

**A COMPARATIVE STUDY OF THE RELATIONSHIP  
BETWEEN THE APPLICATIONS OF *ERYTHRINA  
LYSISTEMON (UMSINSI)* WITHIN THE TRADITIONAL  
AFRICAN AND HOMOEOPATHIC MEDICINAL SYSTEMS.**

By

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Dissertation submitted in fulfilment of the requirements for the Degree of Master of  
Health Sciences in Homoeopathy in the Faculty of Health Sciences at the Durban  
University of Technology

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# **DECLARATION**

I declare that this work is entirely my own, unless clearly referenced (including citation of sources). I declare that this work has not been submitted previously in any method to the Durban University of Technology or to any other institution for assessment or for any other purpose.

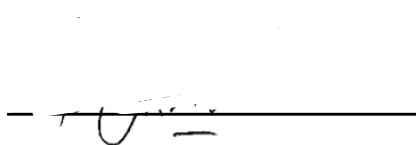


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## **ABSTRACT**

Traditional practices are highly respected and prioritized by a greater part of the black population in South Africa. There is a gap between the scientific evidence and the limited documentation of these practices due to knowledge that is being passed down from generation to generation through teachings, observations, and experience. This study sought to explore the different aspects of traditional African medicine, including the transmission of the indigenous knowledge and its relationship to homoeopathic medicine with respect to the applications of the medicinal plant *Erythrina lysistemon*.

The study's main aim was to explore the relationships in terms of similarities and /or differences existing between the African traditional and homoeopathic medicinal systems of the plant *Erythrina lysistemon* with reference to its pharmacology.

A qualitative research methodology was employed to explore the understanding of the African traditional medicinal applications of *Erythrina lysistemon* by traditional healers from the Durban Warwick Triangle Muthi market. Semi-structured interviews were conducted on twelve traditional healers with the use of an interview guide and a voice recorder. The interviews were conducted in IsiZulu, after which they were transcribed verbatim and translated into English. The NVivo qualitative software was used for data analysis where themes were derived and analysed.

Data on the homoeopathic applications of *Erythrina lysistemon* was derived from its homoeopathic materia medica which was formulated following a proving of the bark of *Erythrina lysistemon* in 2007. A desktop review of the plant's pharmacology and toxicology was also conducted in comparison to its effectivity. The results obtained from the arising themes within the two medicinal systems were subjected to a comparative analysis, noting the differences and/or similarities presented.

The field interviews conducted produced data that confirmed most of the documented uses of *Erythrina lysistemon* and further produced undocumented indications. A desktop review of the pharmacology and toxicology of *Erythrina lysistemon* also

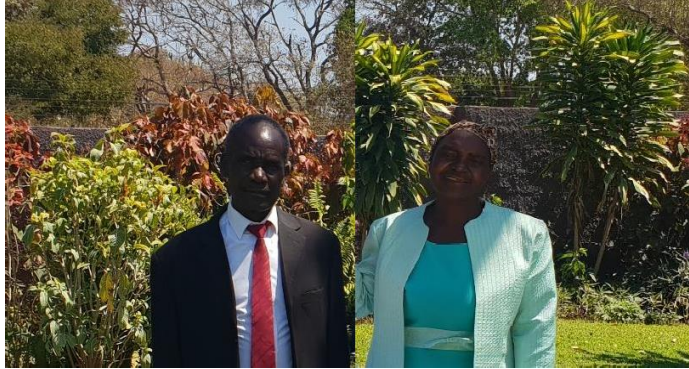
offered an understanding for some of its application properties. The prenylated flavonoids of *Erythrina lysistemon* have antimicrobial properties which render the herb effective in abscesses and infection, its application in sprains and other musculoskeletal complaints is due to its analgesic properties and the alkaloids produce estrogenic effects, accounting for its effect on the female reproductive system.

The comparative analysis revealed areas of definite similarities between African traditional and homoeopathic applications of *Erythrina lysistemon*. The main areas of overlap were highlighted under the following headings: Head, Stomach, Abdomen, Urinary system, Female complaints, musculoskeletal system, Skin, Earache, Nausea and Vomiting, Stool, Wounds, Mental and Metaphysical symptoms. There were areas where no overlap was observed such as the Sleep, and Eye sections that were only accounted for in the materia medica but not in the African traditional medicinal application data. Both the physical and metaphysical indications of *Erythrina lysistemon* in traditional medicine were discussed and the metaphysical indications were compared in reference to some of the materia medica mental symptoms.

The study concluded that there are definite areas of overlap between the applications of *Erythrina lysistemon* within the two discussed medicinal systems. The effectivity of *Erythrina lysistemon* in treating physical ailments in African traditional medicine can also be credited to some of its toxicological/pharmacological attributes. Furthermore, recommendations have been made for future studies.

# **DEDICATION**

This dissertation is dedicated to the following:



My parents, Wilson and Sinikiwe Nyoni

Thank you for believing in the importance of education and for allowing me the opportunity to find my own path in life. You sacrificed so much so your children could have a shot at a better future. I will always appreciate your unconditional love, prayers, and support. I would not be here if it were not for all your hard work. You are amazing and wonderful parents indeed. Thank you!!!

***Nyoni, Matshelela, Ndizemoyeni, uMadida owadida amakhosi!!!***

*Ndalumba loko, Leza amuyungizye, amuphe bumi bulamfu.*



My late grandmother (1932 - 2018) uMaNcube intomb'enhle, your generosity and love never went unnoticed. You are loved and missed dearly. *Mone akuumuna bagogo, thinokhede nkhatimuyede.*

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*‘And we know that all things work together for good to them that love God, to them who are the called according to his purpose’ - Romans 8 vs 38*

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## **DEFINITION OF TERMS**

**Allopathic medicine:** Often referred to conventional medicine or mainstream medicine, allopathic medicine is a form of healthcare treatment which has been defined as the practice that uses opposites, i.e., the use of medicines or treatment methods that have opposite effects to the symptoms of the condition (Eldridge 2019).

**Homoeopathic materia medica:** '*Materia medica*' is Latin for Materials of medicine referring to the collective of knowledge about the therapeutic properties of any substance used in healing. The homoeopathic materia medica is a compilation of the homoeopathic drug pictures, listing all the substances used in homoeopathy along with the detailed indications for their application. The information in the materia medica is compiled from provings and clinical observations of all the different substances used (Ullman 2017). The first symptomatic homeopathic materia medica was arranged by Hahnemann.

**Homoeopathic repertory:** A homoeopathic repertory is a systematic index or cross reference of disease symptoms and disorders to the homoeopathic remedy in whose materia medica they occur. The degree of association between the two is indicated by the type in which the remedy name is printed (Swayne, 2000:183). The first homoeopathic repertory titled the Repertory of the Homoeopathic Materia Medica was compiled by an American physician Dr James Tyler Kent (1849 – 1916) in 1897. It has since been translated into several languages with new proven remedies added to the repertory. It has been used as a model to many modern repertories used throughout the world and remains in use by homeopathic practitioners today.

**Traditional health practice:** the ability to diagnose, manage, heal or cure ailments based on traditional philosophies with the use of medicinal plants or spiritual and supernatural interventions. The practitioners of traditional healthcare base their ability to heal on religion, supernatural gifting, experience or apprenticeship (Birhan et al 2011)

**Apartheid:** An Afrikaans term meaning 'apartness', apartheid occurred from 1948 to the early 1990's, it was an established system that promoted racial segregation in South Africa. The minority white population claimed superiority politically,

economically and socially. The black population was the most inferior group and the different races were not allowed to intermingle (Byrnes 2013).

**Succussion:** Homoeopathic medicines are highly diluted multiple times, after each stage of dilution, the solution is shaken vigorously in the process called succussion (Longworth 2007).

**Aggravation:** An aggravation in homoeopathy is the worsening of an individual's symptoms following the administration of a corrective remedy (Stub et.al 2012).

## **1.1 TRANSLATIONS OF REPEATEDLY USED WORDS BY TRADITIONAL HEALERS**

<b>isiZulu</b>	<b>English</b>
<i>i-alamu</i>	A sour tasting white mineral, most commonly aluminium sulphate
<i>Idliso</i>	Poisoning (by eating)
<i>Insizi</i>	Black powdered traditional African medicine that is made from dried and ground herbs
<i>Intelezi</i>	A liquid herbal medicine made from different plant materials from different plants mixed together
<i>Inyongo</i>	Excess bile
<i>Inyoni</i>	Bird/ symbolism of witchcraft/ a condition of a sunken frontanelle in infants
<i>Isilonda</i>	Waste toxin build up
<i>Umsinsi</i>	<i>Erythrina lysistemon</i>

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 INTRODUCTION**

*"All that man needs for health and healing has been provided by God in nature, the challenge of science is to find it."* Philippus Aureolus Theophrastus Bombast von Hohenheim – Paracelsus (1493-1541)

As plants still cover over 30% of the earth's land area, they continue to fulfil an essential role in a balanced ecology (Nunez 2019). Without plants, the earth's atmosphere would not be able to support life, if plants did not absorb carbon dioxide, it would build up and turn the earth into a green-house leading to severe global warming, floods, fires, famine and catastrophe.

With their profusion of leaves and blooms, the thousands of plant species, some undiscovered, provide shelter and nourishment for the animals that live among them by transforming light energy into life energy through photosynthesis. Plants sustain the earth's atmosphere by renewing the oxygen that makes life possible and provide us with medicine. Indeed, the history of medicine has largely been the story of plants and the potent chemicals they produce. Around the world traditional healers using plant medicine provide healthcare to approximately 80% of the human population, which is to date, over 6 billion people (Dhwty 2019). In this study, the focus will be on one specific plant that has been used as a source of medicine to attain healing in the context of traditional African medicine and that of homoeopathy.

### **1.2 THE CONTEXT OF THE STUDY**

I am currently a Master of Health Sciences in Homoeopathy student, born in the city of Kings, Bulawayo in Zimbabwe from Tonga speaking parents, but raised in an IsiNdebele speaking community and essentially adopting IsiNdebele as a second home language. I grew up in a somewhat religious family, my parents both belonged to an indigenous Zimbabwean religion, *Guta RaMwari* which translates to, 'The City of

God', a religion that did not follow the teachings of Jesus Christ but followed God through a man called Taxwell Tayali, who they believed to be God incarnate, known to his followers as 'The Host of God'.

My parents would explain to us how they joined this religion in 1994 due to my mother's experiences with a series of unexplainable illnesses and some unusual occurrences in our homestead. After consultations with allopathic doctors and numerous traditional healers to no avail, a friend introduced them to the religion and all my mother's illnesses had since disappeared and everything had gone back to 'normal'. They however did not completely abandon their beliefs in traditional healing, they would occasionally use some herbal medicines and my grandmother remained steadfast in her beliefs. I remember her consultations with faith healers, *Sangomas* and *Inyangas* on several occasions.

Although it was a religious household, for me there was never a clear distinct line separating religion and traditional practices until I was around 16 years of age, at a point which I became born again and became a part of a Protestant Christian movement. My parents were not too pleased with this decision, to them, it seemed like a sign of rebellion against the family religion and a venture into my own. My father had even given me a warning, 'if anything befalls you, you are on your own', he said. His fears were probably from what he had experienced with my mother, unexplained illnesses, and thoughts of enduring witchcraft as I had moved from under the protection that was offered by this religion into a different religion he hadn't experienced before.

The Christian teachings had had me convinced and there was no turning back at this point. These teachings often focused on a personal relationship with God and discredited any sort of traditional practices. For years I believed not to be either directly or indirectly affiliated with any sort of traditional medicinal practices, *sangomas* or *inyangas*. This was until I moved to Durban South Africa in 2014 to continue with my studies, after a strikingly interesting conversation with a classmate on their take on traditional practices. He was a Christian but had kept his firm belief in the traditional practices, and he explained his reasons for this. It was a point in time where I had already associated traditional healing with witchcraft and thought nothing more of it. This conversation made me question some of my beliefs, I had never questioned my faith in such a manner. I then decided to take a step back from religion, a year to be exact. I have since become an active member of a Baptist Christian Church teaching

at the children church allowing young minds to explore their faith and belief in God. There is still a lot of unanswered questions but that is the basis of faith, “The substance of things hoped for and the evidence of things not seen” (Hebrews 11vs 1 – NKJV).

Apart from my muddled beliefs throughout the years, I have always had a desire to become a doctor from a very young age. I was interested in understanding the functioning of the human body and its processes in disease and healing. Which lead me to pursue studies in homoeopathy. I had not heard of homoeopathy prior to applying at the University but my understanding at the time was that it used natural medicine in allowing the body to heal itself. This was very intriguing, and I was immediately sold.

My years as a homoeopathic student have also led to a growing interest in exploring traditional medicinal practices, in developing an insight on how traditional practitioners are able to diagnose and treat individuals without any formal training of the different body systems and how they function collectively or an understanding of the different therapeutic effects of medicine without any study of their pharmacological composition or their mode of action. This study has been an opportunity for me to integrate these two systems of medicine, exploring their history and different methodologies of practice.

### **1.3 A VIEW INTO AFRICAN TRADITIONAL MEDICINE**

Traditional medicine has been respected and used across different cultures for centuries. In the African continent, the practice of traditional healing is much older than some of the other medical sciences. It is a practice that does not solemnly focus on therapeutic aspects, but is rather a lifestyle and a part of the culture, as it arises from the theories, beliefs and experiences that are indigenous to that specific culture and often incorporates certain practices and/or rituals (McFarlene 2015). Traditional healers play an important role in traditional medicinal practice, as it is believed that 8 out of 10 black Africans consult with traditional healers alone or in combination with Western medicinal practitioners (Zuma et al 2016). A traditional healer is described as “A person who is recognised by the community where he or she lives as someone competent to provide health care by using plant, animal and mineral substances and other methods based on social, cultural and religious practices” (Mothibe and Sibanda 2018).

In many rural or remote parts of Africa, traditional healers prescribing medicinal plants are the most easily accessible or affordable health resource available to the local community and at times, the only therapy available. The use of medicinal plants or plant derived medicines is very common in African traditional medicine with over 90% of traditional medicine recipes and/or remedies containing medicinal plants (Sofowora et al 2013).

With Africa's 216 million hectares of forest, ethnobotanical studies suggest that the rich African biodiversity is estimated to carry between 40 to 45 000 plant species with at least 5 000 of those species being used in medicinal preparations (Mahomoodally 2013). Africa is however also known for high rates in deforestation, with a forest loss of 1% annually, creating a need to document the medicinal uses of the available plant species. The accounts of plants used in traditional medicine may promote the conservation of cultural knowledge.

