found in a particular mental disorder. Therefore, the prescription of probiotics may aid in the patients' stress management, but supplementary stress management strategies may also aid in gut microbial correction. Hantsoo and Zemel (2021: 113474) showed that stress significantly impacts the gut's microbial composition, highlighting that stress management strategies may be helpful in homoeopathic practice.

2.10.4. Western Herbal Medicines

Homoeopaths may incorporate mother tinctures in their prescriptions for valuable assistance in their treatment approaches. The Western herbal medicine approach to gut dysbiosis in homoeopathic practice is still unclear. Finding a common approach

to incorporating mother tinctures and other Western herbal medicines might shed light on the best treatment strategy for gut dysbiosis. Hein Zeylstra, a herbalist, developed a ‘Weed and Feed’ protocol for managing Crohn’s disease and ulcerative colitis, which was later adapted by Hywood and Bone (2004: 41) into a bowel flora protocol. The protocol starts with a 24-hour fasting period, preparing the gut lining for the subsequent ‘weeding’ phase, which unfolds on days 2 and 3. During this weeding phase, garlic, goldenseal, or other broad-spectrum antimicrobial agents are used to address dysbiosis. Patients are advised to continue their fasting or consume small portions of low-glycemic vegetables during these days. Following the weeding phase, the ‘feeding’ stage takes place from day 4 to 15 and aims to encourage the growth of beneficial microbiota with slippery elm powder - a potent prebiotic. The entire protocol may be repeated if necessary. Antiseptics such as green tea and grape seed extract may be used to prevent the reoccurrence of pathogenic microbiota (Hywood and Bone 2004: 41). Although Hywood and Bone’s (2004: 41) Weed and Feed protocol is advised by herbalists, it is unknown whether homoeopaths follow a similar approach.

2.10.5. Referrals

Homoeopaths should be required to be aware of their scope of practice and recognise when a case may need to be referred for further investigations or another treatment modality. Dangerous diseases such as colorectal cancer, inflammatory bowel diseases, diverticulitis and gastrointestinal ulcers may need to be referred to gastroenterologists as soon as possible. High calprotectin levels in the blood or stool may indicate gastrointestinal inflammation and could be indicative of diseases such as parasitic infections, Crohn's disease and ulcerative colitis (Konikoff and Denson 2006: 524-534). Little is known about how often homoeopaths refer patients to other specialists or how well they integrate their treatment with conventional medicine. This lack of research deserves further investigation to improve patient care and referral practices.

2.10.6. Chiropractic treatment

In a study conducted by Zhu *et al.* (2020: e926039-1 - e926039-9), the impact of chiropractic treatment on the gut microbiome and its subsequent influence on allergic asthma symptoms was investigated using young rat models. While the precise mechanism underlying these effects remains unknown, the study observed a remarkable inflammation and immune overactivity reduction following chiropractic treatment. This research highlights the potential of chiropractic treatment to wield a positive influence on the gut microbiome and suggests its viability as a complementary approach in addressing gut dysbiosis and related chronic diseases.

2.10.7. Hydrotherapy

Hydrotherapy, also referred to as colonic cleansing or irrigation, is a therapy that uses water to flush the colon. While limited scientific evidence currently exists regarding the impact of colon hydrotherapy on the gut's microbial composition, it is significant that numerous healthcare practitioners commonly use this therapy to manage various chronic diseases (Walker 2000: 1-6). Conditions such as constipation, cancer, ADHD, skin rashes, joint discomfort, and allergies are among the long list of medical concerns that professionals could successfully address through hydrotherapy (Walker 2000: 1-6). Nevertheless, further research is essential to comprehensively understand the effects of this treatment modality on the gut microbiome.

CHAPTER 3

METHODOLOGY

3.1. INTRODUCTION

This chapter discusses the methodology used during the execution of this study. It explains the design, setting, population, sampling, data collection and data analysis used. This chapter also considers the trustworthiness and ethical considerations of this study.

3.2. RESEARCH DESIGN

Qualitative research refers to descriptive information about phenomena that can be observed but not quantified (Mcleod 2023). Qualitative research aims to understand social realities and to draw conclusions from the processes, patterns and structural features of the participants. The experiential approach to qualitative research aims to gain knowledge based on the experiences of the research participants. The conclusions gained not only apply to the participants but also introduce more views towards a subject (Flick, von Kardorff and Steinke 2004). According to Sandelowski (2004), "qualitative research aims at discovering how human beings understand, experience, interpret, and produce the social world." Qualitative research was therefore chosen for this study as the best method to investigate the homoeopathic perceptions and treatment plans regarding gut dysbiosis as an obstacle to cure. This research made use of semi-structured interviews to obtain non-numerical data through open-ended questions (Cebekhulu 2019: 45). The questions were predetermined in the interview guide (Appendix 1) to ensure the effective exploration of the experiences and understanding of homoeopaths about gut dysbiosis and its treatment.

3.3. SETTING

Although participants were given the choice between online and face-to-face interviews, all of the participants preferred online meetings for the data collection process. Online meetings took place on 'Zoom', a secure platform with passcode protection to ensure the confidentiality of the researcher and the participant. The interview settings were safe, private and comfortable, which enabled the participants to speak freely.

3.4. POPULATION

The population of this study was registered and practising South African homoeopathic practitioners. The participants interviewed were a mix of different genders, years practising as homoeopaths and locations of their practices. The population were all registered with the Allied Health Professions Council of South Africa (AHPCSA), as this is a legal requirement for all practising homoeopaths within South Africa. At the time of the study, there were 566 homoeopaths registered with the AHPCSA. To gather a rich descriptive insight into the range of perspectives and practices of South African homoeopaths, a total of 13 registered homoeopathic practitioners were interviewed. Normally, a sample size of 12 participants is known for its capacity to yield data-rich insights (Cebekhulu 2019: 44). Interviews continued until data saturation was achieved, signifying that a sufficient amount of information had been collected to develop a robust understanding of gut dysbiosis as an obstacle to cure and to explore potential treatment approaches (Pillay 2021:18).

3.5. SAMPLING PROCESS

Participants in this study were selected through Purposive sampling, a deliberate and non-probability sampling technique where the researcher specifically chooses individuals to participate based on their particular qualities or expertise on the research topic (Tongco 2007: 147-158). This purposive sampling method was chosen because it allowed for the selection of homeopaths with diverse knowledge

and experience in treating various illnesses. This approach provides a broader representation of South African homoeopaths' perspectives on this condition. Using the Purposive sampling method allowed the study to obtain a diverse perspective on this research topic and ensured that the results of this study would be grounded on the in-depth knowledge of suitable homoeopaths.

3.5.1. Inclusion criteria:

- Participants were required to be registered as homoeopathic practitioners with the Allied Health Professions Council of South Africa (Pillay 2021:17).
- Participants were required to be practising as homeopaths within South Africa
- Participants were required to be fluent in English for easy communication during the interviewing process (Cebekhulu 2019: 43)
- Participants were required to be reachable via email and telephone when required
- Participants were required to have a minimum of 5 years experience within private practice (Pillay 2021:17).

3.5.2 Exclusion criteria:

- Practitioners who did not have knowledge of gut dysbiosis
- All homoeopaths who did not meet the inclusion criteria stated above were excluded from the research

3.6 DATA COLLECTION PROCESS

A freely available public register of homoeopathic practitioners registered with the AHPCSA was used to find possible participants. Contact details of homoeopathic practitioners were found on the Homoeopathic Association of South Africa (HSA) website or other public domains. Potential participants who fit the inclusion criteria were emailed regarding their willingness to participate in the study. The first 13 willing practitioners were sent an information letter (Appendix 2), as well as an

informed consent letter (Appendix 3). After completing the informed consent, the participant was contacted via email to determine whether they would prefer to meet face-to-face or online. If an online meeting was favoured, a time and online platform most suitable to the practitioner was arranged. Confidentiality was maintained as each participant was assigned a participant number that was used during the entire duration of this study. Interviews lasted for approximately 30 to 40 minutes, during which data was collected. Interviews were recorded (Walsh 2001: 89) with the consent of the participants and later transcribed verbatim (Dudovskiy 2018). Data collected was saved on a password-protected computer and was accessible to both the researcher and the research supervisor. Hard copies of the data were stored in a designated space within DUT's Homoeopathic Department, where only authorised personnel could access the data. The data will remain secured in the Homoeopathic Department for a period of 15 years before being shredded with a paper shredder. Participants are free to access their data at any point during this time.

3.7. DATA ANALYSIS

The researcher employed thematic analysis, a well-established method in qualitative research, to identify recurring themes within the data (Terry *et al.* 2017). This approach, combined with theme-driven coding based on the research questions, allowed the researcher to gain insights into the research questions while remaining open to emergent themes arising from the analysis (DeGloma 2024: 278-297). This flexibility was particularly valuable given the qualitative and experiential nature of the data.

In the data analysis phase, all audio recorded interviews (Walsh 2001: 89) were transcribed verbatim (Appendix 4) and imported into NVivo software (Dudovskiy 2018). Before reading the transcripts, the research questions were translated into a set of preliminary themes. Then, quotations relevant to these themes were coded and assigned to their corresponding categories (DeGloma 2024: 278-297). New themes that emerged during the coding process were added. Once all transcripts were coded, the themes were reviewed and refined into sub-themes. Finally, an

external reviewer assessed the final set of themes and sub-themes to ensure clarity and comprehensiveness before they were presented as the study's results.

3.8. TRUSTWORTHINESS

Although qualitative research is increasingly being recognised in the scientific community, the trustworthiness of qualitative data is still questioned at times (Kornbluh 2015: 397-414). To avoid personal biases of the researcher interfering with the reliability of this qualitative research, the following measures and strategies by Lincoln and Guba (1985: 129) were used.

3.8.1. Credibility

Credibility ensures confidence that the data is truthful and trustworthy. It aims to reflect reasonable conclusions drawn from the original context in which the participant intended their statements to be (LaBlanca 2010). To ensure the credibility of the qualitative data in this study, various strategies were employed. Prolonged engagement was encouraged as longer interviews allowed time to build trust between the participant and the researcher. Longer interviews also ensured that all data provided by the participants was described within the appropriate context and tested for any potential misinformation (Lincoln and Guba 1985: 129). Another strategy used was persistent observation, where the researcher identified and focused, in great detail, on the characteristics and elements that were most relevant to the study objectives. Additionally, a member check was conducted, which involved sharing data, analytical categories, themes, interpretations, and conclusions with the study participants. This process helped strengthen the data by incorporating the perspectives of the participants, which may differ from those of the researcher. It ensured that all interpretations and conclusions remained true to the original perceptions of the participants, enhancing the overall credibility of the study's findings. To enhance the credibility of this study, all coding was verified by an external reviewer.

3.8.2 Transferability

Transferability refers to the study results being transferred or generalized to another audience or context (LaBlanca 2010). To ensure the transferability of findings in this study, a strategy of employing ‘thick descriptions’ was adopted (Cebekhulu 2019: 49). During the interviews, detailed or ‘thick’ descriptions were obtained, delving into the homoeopathic perception and treatment of gut dysbiosis. By capturing rich and detailed descriptions, the homoeopathic perception and treatment of gut dysbiosis could be more comprehensible to individuals who may be unfamiliar with this field. To ensure the applicability of the findings to other contexts, this research included detailed descriptions of the participants and the research methodology. This transparency allows readers to evaluate the transferability of the results to their own setting (Korstjens and Moser 2018: 122).

3.8.3. Dependability

Dependability ensures the stability of the findings of the qualitative research over time (Polit and Beck 2006). Dependability was maintained by the participants’ evaluation of the findings. The participants interpreted and made recommendations to the study to ensure that it supports the data received. Another strategy employed to ensure the dependability of this research was the establishment of an audit trail, which involved maintaining a transparent record of research steps. This approach enhanced the dependability of the study by providing a clear and documented path that could be followed and examined by others (Lincoln and Guba 1985: 129).

3.8.4. Confirmability

Ensuring the confirmability and trustworthiness of the study's findings is crucial in maintaining the integrity of the research. One strategy employed to achieve confirmability was the implementation of an audit trail, as mentioned earlier. By maintaining a transparent and well-documented record of the research process, this

strategy aimed to establish a reliable basis for confirming the study's findings. The audit trail served as a means of ensuring that data and interpretations were derived solely from the gathered information and were not influenced by the researcher's personal biases (Polit and Beck 2006). By adhering to this strategy, the research aimed to provide a solid foundation for subsequent researchers to validate and corroborate the findings, thereby enhancing the confirmability and overall trustworthiness of the study.

3.8.5. Reflexivity

To ensure the trustworthiness of qualitative data, the study employed strategies to foster reflexivity, which involved engaging in critical self-reflection as a researcher. This process aimed to identify and acknowledge personal biases, preferences, and preconceptions that could potentially influence the research outcomes. One strategy employed was the use of a diary, which allowed the researcher to systematically examine their assumptions, preconceptions, values, and biases throughout all phases of the study (Lincoln and Guba 1985: 413). By maintaining this reflective practice, the researcher sought to gain a clear understanding of their relationship with the participants, as well as how their perspectives may impact the research decisions made. The implementation of these strategies throughout the study aimed to enhance the trustworthiness of the qualitative data by minimizing the potential influence of the researcher's biases and ensuring a more objective and rigorous research process.

3.9. ETHICAL CONSIDERATIONS

This research was conducted with the ethical approval of the Durban University of Technology Institutional Research and Ethics Committee (IREC) (Appendix 5). The ethical clearance number provided by the committee is IREC120/23. Participation was voluntary and all participants completed an information and consent form before data collection. Participants were not exposed to any harm or coerced in any way to partake in this research. Participants were asked for consent before any recording

was taken. Confidentiality and anonymity were adhered to by using participant numbers during the transcription and analysis of the interviews. Honesty and transparency were crucial ethical considerations that were maintained within the entire duration of this study. The four ethical pillars - autonomy, justice, beneficence and non-maleficence - were applied to this study (South Africa, Department of Health 2015: 8-9).

3.9.1. Autonomy

Autonomy, as a fundamental principle in research, emphasizes the importance of granting participants the freedom to exercise their own decision-making. To uphold autonomy, researchers must ensure that participants possess the capacity to make intentional decisions while fully comprehending the implications, free from external influences (Jahn 2011). Essential aspects of autonomy considered by the researcher of this study included providing accurate information, obtaining informed consent, respecting privacy, and maintaining the confidentiality of participants' information. Participants were allowed to remove themselves from the study at any point with no negative implications (Pillay 2021: 20).

3.9.2. Justice

The principle of justice mandates the equitable distribution of benefits, risks, costs, and resources among all study participants, irrespective of their background or identity (Jahn 2011: 225-226). In the pursuit of justice, researchers are obliged to allocate an equal share to each participant and provide resources based on their individual needs, efforts, contributions, and merits. By adhering to this principle, the researcher of this study ensured fairness and impartiality throughout the study, fostering an environment of equal opportunity and treatment for all involved (Pillay 2021: 21; Jahn 2011: 225-226).

3.9.3. Beneficence

Beneficence in research compels researchers to act solely in the best interest of others. In the realm of ethical research, the objective is to rescue individuals in danger, provide assistance to those with disabilities, and proactively prevent circumstances that could lead to harm (Jahn 2011: 225-226). By upholding the principle of beneficence, the researcher demonstrated a commitment to the welfare and well-being of the homoeopathic practitioners who participated in this study (Pillay 2021: 20) and all homoeopathic patients who suffer from gut dysbiosis.

3.9.4. Non-Maleficence

Non-maleficence, a principle of utmost significance in research, demands that researchers refrain from causing harm to any of their participants. By adhering to the principle of non-maleficence, the researcher of this study prioritized the well-being and safety of the participants, ensuring that their involvement in the study did not cause harm or contribute to their suffering in any manner. This study prioritized participant respect, dignity, and autonomy throughout all stages of the research process

CHAPTER 4

RESULTS

4.1. INTRODUCTION

This chapter presents the data collected during the interviews of homoeopaths practising in South Africa. The data is presented as excerpts from the interviews under the relevant themes and sub-themes found during data analysis. The participants in this study mentioned the increasing prevalence of gut dysbiosis in their patients. The participants in this study understood gut dysbiosis to be an imbalance in the gut's microbiome or an overgrowth of harmful bacteria, fungi, yeasts, or parasites. The majority of participants not only acknowledged that gut dysbiosis can present with a variety of gut symptoms but that it may also present with many systemic effects and play a vital role in multiple chronic diseases. When homoeopathic treatment for gut dysbiosis fails, practitioners may consider a number of factors, including the patient's case history, diet, lifestyle, and any obstacles to cure. They may also prescribe adjunctive therapies such as probiotics, prebiotics, and fermented foods. Most participants approach gut dysbiosis by first removing harmful microbiota before replenishing them with beneficial bacteria. Homoeopathic practitioners typically emphasize the importance of a healthy diet in both the treatment and prevention of gut dysbiosis. They may also refer patients to specialists if necessary. Other findings from the study include the need for more education on obstacles to cure, gut dysbiosis and bowel nosodes for homoeopathic practitioners in tertiary institutions. Many participants believed gut dysbiosis to be an important consideration in homoeopathic practice that is often overlooked.

4.2. PARTICIPANT DEMOGRAPHICS

While this study draws on a relatively small sample of 13 South African homoeopaths, it offers valuable initial insights into their perceptions of gut dysbiosis. The sample encompasses a mix of genders, ages, experience levels, and geographic locations (Gauteng, Northwest, Western Cape, KwaZulu-Natal, Eastern Cape). The data also reveals variations in their educational backgrounds, with some practitioners graduating from universities (UJ, DUT) and others from colleges (College of Homoeopathy, South African Faculty of Homoeopathic Medicine). Although this sample size doesn't provide a definitive overview, it sets the stage for further exploration of homoeopathic perspectives on gut dysbiosis. The following table provides an overview of the participant demographics for this study:

Table 1: Demographic Data of Homoeopathic Practitioners

Gender	Age	Years of practice	Location of Practice	Institute of Study
Female	34	10	Gauteng	UJ
Female	48	22	Gauteng	UJ
Male	53	27	Gauteng	DUT
Male	77	52	Northwest	South African Faculty of Homoeopathic Medicine
Female	43	19	Western Cape	UJ
Male	34	10	Western Cape	UJ
Male	44	20	KwaZulu Natal	DUT
Male	66	24	Eastern Cape	DUT
Female	66	42	KwaZulu Natal	College of Homoeopathy
Female	49	23	Western Cape	UJ
Female	53	25	KwaZulu Natal	DUT
Male	42	15	Western Cape	DUT
Female	54	28	Gauteng	DUT

4.3. THEMES

Following data analysis, 6 main themes and their sub-themes were formed.

The first theme delves into ‘Homoeopaths’ Experiences with Gut Dysbiosis’. Here, the study explores homoeopaths' knowledge and experience with gut dysbiosis. This includes their insights into its prevalence, how lifestyle choices might influence the gut microbiome, and the potential impact of conventional medicine on gut health. Additionally, it investigates how homoeopaths view other potential causes of gut dysbiosis and the methods they use to diagnose its presence.

The second theme, ‘Homoeopathic Perception of Obstacles to Cure and Gut Dysbiosis’, examines how homoeopaths perceive gut dysbiosis as a potential obstacle to cure. This theme explores their understanding of obstacles in general, how they view the local and systemic effects of gut dysbiosis, and how these effects might hinder cure.

The third theme then shifts to ‘Homoeopathic Considerations When Initial Treatment Fails’. This theme investigates how homoeopaths approach situations where their initial treatment for a patient's condition proves unsuccessful. It delves into their strategies for reevaluating the case, revisiting the treatment plan, and considering various factors related to the patient as a whole. It also explores gut dysbiosis as a factor that needs to be considered if treatment fails.

The fourth theme that was found during data analysis is the ‘Homoeopathic Treatment Protocols for Gut Dysbiosis’. This theme unveils the specific treatment approaches homoeopaths use to address gut dysbiosis. It explores how they tailor treatment to individual patients, the homoeopathic treatment methods they employ, and the potential role of bowel nosodes in their treatment plans.

The fith theme that is investigated is ‘Adjunctive Approaches to Gut Dysbiosis’. This theme examines how homoeopaths might integrate complementary therapies alongside their core homoeopathic treatment. It explores the use of dietary and lifestyle modifications, adjunctive therapy prescriptions, and referrals to other healthcare professionals for a more holistic approach.

Finally, the sixth teme looks at ‘Other Findings’ that presented during data analysis. This theme highlights any additional relevant discoveries from the research, such as insights into homoeopaths' education on gut dysbiosis and bowel nosodes. The themes and sub-themes of this study is set out in the table that follows:

Table 2: Overview of Main Themes and Sub-Themes

Main Theme	**Sub-Theme**
4.3.1. Homoeopaths’ experiences with gut dysbiosis	4.3.1.1. Prevalence of gut dysbiosis
	4.3.1.2. Lifestyle and the gut microbiome
	4.3.1.3. Conventional medicine and the gut microbiome
	4.3.1.4. Other causes of gut dysbiosis
	4.3.1.5. Testing for gut dysbiosis
4.3.2. Homoeopathic perception of obstacles to cure and gut dysbiosis	4.3.2.1. Perception of obstacles to cure
	4.3.2.2. Understanding of gut dysbiosis and its local presentations
	4.3.2.3. Perception of gut dysbiosis and its systemic effects
4.3.3. Homoeopathic considerations when initial treatment fails	4.3.3.1. Reconsider the case
	4.3.3.2. Reconsider the treatment
	4.3.3.3. Consider the patient
	4.3.3.4. Consider diet as an obstacle to cure
	4.3.3.5. Consider the gut as an obstacle to cure
	4.3.3.6. Consider other obstacles to cure
4.3.4. Homoeopathic treatment protocols for gut dysbiosis	4.3.4.1. Patient-focused treatment and advice
	4.3.4.2. Homoeopathic treatment approaches
	4.3.4.3. The use of bowel nosodes
4.3.5. Adjunctive approaches to gut dysbiosis	4.3.5.1. Diet and lifestyle
	4.3.5.2. Adjunctive therapy prescriptions

	4.3.5.3. Referrals and adjunctive treatments
4.3.6. Education on gut dysbiosis and bowel nosodes	

4.3.1. HOMOEOPATHS' EXPERIENCES WITH GUT DYSBIOSIS

Many homoeopathic practitioners experience the increasing prevalence of gut dysbiosis in South Africa's general population and contribute this rise to lifestyle and conventional medicines. Other causes of gut dysbiosis mentioned were caesarean sections, reduced breastfeeding, sterile environments, food additives, general pollution, heavy metal toxicity and herbicides. Although many found bacteriological stool testing valuable, it is not used routinely due to the shortage of laboratories that do comprehensive stool analysis and the high expense of such tests.

4.3.1.1. Prevalence of gut dysbiosis

Many participants described the prevalence of gut dysbiosis to be high among the patients they treat and the general South African population. Direct excerpts from participants to support this sub-theme follow:

"... and it's a fairly common complaint because probably on average, in my practice, I would say 90% of the patients I see have some sort of digestive disturbance, whether it's constipation, irritable bowel, you know, inflammatory bowel diseases, heartburn, dyspepsia, gastric ulcers, silent reflux, etc. You name it. Most of the adult population has some sort of disturbance in the gastrointestinal tract." (Participant 1)

"If you're looking, for a percentage-wise, I think it's easy 70 to 90% of cases (that present with a possible gut dysbiosis)." (Participant 3)

"There are very few patients who don't have gut problems, and I've only seen one stool test in my entire time of working with Nordic, I've only seen one stool test that was okay. So yeah, everyone has a problem, everyone." (Participant 10)

4.3.1.2. Lifestyle and the gut microbiome

The majority of participants described lifestyle factors such as diet, stress and being sedentary to be the main cause of gut dysbiosis. A diet that lacks adequate prebiotic food and is high in sugar, carbohydrates, gluten, dairy, alcohol and a 'Westernised' diet of processed, refined foods were described as disruptive to the gut microbiome. Direct excerpts from participants to support this sub-theme follow:

"Most patients aren't eating very well and they have a disturbance in the variability of their diets. Not enough of the prebiotic foods that feed the right types of gut bacteria." (Participant 1)

"... bad diet, a big one (cause of gut dysbiosis). Westernised diet, even these people that are all moving towards vegetarianism. I'm vegetarian now and I've been vegetarian for decades, you know, I believe in vegetarianism, but you know, then it becomes a carb-heavy sugar diet. That's not healthy." (Participant 2)

"... and, as I said earlier, it's because of nutrition. I mean, the gut, the biome, doesn't go out of sync on its own. So, I'm much more interested actually in nutrition. If people have been eating badly, then that basically pollutes the body in various obvious ways, and it causes obvious stress on organs and on circulation." (Participant 8)

"Stress levels 100% contribute to disruption in our gut microbiome. You know, those little bacteria respond to pH changes, related to hormones, related to stress response definitively." (Participant 1)

"A lot of patients are extremely sedentary; they work in front of the computer. And chronic constipation is a very, very important symptom." (Participant 4)

4.3.1.3. Conventional Medicine and the gut microbiome

Although the role of conventional medicine was not asked during the interviews, the majority of participants described the use of conventional medicine as a perceived

cause of gut dysbiosis. The homoeopaths interviewed are not qualified in conventional treatment but merely provide their views of how conventional medicines affect the gut microbiome of the patients they see in practice. Antibiotics were the greatest perceived agent of gut dysbiosis, but cortisone, contraceptives and proton pump inhibitors were also mentioned. The study did not reveal any discussions regarding an integrated approach, where patients receive a combination of conventional medicine and homoeopathy.
Direct excerpts from participants to support this sub-theme follow:

"Certainly in the paediatric population, there is the tendency to the overuse of antibiotics. And I've also found certainly within the traditional medical field, inadequate probiotic treatment with the antibiotics so they do a single course of your 'ProbiFlora', which generally speaking has killed bacteria and it doesn't get to live cultures. It's not heat stabilized appropriately, and they just do a five-day course as long as they're on the antibiotic. So, overuse of antibiotic treatments definitely contributes." (Participant 1)

"(I would ask the patient) 'Have you had an antibiotic recently?'...Chronic antibiotic use and unfortunately a lot of doctors are not selective enough with holding back on antibiotics and it really disrupts the gut." (Participant 2)

"As you know, cortisone is doing a lot of harm to the mucous membrane, and especially the microbiome. So, that is a big problem." (Participant 4)

"Too many conventional medications, unfortunately, the oral contraceptive pill and hormones." (Participant 2)

"I mean something that we deal with every day, something like medication that you can't remove. And I think those are really one of the biggest obstacles that we face to cure. We still see results, but I mean something like your contraceptive pill, our ladies are taking it, you have to work around those things." (Participant 11)

"... like if they've been on proton pump inhibitors." (Participant 13)

4.3.1.4. Other causes of gut dysbiosis

The majority of participants mentioned other causes of gut dysbiosis, including caesarean sections and the lack of breastfeeding as the main causes of dysbiosis in infants. Over-sterile environments; the use of food additives such as preservatives, MSG, and tartrazine; chlorine in drinking water; general pollution; heavy metal toxicity and herbicides were described as other perceived causes of gut dysbiosis. Direct excerpts from participants to support this sub-theme follow:

"... increased frequency of C-section deliveries versus vaginal deliveries, which does influence that initial inoculation with your gut microbiome." (Participant 1)

"... preservatives, our general sterilization processes, just generally speaking, and we certainly saw an increase in that during the pandemic years. People do live in quite a sterile environment." (Participant 1)

"... it's got to do with our modern world of eating foods with preservatives and chemicals killing the good bacteria in the gut microbiome. The fact that you drink chlorinated water to kill the bugs in the water, and the chlorine is killing your gut bugs. So friendly bacteria are continuously being killed. So, heavy preservatives in meat and other products are causing continuous damage in your microbiome." (Participant 3)

"... (the) dilemma of chlorine in our drinking water. In Africa, we have to clean our water, and most of our water (is) from municipalities, especially in the past, we have used a tremendous amount of chlorine, and as you know, it is profoundly toxic to the mucous membrane, and the kidneys, and it's even carcinogenic. So, from that point of view, I would think, we've got an enormous problem from the chemicals that we are exposed to when we come to dietetics of food, we have all the preservatives in our foods and drinks, and we have the dilemma of sulfur dioxide and the additive of antibiotics to dairy products, and that is a real dilemma. The addition of preservatives

in our foodstuffs and the chronic exposure to this is a real real real dilemma." (Participant 4)

"... and I found that gluten, dairy, MSG (monosodium glutamate), tartrazine, (and) a diet that's very high in sugar changes the gut function and that inversely now affects the patient's mood." (Participant 7)

"... heavy metal toxicity, of course, is also a great dilemma and especially the use of aluminium cooking utensils. In Africa, aluminium cooking utensils are cheap. It is used extremely widely. Even in the so-called 'affluent people' and in restaurants and places where they make food for a lot of people. Your aluminium toxicity we know is a great toxin to the gastrointestinal tract … simply by just cooking or boiling water in an aluminium container, that water will carry aluminium ions which will be toxic to the microbiome and mucous membrane." (Participant 4)

"Another factor that I did not make mention of, and that is the herbicide, the glyphosate that is used in the growing of grains today. That brings a lot of chronic dysbiosis. I would think your agricultural toxicities bring a lot of pathology. And we have to very often eliminate all grains in our patients with chronic dysbiosis … So, I'll find that sometimes we've got no alternative to eliminate, especially the glyphosate and the grains in our patient's diet, otherwise, chronic disease just carries on, (and) the patient will have chronic arthritis and chronic fibromyalgia. And you will only have results after you have corrected his lifestyle." (Participant 4)

"... and then we can go to a simple thing like amalgam fillings in the dental structures of people. Many, many dentists today will not use amalgam fillings anymore. And I believe that in some countries in Europe, amalgam fillings have been declared a toxin, and dentists are not allowed to use them anymore. And I've found that very often with patients with a lot of dental amalgams that they may present with a high level of lead toxicity and that has got to be treated." (Participant 4)

4.3.1.5. Testing for gut dysbiosis

Most participants viewed bacteriological stool testing to be valuable but too expensive to use routinely. These participants would only test for gut dysbiosis if the patient's state is critical or if the patient is able to afford it. The majority of participants perceived South African laboratories to be inadequate in their dysbiosis testing and most preferred to use international laboratories that will do more extensive testing. Most participants would successfully treat patients without testing. Other tests mentioned include breath testing; DNA analysis; Gastrointestinal Microbial Assay Plus (GI MAP) testing; blood tests for calprotectin, melatonin and IgG (Immunoglobulin G) levels; and kinesiology. Direct excerpts from participants to support this sub-theme follow:

"So, the clinical value is obviously number one, you see exactly which of the pathogenic organisms are unbalanced, whether it's bacteria yeasts or parasitic, and your stool analysis. You're going to be obviously varying with your traditional laboratories Lancet® and Ampath®, who really focus on your pathogenic bacteria that are linked with things like persistent diarrhoea, that sort of a focus versus your international labs, where you're looking at a comprehensive stool analysis to not only determine the gut dysbiosis cause, which imbalance of which bacteria, but other factors that contribute. It's hugely valuable in practice, but one of the tricky tickets certainly in private clinical practice in South Africa is costing of these tests, especially your international laboratory tests that aren't going to be covered by medical aid. So, that's when it really becomes a risk versus benefit, or cost-benefit analysis for the patient." (Participant 1)

"I think it helps to target the treatment, so if you are testing and you see something specific, you can target it much more specifically. So, I suppose, very important. Although, I normally start with the general things first, a good detox, removing food intolerances, (and) putting back the good probiotics. And then I see from there; if we are not getting results how to look deeper." (Participant 2)

“So, it's very valuable to test, but if a patient can't afford it, then one can still treat. But if a patient is very ill and their symptoms are not improving dramatically, then I'll get them 90% better, and then eventually some of them who are very ill I will do for those patients that I can't get 100% better, we'll end up doing the test for them. Depending on how sick the patient is, on how much time we've got, you know, if they've got cancer, I would test for sure because we want to know what you're dealing with.” (Participant 10)

“So I think it's invaluable. However, it's difficult to do. So, it is great to be able to quantify what bad bacteria (and) what pathological bacteria they've got. And then to be able to do a follow-up stool sample later to see what's improved or what's changed. And then also, obviously, with seriously pathological bacteria. Do you know what I mean? Like that whole Clostridium difficile thing, then you really, really, really want to know what's going on.” (Participant 13)

“We do (normally send for testing), there might be stool testing, there might be different blood tests we want to do, there might be more advanced testing through other laboratories, like Nordic laboratories®, where we are looking at comprehensive stool analysis, looking at parasitology, looking at organisms in the gut, etc. So those definitely we will do, often with a cost factor for patients, but yes, absolutely ... blood test, or DNA test, or an assessment on one of the machines (kinesiology) that I work with. I'm already starting to identify where those blocks are coming in and fixing them.” (Participant 2)

“It's a helpful window. I don't use it personally, very often, because it irritates me that you send for a report and they tell you which antibiotic to use. So, I'm not interested because I'm not going to be using an antibiotic. So yeah, basically, it is helpful. But again, I use that clinical intervention phase, if I don't see the response I'm expecting, okay, so it's not a first line of treatment for me. I don't first test everything under the sun and then decide the treatment process, I let the case emphasize the details. And then if I don't get the response I'm expecting as I treat, then I'll look at it. So it's definitely useful. It's the same with all laboratory tests, you can go in and test everything to the nines. But, you may be wasting resources when you could get a

good clinical response in the first phase, but also, depending on the severity, obviously, for most of your cases, you may approach it as a first line of treatment, or your first line of assessment. But definitely there is value because you can identify the component and then it may indicate, you know, using a specific nosode of that. Candida for example, Candida 200 (CH), Candida 500 (CH), you know if Candida is an issue ... but if a patient comes in, it's not specific, and there's not a huge amount going on, then I will look further and part of that looking further will involve various investigations and depending on what's most suited for the case, one would incorporate that." (Participant 12)

"No, not really. Because it's really difficult. So the conventional lab testing doesn't give me enough information, and then I do for patients who can afford it, I send samples overseas. But that's really expensive and takes a while too. Well, I mean, it always takes a while to get the results back. But because that's not covered by the medical aid, there are only some patients who are willing to pay for it." (Participant 13)

"... you can also do your breath testing. That I have to admit, I haven't implemented that much in practice myself, just because I know based on clinical symptoms if a patient has got small bowel overgrowth or a gut dysbiosis." (Participant 1)

"... or they've done a test for calprotectin and it's very high." (Participant 6)

"I've done GI MAP testing and that worked before, and we're treating them for gut-related symptoms." (Participant 6)

"I am also a specialist Kinesiologist so I am able to use kinesiology as a method of treatment, although, I tend not to, I focus on the homoeopathy. But I will use Kinesiology if I can't clearly observe what an obstacle might be. I actually have a list that I will then go through and test through with kinesiology and identify where obstacles to cure are with that and then address them via that, then I resort to kinesiology to muscle monitoring. What I have done, not often again, because of the price involved, but sometimes I have sent them for IgG testing." (Participant 9)

4.3.2. HOMOEOPATHIC PERCEPTION OF OBSTACLES TO CURE AND GUT DYSBIOSIS

The study participants described obstacles to cure as anything that hinders patients from improving and emphasized the importance of removing them to facilitate effective treatment. While most believed it was crucial to address these obstacles as soon as possible, others would only do so when necessary to advance the case. Gut dysbiosis was described as an imbalance in the gut's microbiome or an overgrowth of pathological bacteria, fungi, yeasts, or parasites. The majority of participants perceive that gut dysbiosis can cause various gut symptoms and systemic effects, playing a role in many unrelated chronic diseases.

4.3.2.1. Perception of obstacles to cure

The majority of participants described obstacles to cure as anything that prevents patients from improving. The removal of obstacles to cure is perceived as important in the treatment of patients, especially if it adds to the pathology of the patient. Most participants believe it vital to remove obstacles as soon as possible, whereas, others will only remove possible obstacles when indicated as necessary to move the case forward. Some participants did mention that it may not always be possible to remove obstacles to cure. Some obstacles to cure that were mentioned by the participants are: lifestyle, diet, stress, emotional turmoil, environment, occupation, chronic exposure to toxic substances, allopathic medicine, and genetic factors. Direct excerpts from participants to support this sub-theme follow:

"So, obstacles to cure are the things that are standing in our way between where our patients are and where we want them to be, and often those obstacles to cure can be removed without even having to give a medicine. So, often I say if we get lifestyle things right, the need to even take medicine is removed. It's a block, it's a block in us receiving the results we want to receive." (Participant 2)

"Well, 'obstacle to cure' is obviously coined in the Organon of Medicine, where Hahnemann says that we are to remove the obstacles of cure. So it might be factors

that prevent the patient from healing: things that need to be removed for the remedy to be effective in actual action." (Participant 3)

"Obstacle to cure is, I think, anything that can stop or prevent a patient from obviously reaching the complete cure. But, also from a homoeopathic perspective, I think in terms of our remedies, you know, working as well as we want them to. So, definitely an important thing to first find out what (the) obstacle to cure is and, obviously, then the removal being the very important part. Sometimes, I find though, depending on the obstacle, it's not always completely removable, but I do find that if an obstacle can be even lessened, we can get a lot more improvement with homoeopathy as well." (Participant 6)

"My understanding of obstacles to cure, or possibly would call them 'blocks', are factors within the environment and or the person themselves, which need to be addressed before a homoeopathic remedy can act optimally. Or if one sees the remedy not working well, man needs to investigate to see if there's something that is hindering its working. Is the removal of (obstacles to cure) an important act? Yes, although I'm sometimes in two minds about that, because sometimes if the remedy is really spot on, it seems to get through any potentially perceived obstacles. So in my perception, they play a bigger role the further away one is from the simillimum." (Participant 9)

"I really do try and identify potential obstacles to cure in the case taking process when you find out about their occupation, family history, lifestyle factors, what diet they follow, are they a smoker, non-smoker, etc. Yeah, and you try to, at the very least, bring it to their attention in the first consult. And ideally, it is something that is a modifiable risk factor or a modifiable obstacle to cure that you can address." (Participant 1)

"... first consultation straightaway, let's identify it straight away (obstacles to cure). We already in the consultation will start seeing particular lifestyle things that are out of balance and unless we address those from the start, it doesn't help to give supplements, it doesn't help to give the remedies, we need to get those addressed

as soon as possible. So, I would normally go about these strategies even before seeing if the right remedy fails or not. Sometimes, in the first consultation if a remedy isn't clear to me yet and their lifestyle is not right, I address that in the first consultation." (Participant 2)

"If I can identify it with the first consultation, I usually address it during the first consultation, but sometimes it is things that we don't think of and so sometimes only later during the course of treatment." (Participant 5)

"... it's always individualized. Sometimes one sees it clearly from the get-go and needs to address it or certainly approach it and talk to the patient about it. Sometimes only when I'm pretty sure that my remedies are close to accurate and they're not working, then I will address it so it varies." (Participant 9)

"The removal of it is an important act as a homoeopath. If they are active, that is kind of one thing, which I want to clarify, because, generally, you know, a lot of people can say that obstacles to cure exist before you even perceive them. So, you have to start treating the obstacles before they even present. I prefer to approach it as obstacles appear, then you address the obstacles that are pertinent to the case at hand, So at the point that they're present. At what point in treatment would be the point at which they limit progress in the case? Okay, that would be the point. So, if the case is progressing, then one doesn't need to evaluate obstacles on a deeper level or more extensive level." (Participant 12)

"It depends on where the obstacle to cure lies and what the most important thing is. Let's say they've got pain, then at the moment, I'd be focusing on the pain much more than I would be focusing on the obstacle to cure, but then as the pain or as the acute gets better, then I'd worry about that. The easiest answer is to say that it's in the chronic treatment of the patient and not in the acute." (Participant 13)

4.3.2.2. Understanding of gut dysbiosis and its local presentations

The majority of participants described gut dysbiosis as an imbalance in the microbiome of the gut, or an increased growth of pathological bacteria, fungi, yeasts or parasites in the gut. The participants described the following gut symptoms as indications of gut dysbiosis: bloating, flatulence, abdominal discomfort, diarrhoea, constipation, food cravings or intolerances, indigestion, and weight changes. Gastroesophageal reflux, indigestion, gastric or duodenal ulcers, irritable bowel syndrome, inflammatory bowel disease and a history of antibiotic use were also mentioned as common indicators and associated diseases of an imbalanced gut microbiome. Direct excerpts from participants to support this sub-theme follow:

"We always know that anywhere we hear 'dys-', it means it's abnormal, or it's in an inappropriate state; '-biosis' is your microbiome or the balance of your commensal ideal bacteria in the gut itself together with any sort of pathogenic bacteria. So basically, when we have a gut dysbiosis we have an imbalance of the correct microflora, which is leading to some sort of intestinal complaint or chronic illness related to an imbalance in this gut microbiome." (Participant 1)

"Gut dysbiosis is not just bacterial; it can also be the fact that it's fungal and Candida overgrowth, so it's an entire spectrum." (Participant 3)

"So my understanding of basically our gut dysbiosis is an imbalance in the gut microbiome which can indicate either a pathogenic nature - so the growth of bacteria and fungi, yeast, viruses in the gut, and therefore also suppression of the good bacteria. But I think that we can also get the gut dysbiosis where we have an overgrowth of good bacteria as well, where there is that kind of imbalance as well." (Participant 6)

"So, it's basically an imbalanced gut. So, there may be overgrowth of various bacteria, there might be fungal infection going on, there may be parasites, (and) protozoans. So, overgrowth. There might be no growth or very low growth of the

beneficial bacteria. And then it can also mean that there might be some gut permeability." (Participant 10)

Continuing on from the theme of the homoeopathic 'Understanding of gut dysbiosis and its local presentations, below are the excerpts for the participants regarding the various symptoms that they assosiate with gut dysbiosis:

"... asking them about their digestive health, and they starting to say things like, 'I'm constipated, I have IBS, I have reflux, bloating, flatulence, or indigestion', any of those things." (Participant 2)

"Chronic constipation is a very, very important symptom. Then, of course, the chronic diarrhoea, chronic indigestion, and upper gastrointestinal symptoms like chronic pyrosis, and chronic pathologies like gastric ulcers and duodenal ulcers - one's got to treat that very, very important chronic upper abdominal discomfort and pain." (Participant 4)

"... bloating, constipation, diarrhoea or infrequent bowel movements, brain fog, inability to absorb nutrients properly, inflammation in general. So, just about every disease, you can look at it." (Participant 5)

"So firstly, I think it would be gut-related symptoms. Yeah, and that can range from what would be 'umbrellaed' as IBS - a lot of patients will come and say my doctors told me I have IBS or I've had IBS for years. And under that sort of umbrella, which I believe IBS is a term for a lot of other problems going on including dysbiosis, you know, you would have your general abdominal pain, constipation, diarrhoea or alternation between the two, your bloating, burping, flatulence, and that is sort of the general kind of thing." (Participant 6)

"... bloating, discomfort, diarrhoea or constipation. Sensitivity or intolerance to certain foods." (Participant 9)

“Any gut symptoms. So it can be bloating, it can be IBS kind of symptoms, alternating constipation, diarrhoea, if they've got sugar cravings, or any food cravings, weight gain, weight loss, changes in bowel habit.” (Participant 13)

4.3.2.3. Perception of gut dysbiosis and its systemic effects

The majority of participants described gut dysbiosis to not only have a role in gastrointestinal diseases, but also to have systemic effects and a possible role in many unrelated chronic diseases. Immune system disorders such as autoimmune diseases, increased infections, and allergies; hormonal imbalances; metabolic disorders; thyroid problems; cancers; cardiovascular diseases; respiratory issues like asthma skin disorders such as eczema urinary tract infections and joint disorders such as rheumatoid arthritis and osteoarthritis are perceived to be influenced by gut dysbiosis. The majority of participants viewed the gut as having a great effect on the neurological system and mentioned its relation to mental health disorders such as anxiety, depression, brain fog, Alzheimer’s disease, Autism, ADHD, and other concentration difficulties. General fatigue, lethargy and Chronic Fatigue Syndrome are also viewed to be affected by gut dysbiosis. Direct excerpts from participants to support this sub-theme follow:

“... never mind the fact that it has been linked with autoimmune reactions, has a contributory link with chronic diseases, cancers, cardiovascular diseases, Alzheimer's - you name it - and any autoimmune condition whatsoever.” (Participant 1)

“... and then very importantly, I think we forget that we have a second brain in our gut and people’s mood, their ability to handle life and stress when the gut is unhappy, even that becomes affected.” (Participant 2)

“... then hormonal disturbances, thyroid disturbances can be affected, even concentration and gut problems. The gut can affect the brain function, so fogginess,

fatigue, lethargy - it's a multi-systemic effect. You have to look at gut imbalances." (Participant 3)

"... but then also systemically, I also find that when people are getting sick frequently, when there are a lot of food intolerances when they have things even like mental and emotional conditions, it's also an important area to look at in terms of anxiety, brain fog, depression, concentration issues, and furthermore sort of ADHD and that kind of thing. So, general symptoms being gut-related, but also the more systemic and even to the point of other physical symptoms like skin disorders such as eczema, and even things like asthma - anything I think that involves the immune system either being overactive or underactive is always an important area to look at a balance of the microbiome." (Participant 6)

"... fatigue, irritability, depression, anxiety, loss of weight, gaining weight, skin, headaches, restlessness, insomnia, everything." (Participant 10)

"I mean, even a child of ADHD, you've got to look at the gut, an autistic child, someone with dementia, someone with cancer. So it's extremely important (in) chronic diseases, autoimmune diseases, thyroid problems, you always got to look at the gut. So it's very important and you cannot not treat the gut." (Participant 10)

"It's a massive role, it probably underlies, I don't know, at least 80% of the chronic diseases in anything from immune system disorders to autoimmunity, to psychological issues to weight gain, weight loss, hormone balance, detoxification, all of that has to do with gut dysbiosis." (Participant 13)

"So you could arguably say that it could be a contributing factor in almost all types of chronic diseases, barring those that are directly linked with purely genetics or say for example, weight and age. So like, for example, something like osteoarthritis, you're probably not going to suspect directly gut dysbiosis contributing to that, but I mean, clinical research trials are coming out every day that demonstrate it has an influence on your metabolic pathways and hence, it can have a potential knockdown effect with a whole host of physiological functions." (Participant 1)

“I don't feel that every single chronic disease centres around gut dysbiosis and so there are certain chronic diseases, as I mentioned before, inflammatory etc., you can go back to that, you know, question that you lean more towards gut dysbiosis playing a bigger role, but I will also just comment that if you look at the provings of the bowel nosodes, things like anxiety come back, and I mean, anxiety is very sensitive, so it's not only inflammatory, there are also psychological chronic components that are influenced quite strongly by gut dysbiosis.” (Participant 12)

“If your gut system is imbalanced; your entire absorption capacity, your ability to nutrify the body . The gut is very important from the T regulatory aspect for your T-cells. When you look at the balance between Th1 and Th2, (the) balance between the inflammatory cascade and your autoimmune cascade, so a lot of disease and chronic diseases start basically at the gut value and the gut barrier, so it's a fundamental importance.” (Participant 3)

“I think it has a vital role to get the gut dysbiosis correct because it has a direct influence on inflammation and on the absorption of nutrients. So, I think it's a very important role - if the gut is not healthy, it creates inflammation in the body. So, the probiotics or the good bacteria in the gut play a vital role in the assimilation of food and absorption of nutrients. So, if that is not correct, the body cannot heal.” (Participant 5)

4.3.3. HOMOEOPATHIC CONSIDERATIONS WHEN INITIAL TREATMENT FAILS

Participants would consider many things when initial homoeopathic treatment fails. The majority of the patients would reconsider the case by examining the patient holistically to see if there is anything they may have missed and by reconsidering the initial diagnosis. The majority of participants would also reconsider their treatment by looking at the remedy, potency and quality of the remedy. Some would consider a miasm and address it with a proper prescription, while others would consider treating the patient with a different treatment modality. The patient and their behaviour,

psychology, expectations and ignorance are also taken into consideration by many of the participants. Some participants stated that they would consider whether the patient is taking the remedies correctly and whether they may be withholding any information. The majority of participants viewed the diet of the patient to be highly important as it may be inadequate, pro-inflammatory, include food the patient may be intolerant to, and exacerbating to their disease.