Indigenous to the South African flora are several of the *Erythrina* species which can be found in different areas, ranging from the botanical and domestic gardens, streets and parks to prime Safari territories. *Erythrina lysistemon*, an *Erythrina* species that is useful as a part of the ecosystem providing a food source and shelter to different kinds of animals and organisms such as birds, insects, monkeys and baboons is also useful to man, not only for its decorative purposes but as a source of traditional medicine (Mbambezeli and Notten 2002). As it is a source of traditional medicine, it is therefore hypothesized that traditional healers are familiar with the applications of *Erythrina lysistemon*. Obtaining this knowledge of application from traditional healers will allow for the expansion of the already available documented data of the African medicinal applications of *Erythrina lysistemon* and for further comparison to its homoeopathic applications.

## **1.4 A VIEW INTO HOMOEOPATHY**

In 1789 a German physician, Dr Samuel Hahnemann, while translating the book, *A Treatise on the Materia Medica* by Willian Cullen, one of the leading physicians of the era, noted that Cullen ascribed the effectiveness of Peruvian bark [*Cinchona officinalis/China rubra*] in treating malaria to its bitter and astringent properties.

Hahnemann disputed Cullen's explanation, he asserted that they must be another factor attributing to the efficacy of the Peruvian bark since there were other substances or mixtures of substances which were much more bitter and more astringent than the Peruvian bark that did not prove effective in treating malaria. He then described how he had taken repeated doses of the plant's bark until his body responded producing symptoms which included fever and chills which were similar to the symptoms of malaria. Hahnemann then suggested that the reason the Peruvian bark was beneficial in treating malaria might be because in a healthy individual it produced symptoms similar to those of the disease it was treating (Ullman 2017).

Hahnemann continued his research into "cures" and the idea of "similar suffering," and collated his findings. This led to Hahnemann postulating a healing principle: "Any substance capable of producing a set of morbid symptoms in a healthy individual, can treat an individual manifesting a similar set of symptoms occurring as an expression of disease". This principle, 'like cures like' – "*similia similibus curentur*", became the basis for an approach to medicine which he gave the name 'homoeopathy' which is derived from two Greek words *hómoios*, meaning like/similar and *pathos*, meaning suffering. Thereby translating to, "similar suffering".

In the following years, Hahnemann tested different substances on himself and others to prove his principles, although he used a wide range of different substances which included chemical elements, a greater part of the medicines he tested was comprised of plant material. (Morrell 2005).

Hahnemann published the first collection of the substances he had tested in the *Materia Medica Pura* (Morrell 2005). The processes by which Hahnemann tested the effectiveness of these substances he called it a '*prüfung*' a German term which means to "test" or "examine", this was later termed a 'proving'.

In a proving, potential homoeopathic medicines are administered in minute dosages in the form of verum powders to healthy human subjects [provers] and under double blind conditions to prevent bias and with the intention to induce disease symptoms to the individual (Lawson 2016). Symptoms produced are subjective and highly individualised. The individual records these symptoms in a journal, the journal data forms the basis of a homoeopathic materia medica essentially becoming the backbone of effective homeopathic treatment. The patient is then treated with a substance that

produces similar symptoms in an otherwise healthy individual (van Wyk 2009). Substances are administered in non-toxic, highly diluted dosages. The correct matching of the picture of the illness, the substance, and the correct dosage of the substance are highly important.

A proving of *Erythrina Lysistemon*'s bark in the 30<sup>th</sup> centesimal potency (discussed in 2.3.1) was conducted at the Durban University of Technology Homoeopathic Health Centre in 2007. The literature obtained from this proving produced the materia medica of *Erythrina lysistemon* which is an essential part of this study.

As mentioned in 1.2.1, *Erythrina lysistemon* has cultural significance that is used in traditional medicine. Its applications are documented in literature with some applications that may not be available in literature but available amongst traditional healers.

## **1.5 THE RELATIONSHIP BETWEEN AFRICAN TRADITIONAL MEDICINE AND HOMOEOPATHY**

The traditions on healing are very broad and diverse across different cultures globally. The approaches to which healing is achieved may be varied amongst cultures, however, the degree of similarity in healing practices, beliefs, founding principles as well as several themes regarding cultural traditions on healing, health and wellness are remarkable. These are often reliant on the integrated effects of the mind, body, and spirit ensuring a holistic approach (Helton, Nair and Pesek 2006: 114 -118).

The World Health Organisation describes health as "A state of complete physical, mental and social well-being", not only referring to the absence of disease and infirmity, but also the holistic wellness of an individual (Sartorius 2006). African traditional medicine is a form of holistic health care system that is organized into three levels of specialty, which include: Divination, spiritualism, and herbalism, though these may overlap in some situations. This holistic approach in healing not only rids of the disease or impairment, but allows the individual to adequately cope with all the demands of daily life establishing a state of balance and equilibrium within the individual and between the individual and their social and physical environment (Sartorius 2006).

Health in homoeopathy is established with the application of three main homoeopathic principles of treatment. These include the individualisation of cases, the law of similars and infinitesimal dosages (Apicella, et al 2016:1).

The concept of individualization seeks to create a deeper understanding of the individual with the view that each individual is different from another and experiences the same ailment differently. The treatment is not based on the disease alone, but the patient's peculiarity in characteristics and expression of symptoms (Das 2019). The law of similars allows for a remedy/medicine to be selected based on its ability to produce similar symptoms expressed by the diseased individual in an otherwise healthy individual. Hahnemann also proposed the use of infinitesimal dosages, in which the selected remedy is administered in non-toxic and highly diluted doses with the belief that the more highly diluted the remedy is, the more potent it becomes (Apicella, et al 2016:1).

After a careful consideration of the individual's full picture, a remedy that is specific to the individual is selected ensuring an individualised and holistic means of treatment. This approach in treatment, focusing on the whole individual rather than their disease, is what creates a distinct connection between the approaches employed in African traditional medicine and in homoeopathy.

## **1.6 THE RESEARCH QUESTIONS**

The formulation of this study, and the identification methodology applied, were framed by the following questions:

- What are the traditional applications of *Erythrina lysistemon* [Umsins] that have been identified by traditional healers?
- To what extent is the traditional use of the plant able to be attributed to the documented pharmacology and/or toxicology of the plant material?
- To what extent are the symptoms in the materia medica derived from the proving of *Erythrina lysistemon* able to be related to the documented pharmacology and/or toxicology of the plant material?

- To what extent are there overlaps between proving symptoms and traditional indications of the plant material, suggesting a 'homeopathic' application within the traditional application?

## **1.7 THE AIM OF THE STUDY**

The aim of this study was to explore the relationship between the homoeopathic and traditional applications of *Erythrina lysistemon*, based upon a homoeopathic proving, a desktop review of the documented traditional applications of *Erythrina lysistemon* and its toxicology and field interviews with traditional healers.

## **1.8 STUDY OBJECTIVES**

To achieve the aim, the following objectives were pursued:

1. To identify the traditional medicinal uses of *Erythrina lysistemon* from published resources and field interviews with traditional healers in the greater Durban area.
2. To review the homeopathic proving of *Erythrina lysistemon* (2007), in terms of the documented tradition of use.
3. To explore the similarities and the differences existing between the homoeopathic and traditional African medicinal uses of *Erythrina lysistemon*, in terms of the spheres of influence, sensations and other distinguishing features.

## **1.9 SIGNIFICANCE OF THE STUDY**

Some plant species on the face of the earth are becoming extinct every year, for every plant therefore that goes extinct, we may not know what it could be used therapeutically for and should be considered as a potential source for a new. Plants are not only useful in traditional African medicine, but they play a significant role in other well-known medicinal systems and still provide a source for a lot of homoeopathic remedies.

Therefore, documentation of the use of *Erythrina lysistemon* is essential to preserve its therapeutic knowledge and to conserve the plant and use it sustainably. Furthermore, obtaining knowledge about the traditional applications of *Erythrina lysistemon* is vital in understanding how its medicinal applications in this field compare to the homoeopathic medicinal applications.

## **1.10 ASSUMPTIONS**

The following assumption was made with regards to the interview sessions with the traditional healers:

- The traditional healers were honest in their claim to have an understanding on the uses of *Erythrina lysistemon* and provided unbiased and accurate information relating to their understanding.
- The conditions in the applications of *Erythrina lysistemon* stated by traditional healers may not always be accurately translated and expressed in English.

## **1.11 DELIMITATIONS**

This study did not:

- Seek to generalise the results obtained from this study to be relevant and accurate for all medicinal plants used in the two medicinal systems with regards to their similarities and/or differences.

## **CHAPTER 2**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 INTRODUCTION**

The understanding of medicinal applications in traditional African practices and homoeopathy arises from the knowledge, methodologies and beliefs found within the respective systems. In this chapter the related literature of general homoeopathic practices and African traditional medicinal practices within the Zulu culture was reviewed, highlighting the understanding of disease, approaches to healing and the different medicinal administrative methods within these systems. The plant medicine *Erythrina lysistemon* [*Umsinsi*] common to both medicinal systems is also reviewed.

#### **2.2 AFRICAN TRADITIONAL MEDICINE**

Traditional medicine is a combination of medicinal aspects of indigenous traditional knowledge and spiritual therapies developed and passed down through generations within various cultures. Traditional medicine is defined by the World Health Organisation [WHO] as “The sum total of knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health, as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness” (Mahomoodally 2013). Therefore, African traditional Medicine is all the traditional theories, beliefs, practices and medicines indigenous to the different African cultures.

Traditional African beliefs suggest that individuals are made up of various aspects which include the physical, spiritual, moral, and social being. These aspects need to function in harmony for the individual to be in good health. Thus, individuals' illnesses are often viewed as disturbances in either one or more of these features. Therefore, the treatment involves not only aiding their physical wellbeing but employs a holistic approach of the entire being (Dhwty 2019).

The treatment methods vary from the use of plants on land and sea, the use of different parts obtained from wild or domestic animals and mineral-based medicines, with the belief that all animate and inanimate objects have a spirit and are therefore able to be a source of healing (Ross 2011).

### **2.2.1 Stigmas on African Traditional Medicine**

Prior to the colonial period, traditional medicine was the only source of medical system available to millions of people in Africa. However, the arrival of Western conventional medicine marked a significant turning point to this long-standing tradition and practice (Dhwty 2019).

In South Africa, under the Apartheid regime, traditional medicine was initially considered illegal due to lack of scientific evidence for its effectivity and its association with superstition (Mothibe and Sibanda 2018). The South African Medical Association outlawed traditional medicinal practice cooperation with conventional health practitioners in 1953. The Witchcraft Suppression Act 3 of 1957 and the Witchcraft Suppression Amendment Act 50 of 1970 was put in place to prohibit the practice of traditional medicine (Mothibe and Sibanda 2018).

Post-independence, efforts have been made in terms of recognising African traditional medicine as an essential aspect of delivering health services to the African population. The World Health Organisation has since recognised, described, and aimed to regulate traditional medicine. The South African government (2005:8) put in place the Traditional Health Practitioners Act 35 of 2004 with the following aims:

- To establish the Interim Traditional Health Practitioners Council of South Africa.
- To provide the registration, training, and practices of traditional health practitioners in the Republic.
- To serve and protect the interests of members of the public who use the services of traditional health practitioners

These regulations have made it possible for traditional healers to practice freely and for individuals to also use their services openly. The Interim Traditional Health Practitioners Council of South Africa (ITHPCSA) was launched in 2013. The objectives of the ITHPCSA according to the South African government's act (2005:8), are to:

- Promote public health awareness.
- Ensure the quality of health services within the traditional health practice.
- Protect and serve the interests of members of the public who use or are affected by the services of traditional health practitioners.
- Promote and maintain appropriate ethical and professional standards required from traditional health practitioners'
- Promote and develop interest in traditional health practice by encouraging research, education and training.
- Promote contact between the various fields of training within traditional health practice in the Republic and to set standards for such training.
- Compile and maintain a professional code of conduct for traditional health practice.
- Ensure that traditional health practice complies with universally accepted health care norms and values.

Although the Government has corrected the laws illegalizing African traditional medicinal practice, the colonial period also introduced religious practices that do not condone consultations with traditional healers. Talks of ancestral spirits are usually unheard of and often linked to witchcraft, 'An act that can never be approved by God' (Mokgobi 2015).

### **2.2.2 Traditional African Medicinal Practices within the Zulu Culture**

The Zulu tribe also known as AmaZulu are an indigenous South African population of the Nguni people originating from the Bantu tribes. The Bantu tribes consists of four major ethnic divisions, the Nguni, Sotho, Shangaan-Tsonga, and Venda tribes. The Nguni can be divided into four distinct groups; the Northern and Central Nguni [the Zulu-speaking people], the Southern Nguni [the Xhosa-speaking people], the Swazi people from eSwatini and adjacent areas, and the Ndebele speaking people of the Mpumalanga province. Archaeological evidence shows that the Bantu-speaking groups, that were the ancestors of the Nguni, migrated down from West Africa as early as the eleventh century (SAHO 2019).

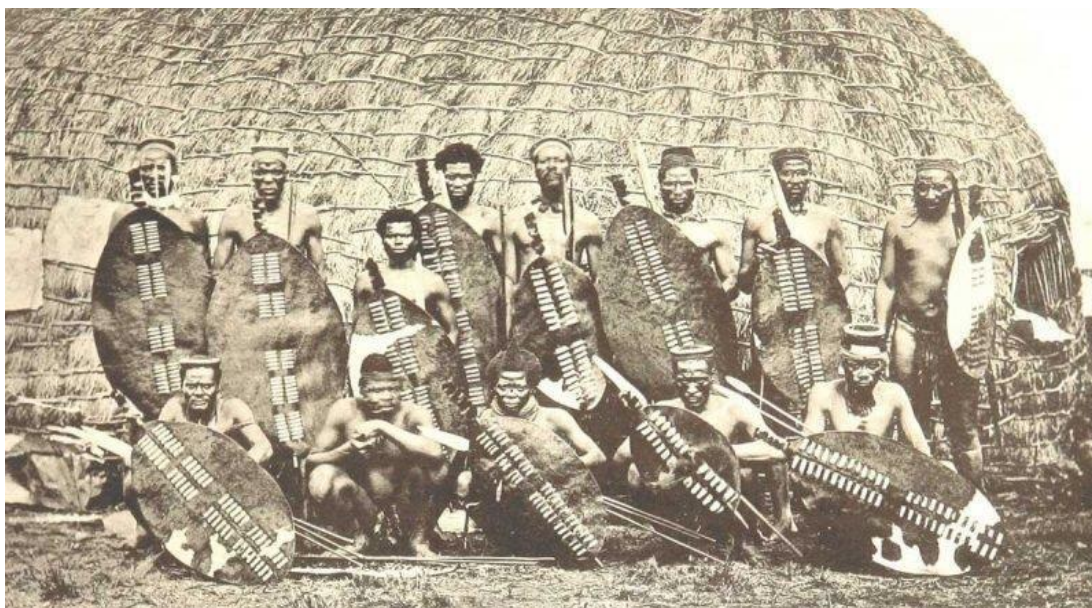


Figure 2.1 The ancient Zulu tribal warriors (McLaughlin 2018).