Many of the participants believed that gut dysbiosis can act as an obstacle to cure by limiting the remedy, interfering with the body's curative process, and triggering an immune response that could lead to chronic disease. Whereas, a few participants believed that although gut dysbiosis can act as an obstacle to cure, it only needs to be considered when the patient fails to improve, has recently taken antibiotics, or presents with clear signs of an imbalanced gut microbiome. While some participants believed gut dysbiosis needs to be addressed for any favourable result, others described that homoeopathic remedies can initiate a response even when the patient presents with gut dysbiosis. Other obstacles to cure that participants mentioned include family history, past medical history, diet, lifestyle, relationships, stress, exercise, smoking, occupation, environment, infection, organ insufficiency, inflammation, and vitamin and mineral deficiencies.

4.3.3.1. Reconsider the case

The majority of participants described that their first action when a patient fails to improve on a remedy would be to reconsider the case and search for important information that might have been missed previously. They would retake the case and consider the patient holistically. Some participants described the need to also reconsider the diagnosis when the treatment fails. Direct excerpts from participants to support this sub-theme follow:

"... and what I would usually do if I find (there) is no change; is to take a case again, make sure you don't miss anything." (Participant 3)

“Well again, retake the case, look at the medication, diet, lifestyle. If I have recommended some lifestyle, diet changes - did the patient implement it correctly, and just basically start from scratch.” (Participant 5)

“If the indicated remedy isn't working, I would firstly go back to the actual case itself to make sure that I've looked at everything completely. Anything that I may have missed. Sometimes, I may then look at a follow-up consultation with patients again to see if anything changed. But, I think first and foremost would be the reassessment of the case and going through it in a little bit of finer detail.” (Participant 6)

“So, the best way is always if it's not the incorrect remedy, then to go through the case again. And I think in your case taking I think even in the first case taking you always have in the back of your mind (that) most of our patients actually have obstacles to cure. If they come back, and there is no improvement, then when you retake the case, you perhaps emphasize that more.” (Participant 11)

“You taking a step back to look at possible further investigations, especially investigations which may support or refute the initial diagnosis and its differentials. So doing further investigations, and identifying organ components, you know, going back to that principle of organ support, and then also, in a sense, evaluating pathology in the context of the case. So, making sure that you have a comprehensive case… So if the indicated remedy fails to act, one has to sort of go back and ensure that you have done an extensive case review for other contributing factors.” (Participant 12)

“We also have to realize that we are medically trained and are we treating the right disease first of all?. Nine times out of ten you were treating one thing, and we're sitting with some other disease entity.” (Participant 7)

4.3.3.2. Reconsider the treatment

The majority of participants described that the treatment needs to be reconsidered when the treatment applied does not produce favourable results. The majority of participants mentioned that they would reconsider the remedy and the potency of the remedy, whereas one participant would also reconsider the quality of the remedy prescribed. Many participants would consider a miasmatic block and aim to remove it with the indicated nosode, while only some would consider treating the patient with a different treatment modality. Direct excerpts from participants to support this sub-theme follow:

"I'll have a look at always in my case takings I make a note of, you know, potential, like two or three other remedies to consider and then I'll go and re-review them and double check if it's actually not one of my secondary choices that fit the picture better." (Participant 1)

"Generally I will re-prescribe and I will look for an allied remedy because I'm generally assuming I'm more or less on the right track. I mean, I'm doing it in the ballpark, or I'll go with a nosode." (Participant 8)

"... and then you might look at an alternative dosage and obviously making sure that your secondary prescription don't antidote each other, or if you have found that it is an aggravation, then the antidote would in that case be helpful." (Participant 1)

"Firstly, to go on to the basic homoeopathic philosophy about prescription and posology. To look at whether your posology (was) right, about whether your prescription was, in fact, the correct prescription." (Participant 3)

"I won't usually prescribe the same medicine or go up or change the potency, I will generally look for an allied remedy or possibly a nosode." (Participant 8)

"if we're talking about your indicated simillimum remedy, I will review my potency choice, because more often than not, especially if you've done quite a

comprehensive case taking and you really do feel you've matched the remedy accordingly, it could just be a question of the potency selection." (Participant 1)

"Hahnemann says you shouldn't doubt that your medicines were made correctly. So, you must make sure that your medicines were (made) correct." (Participant 3)

"And that's where I believe miasmatic treatment is extremely important in removing the obstacles to cure. There could be a miasmatic issue or block again, as we spoke about. You take the case, give a miasmatic remedy, wait and see that you change the picture, and probably a different remedy would come up." (Participant 7)

"Okay, so the obstacles to cure in the context of homoeopathy classically are maybe miasmatic. So there's a miasmatic sort of unresponsiveness - not responding to otherwise well-indicated homoeopathic medicines. Suppression, history of suppression and you know, as sort of a major part and then obviously, I mean, in the context of your research, so, gut dysbiosis. So, for example, we have a miasmatic sort of blockage, you know, intercurrent miasmatic remedy in association with the current remedy." (Participant 12)

"I might even then look at herbal medicine or something else. I might not even then stick with Homoeopathy, maybe I will look at herbs or more of a functional medicine approach with very targeted supplementation." (Participant 10)

4.3.3.3. Consider the patient

Most participants mentioned that when a remedy fails, an evaluation of the patient's behaviour, psychology, expectations, and ignorance may be needed. Some mentioned that the practitioner needs to ensure that the patient is taking the remedy properly and as frequently as prescribed and whether the patient may be withholding some important information. Direct excerpts from participants to support this sub-theme follow:

“In more recent years I've learned this: I will always double-check as well that the patient has been taking the remedy as advised because sometimes it could be that they were taking it too frequently and they had an aggravation or they haven't been taking it correctly or they've skipped doses etc.” (Participant 1)

“I mean, another thing that they perhaps can mention - one of our other big obstacles to cure is patients that don't take their medicine. So, I think in your case taking you adjust then to keep in mind that our patient is not doing what they (are) supposed to do.” (Participant 11)

“First thing I tend to look at is if there's anything obvious I can see in terms of lifestyle and or psychological aspects.” (Participant 9)

“I think sometimes mentally/emotionally for me, you know, with patients. … oftentimes in consultation you'll get patients to say ‘I never really thought of that, I don't really know’, then you see them for a follow-up to get a bit more information for you. But sometimes I find in terms of that, you know, the patient’s awareness of themselves not great at the time. Once he obviously has a bit more of an in-depth consultation and starts to speak to you, they can come back with a little bit more information that then might permit direction on prescribing a bowel nosode or using it based on those symptoms as well.” (Participant 6)

“I find when a remedy fails to act, usually it is based on the fact that a patient hasn't actually disclosed all the relevant information. So, actually, often it's a dialogue of you had your interview, you did your assessment, you explored every single possible avenue, and then the patient comes back and all of a sudden, there's another layer of information that just didn't exist in the first consultation. And often, this layer of information comes through at the third or fourth or fifth or sixth consultation, you know, that it just depends on where the patient is with you as an individual. And sometimes it's very sad to see that a patient may come back once for a follow-up and then if they don't see a response, they may never come back again. But for those patients who do continue with them, you often find that that information becomes more apparent later on, and they reflect and may remember and they

identify, and then we recognize that component. So, missing information is very essential, like causative." (Participant 12)

4.3.3.4. Consider diet as an obstacle to cure

Most participants described diet as an obstacle to cure that needs to be addressed in most patients as diets could exacerbate disease, be inadequate, or be inflammatory in nature. Some participants described the need to identify and address food intolerances that could act as an obstacle to cure. According to one homoeopath, patients may not know what the recommended diet should look like or may be unwilling to implement these changes in their lives, which highlights the important need for education about a healthy diet to avoid it as a potensial obstacle to cure. Direct excerpts from participants to support this sub-theme follow:

"... and Hahnemann's time when he had to write about the obstacles of cure and you also spoke about dietary modification, even then, if you look at the exact aphorisms; he talked about it and spoke on what we should be eating and shouldn't be eating. If it was important then, it's far more important now in the modern era of things. So for me, it's always been about gut health." (Participant 3)

"... not just about giving homoeopathic remedy and carrying on eating junk. We have to give good nutrition to promote the natural gut economy of the body." (Participant 3)

"... and then food. So it's a vital role and there's no way you can, in my opinion, seek out or gain amelioration of chronic diseases without dramatically improving nutrition." (Participant 8)

"I think the simillimum has the ability to improve the gut dysbiosis largely, but I suspect particularly in our lives nowadays, that they probably affect us in terms of the nutrition that we can get, etc. That is just not optimal. That might not allow it to work one hundred percent, but I certainly think one can get a large improvement." (Participant 9)

“Dietary aspects are so very important. Identifying a balanced adequate diet, you know, looking at inflammatory components of diets.” (Participant 12)

“A lot of it is around looking at diet, looking at food intolerances, looking at and then addressing that with them.” (Participant 2)

“I mean in diet, I can be quite happy to refer to someone that's maybe a bit better versed in nutrition, but I think again, if you send to a dietician or someone like that they tend to put people on strict sort of regimes that don't work, experiences told me it doesn't work. So, if a patient is completely clueless, then we sometimes see that welleducated people can be completely clueless on what they need to do for their diabetes, what they need to do for their IBS, and so on, so referrals are not for me, it's (not a) standard thing, referrals for things like gut dysbiosis to our medical professionals is absolutely useless because the more I interact with our medical professionals, and they admit as well, they've got absolutely no clue about diet. I think it is the idea of the medical professional: this is my little box and if you need anything more, I will refer you out.” (Participant 11)

4.3.3.5. Consider the gut as an obstacle to cure

The majority of participants believe that gut dysbiosis could act as an obstacle to cure, whereas only two participants believed that homoeopathic remedies can be successful even if the patient has an imbalanced gut microbiome. Most participants believed that gut dysbiosis can make it difficult for homoeopathic remedies to work effectively, interfere with the body’s ability to heal itself and trigger an immune response that can lead to chronic diseases. A few homoeopaths described that gut dysbiosis should only be considered as an obstacle to cure when the patient has a chronic disease that fails to improve, has had antibiotics, or has any symptoms that indicate dysbiosis. Direct excerpts from participants to support this sub-theme follow:

“So all you're basically working off of is a sub-optimal base even in reportedly healthy individuals - if there is an element of gut dysbiosis present.” (Participant 1)

“Even if you've not necessarily addressed gut dysbiosis with, say, for example, like a rheumatoid arthritis patient or a Hashimoto's patient, you know those types of patients, you would still be able to get a therapeutic response, irrespective of it, but certainly not with your patient that is coming to you with gastrointestinal symptoms as their primary complaint. Yeah, you're definitely not going to get that improvement with your homoeopathic prescription without addressing that.” (Participant 1)

“I will not necessarily consider gut dysbiosis if there are no gut symptoms. Initially, there might be other things that require our priority first, but I wouldn’t say you can never consider it and often if you don’t know where to go, do a good gut balance.” (Participant 2)

“It can be huge. So, like I say, it can be starting at things like ‘Oh my digestive system doesn’t feel well’, but it can go right on to immune system dysfunction and autoimmune even worse.” (Participant 2)

“I think it is to a great extent, in my experience, maybe very underrated or understood, but if you are basically not nourishing from the gut because it's dysfunctional, you're not going to get the right nutrients and the right ability to heal and bring back balance to the body system. So, gut dysbiosis would play a major role in the obstacles to cure. If you're looking for a percentage-wise, I think it's easy 70 to 90% based on the gut values.” (Participant 3)

“I would say, into the 90% of cases gut dysbiosis acts as an obstacle to cure and that's where the simple therapeutic process is. You may give your patient a single dose of Nat mur (homoeopathic remedy), it may improve for a little while, and the patient will relapse. And you will repeat the single remedy in a higher potency. He may improve for a little while if he improves, and it will relapse. In my experience, that's where your gut dysbiosis will bring a chronic obstacle to cure.” (Participant 4)

“I think that plays a major central role. Oftentimes I find that if we (are) treating patients with chronic illnesses with homoeopathy even, and there is a role of dysbiosis to play, I do find that firstly our remedies, in my experience, don't work as well as we want them to. It may take a little bit longer or we don't get the results we expect. But once we can help and get that dysbiosis regulated a lot of the time and get them back to kind of a healthy gut state, you know, the immune system then can react too and the body is supposed to react to the remedy a lot better than with that obstacle to cure. It definitely helps a lot. It's a very central role in chronic illness and obviously the management thereof.” (Participant 6)

“I think in some cases it can really completely ruin the treatment effect in some cases, not all, but if there's a lot going on in the patient and dysbiosis is quite severe, quite chronic you know, I think it can act as a major obstacle to cure. I think we underestimate what the microbes, both the good and the opportunistic bacteria, what kind of effect that actually has, not only on you know, the sort of things we may eat or may take for treatment, medication-wise, but also the effect obviously, that (it) has on the body. So, in certain cases I feel like it can even render homoeopathic treatment ineffective and conventional treatment ineffective if it's not taught as a sort of foundation of treatment boost.” (Participant 6)

“In my perception, gut dysbiosis is not on my list of obstacles to cure and I haven't perceived it in that way. It's more something that if I see that it's an issue because of symptoms, you know, with obvious things like any kind of bowel problems nowadays, probably everybody has gut dysbiosis to some degree, but I would address it normally if people have had or used antibiotics if they are affecting things like irritable bowel syndrome, where the pathology focuses a lot on the bowel and also on allergies, particularly food allergies. So that's where I would initially consider and possibly do something about it.” (Participant 9)

“From a philosophical point of view, probably a major role . Although again, I do think homoeopathy can largely bypass it and I do think homoeopathy can help to balance things out and correct things, particularly if factors and things like diet - make the necessary changes in terms of diet, etc. I haven't considered gut dysbiosis as an

obstacle to cure. My perception hasn't been directed towards that. So thinking about it now, obviously, since you've mailed me and I know what your question is, I think it's entirely possible. Who knows, maybe it's even one of the primary things I certainly know that there are some people who think it's one of the primary aspects one needs to address." (Participant 9)

"I wouldn't say I emphasize my prescription so much, because I think almost, probably every person today has some degree of gut dysbiosis. The effect of that, I think, also varies depending on the sensitivity of the individual. Maybe it's something I can focus on more. I think again, as a homoeopath, you look very much at the individual and I think if an individual's weakness is not there, it's not that important. Again, our remedies can sort out a lot of that. I mean, some patients have got hideous diets and they still get better. But I think, I mean, certain conditions I definitely think patients will be more affected if they don't give attention to diet and correcting the gut. I mean, if you think from the very small trial, you'll see things like difficulties with digestion, and colic, and intolerances and allergies, those patients I think, definitely you need to go and focus a lot more." (Participant 11)

"It plays a huge role, but it doesn't mean every single case I only do gut work before I do anything else. Again, I wait for the opportunity to present before jumping in, you know, for me, I feel that wherever the energetic disturbance is strongest within the individual is where the case requires the first attention. So, when it comes to gut dysbiosis, if bowel movement is normal, if there are no significant cravings or aversions, if the appetite is good and they eat a moderate balanced meal, if there's no heartburn, reflux, indigestion, bloating, discomfort, no significant history of antibiotic use, no major parasitic, but you know, if all of those parameters are looking fine, I'm not going to approach gut dysbiosis. Purely from one - an economic perspective for the patient and two - an expedient treatment approach for the patient. So that's what I'm going to exclude gut dysbiosis in the treatment approach, when I see some level of that, okay, so whether it's a history of antibiotic use, or some vague, you know, fluctuation in bowel movement, any issues associated with just mucosa in general, you know, we're going to look at the digestive process." (Participant 12)

“Again, depending on the nature of the illness, it can be. It can be the core or the sort of foundational obstacles to cure in a process, because it can be many levels. But I think it is up there in top considerations for evaluating possible obstacles to cure. It's not an obscure, remote and insignificant consideration in an obstacle to cure. It should be second, third or utmost, fourth in weighing up what is contributing to an obstacle to cure. So yeah, definitely a very high priority, I think in the equation.” (Participant 12)

4.3.3.6. Consider other obstacles to cure

The majority of participants described the importance of finding other obstacles to cure that could render treatment less than ideal. Some other obstacles that the participants identified include family history; past medical history including trauma, surgical interventions and chronic medications; diet; lifestyle; relationships; exercise; smoking; occupation; environment; stress; infection; organ insufficiency; inflammation; and vitamin and mineral deficiencies. Direct excerpts from participants to support this sub-theme follow:

“I really do try and identify potential obstacles to cure in the case-taking process when you find out about their occupation, family history, lifestyle factors, what diet they follow, are they a smoker, non-smoker, etc.” (Participant 1)

“As I said, when you’re taking the history, lots of factors come into play - the emotional side, the physical, physiological, environmental, relationships, diets, foods, if they're abusing any drugs - all those sort of things. So when you're doing your homoeopathic case history, you're going to look at all those aspects.” (Participant 7)

“I'm making inquiries in regard to aetiology and including trauma and medical and heritage too. What's the health of the family tree? As well as what circumstances the person is living in - a city, in the mountains,, the other living next to marsh to use Hahnemann's example of an obstacle to cure. So, you know, are they in a healthy relationship, or are they in a toxic relationship?” (Participant 8)

"... also if they're on chronic medication, which I respect, but I need to know that, you know, what that medication is as well. I'll also then look to, in a sense, obstacles to cure … we know they were taking cortisone or an antibiotic." (Participant 8)

"First thing I tend to look at is if there's anything obvious I can see in terms of lifestyle, and or psychological aspects, and or miasms, and if that doesn't work, then I resort to kinesiology to muscle monitoring." (Participant 9)

"I'll be looking at inflammation because that's an obstacle to cure. I'll be looking at detoxification - how's the liver coping, the kidneys? So many things: infection, lifestyle, stress, diet's, huge. So the 32 questions essentially, one has to block the 32 holes in the ceiling really. So, that is all obstacles to cure." (Participant 10)

"They may also be in a sort of organ insufficiency." (Participant 12)

"... ensuring adequate nutrient components so whether it's vitamin/mineral deficiency, identifying any of those aspects, dietary aspects." (Participant 12)

"Obstacles may be specific infectious components like parasitic, you know, you have to address parasitic in the presence of parasites may also be an obstacle to existing cure, physically foreign organisms, and then also understanding various other interventions that may compound or produce an obstacle. Lack of missing organs, surgical interventions, modern invasive procedures, implants, pacemakers, whatever various medical devices may be involved, those can produce obstacles to cure, which are not necessarily able to be changed, but maybe some processes may have initially been a positive intervention and then maybe need to be reversed in some shape or form." (Participant 12)

4.3.4. HOMOEOPATHIC TREATMENT PROTOCOLS FOR GUT DYSBIOSIS

The majority of participants described their homoeopathic treatment of gut dysbiosis as individualized and tailored to the patient, taking into account their

physical, mental and emotional symptoms, constitution, and miasm. Participants use a variety of homoeopathic remedies, including single remedies, complex remedies, bowel nosodes, organotherapy, gemmotherapy, biopuncture, isopathy, and tissue salts. Single remedies are often prescribed by the participants when there is a clear indication, while complex remedies may be used as the preferred treatment of the practitioner in acute cases, or where the remedy is unclear. Bowel nosodes, organotherapy, gemmotherapy, biopuncture, and isopathy are commonly used to drain, support, and heal the gut lining, whereas single or complex remedies are prescribed to address the patient holistically. Some participants believe that bowel nosodes are a valuable tool in their practice, while others do not use them or use them to a lesser extent. Bowel nosodes are typically considered by the participants for patients with gut dysbiosis where: the gut terrain needs to be re-established, healing after suppression of the gut microbiome is needed, the well-indicated remedy fails, there is insufficient progression in the patient, or the patient presents with skin disorders. The participants prescribe bowel nosodes in a variety of potencies, including 30CH and 200CH. The frequency and duration of treatment vary depending on the individual patient.

4.3.4.1. Patient-focused treatment and advice

The majority of participants described the importance of homoeopathic treatment of gut dysbiosis as being individualised and tailored to the patient. Some participants mentioned that it is not only the remedies and potency that should be individualised but that any advice regarding lifestyle, diet, and which probiotics to use should also be tailored to the patient. Participant 11 made specific reference to two cases as examples of when they needed to alter their advice for the patient's benefit. The first case was with an obstinate paediatric patient who refused to eat any healthy recommended foods and the second case was of a devoted vegan with a severe protein deficiency who could not eat protein from animal sources. They also mentioned the importance of advising the patient holistically and finding a balance between what the patient needs to do, can do and is willing to do (including

paediatric patients). Without this, treatment and lifestyle changes would be ineffective. Direct excerpts from participants to support this sub-theme follow:

"It might be daily remedies and vary between using CH potencies, M potencies, and I use a lot of LM potencies, which I can give in a repetition of the dose. Depending on the nature of the patient, the kind of sort of patient, other mitigating factors, you know, comorbidities and depends on the vitality of the patient and the vital force will determine how I treat." (Participant 3)

" I individualize my complexes for the patients." (Participant 5)

"... more tailored to what patient's symptoms or patient's condition is. I'm not very one-sided in terms of clinical treatment or constitutional treatment. I think for me, it changes depending on the person and what I feel is best for them at that time." (Participant 6)

"Some colleagues might disagree, but I think you should not be too strict with the one remedy … and I think it's always important to just take the individual. There is not a 'one thing fits all' and you might repeat the same thing for certain individuals, but everyone's situation is very unique." (Participant 11)

"So, I do have a treatment plan, but I change the treatment plan depending on what symptoms the patient has…. There's a rationale underlying it but then how I implement the rationale depends on the patient and depends on the symptoms and often also depends on their means." (Participant 13)

"I would say education is one of the most important factors to the patient. Doctors should not overfill the consulting rooms with patients, because the only way that the physician can bring his knowledge to the patient is by training him, teaching him, and showing him the way to cure." (Participant 4)

"And of course, with children it can be a bigger problem because some of them just simply refuse to eat what they should, but I think they can also do definitely better if

you perhaps look at the gut as well. Again, not sort of make it your only focus because these children are already struggling, now to try and enforce something on them as far as diet and so on." (Participant 11)

"Unfortunately, patients aren't always advised to take probiotics - on how to take probiotics and what probiotics to be taken. There's such a big variety of it. I feel that people, I myself, are overwhelmed with the choices that are available on the shelf." (Participant 5)

4.3.4.2. Homoeopathic treatment approaches

The majority of participants use a combination of simplex remedies, complex remedies, bowel nosodes, organotherapy, gemmotherapy, biopuncture, isopathy and tissue salts. Most practitioners will prescribe a single remedy when well indicated, whereas only a few will focus on complex prescriptions which may be individualised products from homoeopathic laboratories or their personal complex formulas. Complexes are also prescribed in acute cases, where the remedy is unclear, or it is the preferred treatment of the practitioner. Bowel nosodes, organotherapy, gemmotherapy, biopuncture, and isotherapy are commonly used to drain, support and heal the gut lining. Simplex remedies mentioned by the participants include: *Arsenicum album, Ipecacuanha, Podophyllum, Phosphorus, Lycopodium clavatum, Nux vomica, Carbo vegetabilis, Veratrum album, Natrum muriaticum,* and *Sepia officinalis.* Complex and organotherapies mentioned include: Natura® formulations such as Gut mucosa®; and Heel® products such as Veratrum Hommacord®, Nux vomica Hommacord®, Mucosa compositum®, and Spascupreel®. Direct excerpts from participants to support this sub-theme follow:

"My prescriptions would be single prescriptions, meaning one type of remedy. It might be daily remedies and vary between using CH potencies, M potencies, and I use a lot of LM potencies, which I can give in a repetition of the dose." (Participant 3)

"Classical homoeopathy really is my ideal orientation, although, I'm practical and I practice a lot of clinical homoeopathy too … Finding simillimum, find a remedy that

comes as close as possible and I will treat with that, because that will really sort things out. And the closer you get to the simillimum, the better your results will be on all levels, including the gut." (Participant 9)

"If it's an acute case, of course, then there's nothing like Arsenicum, Ipecac, Nux vom, you know all those remedies. Podophyllum, Phosphorus, of course, I mean, acute dysbiosis. Yes, I use my homoeopathy there. I'll give the saccharomyces boulardii (probiotic yeast). But then I will treat with all my remedies, the acutes. Chronics not so much. I do, but in acutes of course, then I go straight in and treat with homoeopathy, and that's when homoeopathy is just phenomenal. When it's an acute case, I'd give a homoeopathic remedy, and that would have an effect, but when I have a chronic case, I'm looking more at doing the adjunct therapies, the antimicrobials and then also changing diets, and then only after they've gone through that detox stage, then I would consider homoeopathic medicines." (Participant 10)

"As far as possible I am a single remedy prescriber. I've got no problem to maybe give that nosode followed by the remedy. That was a very valuable thing I was taught because I also take into account what our patients do. You need to make an impact the first time or they're not coming back. Perhaps sometimes I can definitely prescribe more than what the classical prescription is of one powder a month, I can definitely do more than that. I've got no problem with complexes in acutes and in children with chronic things like chronic mucus, chronic this, chronic that. I've got no problem giving it for a short period of time - a complex. it's not always easy to get the simillimum but maybe you're a little bit braver to give that single remedy." (Participant 11)

"The high potency simillimum of course, can do wonders. And I think that high potency Nux vomica, Lycopodium, Veratrum. The Lycopodium especially. Today's wonderful remedy Nux vomica indeed, you can't practice without it. The Haemotoxicological remedy Nux vom Hommmacorde® plays a large part in my armamentarium. And of course, Nat mur is very important, Sepia is extremely important." (Participant 4)

“I'm not strictly classical, but I do like to use a single remedy if it's indicated. Obviously, that's very, very effective and important. But I use lots of complex remedies as well, low potency for instance. If we have something where I want to stimulate enzyme production in the gut, I'll use some of the Natura® formulations.” (Participant 2)

“I've seen results, but I find that in so many cases, the relapses of treatment will bring us to treat in a more holistic way and in treating patients with the complex remedy and the more functional remedies to help the chronic dilemmas of chronic constipation, chronic diarrhoea is or chronic irritable bowel disease.” (Participant 4)

“I mostly prescribe complex remedies. Those are individualized. That all depends on what the symptoms are and the severity of the symptoms and how long they've had it for and all of that.” (Participant 13)

“I got much better results by utilizing the Heel® products, and I know that the multi-remedies that Heel® makes, for example, the Mucosa compositum® remedy, and in acute gastroenteritis conditions Veratrum Hommacorde® and Nux vomica Hommacorde® and that is remedies, which is complex remedies gave me much better results in the therapeutic scenario and modern gut dysbiosis.” (Participant 4)

“... and then I do use a lot of Spascupreel®, actually the Heel® product for spasm and pain.” (Participant 10)

“I'm always very aware not to give things that is proven to antidote each other and so on. That always sort of amazed me that you buy a bottle, I mean, even our Heel® products which I think is great, but sometimes I look at and these things should not be in the same complex and so yeah, again very aware what sort of complex, and I think the best one is if you actually prepare your own complex.” (Participant 11)

“We do drainage so we can do organotherapy. We can give Gut mucosa® as a low dosage, we use tissue salts, we use gemmos (gemmotherapy), a little bit of biopuncture where necessary.” (Participant 7)

“Sometimes biopuncture is quite helpful depending on the patient. Things like your Mucosa comp®, if you are able to do testing and things like that. But also you can use the Mucosa Comp® looking at the gut lining, but also if you do note things like a very mucousy stool or those kinds of things, the hyper-inflammatory kind of gut. I think that's also an area that you know, homoeopathics and combination homoeopathics like the mucosa comps and that kind of thing come in handy as injectable over the large intestine.” (Participant 6)

“Do they have gluten intolerance, dairy intolerance, too much coffee, too much sugar, and we show them that they are allergic to that stuff. Then we do allergy desensitization. So, we will give them gluten in 6CH or dairy 6CH or whatever. And so we will do allergy desensitization.” (Participant 7)

“... then I would go in with a potent probiotic, or my bowel nosodes as initial treatment, together with, if I am treating them homoeopathically, with a constitutional (remedy) then I'll treat in concurrence then.” (Participant 1)

“... and so identifying and assisting it, in a sense, from a gut dysbiosis perspective, your bowel nosodes are the cornerstone of getting that, obviously, along with constitutional treatment.” (Participant 12)

4.3.4.3. The use of bowel nosodes

The majority of participants believed that bowel nosodes are a valuable tool in their practice that they use regularly with positive results. Some participants do not use bowel nosodes, or use them to a lesser extent as they do not find them useful. These participants stated that they have limited experience with bowel nosodes in practice and would make use of other treatment approaches such as Western herbal medicines or probiotics to treat gut dysbiosis. Participants would consider bowel nosodes in cases with gut dysbiosis where the gut terrain needs to be re-established; to assist with healing after suppression of the gut microbiome; where the well-indicated remedy fails; where there is insufficient progression in the patient; or if the patient presents with skin disorders.

Participants commonly prescribe bowel nosodes on the totality of symptoms including the patient's physical, mental and emotional state, the patient's constitution, and the patient's miasm. Prescriptions of bowel nosodes are also commonly based on the clinical presentation of certain conditions and the indicated polychrest remedies associated with the bowel nosode. The majority of participants prescribed bowel nosodes as an intercurrent remedy and in combination with other treatments i.e. homoeopathic remedy, Western herbal medicines, probiotics, etc. Some participants mentioned prescribing bowel nosodes in a 30CH potency once every week for a few weeks or months, or they prescribe a single dose of 200CH potency. Direct excerpts from participants to support this sub-theme follow:

"I use bowel nosodes regularly all the time. And they're amazing, actually, they're phenomenal. I mean, I've heard of patients just bring reports that they're just like, 'I didn't know my stomach could be like this', you know, that's the kind of response and that's just like one dose of Morgan pure 200(CH)." (Participant 12)

"That's also where I really do find the treatment with the bowel nosodes is hugely helpful. So, that would be one of the things, especially for a gastrointestinal patient, where if the indicated remedy, whether it was a Lycopodium or a Nux vomica or whatever the situation was failed to act, I would definitely look at using the bowel nosode as an intercurrent remedy. I would even consider it almost like its own sort of separate aspect of a treatment modality. And I would put them as equally as important as your homoeopathic prescription, your homoeopathic simillimum prescriptions, and your probiotics definitely. And they work so quickly as well, which is really fantastic." (Participant 1)

"I love using bowel nosodes. So I think they are fantastic. And there again, you're priming that gut with the remedy so that when you're giving a probiotic, or you're giving a supplement, it just optimizes the way it can function in the body." (Participant 2)

“I think that the bowel nosodes are invaluable in the treatment of gut dysbiosis. They are really important because they can be used in children and are easy to use. So, you can use bowel nosodes in children in a way that you wouldn't be able to use, let's say, massive changes or strong medication. So, I use them in the treatment of gut dysbiosis. I am not 100% sure of how they work, but they seem to normalize and stabilize the gut microbiome. And they seem to definitely improve patient's symptoms, and they seem to have a much longer-lasting effect than, let's say, probiotics. And they're a much easier way of treating patients than with massive, like supplement change and things like that.” (Participant 13)

“So, there'll be physical symptoms I'll look at absolutely. And certain indications. I mean, if it's more on the skin, we're going to look at certain bowel nosodes. If it's more within, you know, say intolerances, we're going to look at different bowel nosodes. But the mentals/emotionals is a very interesting indicator of where you want to go with which one.” (Participant 2)

“I think bowel nosodes for me would come in very much there in terms of helping to treat that kind of gut terrain and using it to help to stimulate a body, a person's immune system and body to react to those nosodes in such a way that we can actually establish and maintain a healthy gut as well. So personally, for me, sort of more of a re-establishing of the gut terrain, if I can put it in those terms, that would be quite helpful. But I think there's a different sort of school of thoughts and opinions on how people use them.” (Participant 6)

“I think of that attenuate as being a bit of a rebalancing, or respringing up off of the sort of dynamic of the gut biome to some extent. If there's been suppression or repression through particularly a lot of medication, or poor eating.” (Participant 8)

“Usually if I look at them closely, if what appeared (to be) apparently well-indicated remedies don't work - that would normally be my go-to. I do actually also have them on my testing list (kinesiology testing). So, if I'm not able to see an obstacle to cure and I use my kinesiology monitoring to try and identify it, I might find them there and then use them based on that.” (Participant 9)

“We're not prescribing necessarily based on the full comprehensive picture, we're looking for very key symptoms of it you know, is it spasmodic, is it more of your persistent diarrhoea. I just look at the clinical symptoms, and then I base it on that particular pathology picture. Once or twice, I have implemented the miasmatic approach, you know, like using your Sycotic co. in a patient that presented with elements of the Sycotic miasm, but not frequently, it's more, in my practice, on the clinical presentation of the patient. I focus very much on their clinical picture with that. Definitely. Not so much on the mental/emotional side.” (Participant 1)

“I prescribe bowel nosodes based on the mental, emotional, and totality of symptoms. I try to look at the whole lot. So the more closely it matches on the emotional level as well, the better I know, that's the nicer one to use.” (Participant 2)

“With regards to bowel nosodes, constitutionally I think it's also important to take into consideration patient history. I think just constitutionally, even as we would with remedies in terms of simillimum, but just to look at more constitutionally how a person is, their sort of history, I think also use of chronic medications -things like that would be the basis of what I generally use - the symptoms that they are experiencing, their past history and use of chronic medication are sometimes very important. And yeah, I think mainly constitutionally and current symptoms and past history of infection, and maybe even, I think coming to my analysis of the family history of blood-relative’s conditions as well.” (Participant 6)

“Generally, on a clinical or symptom-based sort of sense, a version of classical as well, in other words, it needs to match the symptoms of that nosode through the literature that I can look at and then also on the principle of a nosode in general. It's an underlying layer that I'm treating. So, I couldn't remember that I've actually used it as a standalone classical remedy. I usually use it alongside sometimes or sometimes in a sequence. Yeah, but it must need to fit the kind of clinical picture as well in the Materia Medica picture.” (Participant 8)

“So he (Paterson) describes the bowel nosodes in correlation to major polychrests. So in a sense, what you do is, when you're looking at obstacles to cure, there is a clinical indication and then similar principles. So, this is prescribed as a simillimum component, but I use it as an intercurrent. So it's kind of like if I'm using Lycopodium, then I will add a dose of bowel nosode, you know, so Morgan bach, for example, I'll add that in just as intercurrent, or, you know, I'll do maybe once a week, for example, in the process, because it's just stimulating to restore that balance. So I don't use it as like taking 10 drops three times a day for the next six weeks, you know, on bowel nosode, not at all, it's stimulating to restore that balance.” (Participant 12)

“... you added the bowel nosode as an intercurrent, I wouldn't, I've never sort of come across it where, I mean that's like a handful of cases, it is the simillimum. So, it was definitely an intercurrent remedy and then to see the original remedy, the bowel nosode would move it forward and then also your simillimum worked much better after that.” (Participant 11)

“So I think I give it as an intercurrent remedy, and then I normally give it say, once a week, maybe twice a week, if I'm using a 30CH, depending on the case, but if I'm using a bowel nosode intercurrently, I will use it for about a month, and then in a follow-up, we have a look and see how the person has responded.” (Participant 2)

“I don't know, I've got all the bowel nosodes here and we generally use it in our clinical formulas itself. I think that it will play, as it does, a massive role in terms of treatment itself, but it's kind of like a complete system all unto itself. I would like to learn more. I have chatted to colleagues who used to teach Materia Medica and maybe something that could come up in the future but, honestly speaking, I've got a whole series but I don't frequently use it as a standalone remedy, or an intercurrent remedy. I use it in formulas for different gut issues.” (Participant 7)

“I don't use the bowel nosodes. So, I will use more of the herbal antimicrobials, probiotics and digestive enzymes, more of a herbal approach. I believe they're good and you know, the more classical homoeopaths would use them with good results. I think we have a different toolbox of choice.” (Participant 10)

“The remedies to correct the gut dysbiosis I have used, but I must admit, I've stopped using that altogether. They fell into disuse because I must admit that I never had fascinating cures by using those remedies in the past. So, in the traditional bowel nosodes there is some research done there, and I think it can be incorporated. And in my practice today, I don't use it anymore.” (Participant 4)

4.3.5. ADJUNCTIVE APPROACHES TO GUT DYSBIOSIS

The majority of participants emphasize the importance of a healthy diet in both the treatment and prevention of gut dysbiosis. They typically recommend excluding processed foods, refined sugars, artificial sweeteners, gluten, dairy, and any foods that the patient may be intolerant to. They also recommend including whole foods such as fruits, vegetables, legumes, nuts and seeds, and fermented foods. The participants commonly use a ‘remove and replenish’ protocol when treating gut dysbiosis with adjunctive medicines. This involves first removing unwanted microorganisms and healing the gut lining before replenishing the gut microbiome with beneficial bacteria. To remove unwanted microorganisms, the participants may use antimicrobials, L-glutamine, D-glucose, liquorice, herbal complexes, gut mucosa, gemmotherapy, and organotherapy. To replenish the gut microbiome, the participants may prescribe prebiotics, probiotics and fermented foods. Some commonly used probiotic products that were mentioned include BIOremFERMENTf®, Rawbiotics®, Acidophilus 40 plus®, and products containing Saccharomyces boulardii. Other adjunctive therapies that the participants have used include tinctures, medical foods, vitamin C, and essential oils.

The participants stated that they may refer patients to other specialists if: there is no therapeutic response, the case is severe, the homoeopath feels they cannot help the patient further, or when there is a need to further investigate the pathology. The participants mentioned that they may refer to a gastroenterologist for suspected chronic heartburn, ulcers, haematemesis, melaena or high levels of

calprotectin in their stools, or if they have a family history of colon cancer and are over the age of 50. The participants may also refer to a psychologist for emotional issues or to a dietitian for dietary advice. Some participants also found chiropractic treatment or kinesiology helpful in certain cases.

4.3.5.1. Diet and lifestyle

Some participants described the importance of advising on a healthy diet, not only to correct gut dysbiosis momentarily but to aid in the maintenance of a healthy gut microbiome and to prevent dependence on treatment. The majority of participants would exclude the following in the patient's diet to aid in the treatment of gut dysbiosis: processed foods, refined sugars, artificial sweeteners, gluten, dairy and any foods that the patient could be intolerant to. Participants would recommend the inclusion of whole foods such as fruits, vegetables, legumes, nuts and seeds, and fermented foods. The Paleolithic diet, Mediterranean diet, and low FODMAP diet have been mentioned as possible diets to recommend to patients with gut dysbiosis. Other lifestyle changes that the participating homoeopaths would recommend include drinking enough water, exercise, stress management, maintaining healthy relationships and spending time in nature. Direct excerpts from participants to support this sub-theme follow:

"Lifestyle and diet changes absolutely. I think, you know, without that, you're never really going to effectively manage that gut dysbiosis down the line. You can do what you can now for a patient but I think that in terms of the maintenance, you never really want the patient to rely on medication, you know, being herbal, nutraceutical, homoeopathic, you kind of want to get them to a spot where they are cured, they are treated. And then using diet and lifestyle as the sort of means." (Participant 6)

"The biome needs to be balanced to give the best opportunity for the whole organism to help re-establish health. You can't do it in an isolated way, you can't either just fix the gut on its own or just fix any element in the body on its own, it has to work

together. That's why nutrition and lifestyle issues are part of my consultation." (Participant 8)

"We cut out processed food. And so nothing gets processed, we cut out all refined foods, refined sugars, and I make it a simple rule, 'If God didn't make it, don't eat it', And if God made it, if it's not stored properly, for example, mouldy peanuts and things that are not vacuum packed - we avoid, we avoid artificial sweeteners, we avoid anything sauces, I go on a quite strict diet right initially. So, we use like a diet that is restricted for the growth of bad pathogenic bacteria and fungi." (Participant 3)

"All my patients, I will take them off gluten, dairy, sugar, alcohol, sometimes fruit depending, but I will limit fruit quite a lot. I usually take them off coffee, and then anything with chemicals, preservatives, colourants, that kind of thing. And then I'll get them to eat largely plant-based diets similar to the Mediterranean diet, but absolutely no gluten. And also the cross-reactive like I will take out corn as well. And then I'll get them to drink a lot of water, do exercise." (Participant 10)

"Ensuring that the nutritive supply is good, you know, not excessively acidic or sugary diets or anything like that. Low inflammatory diets, you know, looking at also histamine foods depending on the context of the issue." (Participant 12)

"If I've done food intolerance testing, then I will get them to exclude those foods from their diet. Often, I might just start with a general detox. So a liver detox, general liver detox guidelines. For instance, they go for two to four weeks without any of those really high-allergen foods. So I'll cut out gluten, and dairy, and hormone-containing foods, and sugar, and caffeine, alcohol, all those typical bad ones. Because then often they'll be working on a clean slate almost so that if they then expose themselves to a different food or whatever they can feel what the reaction is and how their body tolerates it. So it's them learning to listen to their bodies as well." (Participant 2)

"I do advise lifestyle changes to my patients in general anti-inflammatory, so more towards the Paleolithic diet. Limiting gluten, specifically dairy and sugar and

sweetness, I find those are the biggest triggers. So depending on each patient, and how they can accommodate and change their lifestyle, we start with that, depending on the situation as well. So, if I'm looking at autoimmune disease, arthritis and skin problems specifically I might even look at avoiding the legumes and Solanaceae - the potato family and processed meats as well. And then adding good probiotics and fermented foods to the diet is a very important one. I am looking more towards fermented foods, I'm finding for the patients who are willing to try it and eat it, I'm finding more success with that." (Participant 5)

"I discourage the use of kombucha because I have found absolutely every single patient that has had a digestive disturbance, including and especially irritable bowel syndrome, they flare. It causes the gas and I think it's because of that fructose fermentation - the sugar ferments. So, I don't recommend kombucha in my practice at all." (Participant 1)

"From a dietary point, I think that is also quite specific to the patient. So obviously, during the initial consult, we'll go through diets and see what may aggravate the patient, and from there I think sometimes we can determine, even without testing all the time for food, for instance, food intolerances and things like that, we can generally start to see things that may aggravate patients. So diet-wise a lot of the time will be restrictions for inflammatory foods like sugars and glutens and often dairy as well. Again, very patient dependent, but then also looking at other diets, so we can pick up anything that they're reacting to like a low FODMAP diet or you know, histamine, high histamine reactions and things like that." (Participant 6)

"... and for me it's not 'you must go on a specific diet'. Of course, if there is a horrible diet you're not eating your fruits and vegetables then we look into that. But for me, it is your chronic conditions especially if your patient is not making good enough progress. So, I will never tell a patient I'm going to put you on a diet, rather give them a list of 'I advise you to this, and this, and that'. I think people are more willing to work with you. And I think especially lifestyle and diet changes don't show results immediately. So that's a tricky one. Also, I'm not going to send you to the gym, you need to start now. Small changes, and sometimes I see if patients feel better, and

they see maybe that these things work, then they're more willing to actually take it on themself. And those patients, you will always see better results than the one that you just keep on prescribing but nothing else is happening. So it's very much an individualized thing. It's not: I put you on a diet, you must do this, and this. It's: I give you a list of things that you need to look at." (Participant 11)

"... and lifestyle, just encouraging them, things like making sure they're drinking enough water, telling them when the bowel meridian is most active, you know, how they should be concentrating on having a healthy bowel movement, at what time of the day, etc., adjunct therapies are very important, whether it's maybe exercise protocols they need, even psychotherapy, seeing a psychologist or therapist." (Participant 2)

"Lifestyle again, you know, being things like a good amount of exercise. I think also stress management in this day and age, we know that that can have quite a big impact on the gut. So, definitely stress management, whatever the patient feels is best for them, whether it's breathing, whether it's just relaxation, whether it's mindfulness, whether it's changing the actual day-to-day kind of thing, giving more time to themselves." (Participant 6)

4.3.5.2. Adjunctive therapy prescriptions

The majority of participants described a 'remove and replenish' treatment protocol when addressing gut dysbiosis with adjunctive medicines. Participants will first detoxify and heal the gut, and remove unwanted microorganisms using antimicrobials, L-glutamine, D-glucose, liquorice, herbal complexes, gut mucosa, gemmotherapy, and organotherapy, and by removing food that cannot be tolerated. The gut microbiome will then be replenished with beneficial bacteria found in probiotics and fermented foods. The majority of participants prescribe prebiotics and probiotics and find it useful not only for adults but also for paediatrics patients. The majority of participants use a broad-spectrum probiotic for a limited duration and find the use of bowel nosodes supportive in conjunction with probiotics. BIOremFERMENT®, Rawbiotics®, Acidophilus 40 plus®, and products containing

Saccharomyces boulardii were mentioned as commonly used probiotic products. Participants would also recommend the incorporation of fermented foods such as kimchi and natural yoghurts to aid in the restoration and maintenance of the gut microbiome.