The use of traditional medicine in the Zulu culture is not focused merely on healing but in other important rituals. For instance, during tribal wars, the Zulu warriors would often attend rituals to prepare, strengthen and condition them for success and victory during their battles, no warrior would go to war without undergoing these rituals. The medicines gave them confidence in defeating their enemies, this was often accompanied by the protection from their ancestors. After the battle, cleansing ceremonies were conducted to appraise the ancestors (Bourquin 1979). These rituals were also conducted for traditional leaders, the herbs were used to ensure protection from enemies and respect from their subjects.

Healing however, within the Zulu traditional culture aims to establish a balanced and harmonized state, returning from a state of disease to a state of health.

To be healthy in IsiZulu is *ukuphila* or *ukuba nempilo*, often in greetings one is asked, “*unjani?* [how are you?]” the response is *ngiyaphila* [I am well]. ‘*Ukuphila*’ in Zulu, speaks to something bigger than just being physically well, it speaks to a state of being in which the physical, mental, spiritual (including ancestral) realms of being are all in harmony. The state of being free from any physical or psychological malfunction. The fullness of life that is guaranteed with good health, peace, and harmony with oneself. Therefore, in seeking true healing the traditional healer seeks to restore the balance in one’s life that is not only limited to their physical ailment (Ross 2011).

The ailment/disease is referred to as *isifo*, derived from *isi-*, *-fa* and *-o*. *Fa* is an intransitive verb meaning to die. Other derived words or phrases include *-fela* [to die for], *-ifa* [die], *ukufa* [dying] etc. The later '*ukufa*' only means 'to be dying' in reference to humans; only animals actually 'die' with the same word used. The use of these words creates a very interesting dynamic in understanding the references for health and sickness with life and death. Life and death refer to a unity or harmony between one's spirit or soul and their physical body, one of the reasons why, when humans die, a different verb is used e.g., *ushonile*, *uswele*, usually denoting a moving into another realm. Disease can be regarded in a similar manner of creating a disturbance in the balance of one's entire being and health as restoring that balance (Ross 2011).

In the context of traditional Zulu healing, a diseased state is often believed to be brought about by one or more of the following:

- The ancestors [*Amadlozi /abaphansi*] are believed to be actively involved in the world and affairs of the living and are frequently suspected of sending *isifo* [disease] to punish the living when provoked. For example, when one is in violation of a taboo the wrath of the ancestor's results or manifests in the form of a sickness. One way of regaining health after such is to perform rituals to appease the ancestors and ask for their forgiveness and refrain from such activities. The ancestors may also cause a disease in an individual who is adhering to their call to become a traditional healer. The disease may not stop until the ancestor's wishes are fulfilled (Martin 2009).
- The First Creator [*UMvelinqangi*], the head and greater ancestor, the creator of all and therefore the creator of sickness and disease. He is less involved directly with the living. Communication with him is usually through *umsebenzi* [rituals] via the ancestors (Anon 2020).
- Toxin build up. Physiological processes in the body can often lead to excess bile [*Inyongo*]- *Inyongo* is understood to be a build-up of bile in the stomach that needs to be expelled through purging. Its symptoms often include headaches, dizziness, vomiting, coughing, chest complaints, biliousness, and general debility. Removing of *inyongo* is one's way of cleansing oneself and getting rid of any dirt that may be within them, on a physical and metaphysical level (Zukulu

et. al. 2012). Another type of illness caused by toxin build up is referred to as *Isilonda*, although most common in children, it can affect anyone. It often presents with chronic constipation, appetite loss, tiredness, weakness, malaise and backpain (Mchunu 2019).

- Witches can cause harm to bring about a disease. This may be in the form of evil spirits, use of medicines or taking on other forms such as possessed animal forms and several other agents. This is usually because of anger, jealousy, and envy. In the Zulu tradition, witchcraft is taken very seriously, and people often take precautionary measures to protect themselves. They may burn *impepho* (incense) to appeal to the ancestors for protection or they may choose to wear *amakhubalo* which are often charms or amulets made from bark or root fragments tied around the neck or waist and reputed to have magical powers to ward off danger and ensure good fortune (Anon 2020).

The most common form of witchcraft known within the Zulu culture is *idliso* derived from the word *ukudla* which means eat. *Idliso* [literally something that one has been made to eat] is loosely translated to English as a poison or poisoning but there needs to be an understanding of the power of *idliso* as a spell and its function in serving as a medium between the witch and the victim. The witch who installs *idliso* creates a creature that may manifest in the victim's body as *inyoka* [snake] or any other creature with the ability to cause misfortune and sickness from within (Ashforth 2005).

Another form of witchcraft symbolism is *inyoni* [bird], in which a lightning bird (*impundulu* or *uthekwane*) can be used by witchdoctors to attack their enemy through lightning as this bird is believed to have the ability to summon thunder with its wings and talons. *Inyoni* can also be used to describe the form in which the lightning strikes without manifesting physically, symptoms can include sharp or sudden chest pains.

The third presentation of *inyoni*, although not related to witchcraft is the condition in which an infant presents with a sunken fontanelle, as a symptom of a condition called *ipleyti*, which is believed to occur when an infant has not

passed their first stool after birth – the meconium. Accompanying a sunken fontanelle, the child also presents with white eruptions resembling pimples in the mouth. Traditional herbal medicine is used to treat this condition (Mothogoane 2015).

The Zulu traditional healing practice consists of two main types of traditional healers and their terms of healing have changed very little over the years. The first group are the herbalists [*Inyanga* / *Izinyanga*- plural] who are mainly concerned with the dispensing of medicines [*imithi*] to offer healing and protection, but because they're not possessed or led by the ancestral spirits, they lack power of divination.

Although the medicines they dispense are made from either plant or animal material, the term *umuthi* is derived from the same word meaning tree or shrub [*imithi* – plural] as their medicines have been vastly derived from trees and other plants.

The second group consists of diviners [*Isangoma*/ *Izangoma* – plural], they are the diviners between the living and the ancestors [*Amadlozi*]. Diagnosis is through consultations with the ancestors and their methods of treatment include the use of medicines [*imithi*] and/ or performing rituals (Lange 2018).

#### **2.2.2.1 Practicing as a Herbalist (*inyanga*)**

*Inyangas* are often male and are known to collect their herbs in the full moonlight nights, as some medicinal materials can only be gathered at specific times of the day. These may also coincide with specific lunar cycles. *Inyanga*: This term's homophone also describes the moon or month and may perhaps be referring to the herbalists as 'the moon ritual persons'.

They are often groomed or trained, starting off as apprentices. This journey is usually more of a choice than a calling. They spend countless time on this complex task of learning the different plants, their preparations and administration. It is important that the correct plant and part of the plant is administered to the patient, hence they possess an extensive amount of knowledge with regards to natural treatments (Cumes 2013).

Some *Inyangas* become specialists in their fields due to their knowledge and skill. *Inyangas* require background knowledge on their patient's ailments prior to diagnosis and treatment. They offer curative, preventative, or prophylactic medicines and lucky charms or potions (SAHO 2019a).



Figure 2.2 *Inyanga* (Holmes 2015).

#### **2.2.2.2 Becoming a diviner (*Isangoma*)**

A *sangoma* is the diviner between the living and *amadlozi* [ancestors]. *Amadlozi* is derived from *ukudloza* which means to be careful or to keep an eye on, as the ancestors are believed to be watching over us [their descendants] and often call on certain individuals to help and guide us when needed, i.e., the diviners, who then act as a medium between the mortal world and the ancestral spirits.

Although *sangomas* are called without restriction of gender, they are often women and are referred to as 'Gogo' ['grandmother'/ 'old woman'], despite their gender or age as this is in reverence or respect to the ancestral spirit within them. One cannot voluntarily choose to be a *sangoma* as they are called, and the calling [*ubizo*] cannot be ignored, it is usually initiated by unexplained sickness, visions, strange dreams such as dreaming of snakes, a big river or clear waters or people in traditional attire and a general disturbance in the individual's daily life. (Martin 2009)

Once the individual has identified the cause of the disturbance, usually through consulting with a *sangoma*, they can begin the training process in their journey of becoming a *sangoma* and this process is called *ukuthwasa*. During this initiation period, the trainee [*ithwasa*] learns about their calling, how to communicate with the ancestor, the different medicines for treatment and all the in-depth processes involved. The trainee lives under strict conditions in which they also undergo purification, abstaining from sexual activities and sometimes may not see their families during this period. The timeframe for this process is not specific, it can go on for a couple of years and may also be dependent on the ancestors if they feel the trainee is ready to graduate and become a *sangoma* (Booi and Edwards 2014).

The graduation ceremony usually takes place over a couple of days, with rituals and sacrifices being conducted. The ancestors will continue to guide and advise the *sangoma* during consultations. Inexplicable illnesses are diagnosed by interpreting messages from the ancestors, who offer information about the patient's case and solutions on how to solve the problems. The *sangoma* can channel and consult with the ancestors through the following ways:

- Throwing of bones [*ukuhlola ngamathambo*] – the *sangoma* throws the bones but the ancestors determine how they land and the *sangoma* can interpret the message from the ancestors based on the arrangement of the bones.
- Listening – The head diviner [*Isangoma sekhandu*] – the *sangoma* divines by listening to the ancestors without any material objects. He /she may create an excitable atmosphere to communicate with the ancestors by sniffing on powdered medicines which cause sneezing and sometimes yawning (Ngubane 1977).
- The whistling spirits [*Abalozi*] – the ancestors are believed to communicate directly by whistling meaningful words from the rafters of thatched huts. These whispers can be understood by the patient, if not, the *sangoma* then offers interpretation (Ngubane 1977).



Figure 2.3 Sangomas (SAHO 2019b)

### 2.2.3 **Fraudulent sangomas**

Many people in the African population have great faith in traditional healers, both *sangomas* and *inyangas*, and unfortunately scammers have since taken advantage of this. A lot of fliers and posters can be seen plastered on walls and poles on almost every street within South African cities, with advertisements about *sangomas* with spells to bring back lost lovers, help one win a lot of money or potions to enlarge penises.

A significant number of people have lost large sums of money from such scams. This may lead to people losing trust in genuine traditional healers. *Sangomas* do not perform miracles such as doubling someone's wealth or giving them lottery ticket numbers, rather they assist and heal those in need.



Figure 2.4 Sangomas flier advertisements

#### 2.2.4 Preparation and administration of medicine

Traditional healers use a wide range of plants or herbs and sometimes animal fats, blood or skin, insects, birds, snakes, and mineral matter for their medicinal preparations. The plants provide roots, leaves, pods, seeds, twigs, branches, stems, bark, flowers, sap, grain, fruits, and bulbs.

These medicines, depending on the parts of the plant used, often involve burning, boiling, grinding or soaking. The preparations and administration of these medicines often depend on the affliction. The most common administration methods often include bathing, steaming, drinking with vomiting, emetics, snuffing, enemas, cuttings, as a poultice or sprinkling (Ngubane 1977).

- Bathing [*ukugeza*] – the herbs are prepared and mixed with the patient's bathing water.
- Steaming [*ukufutha*] – the herbal mixture is often prepared in boiling water. The mixture creates steam which is inhaled by the patient. The steaming can be done either to the whole body or just the face. In this way the patient can inhale the herbs and get rid of the ailments through sweating.

- Drinking [*ukuphuza*] – herbal medicine can be administered orally as a liquid. The herb is usually prepared by boiling or soaking in water and left to cool down before administration.
- Emetic [*ukugabha*] – the herbal infusion is mixed with a large volume of lukewarm water, usually between 2 to 3 litres. The patient drinks the water to induce vomiting [*ukuphalaza*] as a way of cleansing.
- Snuffing [*ukubhema*] – some herbs are dried and ground into a powder for the patient to snuff (Sniff through the nose). Some are used this way to induce sneezing as a way of dispose of the disease.
- Enemas [*ukuchatha*] – In most cases the herbs are mixed with warm water and placed in a bottle that has a tube tied on one end. The tube is introduced into the rectum and the herbal mixture is pumped in. this process often induces diarrhoea and cleanses one's digestive system.
- Cuttings [*ukugcaba*] – the traditional healer makes small cuttings on the patient's skin using a sharp razor. The herbal extracts or powders are introduced into the patient's system through these cuts.
- Poultice [*ukuthoba*] – either a paste or warm liquid from a single herb or a mixture of different herbs is heated and spread on a cloth that is placed directly on the skin to treat inflammation, promote healing or improve circulation.
- Sprinkling [*ukuchela*] – medicines are splashed or sprinkled with a leafy branch around the homestead and cattle kraal to ward off evil, protect the family or as a lucky charm.

The traditional medicines in Zulu culture can also be described in colour dependent on the ailments they relieve. The three main colours are black medicines [*imithi emnyama*], red medicines [*imithi ebomvu*] and white medicines [*imithi emhlophe*]. During the treatment process, the black medicines are used first to remove the bad from the body as they represent darkness, night, danger, and difficulty. The black medicine is then followed by red medicines which act as a bridging colour in transformation from a diseased to a healthy state. The red medicines are often associated with black medicines although they don't represent total darkness and badness, they possess more good than bad compared to the black medicines. The final stage in treatment is the use of white medicines which offer restorative and

protective powers for the sick (Ngubane 1977). The main herbal medicines that are organised according to the colours are.

- *Ubulawu* – this is a liquid medicine that can be used across all three colours. These herbs are mostly used by diviners to communicate with the ancestors by opening their dreaming and intuitive sensitivity. Although mostly made from the roots, sometimes the stems or bark of plants are used (Sobiecki 2017).
- *Insizi* – *Insizi* is represented in black medicine and is used to pull out an illness. It can be made from powdered herbs, roots, or animal products, especially fat (Ngubane 1977).
- *Intelezi* – A herbal liquid used as a white medicine, *intelezi* is used to put an individual in state of harmony and free them after a sickness has been removed with the black and red medicines (Ngubane 1977). It is often a mixture of bulbous plants, leaves or barks that are infused in water and can either be sprinkled [*ukuchela*] around the homestead or the person [*intelezi yokugeza*]. Some believe that *intelezi* can also be used to catch a witch sneaking into the homestead (Pujol 1993).

### **2.2.5 Indigenous Knowledge and its Transmission**

The persistence of indigenous knowledge of African traditional medicines is essential as Africa has an extensive medicinal plant life, and the use of traditional medicine is very common in the African cultures, both in the urban and rural areas (Mahomoodally 2013). In some areas, traditional treatments are the main or only treatment because they are accessible, affordable and culturally accepted (Gouwe 2018). In most rural communities where conventional medicinal clinics are limited and not adequately equipped, a high number of people depend solely on traditional medicine.