Other adjunctive therapies that participants mentioned include the following: Tinctures such as *Andrographis paniculata, Taraxicum officinale, Carduus marianus, Althaea officinalis, Withania somnifera, Passiflora incarnata, Avena sativa,* and *Hydrastis canadensis.* Medical foods from companies like Metagenics® and Zymogen®, such as turmeric/curcumin, garlic, green banana flour, and aloe. Comed's® Morgan Pulv®, Zymogen's® ProBioMax®, Fuller's Earth® Magnesium remedy and products from Coyne®, among others, are used by the participants. Vitamin C, berberine and essential oils like Oregano were also mentioned. Direct excerpts from participants to support this sub-theme follow:

"... but I would say I'm pretty consistent with that approach of: a month of healing gut protocol with like an L-glutamine and D-glucose, liquorice, that sort of thing. Then I would go in first and foremost, I would ideally see them again so that I can monitor any sort of symptoms of intestinal bloating, cramping, or digestive disturbances, then I would go in with a potent probiotic, or my bowel nosodes as initial treatment, together with, if I am treating them, you know, homoeopathically with a constitutional (remedy), then I'll treat in concurrence then. And thenbasically see how they respond. And usually, I get quite good results within the first two months." (Participant 1)

"Then, of course, from a functional point of view, you've got to clean out the gut. You've got to mention that (it) is an extremely important remedy, your magnesium remedy, to clean out magnesium oxide with the Fuller's earth® remedy in that wonderful remedy to clean out the gut. And then to re-establish your post treatment there is your probiotic to help. And in the acute case where you have the chronic constipation, you've got to clean the gut and you've got to re-establish the microbiome." (Participant 4)

“I think different views on how people treat gut dysbiosis. I think there's the school of thought of, you know, getting the opportunistic bacteria or yeast or fungi or whatever you're dealing with out and replenishing with the good stuff and maintaining thereafter. And then there's also the school of thought of changing the gut terrain from the start and not using an antimicrobial treatment, you know, rather changing what someone's eating in their diet. And, and as I say, the sort of host terrain if that makes sense, so things like your prebiotics, etc.” (Participant 6)

“As I mentioned earlier, there are different schools of thoughts of you know, do you eradicate the bacteria, are they sort of useful and you just want to change the terrain so that you’re kind of increasing the bacteria that you want there rather than knocking out any bad bacteria with, or opportunistic bacteria, with things like antimicrobials. But personally, I find them (bowel nosodes) very helpful and at least to establish and initiate treatment, so kind of starting where we know that we are trying to reduce opportunistic bacteria and help your probiotics and good bacteria to obviously thrive as much as possible.” (Participant 6)

“... and from an adjunct therapy we do drainage so we can do organotherapy, where we can give gut mucosa as a low dosage, we use tissue salts, we use gemmos, we use herbal complexes, we use probiotics.” (Participant 7)

“So, I don't actually give the remedy until I've removed all the obstacles and I've actually detoxed the patient. So, I don't usually start with the remedy until a little bit later so I work a little bit differently. So I mean, obviously every six months a patient will go through a detox and I will ensure that I remove all of those obstacles and then you know a remedy is not going to sort out a bad diet or poor circulation, poor lymphatic drainage, you know, need for detoxification, so I'll do all of that and then I will start using my remedies.” (Participant 10)

“They may also be in a sort of organ insufficiency. So, then, you know, organ support drainage, appropriate organ remedy, tinctures low potency to support, nourish and cleanse, facilitate function restorative, you know, all the cellular components.” (Participant 12)

“And then of course, I have used probiotics a lot, and my favourite one at the moment is the BIOremFERMENT®, that we use extensively in babies and even adults, and we use it a lot with good results to replace the organisms in the small and large bowel.” (Participant 4)

“... and then adding good probiotics and fermented foods to the diet is a very important one. I am looking more towards fermented foods, I'm finding for the patients who are willing to try it and eat it, I'm finding more success with that.” (Participant 5)

“And then I will recommend probiotics. And if I do then usually I will muscle monitor to find the optimum for that particular person, but I tend to like the ones that are a bit more complex. So I'll get Acidophilus 40 Plus®, is a good one, which at the moment you can't get. ‘The Real Thing’, I don't know what it's specifically called, but that's also a combination one. I don't really like the simpler ones like Reuterina® or the other one that seems to work quite well for some people is Rawbiotics®, which is the actual liquid.” (Participant 9)

“I use the Morgan pulv® powder from Comed®. That's a fabulous formula for that gastrointestinal lining. Definitely, the use of your Saccharomyces boulardii to basically kind of kill off Candida and then re-inoculating with a probiotic. That there I definitely utilize extensively.” (Participant 1)

“I utilize either the ProbioMax® formula. They've got a variety of different formulas from Zymogen®, or I utilize BIOremFERMENT® from Albiofa®, they are really, really lovely and that's the liquid formula so it's very easy to take.” (Participant 1)

“I use herbs quite a lot. I use tinctures that I will prescribe or mix. I like tinctures or herbs because their whole products are not extracts of one. As you know, Curcumin is a very nice extract and I can see its role in all therapeutic things in certain instances but turmeric has got a complex of other ingredients and in nature our ancestors couldn't extract curcumin; they ate the whole lot. So, I see them as plant

stuff and therefore tinctures. I do also sometimes use herbal tablets or capsules." (Participant 8)

"I must say I will, in 90% of my prescriptions, also prescribe a herb, simply because I like the biological level, the material effect that I know the herbs are going to have. Herbs I commonly use are the liver type of function: Taraxicum and Carduus marianus, but also something like Withania, which is a sort of a neuro-related adaptogen, an antiinflammatory. So I mean, quite often, my opinion and observation and the literature I think would indicate that the nervous system and something like irritable bowel, they're very well connected. So anxiety and so on. So if I'm assessing that anxiety and stress are part of the picture, then something like Withania is usually helpful to me in my observation or Passiflora or Avena sativa even - the oats. I will also use Hyperogast if there's a lot of indigestion as such, not directly colon related. Then I used that herb which has got the better herbs as well, Hyperogast, I generally have in my dispensary and I find that works pretty well." (Participant 8)

"... and then I'll usually treat them for about two months, and then reevaluate. Sometimes we use medical foods like Metagenics® and Zymogen®, I might do that. L-glutamine I use a lot, Aloe, and then for constipation, I'll use a lot of vitamin C high dose vitamin C. Diarrhoea, I'll usually use Saccharomyces boulardii." (Participant 10)

"I think as homoeopaths, it's very much an individual thing … even the supplementation you need to individualize and I think as far as practice wise it is very small for me, but I don't stick to one company that supplies supplements. I will find one thing that worked very well say from Coyne® and I will buy that, and one thing that worked very well from another one. You find what worked well for the individual, you find in your different suppliers, which one of the supplements works well and so work out a therapy that works for the individual." (Participant 11)

"So I might use more herbal remedies or kind of essential oil based treatments like Oregano, etc., in the first part, or Hydrastis or Andrographis, or Berberine. Things along those lines. To get rid of the pathological bacteria, I might use herbs like Marshmallow root (Althaea officinalis), sometimes I use garlic in the first part of the

treatment as well, I might use Molkosan®, I often use green banana flour, so a prebiotic fibre." (Participant 13)

4.3.5.3. Referrals and adjunctive treatments

The majority of participants will refer patients to a gastroenterologist when there is no therapeutic response, when the case of gut dysbiosis is severe, when the participant feels they can't help the patient further and when there is a need to investigate the pathology. They will also refer patients presenting with a suspected chronic heartburn or ulcers, haematemesis, melaena or high levels of calprotectin in their stools and if the patient has a family history of colon cancer and is over the age of 50 years. While some homeopaths used referrals primarily for diagnostic purposes like gastroscopy or colonoscopy, others described referrals to a wider range of practitioners, including conventional doctors and alternative therapists, suggesting a potential for a more integrated approach to patient care.

Participants would also refer to a psychologist for emotional issues and to a dietitian for dietary advice that will prove beneficial to the gut. Some participants find chiropractic treatment helpful by improving the neuroregulation of the gut. Some homoeopaths find colon hydrotherapy useful, whereas others have limited access to this type of therapy. Direct excerpts from participants to support this sub-theme follow:

"In terms of referrals for that dysbiosis specifically, I haven't had the need to do that for correction of gut dysbiosis, but I do refer to (a) gastroenterologist for gastroscopy and colonoscopy if I do not get a prompt therapeutic response in adult patients with persistent nausea that haven't responded to any type of treatment. I usually try and get a treatment response within the first month to two months. The reason why I refer for the gastroscopy is number one - to double check for peptic ulcers that are related to any sort of H-pylori infection. And honestly, with the increase in gastrointestinal cancers I, myself, err on the side of caution and I want to get a visual on it." (Participant 1)

“So, the chronic indigestion and upper gastrointestinal symptoms like chronic pyrosis and chronic pathologies in the gastric ulcers and duodenal ulcers one’s got to treat that - very, very important. Chronic upper abdominal discomfort and pain has got to be investigated by your colonoscopy and gastroscopy, so I do a fair amount of referrals to the surgeon when it is needed. And especially if your patient has haemoptysis and they have haematemesis then the patient has got to be referred to the surgeon and the gastroenterologist to exclude a possible malignancy, which is extremely important to eliminate malignant conditions. So one’s got to do the pathology there and make sure that the symptoms of any of those conditions that are made mention of or even melena in the stools, you've got to investigate. Your clinical pathologist is a very, very important partner in treating the symptoms of patients with pathology there.” (Participant 4)

“So, for gut dysbiosis and that, personally I like to generally treat the patient if for any reason that you know, they aren't responding and we've done testing as well and they aren't responding then absolutely, you know, we'll refer, depending on the patient, to maybe specialists for further testing and diagnosis, anything that we haven't done.” (Participant 6)

“I certainly have referred people to gastroenterologists but that's when I suspect something like ulcerative colitis or a hernia or possibly diverticulitis, yeah. So I mean, I'm quite keen on, in a general sense, on blood tests or X-ray scans, and referrals to specialists. Yeah, it's just important because it's information on the table you don't want to miss, but just that dysbiosis as such. Which would be where I would work a lot on a person's overall health and digestive symptoms first before referring them, unless there (is) some extreme like, as I said, blood in the stool, or hernias or something I'd like to confirm.” (Participant 8)

“Functional medicine can be really helpful for that. So, I have referred on occasion for that. Sometimes, if emotional issues come up, you know from Chinese medicine that (the) gut is related to large intestine grief. And so sometimes, Kinesiology as the treatment method for emotional issues can be very helpful. So, I have referred for that.” (Participant 9)

“I mean in diet, I can be quite happy to refer to someone that's maybe a bit better versed in nutrition, but I think again, if you send to a dietician or someone like that they tend to put people on strict sort of regimes that don't work, experiences told me it doesn't work. So, if a patient is completely clueless, then we sometimes see that well-educated people can be completely clueless on what they need to do for their diabetes, what they need to do for their IBS, and so on, so referrals are not for me, it's (not a) standard thing, referrals for things like gut dysbiosis to our medical professionals is absolutely useless because the more I interact with our medical professionals, and they admit as well, they've got absolutely no clue about diet. I think it is the idea of the medical professional: this is my little box and if you need anything more, I will refer you out.” (Participant 11)

“Sometimes diet needs to be looked at in greater detail. So referral can be of need, and then yeah in more complex, difficult sort of unresponsive dysbiosis cases because of compounded issues like removal of the gallbladder or, you know, significant surgical history or cancer, you know, so in more complicated cases, definitely, that is very important. And those escalate, depending on the complexity of the case, in the simpler cases, not necessarily needed. But as the cases compound and get more complex, definitely.” (Participant 12)

“... we're not getting results from that, then I would look at referrals for potentially doing an investigation or even to practitioners that we find maybe we think it's something for instance, you know, chiropractic treatment. Sometimes it's helpful, you know, especially being with the bowel and then nerve regulation and things like that.” (Participant 6)

“So, when we're treating kids and we're treating babies with colic, and reflux, I would use chiropractic strongly, it definitely makes a difference. I also find patients who have IBS, a lot of times they suffer (with) lower back pain, and again, chiropractic can assist with that.” (Participant 7)

“So, we tend to do that and we use things like colon hydrotherapy. In our practice, if people are overloaded; they have ideas of constipation. So we'll do a week-long cleansing program and we (are) really good about reading and showing good bacteria load, repopulating - that kind of thing we do. So, my practice has been a cornerstone, my practice has been gut health.” (Participant 3)

“I am aware of therapies like hydro-colon cleanse. I don't offer that to my patients. And there is no nobody in the Western Cape that I know of, in my close area that I can refer patients to so I do not refer patients. I think where I am really, really stuck I might refer to other practitioners who have (a) bit more experience than I have in guts or the specific tests that they need to do further.” (Participant 5)

4.3.6. EDUCATION ON GUT DYSBIOSIS AND BOWEL NOSODES

Other findings of the study include the tertiary education of obstacles to cure, gut dysbiosis and bowel nosodes. Some participants believed that the topics of obstacles to cure, gut dysbiosis and bowel nosodes are poorly introduced in tertiary education and need to be reemphasised considering the importance that they play in daily practice. Direct excerpts from participants to support this theme follow:

“So, I think there's incredible value (in bowel nosodes) and I think at the moment, it's not even lectured to our students anywhere. Even when I was a student, I think it was a single day that we had Dr … coming in and she did a day's lecture on the bowel nosodes. I know that Dr … also did sessions on that, I think it's definitely underestimated... and I think it's fallen away somewhere, I think, probably because there's not enough people that's got the knowledge to actually stand up and lecture about it. So maybe that's something that we need to look at.” (Participant 1)

“Again, another aspect that needs to be reemphasized in (the) education model in the older guard. So the idea in understanding the role of bowel nosodes should be a pivotal part in homoeopathic education and use especially in gut dysbiosis. This is something I use in my practice a lot.” (Participant 3)

“We have to bring a greater awareness to obstacles of cure, gut dysbiosis, because gut biomes and the soil biome, for that matter, and every other biome is important, you know, we've picked up on the recent times become a fanciful term, but it's something that has to be driven into the homoeopathic education, that is not just about giving homoeopathic remedy and carrying on eating junk.” (Participant 3)

“Honestly speaking, I think that as homoeopaths apart from Dr… introducing it to us, and briefly going through it as part of our curriculum with Materia Medica. We don't know. Personally, I won't talk to the rest of the homoeopaths.” (Participant 7)

CHAPTER 5

DISCUSSION

5.1. INTRODUCTION

This chapter discusses the results presented in the previous chapter. It comprehensively interprets the research participants' experiences, perceptions, considerations, and treatment approaches to the research problem: gut dysbiosis as a clinically significant obstacle to cure.

5.2. AIM

This study explored the perceptions, experiences, treatment protocols and adjunctive approaches of a small sample of registered registered South African homoeopaths regarding an imbalanced gut microbiome.

This discussion is structured under the main themes that emerged from the analysis of the data collected during this study:

Theme 1: Homoeopathic experience with gut dysbiosis

Theme 2: Homoeopathic perceptions of obstacles to cure and gut dysbiosis

Theme 3: Homoeopathic considerations when initial treatment fails

Theme 4: Homoeopathic treatment protocols for gut dysbiosis

Theme 5: Adjunctive approaches to gut dysbiosis

Theme 6: Education on gut dysbiosis and bowel nosodes

The interpretation of these main themes and their sub-themes is discussed in terms of related and relevant literature.

5.2.1. HOMOEOPATHS' EXPERIENCES WITH GUT DYSBIOSIS

This research supported the finding of Falony *et al.* (2016: 560-564) that stated that gut dysbiosis may be more prevalent than initially believed. Homoeopaths mentioned many causes of gut dysbiosis, which has all been supported by literature (see Section 2.5). Homoeopaths' experience with diagnostic tools seem to be negative as many described it as limited, expensive and unnecessary. Their experience with gut dysbiosis is discussed further in the paragraphs that follow:

5.2.1.1. Prevalence of gut dysbiosis

Although the exact prevalence of gut dysbiosis in South Africa still needs to be researched, the growing list of chronic diseases connected to gut dysbiosis in recent research could indicate a higher prevalence than initially believed (Gebrayel *et al.* 2022: 1-14). Falony *et al.* (2016: 560-564) found that up to 70% of chronic diseases can be linked with gut dysbiosis. The homoeopathic participants in this study reported an increase in the cases that present with symptoms of gut dysbiosis. Although significant gaps in the knowledge of the South African microbiome diversity exist, this study implies that many diseased South Africans consulting homoeopaths present with symptoms of an unhealthy gut microbiome (Allali *et al.* 2021: 1-48). Until more research is done on the microbiome composition of the South African population, many homoeopaths are forced to understand and view gut dysbiosis based on research outside of South Africa.

5.2.1.2. Lifestyle and the gut microbiome

Diet, stress and exercise are all factors that the participants in this study stated as crucial for the digestive health of their patients. Participants noted that many of their patients follow the Westernised diet as most South Africans have moved away from the traditional 'hunter-gatherer' lifestyle, which has a negative effect on the gut microbiome on a daily basis (Oduaran *et al.* 2020: 1-14). Homoeopaths in this study mentioned that most patients have a lack of prebiotic fibres in their diet and instead have a diet high in sugar, carbohydrates, and processed and refined foods, which

directly affects the gut microbiome (Oduaran *et al.* 2020: 1-14). Some homoeopaths also mentioned the effect that gluten and dairy have on the gut of patients, especially those who may have an intolerance towards it. However, some research has shown the need for gluten and dairy to maintain a healthy microbiome (Nobel *et al.* 2021: e00441; Eid *et al.* 2014: e46). The most popular lifestyle followed by the majority of the South African population is a highly stressed and sedentary lifestyle, which has been shown to significantly impact the microbiome inhabiting the gut (Clauss *et al.* 2021; Lutgendorff, Akkermans and Soderholm 2008: 282–298). The homoeopaths that were interviewed observed the repercussions that the modern Western lifestyle has on gut health in the patients they see in practice on a regular basis.

5.2.1.3. Conventional medicine and the gut microbiome

It is widely known and proven that antibiotics directly affect the gut microbiome, but this fact is not always given the attention it deserves. Studies by Patangia *et al.* (2022) and Ramirez *et al.* (2020) (see Section 2.5.6) found that antibiotic use disrupts gut microbiota, potentially leading to various health problems. This concern aligns with the observations of homeopathic participants in this study. These participants expressed that allopathic practitioners prescribe antibiotics too frequently and often neglect gut microbiome repopulation after treatment. This aligns with the findings from the aforementioned studies (Section 2.5.6). While the participants didn't discuss the duration of these negative effects (as explored by Jernberg *et al.,* 2010: 3216-3223 in Section 2.5.6), they did link a history of antibiotic use in patients with gastrointestinal and systemic diseases. Some participants even highlighted the need for improved medical education on gut dysbiosis, antibiotic use, and gut microbiome restoration after treatment. This suggestion echoes the recommendations of Patangia *et al.* (2022).

Participants of this study also experienced the use of other allopathic medicines such as cortisone, contraceptives and proton pump inhibitors as disruptive towards the gut’s delicate ecosystem. This statement requires further investigation. Homoeopaths mentioned that, although important in managing certain diseases, allopathic medicine could pose not only as a causative agent to dysbiosis in the gut

but also as an obstacle to cure that they need to be aware of to work around. It's important to acknowledge that the participating homeopaths haven't received training in conventional treatment methods. Their perspectives on how conventional medicine affects the gut microbiome and overall health may differ from those grounded in conventional medicine. Interestingly, none of the participating homoeopaths discussed integrating conventional medicine with homoeopathy in their treatment plans. Further research is needed to understand the reasons behind this observation.

5.2.1.4. Other causes of gut dysbiosis

Many other causes of gut dysbiosis were mentioned by the homoeopaths interviewed in this study. Homoeopaths found gut dysbiosis to be an obstacle since childbirth and many made mention of the importance of treating infants for possible gut dysbiosis. The increased frequency of caesarean sections and decreased breastfeeding seen today prevents the newborn from being inoculated with the beneficial bacteria it needs to build and maintain their microbiome (Hoang, Levy and Vandenplas 2020: 60-67; Issaka, Agho and Renzaho 2017: e014145; Naidoo and Moodley 2009: 254-258). Sanitation, chlorine in water, heavy metal exposure such as mercury in amalgam fillings, and food additives such as preservatives, MSG, tartrazine, and herbicides were commonly noted as contributors to gut dysbiosis. Sanitation prevents the gut from being exposed to beneficial bacterial species (Ejtahed *et al.* 2020: 2031–2033), whereas chlorine used to remove the microorganisms in drinking water also removes the beneficial bacteria in the gut (Dias *et al.* 2018: 79-89). Heavy metal toxicity and food additives have been shown to play a role in the dysregulation of the gut (Cao *et al.* 2020: 295-310; Li *et al.* 2019: 454-467). The Westernized diet of fast and processed foods filled with preservatives, herbicides, heavy metals and chlorine has caused this dysbiosis in almost every patient who follows this type of diet. The difficulty in avoiding these causative factors could explain why homoeopaths are seeing such an exponential rise in the prevalence of gut dysbiosis in their practices.

5.2.1.5. Testing for gut dysbiosis

Bacteriological stool testing for gut dysbiosis is primarily done in research as these tools tend to be inadequate and too expensive for readily use by homoeopathic practitioners. According to the participants, most of the medical laboratories in South Africa test for specific pathogens and do not do comprehensive stool analysis. They also believe the laboratories that do 'comprehensive' stool analysis are often limited in their results. Homoeopaths often use international laboratories when needed, which is costly and time-consuming. The participants would only send for testing if a severe disease required targeted treatment or the dysbiosis is too complex. The homoeopathic participants in this study highlighted that the cost of bacteriological stool tests discourages them from applying it in everyday practice. Participants found diagnostic testing to be a financial burden due to high costs and potential lack of coverage by medical aids, forcing patients to shoulder the expense themselves. The participants found that very few patients can cover these costs, rendering the homoeopath to treat without using bacteriological stool tests. Other tests mentioned in this study include breath testing which is a more economical alternative but not reliable or comprehensive enough (Casen *et al.* 2015: 71-83). In this study, some homoeopaths mentioned GI MAP testing as a possible way to incorporate bacteriological stool tests in practice, yet few readily incorporate it. GI MAP testing, which does a DNA analysis of a stool sample , may be an effective way for healthcare practitioners to incorporate gut dysbiosis testing in their practices (Frey 2019: 6). It can be done in the practitioner's consultation rooms, which makes it a cost- and time-effective alternative to laboratory testing. Some homoeopaths mentioned the value of kinesiology as a diagnostic tool in their practices (Auer 2022). Homoeopathic participants also incorporate blood tests of a patient's calprotectin, melatonin and IgG levels as diagnostic tools for gut dysbiosis. Calprotectin and IgG levels may indicate inflammation in the bowels, while melatonin is often used to assess the gut mobility, inflammation and pain (Lin *et al.* 2018: 1-15; Chen *et al.* 2011: 3888-3898; Konikoff and Denson 2006: 524-534). Most of the homoeopaths interviewed mentioned that they would obtain successful results by treating the patient with gut dysbiosis with a generalised approach. They usually allow the case's specific symptoms to guide their treatment approach, which makes the value of testing minimal (De Schepper 2001: 266-285). Nevertheless, this study indicates that

the limited availability and the high costs of these tests remain the most significant barriers to regular testing for gut dysbiosis.

5.2.2. HOMOEOPATHIC PERCEPTIONS OF OBSTACLES TO CURE AND GUT DYSBIOSIS

Homoeopaths perceive obstacles to cure as anything that hinders the healing process. Some homoeopaths perceive the need to remove obstacles to cure as soon as possible while others will only remove them once it prevents cure. However, most believe that removing obstacles to cure holds excellent therapeutic value. Some common obstacles to cure include a poor diet, a sedentary lifestyle, and stress, among others. Homoeopaths also believe an imbalance in the gut microbiome can be a significant obstacle to cure. They perceive gut dysbiosis as responsible for gastrointestinal symptoms and a wide range of systemic presentations. The homoeopathic participants in this study believe that treating gut dysbiosis is essential for the overall well-being of their patients.

5.2.2.1. Perception of obstacles to cure

Sammuel Hahnemann wrote in his Organon of Medicine (2017:54) the following aphorisms:

- Aphorism three: "… the physician must know the obstacles to recovery in each case and be aware of how to clear them so that the restoration of health may be permanent."
- Aphorism four: The homoeopath is "likewise a sustainer of health if he knows the things that disturb health, that produce and maintain disease, and is aware of how to remove them...".

This sample of South African Homoeopaths implements Hahnemann's (2017: 54) third and fourth aphorisms that highlight the need to understand obstacles to cure. Hahnemann (2007: 54) and De Schepper (2001: 266 - 285) list many obstacles to cure (see section 2.7.), and the homoeopathic participants of this study mentioned that they encounter many obstacles to cure within their practice. They view obstacles

to cure as an important consideration in their practices. Most see the value of extensive case taking to identify and remove these obstacles as soon as possible. Many homoeopaths would remove common things like a poor diet, sedentary lifestyle, stress, and other things before prescribing a remedy. These factors are often perceived as the causative factors of many diseases and as possible obstacles that fuel disease processes (see section 2.5.). Suchiang *et al.* (2021: 119-122) advocate prescribing remedies before addressing obstacles to cure. Similarly some participants in this study believed obstacles should only be considered if they become evident as impediments to improvement. Considering obstacles to cure when they prevent cure is an approach true to the homoeopathic principle of individualisation (see section 2.7.). Hahnemann (2017: 54) mentioned that removing obstacles should be individualised and never too strenuous on patients (see section 2.7.). It would, therefore, be homoeopathic in nature to determine whether there is a need to remove something that may act as an obstacle to cure instead of removing several things all at once (Roberts 1936). At times, it will be impossible to remove certain obstacles, still, some homoeopaths believe the correctly chosen homoeopathic remedy can initiate healing despite the remaining obstacle. Nevertheless, most homoeopaths perceived removing obstacles to cure as a helpful tool to bring a quicker, deeper and longer-lasting cure. Often, obstacles to cure are perceived as things known to cause diseases, such as a poor diet or lack of exercise (Ortega 1980). Advising patients on how to care for their bodies properly could prevent disease, avoiding the need to view these maintaining causes as obstacles to cure.

5.2.2.2. Understanding of gut dysbiosis and its local presentations

Homoeopaths defined gut dysbiosis as an imbalance in the microbiome of the gut that may present with increased growth of pathological bacteria, fungi, yeasts or parasites in the gut. They also consider an overgrowth or undergrowth of microbiota to be gut dysbiosis (Gamble 2019: 128-134). Homoeopaths in this study understood that the following might be indicative of an underlying gut dysbiosis: bloating, flatulence, abdominal discomfort, diarrhoea, constipation, food cravings or intolerances, indigestion, weight changes, gastroesophageal reflux, indigestion,

gastric or duodenal ulcers, irritable bowel syndrome, inflammatory bowel disease, and recent antibiotic treatment. Although the precise connection between dysbiosis and some of these symptoms is still unknown, research has shown a correlation between gut dysbiosis and irritable bowel syndrome, inflammatory bowel disease and all the symptoms that accompany it (Khan *et al.* 2019: 126; Principi *et al.* 2018). Although an extensive list of all the gastrointestinal symptoms associated with gut dysbiosis is still unavailable, this study provides some symptoms that practising homoeopaths would view as indicators of dysbiosis.

5.2.2.3. Perception of gut dysbiosis and its systemic effects

Recent research that connects many chronic diseases with gut dysbiosis has brought the extensive reach of the gut's influence to the attention of homoeopaths. Being holistic practitioners, homoeopaths include the importance of gut health in almost every consultation and may treat it using homoeopathic treatment, adjunctive therapies, and lifestyle changes. Although the exact pathophysiology of gut dysbiosis remains unknown and the list of diseases related to gut dysbiosis is growing daily (Carding *et al.* 2015: 1651), homoeopaths seem to note the significance of correcting gut dysbiosis for overall well-being. Many of the participants in this study perceive that the action of gut dysbiosis reaches further than the gastrointestinal tract. They perceive systemic symptoms such as immune system disorders, hormonal imbalances, metabolic disorders, thyroid problems, cancers, cardiovascular diseases, respiratory issues, skin disorders, urinary tract infections and joint affections as possible indicators of an underlying gut dysbiosis. Knowledge of neurological and psychological diseases and how they relate to the gut appears extensive among homoeopaths (Verma *et al.* 2020: 405-419). They regularly consider gut dysbiosis in their anxiety, depression, brain fog, Alzheimer's disease, Autism, and ADHD patients. Homoeopaths in this study mentioned the importance of paying attention to the gut microbiome in cases of fatigue and lethargy. Most participants attributed the gut's multi-systemic influence to the immunological reaction, such as generalised inflammation that follows dysbiosis (Shen and Wong 2016: e72). Whether this is the only way the gut communicates systemically is still unknown.

5.2.3. HOMOEOPATHIC CONSIDERATIONS WHEN INITIAL TREATMENT FAILS

When a homoeopathic remedy fails to produce the desired results, homoeopaths may consider several different factors to determine how to proceed with the case. The homoeopaths of this study were all compliant with homoeopathic principles when faced with a case that failed to improve. They would reconsider the treatment approach, potency, posology and the presence of possible miasms, just as taught by Hahnemann (2017) and De Schepper (2001: 266-285). Homoeopaths would also revisit the patient's expectations and compliance with their treatment plan and lifestyle changes, which indicates a thorough and holistic approach to patient care. Just like Dr Russel Malcom (Penrose 2019: 12-18) and Gamble (2008: 128-134) (See section 2.7), the homoeopathic participants viewed gut dysbiosis as a clinically significant obstacle to cure. Homoeopaths stressed the value of addressing the patient's diet and gut dysbiosis for the homoeopathic treatment to be more effective. The homoeopaths in this study would also consider a long list of other possible obstacles to cure when their initial treatment fails, which is in line with De Schepper's (2001: 266-285) recommendations.

5.2.3.1. Reconsider the case

Although Hahnemann (2017:54) lists many external influences that may act as an obstacle to cure, De Schepper's (2001: 266-285) list of obstacles to cure highlights the need of homoeopaths to also consider their own hand in the failure of a remedy (see section 2.7.). This study found that homoeopaths regularly reconsider their own hand in failure of successful treatment. When initial treatment fails, most of the homoeopaths in this study would first reconsider the case to find any important information they may have missed or overlooked. Whether this is done by retaking the case during a follow-up consultation or reevaluating the initial case notes, homoeopaths will attempt to consider the patient holistically. Similarly to Creedy (2019: 19-25) in the treatment of gut dysbiosis (see section 2.9), participants of this study would consider the homoeopathic principle the 'totality of symptoms' important

after the failure of the best-indicated remedy. Recognizing obstacles like information withholding and incomplete case histories, as identified by De Schepper (2001: 266-285)(see section 2.7), homeopaths would actively clarify existing information or ask targeted questions to gain a more comprehensive understanding of the case. If more information comes to light, it might change the totality of symptoms, which may indicate another remedy rather than the remedy originally prescribed. Reconsidering the case may also point out any obstacles to cure or maintaining causes of the patient's disease process. It could bring a new causality or symptom, which could be important in treating the patient's disease. Unlike Hahnemann (2017:54) and De Schepper (2001: 266-285), homoeopaths in this study identified the potential need to revisit their initial diagnosis when treatment failed, suggesting an obstacle not explicitly addressed in these foundational texts.

5.2.3.2. Reconsider the treatment

Just as De Schepper (2001: 266-285) advises, homoeopaths in this study would first consider their own hand in treating the patient when a remedy fails to act. De Schepper (2001: 266-285) affirmed Hahnemann (2017) in the need for practitioners to reflect on the remedy, potency and posology prescribed and to ensure they align with all homoeopathic principles. This study shows that homoeopaths closely follow Hahnemann's advice to look at their treatment approaches when improvement does not follow their prescription. De Schepper (2001: 266-285) mentions mistakes in prescribing and limited knowledge of the Materia Medica as possible obstacles that need to be considered. When treatment fails, most homoeopaths in this study will look for an allied remedy that closely resembles or complements the remedy they already prescribed. They would also reconsider the potency, dosage and frequency of dose when the remedy fits the symptom picture well but fails to deliver the desired results De Schepper (2001: 266-285). Similarly to Galande (2020: 101-103), many homoeopaths mentioned that they might consider the involvement of a miasm and treat it with the indicated nosode to move the case forward. Since all humans have a susceptibility to certain diseases, it could be the involvement of an active miasm that prevents the cure from taking effect. Homoeopaths must differentiate whether the patient is in an active or dormant miasm to determine whether the patient's miasm

could be acting as the obstacle to cure. If active, the miasm needs to be addressed with the most appropriate nosode in order for the case to improve and respond to other homoeopathic remedies (Nayak, Nayak and Roja 2015; Klein 2010). Some participants in this study mentioned that they would reconsider their adjunctive treatments by treating the patient with another treatment modality or referring the patient to an allied practitioner. They may also reconsider the Western herbal medicines and supplementation prescribed to their patients when the case fails to improve. One homoeopath mentioned the need to trust the quality of the prescribed medicines, which Hahnemann (2017) also highlights in his Organon of Medicine. The many South African homoeopathic and other natural medicine suppliers provide homoeopaths the freedom to prescribe medicines they trust.

5.2.3.3. Consider the patient

Human behaviour and thought patterns will always remain a factor involved in the healing process that can negate the positive effects of homoeopathic remedies. The patient's expectations are something that homoeopaths in this study believe could act as an obstacle to cure. Homoeopaths need to earn the trust of their patients in order to make them feel comfortable to share their case openly. Participants of this study mentioned that patients may find it difficult at times to answer the extensive questions asked in a homoeopathic consultation. Patients may be oblivious to their specific symptoms, leaving them without an answer to the homoeopath's questions. Sometimes time constraints, the patient's memory, mistrust or preconceptions may cause them to withhold important information from the practitioner (De Schepper 2001: 266-285). The participants in this study view it as essential to consider that the patient may withhold important information from them. When homoeopaths suspect that there is missing information, they would continue to build trust with their patient, assure them that all information is relevant and advise them to pay careful attention to their symptoms in the future. This study also found that patients may take their remedies incorrectly or less frequently than needed. Homeopaths would revisit how the patient used the remedy when the case does not improve. Ignorance of what a healthy diet or lifestyle looks like can be problematic and prevent improvement. It is, therefore, of great importance that homoeopaths take time to clarify the directions of

the remedies and the lifestyle changes needed. They need time to answer any questions the patient may have about administering the remedies or implementing a better lifestyle. The patient plays a vital role in their own healing process, and when treatment fails, homoeopaths of this study would consider the patient's actions.

5.2.3.4. Consider diet as an obstacle to cure

Many participants viewed diet as significant in the healing process. When a patient fails to improve, homoeopaths highlight the need to look at the patient's diet. The findings of David *et al.* (2014) on the gut's responsiveness to dietary changes (see Section 2.5.1) are echoed by the participants in this study, who observed a strong link between poor diet and disease. The majority of the participants mentioned that a poor diet could not only exacerbate disease but could be the causative factor in many symptoms experienced by the patient. This also highlights the findings of Shi (2019: 2287) (see Section 2.5.1.) that an inadequate diet that does not provide the body with the nutrients it needs or is pro-inflammatory in nature, prevents the body from healing itself. Some of the participants defined what they view to be a healthy diet as natural foods that use little processing, herbicides or other additives. This shows some similarity with the study by David *et al.* (2014: 559–563), De Fillippo *et al.* (2010: 14691–14696) and Lin *et al.* (2018: 1-15) that recommends plant-based diets for a healthy microbiome (See section 2.5.1.). Although the homoeopaths in this study did not discuss the role of fibre, starch, oligosaccharides and carbohydrates, De Fillippo *et al.* (2010: 14691–14696) and Lin *et al.* (2018: 1-15) found that diets high in fibre, carbohydrates and non-animial protein, are more favourable for a diverse and balanced gut microbiome (See section 2.5.1.). The participants also noted the higher prevalence of a Westernised diet in South Africa, as indicated by Oduaran *et al.* (2020: 1-14). Participants advocated for less processed, preservatives, sugar which are also recommended by studies such as Shi (2019: 2287) and Cuevas-Sierra *et al.* (2021: 2710) (See section 2.5.1.). Some homoeopaths would look for hidden food intolerances and remove any foods that do not suit the patient's digestive system. Nobel *et al.* (2021: e00441), found that food intolerances might be the result of an imbalanced gut microbiome, such as in the case of gluten sensitivity. Removing foods that the patient is intolerant to primarily

negates unpleasant symptoms and inflammation in the bowels. The restoration of the gut microbiome should still remain a priority when removing certain intolerable foods with the aim to later reintroduce it to maintain a healthy and diverse microbiome. Participants in this study found it important to return to the patient's diet after treatment had an undesired result. They would go back to the patient and ensure that they are eating as they should. According to one homoeopath, patients may not know what the prescribed diet should look like or may be unwilling to implement these changes in their lives. Taking the time to clarify details regarding a healthy diet, encouraging the patient and deciding on reachable goals could be vital in treating a patient who fails to improve because their diet acts as an obstacle to cure.

5.2.3.5. Consider the gut as an obstacle to cure

Hahnemann (2017: 54) states in Aphorism four that the homoeopath is "likewise a sustainer of health if he knows the things that disturb health, that produce and maintain disease, and is aware of how to remove them..." Although Hahnemann (2017: 54) never mentioned gut dysbiosis as an obstacle to cure, his definition of obstacles to cure in his Organon suggests that homoeopathic practitioners should consider gut dysbiosis when a case fails to improve. The majority of Homoeopaths interviewed in this study believed that gut dysbiosis can act as a significant obstacle to cure and that it is vital to address it before or in conjunction with homoeopathic treatment. Only two participants disclosed that they would not normally consider gut dysbiosis an obstacle to cure. They believe that homoeopathic remedies can work around gut dysbiosis and would only consider treating it when the patient presents with gut-related symptoms as their main complaint. Most participants were aware of the gut microbiome's ability to interfere with the body's ability to heal itself and trigger chronic diseases (Kim, Zeng and Nunez 2017: 1-8), aligning with Hahnemann's (2017:54) principle in the Organon that homoeopaths should understand not only the cause of disease but also how to remove these obstacles to cure. The majority of participants in this study would treat a large proportion of their patients for gut dysbiosis from the first consultation, preventing the possibility of ineffective treatment. Homoeopaths view a correction in the gut microbiome as a treatment

approach that ‘holds hands’ with and improves the results delivered by the indicated remedy. A few homoeopaths, however, would only consider gut dysbiosis when the patient fails to improve after initial treatment; the patient had a recent course of antibiotics; or mainly complained of gastrointestinal symptoms. Most homoeopaths saw the need for diet changes as vital in restoring their patient’s gut dysbiosis and their overall well-being. They would usually implement these diet changes from the first consultation. Many homoeopaths linked gut dysbiosis with a poor diet. Homoeopaths in this study would usually talk to their patients about the need for diet changes for overall well-being instead of addressing gut dysbiosis specifically. This shows that homoeopaths may not always consider gut dysbiosis an obstacle to cure, but that diet remains their most significant concern in their patient’s journey to health. Whether the obstacle in the patient’s recovery is a poor diet, gut dysbiosis, or a combination of the two is still unknown. However, the connection between diet and the gut microbiome highlights the need for holistic treatment.

5.2.3.6. Consider other obstacles to cure

The participants of this study mentioned that there are a multitude of factors that can act as an obstacle to cure and that each case needs to be examined to identify the factor that is preventing cure. They highlighted that each case may demand different approaches and management. At times, obstacles to cure can be removed, other times, the patient may struggle to cooperate with the removal of it or the obstacle may simply be irremovable. Things in the patient’s family history and past medical history, including trauma, past surgeries, and chronic medications the patient has taken or is currently taking will be considered by homoeopaths during treatment. The participants may use an appropriate nosode or the indicated remedy to remove these obstacles to cure. The participants also mentioned organ insufficiency, inflammation and mineral deficiency as factors that may require treatment with Western herbal medicines or supplementation before the homoeopathic remedy may act favourably. Homoeopaths may need to aid the patient with stress management techniques or refer the patient to psychotherapy when stress or unhealthy relationships stand in the way of a cure. Things such as permanent surgical alterations, the patient's environment or occupation, or life-saving chronic medication

cannot always be removed. This leaves the homoeopath with the aim to offer palliative treatment and manage these irremovable obstacles that can prevent a cure.

5.2.4. HOMOEOPATHIC TREATMENT PROTOCOLS FOR GUT DYSBIOSIS

The treatment of gut dysbiosis is a patient-focused approach that makes use of a wide variety of homoeopathic philosophies, homoeopathic remedies and adjunctive therapies. This study found that homoeopaths tailor their gut dysbiosis treatment protocol based on lifestyle changes, homoeopathic philosophies, remedies, potencies, Western herbal medicines, supplementation, and probiotics. Homoeopaths may treat constitutionally or clinically, and this study found that homoeopaths are often tasked to adapt their treatment approach depending on the direction and need of the case. Different bowel nosodes, organotherapy, gemmotherapy, biopuncture, and isotherapy were also found to be useful by the participants in the treatment of gut dysbiosis. Most participants included bowel nosodes in their treatment protocols as they believed it was necessary for their other homoeopathic remedies to deliver better results. Although homoeopaths use a wide field of treatment approaches in treating gut dysbiosis, this study provided some understanding of how South African homoeopaths would approach gut dysbiosis.

5.2.4.1. Patient-focused treatment and advice

Homoeopathy is a medicine of holistic individualisation (Adi, Adi and Reddy 2019: 1-5), and the participants in this study highlighted the importance of not only tailoring their remedy and potency to the patient but also their gut dysbiosis protocol and lifestyle changes. Although many participants have a common gut dysbiosis treatment approach, they constantly individualise their treatment on what would work best for the patient. Homoeopathic complexes, simplexes, Western herbal medicines, supplementation, and probiotics that might suit one patient may not

always suit the next. Lifestyle, diet and exercise are complex matters to navigate; what is recommended by most research and healthcare professionals may not suit the patient's lifestyle, financial status or culture. Treatment approaches and lifestyle changes that slowly move towards a healthier lifestyle yet still consider the patient's capacity and willingness to implement these changes are vital to a case's success (Lindstrom, Peltonen and Tuomilehto 2005: 81-88).

5.2.4.2. Homoeopathic treatment approaches

Homoeopathic treatment approaches to disease vary since homoeopaths may choose to follow different philosophies and protocols. It is important to note that homoeopathic treatment is individualised, therefore, a practitioner's treatment approach to gut dysbiosis may differ from patient to patient. This was evident in this study as the study group included practitioners who either used constitutional or clinical treatment practices, however, many testified to using both approaches within their practice. Most homoeopaths find that the case determines their approach and that they would alternate between a simplex and complex remedy depending on the need. The majority of participants, however, prefer to practice classically and would look for the best constitutional remedy, the similimum, and prescribe it in a simplex form for their patients. Most participants would normally consider complexes when the patient is in an acute diseased state, whereas a few participants believed that a well-indicated simplex remedy is better suited for an acute case. Other homoeopaths would primarily use complex remedies unless a single remedy is well indicated. Some complex prescribers would individualise their complexes to the patient's needs, whereas others would use popular complexes prepared by trusted homoeopathic industries. This study shows that homoeopaths are well-trained in using the different treatment approaches needed for their patients at hand. We see that homoeopaths would use a complex prescription when it is an acute disease and has an unremarkable constitutional picture, which follows Abermann's (2017: 222-234) suggestions. Some simplex remedies that homoeopaths in this study will consider for the clinical or constitutional prescription of gut dysbiosis include: *Arsenicum album, Ipecacuanha, Podophyllum, Phosphorus, Lycopodium clavatum, Nux vomica, Carbo vegetabilis, Veratrum album, Natrum muriaticum,* and *Sepia officinalis.* Further research into remedies specific for gut dysbiosis is still needed.

Homoeopaths also mentioned the use of patient-tailored complexes or complexes available in the homoeopathic industry, including Natura® formulations such as Gut mucosa® and Heel® products such as Veratrum Hommacord®, Nux vomica Hommacord®, Mucosa compositum®, and Spascupreel®. Different bowel nosodes, organotherapy, gemmotherapy, biopuncture, and isotherapy were also found in the treatment of gut dysbiosis. This study has made it clear that homoeopaths use various approaches to treat gut dysbiosis and aim to adapt their approach to what best suits their patients.