In sourcing this knowledge, *sangomas* undergo an apprenticeship, ritual purification and training to learn how to access knowledge from the ancestral realm. They also learn about their tribal community and the important medicines used in healing. This training period can go from anything between a couple of months to a decade.

Nomsa Dlamini a nurse who worked at the Baragwanath hospital for 15 years before she was called to be a *sangoma*. Described her experience as follows.

*“As soon as I made my decision to accept this training, my headaches immediately stopped! In my dreams, the ancestors showed me many things - like throwing the bones. I was learning fast, day and night, nonstop. My training was very traditional. I had to slaughter the goat, drink blood, and find hidden things through seeing them in dreams, all those typical things.”*

(Campbell 1998)

This knowledge they gain can be passed on to the next apprentice [*ithwasa*]. Inyangas, although they also undergo training, are called in a different way. An *inyanga* usually comes from a family lineage of *inyangas*. An *inyanga* identifies a child who shows most interest in medicines from his family and he trains them. In this way the knowledge is preserved and passed down to the next generation. *Inyangas* can sometimes be identified through dreams and they can then become an assistant to an *inyanga* and are taught which plants and herbs to use for healing. The main source of acquiring knowledge is through experience, apprenticeship, and oral transmission.

## **2.2.6 Pharmacology and Traditional Medicine**

Traditional healers are very confident in the effectiveness of their medicines. Even prior to the introduction of scientific research on plant chemistry, they have accumulated vast knowledge on plants, the specific parts of the plant to use and how to effectively administer them. However, there is still lingering controversy from the pharmaceutical and scientific world with regards to this (Okpako 1999: 482-485).

The modern scientists often question the effectivity of traditional African medicine as it lacks proven scientific, evidence-based data. This has prompted many studies to be conducted on some of the popular traditional medicinal substances to support their effectiveness. The World Health Organisation has therefore sort out to regulate the use of traditional medicine to avoid misuse of the medicines.

Since herbal medication is often used in conjunction with other traditional rituals, scientist believe these rituals enhance the belief in the efficacy of treatment, rather than their pharmacological entities. The argument stands that some medicines used for the treatment of internal ailments can be worn around the waist, ankle or neck, or placed

under the pillow and therefore, the efficacy of such remedies might reasonably be attributed to the placebo effect. Scientists also believe that the immunomodulation and nutritional properties of plant constituents might also contribute to the healing properties of systemically administered plant remedies (Okpako 1999: 482-485).

## **2.3 HOMOEOPATHIC MEDICINAL SYSTEM**

Homoeopathy, derived from the Greek words *hómoios* [similar] and *páthos* [suffering] meaning similar disease aims to treat 'likes with likes', working on the Law of Similars which was identified since Hippocrates' time as the natural law of cure. Hippocrates (460BC – 370BC) is known to have written: *"Through the like, disease is produced and through the application of the like it is cured"*.

In the 16<sup>th</sup> century Paracelsus (1493 - 1541) a Swiss physician and philosopher of the German renaissance criticized conventional allopathic medicine and adopted this Law of Similars as suggested in one of his writings:

*"What makes jaundice that also cures jaundice and all its species? In like manner, the medicine that shall cure paralysis must proceed from that which causes it; and in this way we practice according to the method of cure by arcana."* - Philippus Aureolus Theophrastus Bombast von Hohenheim – Paracelsus (1493-1541)

Two centuries after Paracelsus' writings, Dr Christian Friedrich Samuel Hahnemann (1755 - 1843), a German physician coined the term Homoeopathy. Hahnemann based this on his findings after conducting provings on himself and colleagues. Hahnemann formulated the basis of homeopathy treatment which he documented in what is considered 'The Homoeopathy bible', the Organon of Medicine. In total, he wrote 6 editions, the first edition of the Organon was released in 1810 and the main basis for homoeopathic treatment were as follows:

- **The law of similars** – the law of similars is the principle on which homoeopathy was built on, this was described in the organon of medicine from Aphorism 21 to 27. Here, Hahnemann also laid out the fundamental differences between

Homoeopathy – which uses the law of similars and Allopathy – which uses the law of opposites.

- **The law of minimum** – when an individual is in a diseased state, a very minute dosage can awaken a reaction in the body due to the vulnerable and hypersensitive state brought about by the disease. In Aphorism 273 to 285, Hahnemann suggested that the remedies be administered in minimum dosages to prevent organ damage, avoid aggravations, and utilise the finest curative property of the remedy.
- **The law of simplex** – the law of simplex states that only one remedy should be administered at a time. The remedies are proven singularly and therefore each should be administered that way since the effects of administering more than one remedy are unknown as each remedy is different from the rest. The law of simplex dosage is stated in Aphorism 273.
- **The doctrine of drug proving** – For a remedy to be prescribed and used in the treatment of patients, it must have been proved on healthy human subjects. The curative properties of the remedy can only be known from singly proving it.
- **The theory of vital force** – the Vital force, described from Aphorism 9 to 18 of the Organon of medicine is a dynamic spirit like force in the body responsible for a healthy state by maintaining a harmonious function of the body. A disturbance in the vital force brings about disease, hence bringing one back to health involves restoring this harmony. The remedy administered should be able to stimulate the vital force to do so. Hahnemann also describes the vital force and its involvement in creating disease in Aphorism 11 as follows:

*“When a person falls ill, it is only this spiritual, self-acting (automatic) vital force, everywhere present in his organism, that is primarily deranged by the dynamic influence (Materia peccans!) upon it of a morbid agent inimical to life.” – (Hahnemann: Aphorism 11)*

- **Potentization** – The concept of potentization holds that when creating a remedy, systemically diluting a substance with vigorous shaking at each step of the dilution (dynamization) makes the remedy more effective.

Homoeopathic remedies are prepared and potentized by two methods:

- Trituration: which is used for insoluble substances
- Succussion: which is used for soluble substances

The remedies are potentized to prevent unwanted aggravations (worsening of symptoms) and to turn substances that may be poisonous in their crude form into a therapeutic medicinal form. Potentization helps to awaken and release the dormant dynamic curative powers within the remedy, the remedy's action becomes deeper, longer and more widespread.

- **Individualisation** – each patient is treated as a unique and holistic entity from the next person, even when they suffer from similar ailments. The remedy prescribed should be tailored to that specific individual.
- **The totality of symptoms** – This concept suggests that treatment of a diseased individual should not only be based on the symptoms of the disease but upon the total picture of the individual, these include their lifestyle, emotional and mental state, medical and family history as well as the physical ailments. Therefore, individuals may present with the same physical symptoms but receive different remedies due to the differences in other aspects in their lives (Haselhurst 2018).

### 2.3.1 **HOMOEOPATHY AND SCIENCE**

*“The art of medicine consists of amusing the patient while nature cures the disease”*  
Voltaire (1694 – 1778)

To create gentle and deeper acting medicines, Dr Samuel Hahnemann developed the processes of potentization and dynamization in the preparations of homoeopathic remedies.

The first step in preparing the remedy involves dissolving the crude substance into a mixture of alcohol and water or grinding it into a powder form from which the remedy is made. Then begins the process of potentization, which is what becomes the distinguishing factor between homeopathic medicinal preparations and herbal tinctures or other natural medicines.

During potentization, one part of the tincture is mixed with either nine or ninety-nine parts of a solvent, which is usually alcohol, in the making of an X 'decimal' and a C 'centesimal' potency respectively (X is 10 and C is 100 in Roman numerals). The mixture is then shaken vigorously (succussed) to produce a 1X or 1C remedy. Depending on the required potency, one part of the 1X or 1C remedy is mixed with nine or ninety-nine parts of a solvent and succussed again to produce a 2X or a 2C potency. The process continues until the desired potency is reached, with the next potency created using one part of the previous potency as the basis of the dilution.

For instance, a 12X potency would have undergone 12 dilutions and succussions at the ratio of 1:10. A 12C potency would have undergone 12 dilutions and succussions at the ratio 1:100, the final concentration for this will be  $1:10^{24}$ , and this according to the laws of chemistry implies that after the 12C dilution there isn't a single molecule of the original substance present in the remedy.

The laws of chemistry include a description relating to a limit to the dilution that can be made without losing the original substance in a solution or mixture. This limit, is related to the Avogadro's number ( $6.023 \times 10^{23}$ ), corresponding to homeopathic potencies of 12C ( $1:10^{24}$ ) after which there is not any trace of this original substance altogether. Therefore, these remedies subjected to dilutions beyond 12C potencies are considered to have no trace of the original substances and are the potencies that Hahnemann suggested to be deep acting and able to revive the vital force for the body to return to a harmonized state.

This doctrine of potentization beyond the Avogadro's number is also the central point of controversy from the conventional science community. There is currently no known scientific evidence for the therapeutic efficacy of homeopathic remedies made in high dilutions, in which some have stated that the therapeutic response is that of the placebo effect in which the patients' disease symptoms improve due to the patient's expectations alone (Croce 2001).

### **2.3.2 HOMOEOPATHIC PROVINGS**

Homoeopathic provings, also referred to as Homoeopathic Pathogenetic Trials (HPTs) are a fundamental principle of homoeopathy and remain the only way to expand the materia medica. As discussed in 1.2.2, the first proving was conducted by Hahnemann on himself, he then gradually extended his testing procedures to friends and colleagues. (Lawson 2016).

A homoeopathically prepared remedy is administered and tested on healthy volunteers (provers) to reveal the diseased state or disturbance induced by the substance. The provers are unaware what the substance is and if they are taking the medicated remedy or placebo (blinding). The induced symptoms are recorded by the provers and all the records are collected to produce the materia medica of that remedy. These symptoms are not only limited to the physical state but the totality of changes the prover experiences, including their mental, emotional and physical states.

Homoeopathic provings have increased greatly since Hahnemann with a great deal of remedies in the material medica focused mainly on European based provings. With the spread of homoeopathic medicine across the world and the diversity of indigenous substances in Africa, a lot of provings have also been carried out in South Africa.

Successful provings have been conducted at The Durban University of Technology (DUT) using indigenous plant material, parts from sea and land animals, birds, snake venom, minerals and imponderable substances. Included in these provings, is the proving of the study subject *Erythrina lysistemon* [Umsinsi].

### **2.4 ERYTHRINA LYSISTEMON [UMSINSI]**

Bare chested Zulu girls can be seen in their traditional attires [Ukuvunula] during traditional ceremonies, which often involves singing, beating of drums, and dancing. To accent their high kicks during the dancing, they wear rattles made of different seedpods around their ankles, most especially the bright red-orange colourful *Erythrina lysistemon* seeds.

#### 2.4.1 **DESCRIPTION**

*Erythrina lysistemon* is a beautiful tree with vibrant colours that grows to a medium or large sized up to 12 meters high with a spreading crown appearance. (Browne 2016). The stem is a dark greyish-green or brown colour. The branches start low down on the trunk and older trees are often covered with corky lenticels and scattered, hooked brown thorns on the branches with lengthwise furrows or grooves. (Kerry 2017)

The tree can go without leaves for months. The leaves are simple, long and trifoliate. The leaflets are ovate or sometimes heart shaped with the central leaflet that appears longer than the other two. Their bloom is in early spring and the flowers appear simultaneously with or before the new leaves begin to show (Mbambezeli and Notten 2002).

The name *Erythrina* is derived from the Greek word *erythros* meaning red, due to its flowers and seeds. The plant produces bright orange-scarlet flowers, which appear with the new leaves. The flowers usually have four to five sepals and petals and easily attract birds with their abundant nectar. The species name *lysistemon* is also Greek meaning “with a loose stamen” due to the *Erythrina lysistemon* stamens that are free from the petals (Mbambezeli & Notten 2002).

*Erythrina lysistemon* yields cylindrical fruits which are visible in clusters and have a pod that turns black at maturity, producing small scarlet seeds. These seeds are also known as “lucky beans” and traditional African women often use them as beads in jewellery making (Mukaro 2017).

*Erythrina lysistemon* also offers great importance to the ecosystem by supplying different animals with shelter and food. The birds, bees and many other insects feed on the nectar and find shelter in the hollow trunks of dead trees whilst the herbivorous animals such as black rhinos, elephants, a variety of the buck species, bush pigs, baboons and velvet monkeys feed on the leaves, flower buds, the bark and even the roots of the trees (Mbambezeli and Notten 2002).



Figure 2.5 *Erythrina Lysistemon* (Mukaro 2017)



Figure 2.6 *E. Lysistemon* bark (Ebedes 2019)



Figure 2.7 *E. Lysistemon* trifoliate leaves (Ebedes 2019)



Figure 2.8 *E. Lysistemon* flowers (Mukaro 2017)



Figure 2.9 *E. Lysistemon* seeds (Mukaro 2017)

#### 2.4.2 **CLASSIFICATION**

**FAMILY:** *Erythrina lysistemon* is a species of deciduous trees in the Fabaceae/Leguminosae family (Pear and bean family).

**SUBFAMILY:** Papilionoideae

**COMMON NAMES:** *Erythrina lysistemon* is commonly known as:

- The common coral or the lucky bean tree (English)
- *Umsinsi* (Zulu)
- Umsintsi (Xhosa)
- Muvhale (Venda)
- Mophete (Tswana)
- Koraalboom of kanniedood (Afrikaans)
- Mokhungwane (Sotho) (Mbambezeli and Notten 2002).

**OTHER SPECIES:** There are over one hundred and twenty species of *Erythrina* plants; a few of these include

- *Erythrina latissimi* (broad-leaf coral tree)
- *Erythrina zeyheri* (ploegbreker)
- *Erythrina caffra* (coastal coral tree)
- *Erythrina acanthocarpa* (tamboekie thorn)

- *Erythrina humeana* (dwarf coral tree) and so many more.

#### **2.4.3 DISTRIBUTION, HABITANT AND CULTIVATION**

This species of *Erythrina* is found in a wide range of altitudes and habitats in South Africa, Swaziland, Zimbabwe, Botswana and Angola. In South Africa, they are mostly found in the Eastern Cape, KwaZulu-Natal, Mpumalanga, Limpopo and Gauteng Provinces (Browne 2016). *Erythrina lysistemon* grows in scrub forest, wooded kloofs, dry woodlands, dry savannah, koppie slopes and coastal dune bush and in high rainfall areas (Mbambezeli and Notten 2002).

Although *Erythrina lysistemon* is a fast growing, fairly drought tolerant and undemanding tree, it thrives best in fertile aerated and well drained soils. It also expresses a sensitivity to cold especially when young.

*Erythrina lysistemon* is easily propagated from seed, cuttings, and truncheons. Seeds can be sown in spring and summer, in well-drained soil, preferably in a warm but shaded spot and kept moist. Cuttings are best taken in spring to summer, and truncheons in late winter to spring. *Erythrina lysistemon*, due to its attractiveness, has become an excellent specimen tree for gardens and parks. (Mbambezeli and Notten 2002).