5.2.4.3. The use of bowel nosodes

The majority of homoeopaths often view bowel nosodes as a separate, under-utilized treatment modality. Nine of the thirteen participants (69%) in this study would regularly treat with bowel nosodes and would often see positive results. Sharma, Ambwani and Saraswat (2021: 11-15) and Galande (2020: 101-103) recommend bowel nosodes to remove gut dysbiosis as an obstacle to cure or an active miasm (see sectionn 2.9.). Similarly, a small group of homoeopaths of this study would consider bowel nosodes when the initial treatment fail. Most homoeopahts, however, consider bowel nosodes at the beginning of the consultation to make the gut lumen favourable to beneficial bacteria and unsuitable to opportunistic microbiota, which differs from Sharma, Ambwani and Saraswat (2021: 11-15) and Galande's (2020: 101-103) recommendations. In the same way as other popular homoeopathic nosodes, participants often thought of bowel nosodes as a way to 'clear' the case (Paterson 1950; Bach and Wheeler 1925). Similarly to other nosodes, the homoeopaths interviewed would mainly prescribe bowel nosodes on clinical symptoms, the totality of symptoms, an active miasm, a history of disturbance of the microbiome, past medical history, and family history. Creedy (2019: 19-25) suggests the consideration of the patient's totality of symptoms including the mental, emotional and physical symptoms when considering bowel nosodes. Homoeopaths of this study, however, testified to considering mental and emotional symptoms when considering bowel nosodes but claimed that these symptoms are often clouded and that they would more commonly prescribe it on

a clinical basis. Bowel nosodes are more commonly prescribed on their known association with popular remedies, as recommended by Paterson (1950). *Morgan gaertner* will be prescribed when *Lycopodium clavatum* is indicated, *Proteus* when *Natrum muriaticum* is indicated, and *Bacillus No. 7* when *Kalium carbonicum* is indicated, for example (Paterson 1950). Conditions such as skin diseases, food intolerances and gastrointestinal symptoms are more likely to encourage the participants to consider bowel nosodes, which is in alignment with John Saxton's (2008) use of bowel nosodes to treat skin and gastrointestinal disorders (see section 2.9). John Saxton (2008) would also address autoimmune disorders with bowel nosodes, but this was not mentioned by the participants. The participants often include bowel nosodes as an intercurrent remedy between other remedies and rarely use them alone. Their treatment would be more effective when they prescribed bowel nosodes in conjunction with constitutional treatment and a broad-spectrum probiotic. This study found that homoeopaths primarily consider bowel nosodes in chronic cases and very rarely in acute cases. Participants in this study would prescribe bowel nosodes in a 30CH potency administered once or twice a week; or a single dose of a 200CH potency. 30CH is recommended by Paterson (1950) when an acute disease occurs alongside the chronic, which makes 30CH a good potency for most chronic cases with an acute exacerbation. Paterson recommends a 1M (1000CH) potency when the symptomatology fits well, whereas some participants of this study would justify a single dose of 200CH when the bowel nosode is well indicated (Combrink-Potter 2020: 1-189). A lack of confidence or experience may prevent homoeopaths from prescribing bowel nosodes in a 1M potency (De Schepper 2001: 266-285), yet the reason for the participants' hesitancy towards prescribing bowel nosodes in a 1M potency is still unclear. The homoeopaths in this study are careful not to prescribe bowel nosodes too frequently to avoid aggravations (Paterson 1950). They would only administer it temporarily to aid the action of other indicated remedies. Four participants do not prescribe bowel nosodes, while two would only prescribe it on certain occasions - either included in a complex or when gastrointestinal symptoms are the main complaint. Practitioners who seldom prescribe bowel nosodes appear to have limited experience or knowledge of their use and would often utilise other treatment modalities to treat a patient presenting

with an imbalanced gut microbiome. More research on bowel nosodes and the homoeopathic perception and treatment of gut dysbiosis may aid with the better incorporation of bowel nosodes in practice (Combrink-Potter 2020: 1-189).

5.2.5. ADJUNCTIVE APPROACHES TO GUT DYSBIOSIS

Homoeopathy utilises many adjunctive therapies in the approach to gut dysbiosis and prioritises individualisation for the best treatment response. The role that diet and lifestyle plays in the health of the gut microbiome is crucial. This study highlights that homoeopaths advise against the typical Western diet and would encourage the intake of fibre-rich and fermented foods. Homoeopaths may recommend the Mediterranean, Paleolithic and low FODMAP diets, but their effect on the gut microbiome needs further exploration. Overall, the homoeopaths will advise the patient on positive lifestyle changes that will affect the gut and ensure general well-being. Many homoeopaths follow a 'remove and replenish' approach when treating gut dysbiosis. Homoeopaths would remove harmful bacteria through diet and Western herbal antimicrobial agents and replenish with prebiotics, probiotics and fermented foods. Homoeopathic practitioners in this study promptly refer patients with concerning symptoms, insufficient progress, or a severe pathology to gastroenterologists. Homoeopaths recognise the importance of mental well-being and will often refer patients to psychologists. Participants would refer to dietitians to provide specialised dietary advice, chiropractic treatment and colon hydrotherapy as valuable adjunctive options.

5.2.5.1. Diet and lifestyle

Homoeopaths highlighted the importance of individualisation in dietary and lifestyle advice, yet a common approach was identified during this study. This study found that homoeopaths would encourage patients to avoid processed foods , preservatives , refined sugars, and artificial sweeteners found in the Western diet that many South Africans follow (Cuevas-Sierra *et al.* 2021: 2710; Cao *et al.* 2020: 295-310). This prevents inflammation commonly associated with the Western diet

that leads to many chronic diseases (Shi 2019: 2287). Some homoeopaths in this study will commonly recommend the exclusion of gluten and dairy from the diet, despite research showing that gluten-free and lactose-free diets bring little positive change to the gut microbiome (Nobel *et al.* 2021: e00441; Bonder *et al.* 2016: 45; Jeffery and O'Toole 2013: 561-573; Francavilla *et al.* 2012: 420-427). The exclusion of gluten and dairy from the diet by the interviewed homoeopaths may only negate unpleasant symptoms associated with its consumption in those with a hypersensitivity to it. The Gluten free diet, however, still remains the only way to prevent excessive inflammation in patients with Celiac disease. Homoeopaths in this study would recommend an increased intake of fibre-rich foods such as fruits, vegetables, legumes, nuts and seeds. Fibre-rich foods are greatly beneficial as they can decrease the incidence of common diseases such as cancer, cardiovascular, infections, respiratory diseases, diabetes and obesity (Wilson *et al.* 2020: 723-740). The participants in this study would also recommend including fermented foods, such as kimchi and natural yoghurts in their patients' diets. Fermented foods could provide similar benefits to some probiotics (Marco *et al.* 2017: 94-102), but research has not yet confirmed fermented food's efficacy in repopulating the gut microbiome (Dimidi *et al.* 2019: 1806). Some homoeopaths will consider the Paleolithic or low FODMAP diet in certain gut dysbiosis cases. There is a concern regarding long-term adherence to the low FODMAP diet as it leads to a rise in harmful bile and fat-loving microbiota (Barone *et al.* 2019:e0220619), but the duration that homoeopaths advise this diet is still unknown. The low FODMAP diet may provide symptomatic relief for some patients, but removing the prebiotics in FODMAP foods may exacerbate gut dysbiosis and the patient's abdominal hypersensitivity to certain foods (Hill, Muir and Gibson 2016: 36-45). The Mediterranean diet appears to be the only diet mentioned in this study that will aid microbiome diversity and decrease microbiota associated with disease with no long-term side-effects (Nagpal *et al.* 2019: 1-18). Homoeopaths in this study would also advocate for other positive lifestyle changes including drinking enough water, stress management, exercise, maintaining healthy relationships and spending more time in nature (Hantsoo and Zemel 2021: 113474; Monda *et al.* 2017: 1-5). Although diet remains the most significant factor in the maintenance of the gut microbiome, the effect of these positive lifestyle changes should not be ignored. This study shows that healthy diet and lifestyle changes are

readily incorporated by homoeopaths in their approach to gut dysbiosis and chronic disease.

5.2.5.2. Adjunctive therapy prescriptions

The majority of participants would aim to remove harmful microbiota from the gut before replenishing it with beneficial microbes. This idea is supported by protocols such as Hywood and Bone's (2004: 41) 'Weed and Feed' gut dysbiosis protocol. The Weed and Feed protocol may be a Western herbal medicine approach, but we see similarities with this approach when homoeopaths aim to treat gut dysbiosis with homoeopathic remedies, Western herbal medicines and supplements. Homoeopaths may not follow a 1-3 day fast as this protocol states, but they regard the restriction of certain foods from the diet as necessary during the 'removal phase' of their gut dysbiosis approach. Homoeopaths would commonly remove foods that the patient does not tolerate well to avoid the inflammatory actions in the gut. They would use different Western herbal antimicrobials including garlic, as suggested by Hywood and Bone (2004: 41), to remove any harmful microbiota from the gut. Homoeopaths in this study may also use L-glutamine, D-glucose, liquorice, herbal tinctures, the gut mucosa remedy, gemmotherapy, and organotherapy during this removal phase. They would use prebiotics, probiotics and fermented foods in their 'replenishing' phase of the gut microbiome. Broad-spectrum probiotics mentioned in this study are BIOremFERMENT®, Rawbiotics®, Acidophilus 40 plus® and Saccharomyces boulardii. Kimchi and natural yoghurts appear to be the preferred fermented foods used by the participants of this study, whereas kombucha is avoided as it may encourage excessive bloating. One participant uses green banana flour as a potent prebiotic instead of slippery elm, as used by Hywood and Bone (2004: 41). Although homoeopaths may be unfamiliar with the Weed and Feed protocol, they do appear to have a personal approach to gut dysbiosis, which incorporates a removal and replenishing treatment regime supported with dietary adjustments. Homoeopaths would also incorporate different herbs in their treatment of the gut including: *Andrographis paniculata, Taraxicum officinale, Carduus marianus, Althaea officinalis, Withania somnifera, Passiflora incarnata, Avena sativa* and *Hydrastis canadensis*. Although some of these may not directly influence the gut, they may act on other

systems, such as the nervous system and influence the gut indirectly by calming nervous stimulation of the intestinal wall. Comed's Morgan Pulv®, Zymogen's ProbioMax®, products from Coyne®, turmeric, vitamin C, aloe, berberine and essential oils like orenago are also incorporated by the participants in the treatment of gut dysbiosis.

5.2.5.3. Referrals and adjunctive treatments

This study revealed variation in referral practices among homeopaths for gut dysbiosis. While some primarily used referrals for diagnostics like endoscopies, others considered them a potential tool for an integrated treatment approach, involving conventional medicine or alternative therapies. Homoeopaths are aware of how they can and cannot help a patient and are quick to refer when a patient presents with concerning symptoms. Dangerous diseases that homoeopaths in this study will be vigilant for include: colorectal cancer, inflammatory bowel disease, diverticulitis and gastrointestinal ulcers. They would commonly refer these cases to a gastroenterologist for further investigation and management. Homoeopaths in this study mentioned that they would refer to a gastroenterologist when they see concerning symptoms such as chronic heartburn or ulcers, hematemesis, melaena in the stools or high levels of calprotectin. They will also consider referring the patient when there is an insufficient therapeutic response, the gut dysbiosis is severe and complex, they cannot aid the patient further, or there is a need to investigate the pathology further. With the increased prevalence of gastrointestinal cancers, homoeopaths would refer patients over 50 years of age with a family history of gastrointestinal cancers to a gastroenterologist. Other referrals participants of this study mentioned include psychologists for the improved mental well-being of their patients and dietitians for specialised dietary advice. Homoeopaths would commonly refer gut dysbiosis cases to chiropractors as they recognise the valuable connection between the nervous stimulation of the gut and chiropractic treatment (Zhu *et al.* 2020: e926039-1 - e926039-9). Some homoeopaths found the use of colon hydrotherapy useful in their treatment of gut dysbiosis and would treat the patients themselves or refer them to a hydrotherapy clinic (Walker 2000: 1-6). Further

research regarding the effect of chiropractic treatment and colon hydrotherapy on the gut microbiome is needed.

5.2.6. EDUCATION ON GUT DYSBIOSIS AND BOWEL NOSODES

Interesting other findings discovered during this study include the perception that gut dysbiosis and bowel nosodes are poorly incorporated in the education of future homoeopaths. These findings came spontaneously from four participants who suggested the tertiary education of these topics to be lacking. They clearly expressed the need to incorporate these topics with greater urgency, considering the crucial role that gut dysbiosis plays in nearly every chronic disease process. They believed bowel nosodes were a valuable tool they were never taught in their tertiary education. This could be due to the lack of research and a common consensus regarding the view and treatment of gut dysbiosis. More research on these matters will shed light on the importance of the gut microbiome and its consideration in homoeopathic treatment. Further research should be done as this may indicate an essential gap in educating new homoeopaths and thus improving patient care.

CHAPTER 6

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1. CONCLUSION

This study shed light on some of the homoeopathic experiences, perceptions, and treatment of gut dysbiosis as a clinically significant obstacle to cure. The homoeopaths that participated in this study observed a high prevalence of gut dysbiosis within the South African population. They attributed this to causative factors such as Westernized dietary habits, a predominantly sedentary lifestyle, and the use of conventional medications, among other contributing factors. Diagnostic tools for gut dysbiosis were poorly incorporated by the participants in practice due to the lack of South African laboratories that provide comprehensive stool analyses and the high cost associated with these tests. The participants often relied on clinical assessment and therapeutic intervention rather than precise diagnostic testing, leaving further investigations to severe and complicated cases. This study found that the participating homoeopaths greatly emphasise gut dysbiosis in treating chronic disease. The participants of this study perceived gut dysbiosis as a possible obstacle to cure that they would aim to identify and remove through lifestyle modifications and treatment as soon as possible. Removing other obstacles to cure was also considered necessary in successful homoeopathic treatment. Many participants understood that gut dysbiosis is not limited to gastrointestinal symptoms but extends to various systemic presentations and emphasised its vital role in overall well-being. When initial treatment fails, the homoeopaths included in this study would consider many different factors. Firstly, they would consider their treatment approach by reevaluating the case, the diagnosis, the remedy, and the potency. They would also consider the patient's compliance with the treatment plan, the withholding of important information and the patient's expectations and ignorance. The participating homoeopaths would also consider the patient's diet and possible gut dysbiosis as an obstacle to cure and recognise the importance of both factors in cure and overall well-being. The participants believed it vital to holistically consider the patient and the treatment plan after failure of initial homoeopathic treatment. The treatment of gut dysbiosis in homoeopathy is highly individualised, drawing from a broad spectrum of

homoeopathic philosophies, remedies, and adjunctive therapies. Constitutional and clinical treatment approaches utilizing simplex and complex remedies are all incorporated by most homoeopaths of this study as valuable tools to improve the gut microbiome and overall health. Many participants regard bowel nosodes as necessary in their approach toward gut dysbiosis and would prescribe them clinically and in conjunction with other remedies, probiotics and Western herbal medicines. Supplementation, gemmotherapy, organotherapy and biopuncture will also be considered in treating gut dysbiosis. Despite finding a common approach to gut dysbiosis, this study re-emphasized the importance of individualised treatment tailored to the patient's specific needs. The homoeopathic participants also prioritise dietary and lifestyle changes that support the health of the gut microbiome. They advocate against the common Western diet and for the inclusion of fibre-rich food, offering guidance on various dietary approaches. The 'remove and replenish' strategy is commonly employed by the participants, focusing on eliminating harmful bacteria through diet and antimicrobial Western herbal agents and thereafter replenishing with prebiotics, probiotics, and fermented foods. This study also found some concerns among the participants regarding gaps in homoeopathic education of gut dysbiosis and bowel nosodes. Participants recognise gut dysbiosis's critical role in everyday practice and believe better education on these subjects is needed. This finding suggests a potential area for further research and the opportunity to improve patient care through better education for aspiring homoeopaths.

6.2. LIMITATIONS

The researcher found this study to be a valuable beginning and contribution towards expanding the knowledge base regarding the perception of gut dysbiosis as an obstacle to cure. Despite achieving the aims and objectives of the study, there were certain limitations. The geographical area of the study was South Africa, but only included five provinces (Gauteng, KwaZulu-Natal, Western Cape, Eastern Cape, and North West) in the sample. Due to this limitation, the results may not be generalised to a broader context in other parts of South Africa or internationally. Although the inclusion criteria of this study required a minimum of 5 years of

experience, all participants had more than ten years of experience, which excludes the opinions and perceptions of homoeopaths new to the profession.

6.3. RECOMMENDATIONS

Based on the challenges and outcomes of this study, the following recommendations should be considered for further similar studies or a future repeated study:

- Repeat the study on a larger sample of homoeopaths.
- This study should be repeated internationally to explore the perceptions and treatment of gut dysbiosis to compare the results.
- Further research needs to be done on the perceptions and treatment of gut dysbiosis by different complementary and alternative practitioners.
- Employ different research methods (i.e. qualitative and quantitative) to obtain the best possible results.
- Further investigate the prevalence of gut dysbiosis and the healthy microbial composition of the gut both nationally and internationally.
- Develop a homoeopathic guideline to the approach of gut dysbiosis in terms of case taking, diagnosis, treatment and management. Despite the individuality of Homoeopathy, most participants shared a similar approach, which can be further investigated to advise the profession's best approach to gut dysbiosis.
- The addition of gut dysbiosis and bowel nosodes to the current homoeopathic curriculum provided by the Durban University of Technology and the University of Johannesburg to encourage its consideration in practice and research.

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APPENDICES

Appendix 1: Interview Guide

INTERVIEW GUIDE

- Demographics: Age, Gender, Years of practice, Location of practice, Qualification(s), Institute of study
- What do you understand by the term "obstacles to cure" and is the removal of it an important act as a homoeopath?
- How and at what point of treatment would you go about removing these obstacles to cure?
- How would you normally go about your treatment strategy when the indicated remedy fails to act?
- What do you understand by the term "gut dysbiosis"?
- To what extent do you see gut dysbiosis as being an important clinical consideration?
- What symptoms make you believe a patient has an unbalanced gut microbiome?
- What is the value of bacteriological testing for the diagnosis and management of gut dysbiosis?
- What role does gut dysbiosis play in chronic diseases and its management?
- To what extent may gut dysbiosis act as an obstacle to cure?
- What is your understanding of the use or the role of the traditional bowel nosodes in the treatment of gut dysbiosis?
- If you prescribe bowel nosodes, on what principles do you prescribe it?
- Do you have a treatment plan for patients with gut dysbiosis?
    - What is some lifestyle and diet changes that you recommend to patients with gut dysbiosis?
    - What is the role of adjunct therapies and referrals in your treatment of gut dysbiosis?
- In the absence of a formal treatment plan…
    - What would be some lifestyle and diet changes that you would recommend to patients with gut dysbiosis?
    - What would you consider the role of adjunct therapies and referrals to be in the treatment of gut dysbiosis?

Appendix 2: Letter of Information for Interview Participants

LETTER OF INFORMATION

Title of Study: Homoeopathic perception of gut dysbiosis as a clinically significant obstacle to cure

Principal Researcher: Marizel Hendriks BHSc: Homoeopathy
Supervisor/s: Dr Shanaz Ghuman

Brief Introduction and Purpose of the Study: I am currently doing a research study on gut dysbiosis and how it may possibly act as an obstacle to cure.

Good Day Dr. [surname of participant]

I am a 6th-year student at Durban University of Technology (DUT) doing research for my Master's degree in Homoeopathy. I would like to invite you to participate in my research regarding how gut dysbiosis can prevent the effective treatment of patients in South African homoeopathic practices. Research is a systematic search or enquiry for generalized new knowledge, and this study will be done by interviewing you, as a practising homoeopath with a minimum of 5 years' experience, on your view and experiences of the subject matter. A total of 12 homoeopaths will be interviewed. You will have the choice of either face-to-face interviews in your private practice or to schedule an online meeting on a platform, such as Zoom, Skype or MS Teams, of your choosing. This single interview will be done privately between you and me and should last between 30 and 40 minutes. It will be audio recorded for data analytic purposes. In preparation for the interview, please think of how gut dysbiosis can act as an obstacle to cure within your practice as an additional symptom to other conditions and how it affects the treatment of the patient. There will be no risks or discomforts involved by taking part in this study, as your answers will be confidential, and you may choose not to answer certain questions if you wish. Your name will be changed within the dissertation to keep your answers and identity anonymous. You are entitled to withdraw from the study at any time should you wish to do so. There is the potential that the research may be terminated early in particular circumstances, and I may, under certain circumstances, withdraw you from the study. Potential benefits of this study include gaining more knowledge on how gut dysbiosis may affect the treatment of other disorders, which will help you to better treat your future patients. There is no remuneration or costs involved in taking part in this study. The results will be published in an article that will be available in the DUT Library repository but can also be emailed to you if you wish. Documents will be saved for 5 years on a password-protected computer, which will be deleted after 5 years. Any hard copies will be stored in the Homoeopathic department's research room for 5 years before being destroyed.

Looking forward to your reply,

Yours sincerely,
Marizel Hendriks

Persons to contact in the Event of Any Problems or Queries: Please contact the researcher 083 784 9764, my supervisor 083 588 3245 or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Acting Director: Research and Postgraduate Support on 031 373 2577 or researchdirector@dut.ac.za.

Appendix 3: Letter of Consent

CONSENT

Title of the Study: Homoeopathic perception of gut dysbiosis as a clinically significant obstacle to cure

Name of Researcher: Marizel Hendriks

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, Marizel Hendriks, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: IREC 120/23,
- 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.
- Given the requirements of this 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**

I, Marizel Hendriks, 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 (If applicable)	**Date**	**Signature**

Appendix 4: Sample of a Transcript

Participant 6 Transcript

Researcher
Would you mind if I record this session?

Participant 6
No, not at all you are welcome to.

Researcher
Okay, so it's just a few questions. It shouldn't take too long. But please feel free to answer it as shortly or as long as you like. Okay, let's see. Alright, so firstly, I'm just going to need a few demographical information from you: your age, gender, years of practice' location of practice, qualifications and the Institute where you studied.

Participant 6
Yeah, perfect. Okay, cool. So he is currently 34 years of age. Male and years of practice is now just over 10 years. Location is in Rondebosch in Cape Town, first year was in Pinelands but the current location is Rondebosh, I've been here for nine years now. Qualifications is a MTech homeopathy, which was which was at University of Johannesburg in 2012. And yeah, I think that's it.

Researcher
Cool, yeah, thank you. Alright, so then the first question, what do you understand by the term obstacles to cure and is the removal of it an important act as a homeopath?

Participant 6
Absolutely. So firstly, obstacle to cure is I think that anything that can stop a, or prevent a patient from obviously reaching the complete cure but also from a homeopathic perspective, I think in terms of our remedies, you know, working as well as we want them to. So definitely an important thing to firstly find out what obstacle the cure is. And obviously then the removal being the very important part. Sometimes I find though, depending on the obstacle, it's not always completely removable, but I do find that if an obstacle can be even lessened, we can get a lot more improvement with homoeopathy as well.

Researcher
Perfect, thank you. And then how and at what point of treatment would you go about removing these obstacles to cure?

Participant 6
I think the sooner the better, in my opinion. So again, in terms of how it would depend on the obstacle, so obviously, if it's a lifestyle change, you know, the sooner the better in terms of if it is something regarding a diet, food intolerance or you know, something like that. And so obviously, how would we determine what kind of obstacle it is? And as I say, I think the sooner the better if you can get it, if you

pick it up immediately, especially on your initial consultation. I will try to talk with it first. So that you know we get more of a rapid kind of treatment and obviously a good cure for the patient as well.

Researcher
Yeah, yeah, definitely. Okay, and then how would you normally go about your treatment strategy when they indicated remedy fails to act?

Participant 6
If the indicated remedy isn't working, I would firstly go back to, you know, the actual case itself to make sure that I've looked at everything, completely. Anything that I maybe missed. Sometimes it may then look at a follow up consultation with patients again to see if anything changed. But I think firstly would be first and foremost would be the reassessment of the case and going through it in a little bit of finer detail. Oftentimes, as well, you are maybe a little bit pressured into giving something to somebody quite quickly, remedied, and you might be able to visually overlook something that might be you know, sort of simple or as you mentioned, an obstacle to cure that, you know, either you didn't know to first on thought maybe wasn't as much of a problem if I can put it in those terms as it is and to kind of go back, just reassess. And, you know, if you still feel that the remedy's indicated to continue with it. If not, for whatever reason, or you feel you know, you need to obviously then look at a different remedy ar perhaps potency or frequency then to kind of look at that but I think definitely first reasses the case that, potentially have a follow up consultation, and then look at other things. Again, like the obstacles or a remedy change or potency or frequency change.

Researcher
Okay good. And then what do you understand by the term gut dysbiosis?

Participant 6
So my understanding of basically our gut dysbiosis is, is a imbalance in the gut microbiome which can indicate either a pathogenic nature so the growth of bacteria and fungi, yeast, viruses in the gut, and therefore also suppression of the good bacteria. But I think that we can also get the gut dysbiosis where we have an overgrowth of good bacteria as well, where there is that kind of imbalance as well. So, yeah, that would be a sort of basic description of it.

Researcher
And then to what extent do you see gut dysbiosis as being an important clinical consideration?

Participant 6
So I think it is a very important clinical consideration. As you know, there's a lot of research now into sort of gut dysbiosis and I think if we went back maybe 20 years ago, it maybe wasn't as well researched as it is now. So I think that the more we're researching it, the more we find that the clinical evidence points to not only gut function, but gut dysbiosis as being a major factor in a lot of acute as well as chronic illnesses. And I think that the many factors to do with that, but it is a very, for me in my practice especially, it is a very important consideration clinically to get right and we often see better results once that is established.

Researcher
Ah, great, okay. And then what symptoms make you believe a patient has an unbalanced gut microbiome?

Participant 6
So firstly, I think it would be gut-related symptoms. Yeah, and that can range from you know, what what would the umbrellaed as IBS, a lot of patients will come and say my my doctors told me I have IBS or I've had IBS for years. And under that sort of umbrella, which I believe IBS is a term for a lot of other problems going on, including dysbiosis you know. You would have your general abdominal pain, constipation or diarrhea or alternation between the two. Your bloating, burping, flatulence, and that is sort of the general kind of thing. But then also systemically I also find that when people are getting sick frequently you know, when there's a lot of food intolerances, when they have things even like mental and emotional conditions, it's also an important area to look at, in terms of anxiety, brain fog, depression, concentration issues, and furthermore sort of ADHD and that kind of thing. So general symptoms being gut related, but also the more systemic and even to the point of other physical symptoms, like skin disorders, such as eczema, and even things like asthma anything I think that involves the immune system either being overactive or undernactive, is always an important area to look at a balance of the microbiome.

Researcher
Would you consider gut dysbiosis if a patient maybe doesn't have that gut symptoms, but is have some more of the systemic symptoms?

Participant 6
Absolutely. Yeah. So oftentimes, you know even if people don't. If they say, Oh my general digestion is good and I still have a bowel movement once a day and it's good and I don't have any of these symptoms, but we know that systemically you know they were that is a problem in terms of overall under reaction of the immune system. Its still definitely an area to investigate and often I do so a lot of people will come with eczema, or even asthma and you know, then we do look at even not necessarily the gut symptoms if they don't have symptoms, particularly, but functionally, you know, looking at then treating the gut to get more systemic effects of cure.

Researcher
Great. Okay. And then what is the value of bacterialogical testing for the diagnosis and management of gut dysbiosis?

Participant 6
Yes, I find this one quite a tricky, tricky thing. Only because of with bacterial testing. I don't find for instance, your general stool testing to be effective. I don't find that it can really sort of, you know, diagnose a, lets say, dysbiosis. So when I say a normal stool testing being just your Lancet lab and basically doing a culture, then obviously you do get your more intensive testing through the different laboratories like GI map testing and things like that. So the problem for me is, coming with patients is affordability. So I always tell people that listen, for instance, your symptoms indicate related gut dysbiosis this is the test that we would want to run if you can, and if they say we can, let's do it. I found

that very, very helpful, but obviously, if they can't afford it, because it is quite expensive, then I would still sort of want to do a generalized kind of protocol myself. So protocol and then maintenance as well. So in terms of the value I've seen results for both, you know, with people doing the test as well as people not doing testing and we do in general, kind of, how can I say, broad spectrum treatment for what we believe is the dysbiosis and the more patient centred maintenance there are, again looking specifically at what they've afterwards so the treatment will vary between patients even if it's a generalized protocol, but I have had lovely results with patients who do the testing because there are things that we can't for instance, pick up something I didn't mention we previous questions also hormonal issues if they are chronic issues. Especially our fund with female patients if there is a history of things like estrogen dominance or infertility, unexplained infertility. You know, testing for certain markers in the gut is very helpful to determine if the gut dysbiosis is a factor in the hormonal side. of things. You know, and even chronic use of oral contraceptive pills and that kind of thing and they adapt so I think it is valuable when people can do the test. It is very valuable because of those those reasons. But you know, as I say we can we can still get good results without it. That makes sense. It's not a clear answer to your question, but But yeah, I do find them helpful, but but you can still do do good work with others. Yeah.

Researcher
Great. And then what role does gut dysbiosis play in chronic diseases and its management?

Participant 6
So yeah, I think as mentioned before, you know, chronic diseases and especially those sort of the nature of that overactive or underactive immune system, I think it plays a very central role. You know, because of our gut being you know, a major host of immune cells, biggest sort of area where our immune cells are kept and developed. I think that played a major central role. Oftentimes I find that if we treating patients with chronic illnesses, with homeopathy even and there is a role of dysbiosis to play, I do find that firstly our remedies, in my experience, don't work as well as we want them to. It may take a little bit longer or we don't get the results we expect. But once we can help and get that dysbiosis regulated a lot of the time and get them back to kind of a healthy gut state. You know, the immune system then can react to you know, and the body are supposed to react to the remedy a lot better than with that obstacle to cure. It definitely helps a lot. It's a very central role in chronic Illness and obviously, the management, thereof.

Researcher
Definitely. And then you have touched on this a little bit, but is there anything you'd like to add to what is to what extent may gut dysbiosis act as an obstacle to cure?

Participant 6
Yeah, look, I think in some cases, it can really, completely ruin the treatment ineffective in some cases, not at all, but if there's a lot of if there's a lot going on in the patient and dysbiosis is quite severe, quite chronic you know, I think it can act as a major obstacle to cure. And I mean, even from conventional medicine point of view, you know, that certain microbes also, you know, cause medication to be inactive. So that's obviously from a conventional perspective, but, you know, we can see from that side of things that it plays such a central role because, you know, I think we underestimate that what the

microbes both the good and the opportunistic bacteria, what kind of effect that actually has not only on you know, the sort of things we we may eat or may take for treatment, medication wise, but also the effect obviously, that has on the body so, in certain cases I feel like it can even render homeopathic treatment ineffective and conventional treatment effective if it's not teached as a sort of foundation of treatment boost.

Researcher
Yeah, no, definitely. And then what is your understanding of the use or the role of traditional bowel nosodes in the treatment of gut dysbiosis?

Participant 6
I think that for me, in my personal practice, bowel nosodes will generally be something that I would use sometimes in combination with a dysbiosis treatment, but also afterwards as kind of a reestablishing of the kind of gut terrain if that makes sense. So you know, I think different views on how people treat gut dysbiosis I think there's the the school of thought of, you know, getting the opportunistic bacteria or yeast or fungi or whatever you're dealing without and replenishing with the good stuff and maintaining thereafter. And then there's also the school of thought of changing the gut terrain from the start and not using a antimicrobial treatment, you know, rather changing what someone's eating in their diet. And, and as I say, the sort of host terrain if that makes sense, so things like your prebiotics, etc, and I think bowel nosodes for me would come in very much there in terms of in terms of helping to treat that kind of gut terrain and using it for to help to stimulate a body, a person's immune system and body to react to those nosodes in such a way that we can actually establish and maintain a healthy gut as well. So personally, for me, sort of more of a reestablishing of the gut terrain, if I can put it in those terms, that would be quite helpful. But I think there's a different sort of schools of thoughts and opinions on how people use them.

Researcher
Okay, and then if you do prescribe bowel nosodes on what principles do you prescribe it?

Participant 6
So, yeah, as I said, you know, in terms of I think, with regards to bowel nosodes the constitutionally I think it's also important to take into consideration patient history. I think just constitutionally even as we would with remedies in terms of simmillimum , but just to look at more constitutionally how a person is, their sort of history, I think also use of chronic medications. Things like that would be the basis of what I generally use so the symptoms that they are experiencing. Their past history and use of chronic medication is sometimes very important. And yeah, I think yeah, mainly constitutionally and current symptoms and past history of infection, and maybe even, I think coming to my analysis of family history of blood relatives conditions as well.

Researcher
Okay, okay. So is it a combination between having the mental emotional symptoms of the bowel node as well as clinically and past history?

Participant 6

Yeah, I think sometimes mentally emotionally for me, you know, with patients. How can I say I'm not being too aware of certain things like oftentimes in consultation, you know, you'll get patients say "I never really thought of that, I don't really know" Then you see them for a follow up to get a bit more information for you. So if you can get the can prescribe on the mental emotional side of things, I do think that that is that is also ideal. But sometimes I find in terms of that you know, the patient awareness of themselves' not great at the time, once he obviously had a bit more of an in depth consultation, and start to speak to them, they can come back with a little bit more information that then might, you know, permute direction on prescribing a bowel nosode or using it based on those symptoms as well. But if you can definitely physical and mental emotional, but like I said, usually for me, it's primarily on the physical side because that's what patients are a lot of the time fixated on, if that makes sense.

Researcher
Yeah, definitely, they are fixated on that. Okay, and then the final question has a few sub questions to it. Do you have a treatment plan for patients with gut dysbiosis? And what is some of the lifestyle and diet changes that you would recommend to patients? And what is the role of adjunct therapies and referrals in your treatment of it?

Participant 6
Okay, cool. So firstly, do I have a treatment for patients with gut dysbiosis? I think that goes back to, you know, the testing side of things, for instance. So if we test, we wait for the results, and based on those results, sort of do a bug in depth protocol. If not, then my protocol would genuinely be if they are suffering with dybiotic kind of symptoms that I would see is I have a general sort of protocol that I would do for about a month with them. Which would include you know, things like anti-microbials in terms of herbal approach that I generally use, so depending on what we suspect, might be going on different types of foods, or different types antimicrobials being bacteria or yeast family viruses or, or things like worms as well. So in terms of that, and then alternating that with things that will help with, you know, the gut lining and as I mentioned, sort of really the terrain of the gut as well. So making sure that things that are important things, you know, helping with the lining of the gut helping with good mucus secretion in the gut, you know, obviously your probiotics again and re-inoculation with the important prebiotics as well. So generally I would have a sort of treatment plan where we alternate, those sorts of things for about a month, and then we got a little bit of a maintenance and that would you know, be again, more tailored to what patients symptoms, or patients condition is. So we've kind of tailor make that and obviously in combination with that, we use homeopathic remedies that would relate to their symptoms particularly and being quite supportive remedies. So it depends again, sometimes, you know, we, in my practice, I'm not very, you know, one sided in terms of clinical or clinical treatment, or constitutional treatment. I think for me, it changes depending on the person and what I feel is best for them at that time. So yes you oviously use that that in terms of remedies and bowel nosodes, things like that. And lifestyle and diet changes absolutely. I think, you know, without that, you're never really going to effectively, you know, manage that gut dysbiosis down the line. You know, you can do what you can now for a patient but I think that in terms of the maintenance, you never really want the patient to rely on medication, you know, being herbal, nutraceutical, homeopathic, you kind of want to get them to a spot where they are cured, they are treated. And then using diet and lifestyle as the sort of means and so, lifestyle again, you know, being things like you know, good amount of exercise. I think also stress management in this day and age. We know that that can have quite a big impact on on the gut. So

definitely, you know, streets management, whatever the patient again, feels is best for them, whether it's you know, breathing, whether it's just relaxation, whether it's you know, mindfulness, whether it's you know, changing you know, the actual day to day kind of thing, giving more time to themselves. And from a dietary point, I think that is also quite specific to the patient. So obviously, during the initial consult, we'll go through diets and see what may aggravate the patient. And from there I think sometimes we can determine even without testing all the time for food, for instance, food intolerances and things like that, we can generally start to see things that may aggravate patients. So diet wise a lot of the time will be restriction for inflammatory foods like sugars and glutens and often dairy as well. Again, very patient dependent but then also looking at other diets, so we can pick up anything that they're reacting to like FODMAP diets or you know, histamine, high histamine reactions and things like that. So we're gonna go on low histamine diets those sorts of things. So there could be for me, sort of the bigger generals and then obviously being a little bit more patient specific depending on what information you can get on them. And in the role of adjunct therapies and referrals, so for gut dysbiosis and that personally I like to generally treat the patient if you're for any reason that you know, they aren't responding and we've got instance done testing, as well and they aren't responding then absolutely, you know, we'll refer depending on the patient to maybe specialists for further testing and diagnosis, anything that we haven't done. Any specific adjunct therapies that you are sort of referring to more like conventional or just...

Researcher
More like anything that's not termed homeopathic. So maybe in the use of herbs and Mother tinctures and if you use that what are some of the common ones that you've seen?

Participant 6
Okay, cool. Yeah. So So yeah, other than homeopathic, as I mentioned, I think I think they are effective in my practice and quite necessary in some cases. As I mentioned earlier, I think you know, there's different schools of thoughts of you know, do you eradicate the bacteria are they sort of useful and you just want to change the terrain so that you kind of increasing the bacteria that you want there rather than knocking out any bad bacteria with, or opportunistic bacteria, with like things like anti microbials. But personally, I find them very helpful and at least to establish and initiate treatment. So kind of starting where we know that we are trying to, you know, reduce opportunistic bacteria and help your probiotics and good bacteria, to obviously thrive as much as possible. So I do find them helpful. Sometimes I also find one thing I didn't mention as well is bio puncture. Sometimes it's quite helpful depending on the patient. Things like your Mucosa comp if you are able to do testing and things like that. But also from a you can use the mucosa comp, you know, looking at the gut lining, but also if you do note, things like a very mucusy stools or those kind of things, the hyper inflammatory kind of gut. Or they've done a test for calprotectin and it's very high, I think that's also an area that you know, homoeopathics and combination homoeopathics like the mucosa comps and that kind of thing come in handy as, you know, injectable over the large intestine. So personally I find the adjunct therapies quite helpful. I still feel that you always want to follow on with your homeopathic treatments to really kind of treat or cure the case if that makes sense. But in talking about obstacles to cure if, if you're not finding that that remedy is working, or it's not getting the reaction that we want, and then we have to use those sort of adjunct therapies, or at least I do in my practice, and then as I say, furthermore, we're not getting results from that, then I would look at referrals for potentially doing an investigation or even to

practitioners that we find maybe we think it's something for instance, you know, chiropractic treatment. Sometimes it's helpful, you know, especially being with the bowel and then nerve regulation and things like that. Sometimes it's helpful that I would refer but obviously in certain cases, where it is necessary absolutely.

Researcher
Yeah. And then when it comes to homeopathic prescriptions, are you a single remedy or mostly complex as how would you normally treat the patient?

Participant 6
Kind of, as I mentioned, it would depend on the case, so I'm not strictly like classical or single use remedy, you know, clinical complex, but yeah, so I have like a few nice complexes that I would think of for a patient. You know, in terms of, you know, even if it's while we're doing the gut protocol, we say given them a remedy, it's not working, how we wanted to and then we say, okay, let's start and start looking at these obstacles. You know, change the diet, change their lifestyle, and then do a bit of treatment and then, you know, we may use a remedy that helps them temporarily while working on things for bloating and things like that, you know, you might use Carbo beg, Lycopodium and Nux vom or something like that, just to kind of can really help them and you can get that aleviation that they needed and that works quite nicely for them. Especially if symptoms are quite severe. You know, sometimes you get patients where they're very acute symptoms and you know, underlying these if you're going to be dysbiosis, that they need that kind of relief. So you know, you might go either single remedy that fits well, and that helps but then those chronic symptoms are still there, or you might use a complex that might cause them relief, but then you still want to kind of work a little bit deeper with that patient and then eventually get to the point where they're feeling much better and you can obviously do that constitutional prescription and things like that. So, yeah, it's, you know, it varies for every patient in my practice, I'm not strictly single use single remedy use or complex, classical or clinical, it varies from patient to patient.

Researcher
And that's, that's great, actually, it's very individualized, very homoeopathic.

Participant 6
Yeah, exactly.

Researcher
Well, that's actually that's all from me. Thank you so much. Is there anything else you'd like to add?

Participant 6
No, thank you. Yeah, very, very interested. Yeah. I was saying your research I think only because you know, for me, gut dysbiosis or let's just say the gut, as you will know is very important and I think you start to see it more and more in practice how true that is. From things that you don't even think are linked, but you know, even people, for instance, that I've done GI map testing and that worked before, and we're treating them and let"s say for gut related symptoms. And the first thing they actually started to feel like wow, you know, I was so much clearer in my my thoughts, my anxiety lessened and it's

down 50%. Things like that and then you realize, hang on, you know, you're treating the gut but your body's actually systemically responding so yeah, it's always nice to see this kind of research going on. And in particularly with homeopathy I think is really good because I do feel a lot of homoeopahts you know, focus on gut and will always speak about it may go back to like eczema cases and everyone goes treat the gut, treat the gut. It's also nice to to look at it from a homeopathic point of view. And you mentioned, obviously the bowel nosodes and things like that. So it's gonna be very interesting to see everyone's thoughts around it, from a homoepathic view.

Researcher
And it has been very, very informative so far, and I'm really enjoying it.

Participant 6
I'm sure you'll learn alot.

Researcher
Yeah. I will send you through a copy of the dissertation once it's finally done. But yeah, thank you so much for taking part I appreciate it.

Participant 6
Absolutely. Um, good luck with the rest of it. And yeah, need anything or if you have any follow up questions or anything like that. I'm always happy to help where I can. So good luck with the rest of it. And yeah, we'll chat soon.

Appendix 5: DUT Ethical Clearance

Institutional Research Ethics Committee
Research and Postgraduate Support Directorate
2nd Floor, Berwyn Court
Gate 1, Steve Biko Campus
Durban University of Technology

P O Box 1334, Durban, South Africa, 4001

Tel: 031 373 2375
Email: lavishad@dut.ac.za
http://www.dut.ac.za/research/institutional_research_ethics

www.dut.ac.za

16 August 2023

Ms M Hendriks
15 Ocean View Road
Winklespruit
Kingsburgh
4126

Dear Ms Hendriks

Homoeopathic perceptions of gut dysbiosis as a clinically significant obstacle to cure
Ethics Clearance Number: IREC 120/23

The DUT-Institutional Research Ethics Committee acknowledges receipt of your final data collection tool for review.

We are pleased to inform you that the data collection tool has been approved. 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

Prof J K Adam
Chairperson: DUT-IREC

Appendix 6: Certificate of Proofreading by Editor

Dr Sarah Tandy

Registered Homeopath

MTech Hom (DUT)

AHPCSA no. A12361 | Pr. no.: 0979422

Copy-editor and Proofreader

SA Writers College

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To whom it may concern,

This is to certify that Marizel Hendriks used my services as Copy-writer and Proofreader for the purposes of her Masters Dissertation in Homoeopathy at The Durban University of Technology titled:

Homoeopathic perceptions of
gut dysbiosis as a clinically significant obstacle to cure

This dissertation consisted of 200 pages, including 11 reference list pages. The document was edited for spelling, grammar, layout, and structure. Certain facts and references were also checked according to the relevant literature.

Dr Sarah Tandy

SA WRITERS COLLEGE
CERTIFICATE OF ACHIEVEMENT

THIS CERTIFIES THAT

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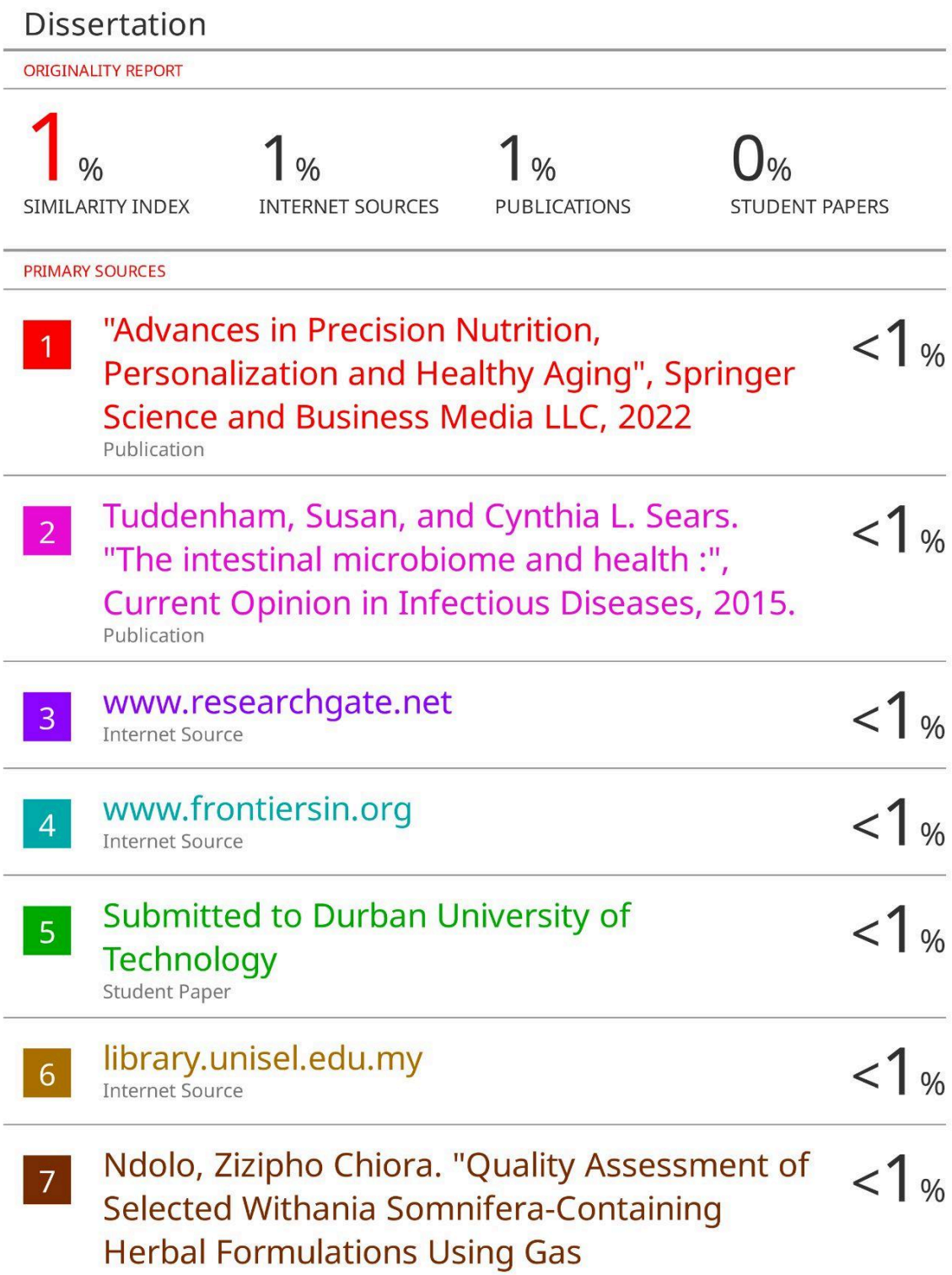

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