#### **2.4.4 THE CHEMISTRY OF ERYTHRINA LYSISTEMON**

Like most plants, *Erythrina lysistemon* manufactures secondary chemical compounds that are distributed across the different parts of the tree. The extracts from *Erythrina lysistemon* leaves, roots and stem bark are known to have been used in traditional medicine for the treatment of various ailments and have shown to have antiviral, anticancer, and cytotoxic activities (Juma and Majinda 2004).

The genus of *Erythrina* species is dominated by two main classes of chemical compounds, the *erythraline* alkaloids and flavonoid derivatives (Khumalo et al 2017). These have been isolated over the past decades with most of the iso-flavonoids being prenylated pterocarpanes or prenylated isoflavones, prenylated flavones and flavans. A higher concentration of prenylated flavonoids and iso-flavonoids have also been

reported to have been isolated from the stem and stem bark of *Erythrina lysistemon* (Juma and Majinda 2004).

The iso- flavonoid derivatives are regarded as most important in the antimicrobial outcomes for the therapeutic use of the *Erythrina lysistemon* bark. According to Khumalo et al (2017), antimicrobial testing of prenylated pterocarpan and iso-flavonoids shows that these classes of compounds are probably among the most potent plant-derived antimicrobial compounds.

The prenylated flavonoids have been found to display a variety of other biological activities, such as behavioural depression and muscle relaxation. They are also known to be antihypertensive and to have  $\beta_1$ -adrenergic inhibition and antimicrobial activities (El-Masry et al. 2002)

The high *Erythrina* alkaloid contents are noted in seeds, making them highly toxic, due to the high alkaloid content in the seeds they are dangerous if ingested with the ability to cause paralysis which can also lead to death by respiratory failure (Fern 2014). Many of the *Erythrina* alkaloids that have been previously isolated in experiments, include but are not limited to: erythravine, erysotramidine, erysotrine, erysodine erysotrine N-oxide and erythristemine (Juma and Majinda 2004).

Three non-alkaloids have also been recently isolated from *Erythrina lysistemon*, and these are: isoflavanone, enoic and neolignan alongside other known flavonoids, benzenoids and phenylpropanoids. These compounds have shown antifungal and antibacterial activities especially against *Candida mycoderma*, *Bacillus subtilis*, *Staphylococcus aureus* and *Escherichia coli* (Juma and Majinda 2004).

The stem bark of *Erythrina lysistemon* is one of the traditionally used “women remedies”, it has also been assessed for its estrogenic activities. In the study, the ethyl-acetate extract of the stem bark of *Erythrina lysistemon* showed estrogenic activities in vitro (Tanee et al., 2007: 222-226). Khumalo et al (2017) also suggests the application of *Erythrina lysistemon* in treating dysentery and symptoms of menopause, which also suggests its estrogenic activities.

Prozesky et al (2001: 239-245) conducted a study testing for in vitro antiplasmodial activity and cytotoxicity of ethno-botanically selected South African plants. The results of *Erythrina lysistemon* in this study, confirmed the antiplasmodial activity of its extracts, suggesting its application in treating malaria. Other pharmacological

implications demonstrated from the crude extracts of *Erythrina lysistemon* include anti-diabetic activity and cholesterol gall stone prevention (Khumalo et al 2017).

## **2.4.5 TRADITIONAL USES OF ERYTHRINA LYSISTEMON**

### **2.4.5.1 Non-Medicinal uses**

In the traditional Zulu culture, *Erythrina lysistemon* [*Umsinsi*] trees have been thought to have magical and medicinal properties and are regarded as royal trees. They were planted on the graves of Zulu chiefs as they were believed to protect them in the afterlife. Traditional leaders would often bathe in water from a boiled or soaked *Erythrina lysistemon* bark to ensure respect from the villagers and to be protected from their enemies (Mbambezeli and Notten 2002). It is also believed to be an anti-sorcery medicine and can be used as a trance inducer (Hutching 1996:145)

The trees have also been used in traditional Zulu landscaping as fences around homesteads, waterholes, and kraals. The seeds have been considered as lucky charms and used as beads in creating necklaces, bracelets, and anklets. The flowering of the tree has been regarded as a signal for the people to start planting their crops. The wood as it becomes light when dry is used in making canoes, rafts, floats, fishing nets, feeding-troughs for farm animals and shingles for roofing. (Browne 2016).

### **2.4.5.2 Medicinal uses**

In African medicinal applications, the bark is burnt, and the ash is used as an antibacterial to disinfect open wounds. Infusions of the bark of *Erythrina lysistemon* [*Umsinsi*] have been used alongside other specific herbs to aid the birthing process. The bark is peeled from the four sides of the tree and tied around a bundle of herbs before it is boiled (Mbambezeli and Notten 2002).

The bark has been used in combination with some *Cussonia* plant species as a purifying emetic, especially in gastrointestinal tract discomforts, inducing nausea and vomiting (Olivier 2007). It is also traditionally applied as a poultice to treat sores, wounds, abscesses, and arthritis. It can also be used in the treatment of headaches,

pain, rheumatism as well as in nervous complaints such as anxiety and mental disturbances (Olivier 2007).

Fresh leaves are used to treat sore feet and cracked heels. The leaves are also often crushed and used to clear the maggots on an infested wound. A study conducted by Mukandiwa (2013) on *Erythrina lysistemon* and other plant species' effect of myiasis, confirmed their effectivity in this regard as the study concluded that *Erythrina lysistemon* interferes with blowfly larvae development in vitro. Infusions of the leaves are also used as ear drops to relieve earache (Mbambezeli and Notten 2002).

Mbambezeli and Notten (2002) state that the decoctions of the roots are applied as a poultice to help relieve bruises and sprains, whilst other decoctions of the roots and bark are used to treat toothache, stomach cramps and epileptic fits. It is believed that stomach-ache and cramps are inflicted by a person wishing to cause harm. The harm can be brought about by secretly poisoning one's food, known as *idliso*, or by witchcraft, known as *idliso lomoya* [poisoning of the spirit]. This is done while the victim is asleep. Often the victim will remember a dream in which he or she has eaten poisoned food and on waking can still taste and smell the poison. Using *Erythrina lysistemon* as an emetic medicine removes both physical and the metaphysical poison (Zukulu et.al 2012).

As stated in 2.4.4, researches have shown that *Erythrina lysistemon* contains a large number of alkaloids that are highly toxic (Juma and Majinda 2004), but its use in traditional medicine suggests that the bark has antibacterial, anti-inflammatory and analgesic properties. The seeds also contain these toxic alkaloids as well as anti-thrombotic substances that may be of value in the treatment of thrombosis (Mbambezeli and Notten: 2002).

## **2.4.6 ERYTHRINA LYSISTEMON IN HOMOEOPATHY**

### **2.4.6.1 The plant kingdom in Homoeopathy**

Since the remedy of *Erythrina lysistemon* falls under the plant kingdom in homoeopathy, the following discussion by Little (2016) focuses on this classification and how the homoeopathic applications of *Erythrina lysistemon* relate to this.

Sankaran, an Indian homoeopathic doctor, developed an idea that since homeopathic remedies are derived from nature, they can also be categorised into the natural kingdoms such as the plant kingdom, the animal kingdom and the mineral kingdom (Little 2016).

Sankaran's idea is that patients who need a remedy made from a plant substance will portray 'plant-like' tendencies and the same is expressed in animal and mineral patients. This classification has proven to be a vital tool in deducing and finding the correct remedy for the patient by analysing their characteristics and comparing them to that of the characteristics found within each kingdom. Although not all characteristics can be represented by one individual, they will predominantly lean towards one kingdom (Sankaran 2002).

The basic quality of a plant is sensitivity. Plants are sensitive to the changes around them, such as the seasons and the time of day. They are dependent on sunlight, water, and the nutrients around them as sources of energy to support their life. Due to their rootedness and inability to move, they must adapt when changes occur around them in order to survive (Scholten 2018).

According to Sankaran, plant remedies in homeopathy are also quite sensitive and are constantly trying to adapt to their changing circumstances. A patient needing a plant remedy is often sensitive, soft, needing support and find difficulty in adjusting to their environment. They are easily hurt and emotional, with passiveness and changeability of emotion and a lack of structure in their lives. Similar to how plants can spread their roots into available spaces to absorb what is necessary to survive, the patients are naturally diffuse, flowing, wondering and more random in speech and thought, seeking emotional support and nurturing (Sankaran 2002).

Just as plants also depend on a good sustainable environment to thrive, these patients are dependent on others around them for attention, love, support, and affection e.g., their loved ones, parents or siblings. If their environment isn't sustainable and doesn't offer the love and support, they desire, they may compensate and become over-emotional with hysterical outbursts and attacks (Sankaran 2002).

Their outfits are often flowery or have some form of a connection to plants. They may be aesthetic, colourful, soft and flowing, even in the male patient. During a

homeopathic case taking, patients needing plant remedies wander around and change the subject, appearing disorganized and incomplete. The ailments they experience often come from a place of shock or hurt, which can be either physical or emotional. They feel very deeply and suffer when their emotions are ignored or repressed. Other people may see them as too sensitive, unpredictable and moody, with abrupt changes. Their dreams are also quite beautiful or vivid, carrying with them a lot of emotional content (Little 2016).

#### **2.4.6.2 The Fabaceae / Leguminosae family sensations in Homoeopathy**

The plant kingdom is divided into plant family groups to understand the specific sensations and characteristics linked to the behaviours of the plants found within that family. This enables a systematic, effective diagnosis and treatment of the core inner sensation within each patient.

*Erythrina lysistemon* belongs to the Fabaceae or previously known as the Leguminosae family (the bean and pea family). Alongside other family sensations, the Fabaceae family has been studied by Sankaran and Scholten, who have noted all the similar themes of the family that manifest differently in each plant (Collins 2010).

Legumes are well known as a great source of protein and have previously been called “the poor man’s meat” and looked down upon in cultures that highly regard meat. They were the main source of protein for those who could not afford to buy meat. Therefore, the prevalent theme is poverty, with a fear of not having enough to sustain one’s needs. The patients needing a remedy within the Fabaceae family often endure poverty with hopelessness and powerlessness (Collins 2010).

The patients will present with overwhelming fatigue, either due to overexertion or their inability to digest certain amino acids. Most legumes within this family contain unusual amino acids, including the essential amino acids lysine and methionine, which are essential in the biosynthesis of proteins and other metabolic processes. If they are not digested properly, they may cause a disturbance in the body’s normal metabolic processes (Collins 2010).

The fatigue presented by these patients is not only physical but mental as well. Physically, it can be expressed as fatigue, or go as far as paralysis or even epilepsy.

Mentally, it can be expressed as dullness, confusion and an inability to concentrate. The overall picture presented is that of gloom, hardship, and suffering (Collins 2010).

Due to this hardship and suffering, these patients are seen in their desire to live an enjoyable, burden free life without any struggles and to have pleasure. Fabaceae plants are known to have a symbiotic relationship with bacteria, which converts nitrogen to nitricumint their roots. In Dutch, the Fabaceae are known as “*vlinderbloemigen*” [butterfly flower family], as they indeed have a desire to be as light as a butterfly. There is a desire to detach oneself from one’s earthly care, struggles and concerns, to split off from the mundane daily lives. The word ‘split’ and its many variations - scattered, fragmented, falling apart, separate, dissociated, etc. - reflect this flight from their life of continuous toil. The split is reflected in the seeds, which have two halves, an example of this from the Fabaceae family, is the peanut [*Arachis hypogeia*] (Collins 2010).

Other major themes of the Fabaceae family include dizziness and vertigo, which is often described ‘as if drunk’. They also have a desire or aversion [dislike] to fat, bacon, cheese, beans or peas and all kinds of proteins. Their time aggravation is 9 am and experience specific aggravations from beans or peas, which is strongly indicative of the Fabaceae family of remedies (Collins 2010).

A Fabaceae remedy can be useful when one’s life has felt like a series of hardships. It can also be used in periods of work with no pleasure or downtime, such as studying for exams. The causative factors for their ailments are: deprivation and times of hardships (Collins 2010).

#### **2.4.6.3 The Materia medica of *Erythrina Lysistemon***

The bark of *Erythrina lysistemon* was used in a proving at the Homoeopathic Health Centre at the Durban University of Technology in 2007. The homoeopathic drug proving of *Erythrina lysistemon* 30CH took place in the form of a randomised triple-blind, placebo-controlled study, meaning that neither the provers, nor the researchers were aware of the name or nature of the substance being proved and whether a prover

was receiving a placebo or the proving substance. The drug was prepared homoeopathically to the thirtieth centesimal (30CH) potency (De Beer 2007).

In the study, 32 provers were randomly divided into 4 equal groups of 8 provers, 12 of the 32 provers received placebo while the remaining 20 provers received medicated powders containing the *Erythrina lysistemon* 30CH remedy. This was all allocated randomly (De Beer 2007).

The data collected was collated, edited and translated into materia medica and repertory language to formulate the remedy picture of *Erythrina lysistemon* 30CH.

A summary of the materia medica of *Erythrina lysistemon* as discussed by Olivier 2007 is as follows:

#### **i. MIND**

The Mind symptoms made up a large percentage of the proving and were further divided into categories so that the complete picture of the remedy could be better extrapolated.

##### **Irritability and frustration**

- Bouts of irritability described as being short tempered and abrupt with people.
- Small incidents spark off the irritability and the individuals become snappy and intolerant.
- The irritability was causeless in many instances with provers waking up feeling annoyed and frustrated.
- There was also an element of impatience within this sense of irritability and provers commented that other people made them annoyed or irritable when they did not do as they were expected to.

##### **Anxiety**

- Nervous anxiousness. Most provers expressed anxiety about upcoming events such as job interviews or having to meet new people. Performance anxiety, where concern is felt as to how the person being perceived. Anticipatory anxiety, described as “a sensation of excitability or anticipation of something”.

### **Delusions**

- The delusion of not being loved anymore by a significant person.

### **Mood**

- Change in moods from one extreme to the other. Happy and up-beat one moment and emotional and angry the next. Crying easily.

### **Company**

- There is a duality evident in this theme.
- Desire for company and don't want to be alone while others are irritated by company and desire to be left alone.

### **Activity/ Occupation**

- Exercise and regular activity make one feel better
- A sense of wellbeing after an exercise session or looking forward to the opportunity to engage in some form of activity.
- The prospect of doing work is also seen in a positive light. Energised and motivated.

### **Energy**

- Extreme tiredness as well as a sense of lethargy and laziness.
- Expressing tiredness even after a good night's rest.
- Energy levels dip very low with a want to fall sleep.
- Tired and unrefreshed on waking.
- Exhaustion and fatigue in the afternoon.

### **Concentration**

- Huge lack of concentration described as a sense of being "spaced-out".
- Unable to focus on tasks at hand and making mistakes while speaking or writing.

### **Confidence**

- Confidence described as a boost or a surge of confidence.

### **Relationships**

- Relationships are strained with a lot of tension and insecurities.

### **Religion**

- Begging for forgiveness from God and a feeling of wanting to do more for Him and questioning one's faith.

## **ii. HEAD**

- Severe headaches described as “terrible”, “heavy”, “never had a headache so bad”, “like a ton of bricks on head”.
- The pain is also described as stabbing and unbearable.
- The headaches are experienced in the frontal, occipital and temporal regions of the head.
- The headache is often accompanied by sore or stiff necks with some sort of eye involvement.
- Battling to keep one's eyes open or experiencing painful eyes.
- Pain felt radiating into the left eye and sensations over their right eye.
- The intensity of the headache varies from very severe, almost debilitating, to a dull heavy headache.
- The headache is relieved by rubbing or massaging the head and neck as well as by warm applications such as a warm shower.
- They are aggravated by loud noises and by moving the head.
- A sensation as if one is becoming ill with influenza, aching body and dull headaches with sore throat and stuffy nose.

### **Vertigo**

- Vertigo experienced as dizziness and a light headedness.
- Aggravating factors are walking and working.
- The episodes of vertigo were not prolonged.

### **Eye**

- There symptoms experienced are very typical to those of allergies or conjunctivitis.

- Eyes are described as being itchy and scratchy and sensitive to the light.
- Eyes can be dry or produce excessive lachrymation.
- Eyes are swollen shut on waking and are sore and puffy.
- Eyelids are dry and excoriated.

### **iii. EAR, NOSE AND THROAT**

#### **Ear**

- Trouble hearing due to blocked nose.

#### **Nose**

- A lot of sneezing, usually in the morning on waking but was not limited to this time.
- Discharges are clear and runny with flecks of blood in the mucus after blowing the nose.
- Post-nasal drips and congested sinuses.

#### **Throat**

- Sore and raw throat with the sensation of an onset of a cold.
- Swollen glands and a sensation of a lump in the throat making swallowing difficult.
- Dry raw sensation worse at night and on waking, but gets better as the day progresses.

### **iv. GASTROINTESTINAL TRACT**

#### **Mouth**

- Toothache and clenching of teeth.
- Sour taste in the mouth.

#### **Stomach**

- Stomach cramps and spasms accompanied by loose stools.

- The pains are sometimes relieved by the passing of stool.
- An increase in appetite described as a ravenous hunger that could not be satisfied.
- A general increase in thirst.
- Cravings for sweets such as chocolates and for salty foods.
- Nausea that is worse for eating fatty foods.
- Nausea described by some as if something was clogging the throat.

### **Abdomen**

- Incidences of flatulence and bloating.
- Complaints of pulsating and radiating lower abdominal pain that is worse for pressure and after urinating.
- Frequent “spluttering and spraying” stools.

## **v. URINARY SYSTEM**

- Pain in the lower abdomen after urinating.

## **vi. FEMALE GENITALIA/ SEX**

- white discharge

## **vii. RESPIRATORY SYSTEM**

- Shortness of breath that was relieved by yawning.
- Cough with lots of coughing and lots of phlegm in the chest.
- Stabbing pains in the chest area.
- A stabbing or tightness around the heart. Also described as a sharp stitch like pain that is worse for breathing in.

## **viii. MUSCULOSKELETAL SYSTEM**

- Lower back pain that is aggravated by the cold, worse for bending forward and relieved by warm compresses.
- A deep muscle ache between the shoulder blades.

**ix. Extremities**

- Itchy elbows experienced by provers with dry flaky skin.
- The itch is relieved by scratching.
- Pains and numbness in the arms.
- Tightness of lower limbs especially feet are a common symptom.
- Muscles are described as feeling tight with tightness in the right calf that is better for stretching.
- Infections under the nail with a discharge from under the nail evident on pressure being applied to the area.

**x. SKIN**

- A formication felt over the skin in various parts of the body.
- Itchy, tingling, crawling sensation.
- The sensation moves about the body randomly and is better for rubbing but not relieved by scratching.
- Fine white pimples in the inner leg and knee and on the forehead.

**xi. FACE**

- Itching of the face and forehead.
- Itchiness seems to run throughout the body and the face is no exception.
- The itch is described as a burning, dry sensation – as if in the wind.
- Tingling on the right cheek as if the face were about to go into a spasm.

**xii. SLEEP**

- Generally, a restless quality of sleep is experienced.
- Experiences of having “a bad night”, restless and unsettled.
- Inability to fall asleep, waking up during the night or in the early hours of the morning at 2am.
- Waking up tired and exhausted causing high levels of irritability and sleepiness during the day.

### xiii. **GENERALS**

- The general feeling of tiredness and lethargy is felt with the common theme of feeling as if one were about to get flu.
- A high fever and sensation of coldness at the same time.
- A sensation of developing a cold.
- Body aches, sore throats and headaches.
- A decrease or increase in appetite with cravings for chocolate and a desire for fried onions.
- Dry skin is a common experience.

## 2.5 **RELATED STUDIES CONDUCTED**

- Nsele (2012) conducted a study to assess the antibacterial activities of *Erythrina lysistemon* and two other plants. The bark of *Erythrina lysistemon* was used to prepare the extracts. All plant extracts were prepared according to a modified method of the German Homoeopathic Pharmacopoeia. These extracts were then assessed for their antibacterial activity against *Staphylococcus aureus*, *Pseudomonas aeruginosa* and *Escherichia coli*. The effect of the plant extracts on these bacteria was determined by the disk diffusion test. Positive results were further subjected to the minimum inhibitory concentration and minimum bactericidal concentration assays.

The ethanol extracts of all three plants including *Erythrina lysistemon* were able to inhibit *Staphylococcus aureus* but not *Escherichia coli* and *Pseudomonas aeruginosa*. The results obtained in this study demonstrated that *Erythrina lysistemon* ethanol extracts contain antibacterial substances and this is essential in understanding their effectiveness for the conditions they are used for. This study also demonstrated that antibacterial effect of these extracts may be considerably enhanced in traditional treatment if traditional healers can include ethanol as one of the extraction solvents (Nsele 2012).

- De Beer (2007) conducted studies of similar methodology to the Nsele (2012) study, which included a triple-blind homoeopathic drug proving of *Erythrina lysistemon* 30CH. The triple-blind, placebo-controlled, randomized proving in a 30CH potency was conducted on 32 provers (40% placebo) recruited from amongst homoeopathic students and patients presenting to the Homoeopathic Health Centre at the Durban University of Technology (DUT).

After formulating the materia medica of *Erythrina lysistemon* 30CH, De Beer conducted a Sankaran family group analysis of *Erythrina lysistemon*, Gryn discussed the toxicological effects of *Erythrina lysistemon* and compared these effects to the symptoms produced in the proving and Thiel investigated the Doctrine of Signatures as it applied to the results obtained from the proving of *Erythrina lysistemon* 30CH (De Beer 2007).

Olivier compared the traditional uses of *Erythrina lysistemon* (*Umsinsi*) to the symptoms produced in the proving. Similarly, this study aimed at exploring the similarities and the differences existing between the homoeopathic systematic uses of *Erythrina lysistemon* (*Umsinsi*) as a remedy in the 30CH potency and its traditional medicinal applications, however, interviews with traditional healers were conducted to determine whether there are undocumented uses that overlap the proving, or that there are documented uses that Olivier was unaware of (De Beer 2007).

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 STUDY DESIGN**

This study was designed with the aim to explore the relationship in similarities and / or differences that exists between the homoeopathic and traditional medicinal applications of the indigenous medicinal plant *Erythrina lysistemon*.

A qualitative research method was employed in the study, the qualitative research methodology is described by Hammarberg et al. (2016) as an exploratory study which aims to answer questions about experience, meaning and perspective from the standpoint of the participant. He further describes the different techniques used, which includes: small group discussions, semi-structured interviews, and in-depth interviews. These are employed to conduct investigations on beliefs and behavioural concepts, to seek views, perspective or background information on a focused topic and to seek to understand experience, personal perspectives or learn about private knowledge in-depth.

In line with the qualitative research methodology, this study comprised of four main phases, which included:

- Semi-structured interviews with 12 traditional healers conducted in IsiZulu within the greater Durban area in KwaZulu Natal. These interviews were to explore the indigenous knowledge and understanding of the traditional medicinal applications of *Erythrina lysistemon*. The interviews were conducted from the participant's [traditional healers] setting with the use of semi-structured open-ended interviews. The interviews were then transcribed and translated accordingly.
- The study of the Homeopathic medicinal applications of *Erythrina lysistemon* from its material medica formulated from a Homeopathic drug proving of the plants bark that was conducted at the Durban University of Technology in 2007.

- A desktop review of the existing knowledge on the traditional applications of *Erythrina lysistemon*. The desktop review also included a toxicological study of *Erythrina lysistemon*, which could account for its medicinal properties.
- Analysing and exploring the relationships of the obtained data through qualitative analysis of the homoeopathic materia medica and the aggregated interview data into a number of general arising themes using the N Vivo 12 computer software and other literary sources.

## **3.2 INTERVIEWS WITH TRADITIONAL HEALERS**

### **3.2.1 STUDY LOCATION**

The interviews were conducted amongst traditional healers within the Durban area i.e. the Warwick Triangle Muthi Market. The Warwick triangle is a well-known area in Durban that lies over the edge of the inner city and is mainly part-market space and part-transport hub. As of 2018, the estimated number of vendors in the area was between 5,000 and 8,000 (Els 2018).

The area consists of nine different markets, with the two oldest dating back over 100 years. There are train stations, bus stations, and taxi ranks in and around Warwick Junction/Triangle that filter out to Durban's various nodes. During the Apartheid era of South Africa, Warwick Junction was a vital hub for Indian and Black residents, allowing them access into the inner city, an area where non-white buses were not typically allowed to traverse (Els 2018). Informal traders set up shop here to take advantage of the large concentration of daily commuters.

The Muthi (herb) market is one of the nine markets found in this area. This market has a rich concentration of traditional healers. Traders stalls can be seen piled up high with dried herbs, tree bark, rocks, lime, baboons, vultures, snake and other animal skins, teeth and bones, each believed to serve a purpose in the process of healing (Anon 2011).



Figure 3.1 The Warwick Triangle Muthi market stalls (Els 2018)

### 3.2.2 **SAMPLE SIZE AND DEMOGRAPHICS**

Convenience and snowballing sampling methods were used to select participants for the interviews. Traditional healers that were experienced in the use of *Erythrina Lysistemon* within the Warwick Triangle Muthi market and were above the age of 18, were selected. Selection was also based on the participants' availability and willingness to take part. A maximum of twelve participants was recruited and interviewed for the study (Ross 2011).

### **3.2.3 RECRUITEMENT AND INFORMED CONSENT**

Assistance was requested from the Warwick Triangle Muthi market council chairman to identify potential participants, who were then contacted in person to enquire whether they were willing to participate in the research study and the researcher then arranged a time to meet with them. After confirmation of willingness to participate, they were given a letter of information and informed consent form to fill in (Appendix C and D); these were also available in IsiZulu (Appendix E and F) as most traditional healers are not fluent in English. Verbal consent was sought from illiterate participants and was audio recorded. The informed consent notified and advised the potential participants that:

- The interview process will be audio recorded, but their personal information will be confidential and reflected in the final report in an anonymised and coded format.
- There will be no monetary or other types of remuneration given to the participants.
- There will be no risks to the participants involved in the research study.
- They were free to not participate, and they may withdraw from the study if they wished to do so at any given point in the study without any consequences.
- The study was solemnly being conducted for research purposes only and as such, the information they provided will not be used for any personal monetary gain.

### **3.2.4 PILOT STUDY**

Prior to data collection, a pilot study was conducted on two traditional healers with knowledge of the African medicinal applications of *Erythina lysistemom* to test if the questions formulated for the interview sessions were viable for the study and an approximation of the length of the interview sessions. The Interview recordings from the traditional healers that participated in the Pilot study were not used for the main study.

### 3.2.5 **INTERVIEWS**

The participation of all traditional healers was completely voluntary. The interviews were conducted in IsiZulu, according to the preference of the interviewees. The researcher, as a second language IsiZulu speaker was assisted by a fellow MHSc Hom. Student who is a fluent mother tongue IsiZulu speaker.

The participants were assigned code names to protect their identities and ensure anonymity. The codes used reflected the participant's designation and placement in the sequence of the twelve interviews. The coding sequence was as follows:

- Healer designation (TH = Traditional healer)
- Placement within the twelve interviews (1,2,3,4 up to 12)

An image of *Erythrina lysistemon*, which included the full image of the tree, separate images of the leaves, the bark, the flowers, the pods and seeds were all printed out and presented to the participants prior to progression with the interview sessions to allow for easy visualisation of the plant.

As the interviews were semi-structured, the questions were not posed in a fixed sequence but rather allowed for a free flow conversation with additional follow up questions arising from the information supplied by the traditional healer. The research interview questions, attached in appendix G [English] and appendix H [isizulu] were structured specifically to gain understanding on the medicinal applications of *Erythrina lysistemon* [*Umsinsi*] with regards to the following;

- Common conditions treated with the plant medicine
- The modes of administration
- The observed therapeutic effects
- The observed ill effects if any are presented
- Parts of the plant used for medicinal preparations
- General preparation of medicines

The interviews were all audio recorded and each interview session was labelled according to the specific codes given to each participant. The recordings were downloaded and stored on a computer with password protection.

### **3.2.6 TRANSCRIPTION AND TRANSLATION OF INTERVIEW DATA**

The recording of the interview sessions was essential to avoid loss of words in writing during the interviews. The interview data was transcribed and further translated using a dual translation method.

#### **3.2.6.1 Transcriptions**

The first step was the transcription of oral text to written text, which was done by the researcher who is an IsiZulu second language speaker using an audio player. For accuracy on all transcription, the following steps were taken:

- Transcribing all words uttered by the participant in verbatim.
- Double checking on the crude transcriptions and deciding on words and sounds to remove such as “Hm”, “Ah”, “Um”, “Uh”, and “Uh huh” / “Nuh uh”, as unlike many involuntary noises, like throat clearing, there may be meaning attached to them that may have had an influence in the conversation (Gardner 2001). All the other sounds that had no impact on the conversation were removed.
- Removal of repetitive questions or responses that the participant or the interviewer may not have been clear of and had to be repeated.
- Substituting the words spoken in English with the appropriate IsiZulu words, the words are indicated in *italics* in the transcription appendix.
- Careful placement of appropriate punctuation remarks to not cause subtle changes to the meaning or context of the text.

These transcriptions were then verified for accuracy by a MHSc. Hom. student who is a mother-tongue isiZulu speaker and a second-language English speaker. The entire IsiZulu transcriptions prior to translation have been included. (Appendix I)

#### **3.2.6.2 Translations from IsiZulu to English**

The researcher decided against hiring a certified translator as this seemed infeasible. Omission of simple words could alter the context or meaning of the text especially with the consideration that most IsiZulu words often carry a double or triple meaning and if

used out of context could alter the meaning of the phrase altogether. A dual translation method was therefore employed.

The initial translation was done by a MHS. Hom. student who is a mother-tongue isiZulu speaker and a second-language English speaker. The researcher, with the aid of an isiZulu-English dictionary, then undertook the task to verify these translations, correcting errors of tense, refining the vocabulary and keeping the context as original as possible.

Further to this, the researcher aimed to avoid the loss of the essence and meaning of the text by including in brackets next to the translated version, some of the words that are subjective to Zulu traditions and medicines e.g. [*Intelezi*] and all of these terms and their context in traditional healing have been discussed in detail in chapter 2. The entire IsiZulu to English translations have been included. (Appendix J)

### **3.2.7 DATA VERIFICATION**

The transcriptions and translations were then subjected to further verifications, prior to the qualitative and comparative analysis, by a pair of two mother-tongue isiZulu speakers. The individuals who were also fellow MHS. Hom. students were provided with the original recordings, electronic copies of the transcriptions and translations. The verifications were done in line with:

- Accurate transcriptions – inclusive of punctuations
- Accurate translations – inclusive of consistency and context
- Grammatical sense in translations

## **3.3 MATERIA MEDICA OF *ERYTHRINA LYSISTEMON***

Following the homoeopathic proving of *Erythrina lysistemon* 30CH in 2007 from the plant's bark, the proving symptoms that were experienced by at least two or more provers were grouped together and recorded in the homoeopathic material medica

The material medica of *Erythrina lysistemon* was then studied in order to gain insight into the medicinal applications of the plant within a homoeopathic context.

### **3.4 DESKTOP REVIEW OF ERYTHRINA LYSISTEMON**

To obtain an in-depth understanding of *Erythrina lysistemon*, a desktop review of its well-known applications and toxicology was conducted. Juma and Majinda (2005), Khumalo et al (2017) and other researchers conducted studies on the constituents of *Erythrina lysistemon* and their activities. The study of its toxicology and constituents may be useful in explaining its medicinal properties and effectiveness with regards to the two medicinal systems of applications.

### **3.5 COMPARATIVE ANALYSIS**

The translated English interview data and the existing materia medica of *Erythrina lysistemon* were analysed by the researcher using NVivo 12 software. The data was analysed in terms of emerging themes, sensations, and spheres of application.

The objective for this analysis were as follows:

- Exploring the consistency of the traditional understanding of *Erythrina lysistemon* amongst traditional healers
- Exploring any relationships existing with regards to the use of the crude *Erythrina lysistemon* plant amongst traditional healers and the homoeopathic use of *Erythrina lysistemon* in potency

The reflections of the traditional and homoeopathic applications of *Erythrina lysistemon* were compared and related to the documented uses, thus establishing the relationship between these two medicinal systems. Within this analysis, the researcher also sought to account for the possible relationship of these results to the toxicology and constituents found within the bark of *Erythrina lysistemon*.

### **3.6 RESEARCH TRUSTWORTHINESS**

A study's trustworthiness refers to the extent in which confidence can be placed to the study's data, interpretation and methods used to ensure the quality of the study, for it to be deemed worthy of consideration by the reader (Korstjens and Moser 2018). The

criteria for the study's quality for all qualitative research include the following: (i) credibility, (ii) transferability, (iii) dependability, and (iv) confirmability

### **3.6.1 Credibility**

Korstjens and Moser (2018:120) describe research credibility as the validity, reliability and confidence that can be set in the truthfulness of the research findings. To attain credibility, the participant's original views must be well represented and interpreted. Research triangulation was used to establish credibility of this study.

Twelve participants were interviewed for the study and a desktop review was also used to determine the traditional medicinal applications of *Erythrina lysistemon* as well as its toxicology allowing for different sources of data collection. Furthermore, open-ended questions were used for the interviews to allow for flexibility and a reflection of the participant's views.

### **3.6.2 Transferability**

Transferability refers to the applicability of the research findings by another user in a similar situation (Korstjens and Moser 2018: 120). The methodological procedure and processes and the different phenomenon established from the study is detailed, in terms of cultural and social contexts and the participants' experiences with the use of *Erythrina lysistemon* to allow other researchers and readers to make suitable transferable judgements. The methodology process includes a detailed description of the context of the interviews, the data collection site, the sample size, including the inclusion and exclusion criteria.

### **3.6.3 Dependability**

Dependability ensures the stability of the results over time; it refers to the extent in which similar research findings may be obtained if the study is conducted on similar subjects in a similar context (Korstjens and Moser 2018:121). To ensure dependability of this study, a thorough step by step procedure of this study is detailed in Chapter 3,

such that if the detailed steps are taken the results obtained would merge with the results of this study.

These steps were put in place such that should a research enquiry audit be conducted on the study to confirm accuracy of the study conclusions and to ensure that the analyses and interpretations of the study are supported by the collected data, the results will remain consistent and stable. An inquiry audit is a process used to establish dependability of the research results by involving an outside researcher, outside of the data collection and analysis examining the process of the data collection, analysis, and results of the study.

#### **3.6.4 Confirmability**

Confirmability refers to the neutrality of the research findings, proving that research findings and conclusions are based on the participants' responses and not the researcher's ideas, bias or intentions to steer the research in a certain direction (Korstjens and Moser 2018:122).

The research data from the interviews was transcribed accurately in the language spoken by the participants and then translated as accurately as possible and both the IsiZulu transcriptions and the English translated versions have been included. The methodological procedures also support all the steps and transparent analysis of the data detailing activities occurring throughout the study to render the findings' trustworthy.

### **3.7 Ethical considerations**

#### **3.7.1 Informed consent**

Each participant was given a subject information letter along with an informed consent form [ICF] that requires their signature. The ICF guards their rights as participants of the research study and both these documents were written in the language that the participant selected for interview.

### **3.7.2 Voluntary Participation**

Participation in this research study was voluntary. Participants were made aware of the research study and were free to withdraw from the study at any point without an explanation. In addition, the research process was not harmful to the participants in any way and the researcher treated the participants fairly, equally, and respectfully.

### **3.7.3 Participants' Confidentiality**

The identity of the participants is safeguarded. Anonymity was used as each participant was allocated a research code number which was used to identify their specific audiotape recordings. The list of codes with participant names attached have been stored electronically and protected with a password known only to the researcher.

The audiotape recordings are currently only assessable to the researcher and the researcher's supervisor and they will also be electronically stored with password protection for a period of 5 years and deleted thereafter.

## **CHAPTER 4**

### **THE RESULTS**

#### **4.1 INTRODUCTION**

This study was conducted using the methodology described Chapter 3. The raw data was derived from the homoeopathic materia medica of *Erythrina lysistemon* and from field semi-structured interviews with twelve traditional healers. This chapter presents the results obtained from applying the research methodology, focusing on the arising themes for the homoeopathic and African traditional medicinal application of *Erythrina lysistemon* in line with the research questions.

#### **4.2 PARTICIPANT DEMOGRAPHICS**

NUMBER	AGE	INTERVIEW DURATION
1	38	00:05:20
2	45	00:05:07
3	59	00:09:52
4	39	00:03:54
5	62	00:01:25
6	37	00:02:22
7	44	00:02:15
8	42	00:02:43
9	32	00:05:53
10	23	00:02:21
11	47	00:04:16
12	60	00:05:23
<b>AVERAGE</b>	<b>44</b>	<b>00:04:14</b>

*Table 4.1 Participant demographics*

### 4.3 RESULTS FROM FIELD INTERVIEWS

The interviews conducted with the traditional healers were audio recorded, transcribed to written text, translated into English, and analysed with the NVivo 12 software. The results obtained are presented below in accordance to the study questions described under 3.2.5

#### 4.3.1 Applications

The traditional applications of *Erythrina lysistemon*'s scope of use are detailed. A diagrammatic presentation hierarchy of the main themes discussed in this section is included in Figure 4.1 below.



Figure 4.1 Hierarchy presentation of the main applications of *Erythrina Lysistemon*

#### 4.3.1.1 Cleansing and Detoxification

In reviewing the related literature, in 2.4.5.2, the medicinal applications of *Erythrina lysistemon* were discussed and included cleansing oneself and using the *Umsinsi* as a detoxifying agent after a series of health-related complaints. The process of cleansing is referred to both in a physical and metaphysical sense.

*It is prepared by boiling and then using it as an enema, it helps in cleaning on the inside. When ingested it can even clean your kidneys.*

**[TH1]**

*Since it is used for cleansing, it removes all the dirt on the inside including the dirt in your blood. (...) it can also be used for cleansing. (...) Both males and females use it similarly because it is used to clean on the inside.*

**[TH2]**

*Yes, I do, it works in a lot of conditions, it works for cancer, it works in cleansing*

**[TH3]**

In its process of cleansing, *Erythrina lysistemon* works in curing diseases caused by excess physiological biproducts and toxins such as *inyongo* and *isilonda* which has also been discussed (2.2.2).

*It is used when someone wants to clean themselves on the inside, it can be used to induce vomiting. When they are suffering from inyongo.*

**[TH11]**

*When one feels like there is something bothering them from the inside, usually things like isilonda.*

**[TH4]**

The notion that disease states can arise from witchcraft is a strong one within the Zulu culture, individuals are poisoned either physically to bring about illness and /or death, or the sickness can be induced in a spiritual sense through *idliso* (poison).

*It is mixed with umbola [Eucomis bicolor - pineapple lily], umdoni [Syzygium cordatum – water berry], imbozisi [Foeniculum vulgare – fennel] and iAlamu to help get rid of idliso. It works effectively with these medicines because in most cases it basically cleans an individual on the inside. (...) Some people are poisoned in their sleep, especially if someone says they usually dream of eating, they would have been poisoned, others can tell on their own if they have been poisoned in that manner, when they are administered with this concoction, that poison rots in them and it can then come out.*

**[TH8]**

*It is used for cleaning on the inside, most people use it in removing inyoni.*

**[TH6]**

#### **4.3.1.2 Female genitalia – sex**

The main applications of *Erythrina lysistemon* for female conditions include its use in aiding with the birthing process (See Chapter 2 discussion). The interview data has also shown that in addition to the already mentioned applications, infusions of the plant medicine are used in healing post-delivery and in menstrual complaints.

*What I can add is that the bark can also be burnt into ashes make insizi, but this is often mixed with other herbs. When a woman has just given birth and they have stitches, this herbal mixture will help to speed the recovery process.*

**[TH1]**

*It is mostly used in women who have just delivered in treating their surgical stitches and in labour to quicken the process and make it less painful.*

**[TH9]**

*It is given infused with other herbs and given to women in labour to drink to ease the pain and quicken the process, it helps in the recovery process as well.*

**[TH12]**

*it works for women who bleed non-stop from their menses, it helps to shorten the bleeding period. (...) When someone is suffering from cancer, be it uterine, colon, spinal or throat cancer.*

**[TH3]**

*Sometimes women also use it shorten the bleeding process during their menstruation.*

**[TH12]**

#### **4.3.1.3 Stomach**

The reviewed literature suggested *Erythina lysistemon*'s involvement in treating gastrointestinal discomforts such as stomach cramps. The theme associated with bowel movements, especially in infants and new-born babies was the most common among all traditional healers.

*Others use it to induce vomiting, but it is generally used as an enema in children with stomach cramps or those struggling with their bowel and with bad stools. The child can drink it or have it introduced as an enema. (...) It is usually with Umthombe [*Ficus craterostoma* - forest fig] but it is dependent on what the child is suffering from, stomach cramps or other complaints.*

**[TH2]**

*It is an enema administered to young children to help with their bowel movement.*

**[TH5]**

*One can drink the herb when they have stomach pains and children can also drink this so that they can easily empty their bowels.*

**[TH9]**

*It is used in young children who struggle with defecating, especially if the child shows signs of discomfort due to the stomach pains and has not been able to pass any stool in days.*

**[TH10]**

The concept of induced vomiting is linked with the idea of cleansing one's self, vomiting is induced as a way of removing *idliso* or *inyongo* through the process of *ukugabha*.

*The medicine can also be used to induce vomiting and for people with chest problems, for instance if you feel as though there's blockages on your chest or some sort of difficulty in breathing*

**[TH1]**

*It can be used to induce vomiting. When they are suffering from inyongo. (...) Others use it to induce vomiting if they think they have been poisoned to get rid of the poison that is within them.*

**[TH11]**

*Others use it to induce vomiting.*

**[TH2]**

#### **4.3.1.4 Abdomen**

*When an infant is struggling with their bowel movement, Umsinsi is boiled and used as an enema. (...) Others use it to induce vomiting, but it is generally used as an enema in children with a sore stomach or those struggling with their bowel and with bad stools. The child can drink it or have it introduced as an enema.*

**[TH2]**

*When someone is suffering from cancer, be it uterine, colon, spinal or throat cancer. I have seen recoveries in patients that I have treated, but like I have stated, it does not work alone, it is mixed with other herbal medicines for it to be effective in this way.*

**[TH3]**

*It can also help in infants who have a difficulty passing stools, it is administered as an enema.*

**[TH12]**

*One can drink the herb when they have stomach pains and children can also drink this so that they can easily empty their bowels*

**[TH9]**

*It is an enema administered to young children to help with their bowel movement (...) No there is not, what I know is that mothers use it to help their infants pass out stools.*

**[TH5]**

#### **4.3.1.5 Stools**

There was no description on the nature of the stools produced but rather the effects of *Umsinsi* pertaining to stools.

*It is used in young children who struggle with passing stools, especially if the child shows signs of discomfort due to the stomach pains and has not been able to pass any stool in days. (...) The medicine can be administered in the morning and before the end of the day, the child would have passed stool and be feeling much better. It is very effective and works over a short period of time.*

**[TH10]**

*No there is not, what I know is that mothers use it to help their infants pass out stools.*

**[TH5]**

*It can also help in infants who have a difficulty passing stools, it is administered as an enema. (...) It assists in children to easily pass stools as well.*

**[TH12]**

#### **4.3.1.6 Skin complaints**

Skin related applications of *Erythrina lysistemon* were not discussed in the reviewed literature. Only one traditional healer mentions its applications in dealing with skin conditions.

*(...) It helps if you have pimples on your face or if you have oily skin.*

**[TH1]**

#### **4.3.1.7 Wounds**

Section 2.4.5.2 also discussed *Erythrina lysistemon*'s indications as a poultice used to treat sores, cracked heels abscesses and in clearing maggots on infested wounds.

*You can use it to directly wash or clean a wound for the wound to heal quicker and to keep it clean.*

**[TH12]**

#### **4.3.1.8 Musculoskeletal**

The available literature suggested *Erythrina lysistemon*'s involvement in arthritis, cramps, and sprains. These themes were less common among the traditional healers.

*It is also useful in fractures and sprains*

**[TH1]**

*When someone is suffering from cancer, be it uterine, colon, spinal or throat cancer.*

**[TH3]**

#### **4.3.1.9 Mouth**

*It is used in treating teeth complaints. (...) For toothache and gum swelling.*

**[TH7]**

#### **4.3.1.10 Urinary**

The theme of urinary complaints was only discussed by one traditional healer in the sense that *Umsinsi* is useful in cleansing the kidneys and helps with burning sensations during urination.

*It helps especially when one experiences burning during urination.*

**[TH2]**

#### **4.3.1.11 Chest and Respiration**

*(...) and for people with chest problems, for instance if you feel as though there's tightness on your chest or some sort of difficulty in breathing.*

**[TH1]**

#### **4.3.1.12 Throat**

*When someone is suffering from cancer, be it uterine, colon, spinal or throat cancer.*

**[TH3]**

*(...) and for people with chest problems, for instance if you feel as though there's tightness on your chest or some sort of difficulty in breathing.*

**[TH1]**

#### **4.3.1.13      Generals**

*This concoction helps to boost your immune system and other things such as ulcers, but Umsinsi only works for this condition when mixed with these other herbs. It also helps in quickening the recovery time for internal (ulcers) and external wounds. (...) This medicine is useful in many ways to people's health.*

**[TH1]**

#### **4.3.1.14      Dreams**

*Some people are poisoned in their sleep especially if someone says they usually dream of eating, they would have been poisoned.*

**[TH8]**

#### **4.3.1.15      Metaphysical**

Often in the Zulu traditional cultures, when a new leader is appointed, there is a series of rituals or ceremonies that are carried out. Some find the need to cleanse themselves and ensure that they will be respected by their subjects. In some instances, even the ordinary men may undergo these procedures for their personal benefits.

*Others use it to make themselves stronger and respected persons in their communities.*

**[TH10]**

*Erythrina lysistemon* seeds have always been considered as lucky charms, but the herb can also be used in warding off bad luck

*.... for instance, if you want to get rid of bad luck, there are medicines that are specific for this that you can mix it with.*

**[TH10]**

*Erythrina lysistemon* trees have been previously planted around the graves of the chiefs or other traditional leaders to offer them protection in the afterlife, the interview data has also revealed that it is used by the living to offer protection to them and their entire family.

*In the past, they used to bathe with it or sprinkled around the homes for protection against enemies, but it was mixed with other herbs.*

**[TH12]**

*One can protect themselves from their enemies especially if they have used traditional medicine against the individual.*

**[TH4]**

*It has been used in the past especially by chiefs and kings for protection. Others used to even build their homes around a place where the trees were present to feel protected. Whenever it was present in a homestead everyone felt protected.*

**[TH9]**

*Umsinsi* can also be used in fighting off bad spirits or dealing with witchcraft (idliso and inyoni)

*If there are some bad spirits around, it is usually sprinkled around the homestead, but it works when mixed with other herbs. (...) When one feels like there is something bothering them from the inside, usually things like isilonda.*

*(...) One can protect themselves from their enemies, especially if they have used traditional medicine against the individual.*

**[TH4]**

*It is used for cleaning on the inside; most people use it in removing Inyoni  
(...) When they want to remove Inyoni.*

**[TH6]**

*It is mixed with *Eucomis bicolor* [pineapple lily], *Foeniculum vulgare* [fennel] and *Alamu* to help get rid of poisoning. It works effectively with these medicines because in most cases it basically cleans an individual on the inside.*

**[TH8]**

*Others use it to induce vomiting if they think they have been poisoned to get rid of the poison that is within them.*

**[TH11]**

#### **4.3.2 Modes of administration**

The different modes of administration for all traditional medicine and their applications to different conditions have also been discussed in detail in the literature review of this study. The modes of administration for *Erythrina lysistemon* are discussed below with a hierarchy presentation of the most common themes included in figure 4.2.

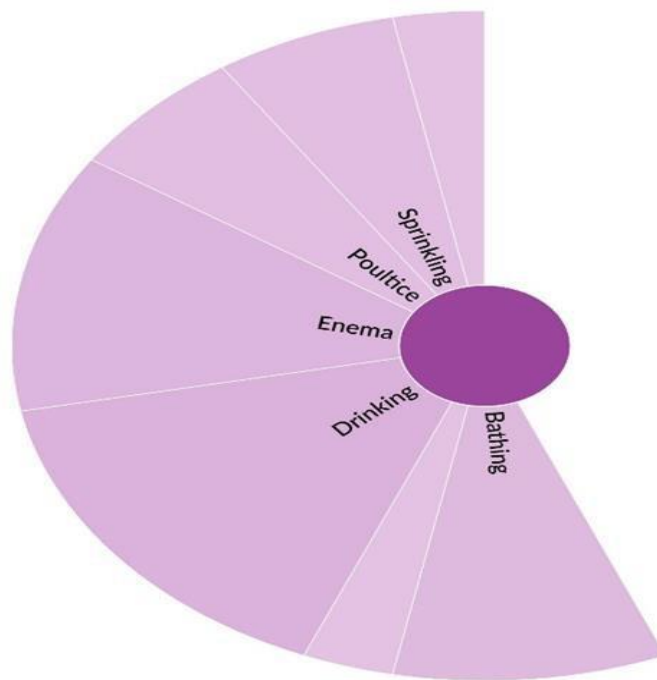


Figure 4.2 Hierarchy presentation of the main modes of administration of *Erythrina lysistemon*

The decision on the method of administration to employ also differs between the different types of traditional healers. Herbalists [inyanga] often decide on the most effective way for the herbs to work, whilst diviners [isangoma] often seek guidance from the ancestors.

*The first thing with herbal medicine is asking for permission from the ancestors.*

**[TH3]**

#### 4.3.2.1 Drinking

The main mode of the medicinal administration for most herbs is through oral administration. *Erythrina lysistemon* is no different in this case. It can, however, be administered in small doses to produce therapeutic effects or it can be administered to induce vomiting through purging.

*The medicine can also be used to induce vomiting and for people with chest problems, (...) It can be mixed with unsukumbili [*Hypericum aethiopicum*], African potato [*Hypoxis hemerocallidea*] and umathunga [*Eucomis autumnalis* - autumn pineapple lily]. These plants are first ground and boiled together for*

*about 30 minutes, let the mixture cool first before drinking. One should drink a quarter of a glass of this mixture twice a day.*

**[TH1]**

*Others use it to induce vomiting, but it is generally used as an enema in children with a sore stomach or those struggling with their bowel and with bad faeces. The child can drink it or have it introduced as an enema.*

**[TH2]**

*They can drink it and have it used as an enema.*

**[TH10]**

*It is for drinking, but others do bathe with it.*

**[TH11]**

*It can be used for drinking.*

**[TH12]**

*You boil it and then drink it.*

**[TH9]**

Besides being mixed with other herbs in preparing herbal concoctions, to ease its bitter taste, *Erythrina lysistemon* can also be diluted with milk for drinking.

*Others mix it with fresh milk which can then be used as an enema or for drinking. It helps especially when one experiences burning during urination.*

**[TH2]**

#### **4.3.2.2 Enema**

In its involvement in dealing with bowel movement, especially in conditions such as constipation and *isilonda*, *Umsinsi* is often administered as an enema. The process of administering an enema is often done in children and new-borns who struggle with passing their first stools, the results are often quick and almost immediate.

*It can also be used as an enema when mixed with other herbal medicines. It is prepared by boiling it and then using it as an enema, it helps in cleaning on the inside. When ingested it can even clean your kidneys.*

**[TH1]**

*It is administered as an enema.*

**[TH5]**

*When an infant is struggling with their bowel movement, Umsinsi is boiled and used as an enema. (...) but it is generally used as an enema in children with a sore stomach or those struggling with their bowel and with bad faeces. The child can drink it or have it introduced as an enema.*

**[TH2]**

*They can drink it and have it used as an enema. (...) The child can pass stool the same day. The medicine can be administered in the morning and before the end of the day, the child would have passed stool and be feeling much better. It is very effective and works over a short period of time.*

**[TH10]**

#### **4.3.2.3 Bathing**

As discussed in the literature review and under the applications section in 4.3.1, bathing with an herbal concoction can be a form of cleansing one's self for good luck or in order to rid of bad luck, to gain protection from any evil or bad spirits and to gain respect from the community. *Erythrina lysistemon* has also been seen to be applicable in this regard.

*You can bathe with it but only when it is mixed with other medicines, I am not sure if it works similarly when alone (...) to remove inyoni.*

**[TH6]**

*Others do bathe with it (...) to cleanse one's self, others use it to make themselves stronger and respected persons in their communities.*

**[TH10]**

*I am not very familiar with its history, but I have heard other people say they others used to bath with the herb for protection.*

**[TH11]**

#### **4.3.2.4 Sprinkling**

The concept of sprinkling herbs around the homestead works similarly to the concept of bathing with a herbal concoction, it can be for protection or chasing off bad or evil spirits and bad luck. Not only one individual is protected, but the entire household.

*If there are some bad spirits around, it is usually sprinkled around the homestead, but it works when mixed with other herbs. (...) You sprinkle it around the homestead*

**[TH4]**

#### **4.3.2.5 Steaming**

Information on the use of *Erythrina lysistemon* as a steaming agent was not available or discussed in the review of the related literature, however, the administration of other traditional medicine has been discussed. Steaming allows for easy penetration of the herb through the skin and in some cases for decongestion. In which, the former is applicable in the case of *Erythrina lysistemon*. Similarly, to *Erythrina lysistemon*'s application on dermatological conditions, its applications through steaming was only mentioned by one traditional healer.

*It helps if you have pimples on your face or if you have oily skin. You steam with it.*

**[TH1]**

#### **4.3.2.6 Poultice**

Applications of herbal medicines directly onto an affected area as a poultice are quite common, some medicinal concoctions such as *Insizi* can also be directly applied onto the area to facilitate in healing or to ease the pain. This method of application has also been discussed in the literature review, although the application of *Erythrina lysistemon* in this regard had not been previously discussed.

*It can also be applied directly on the area.*

**[TH9]**

*It can be used for drinking, as an enema or applied directly on an affected area.*

**[TH12]**

*The bark can also be burnt and made into insizi, but this is often mixed with other herbs. When a woman has just given birth and they have stitches, this herbal mixture will help to speed the recovery process*

**[TH1]**

#### **4.3.2.7 Brushing teeth / gurgling**

*Erythrina lysistemon* is also known to be useful in treating toothache. In its application for treating toothaches, the individuals often gurgle or brush their teeth with the prepared herb.

*You boil it and then use it to brush your teeth.*

**[TH7]**

#### **4.3.3 Observed therapeutic effects**

In line with the medicinal applications of *Erythina lysistemon*, the observed therapeutic effects were established below. Also included below in Figure 4.3, is a hierarchy of the

discussed most common therapeutic effects of *Erythrina lysistemon* in traditional medicine.

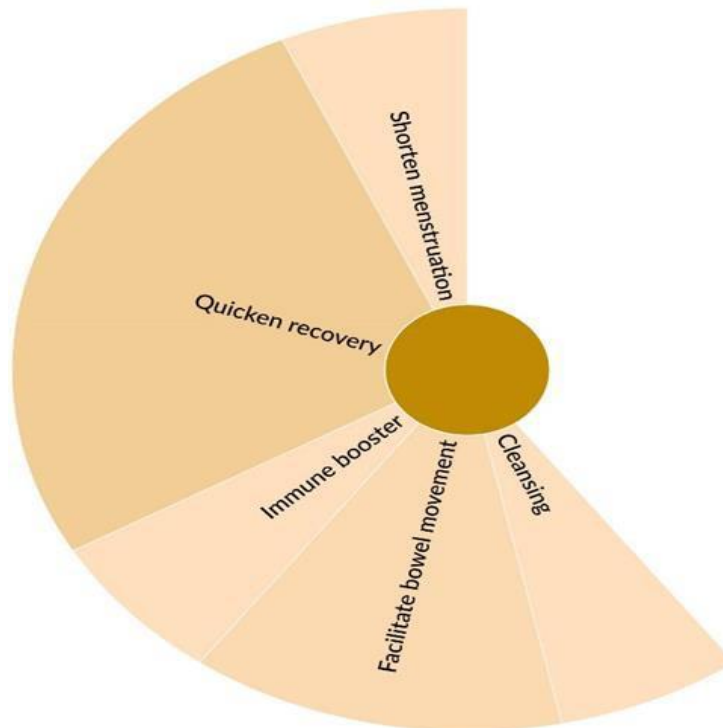


Figure 4.3 Hierarchy presentation of the main therapeutic effects of *Erythrina Lysistemon*

#### 4.3.3.1 Quicken recovery process

Most of the traditional medicinal applications of *Erythrina lysistemon* are concerned with the recovery process, i.e., after delivery, for sprains, toothaches, and other mentioned conditions.

*It also helps in quickening the recovery time for internal [ulcers] and external wounds. (...) When a woman has just given birth and they have surgical stitches, this herbal mixture will help to speed the recovery process.*

**[TH1]**

*(...)for women who have been in labour, the stitches heal quicker.*

**[TH12]**

*When someone is suffering from cancer, be it uterine, colon, spinal or throat cancer. I have seen recoveries in patients that I have treated, but like I have stated, it does not work alone, it is mixed with other herbal medicines for it to be effective in this way.*

**[TH3]**

*(...) the women recover quicker with less pain.*

**[TH9]**

#### **4.3.3.2 Facilitate in bowel movement**

As discussed previously in this chapter, *Erythrina lysistemon* is useful in gastrointestinal complaints, especially in infants and children and is often introduced to the system via the rectum as an enema to assist with the bowel movement and allow for the individual to pass stool easily.

*The child can pass stool the same day. The medicine can be administered in the morning and before the end of the day, the child would have passed stool and be feeling much better. It is very effective and works over a short period of time.*

**[TH10]**

*It assists in children to easily pass stools as well.*

**[TH12]**

#### **4.3.3.3 Cleansing**

As a detoxifying and cleansing agent, both physiologically and spiritually in a traditional sense, in getting rid of *idliso*.

*It helps in cleaning on the inside. When ingested it can even clean your kidneys. It is useful in multiple conditions.*

**[TH1]**

*(...) to help get rid of poisoning [idliso]. (...) it basically cleans an individual on the inside.*

**[TH8]**

*Yes, I do, it works in a lot of conditions, (...) it works in cleansing.*

**[TH3]**

#### **4.3.3.4 Shorten menstrual bleeding**

*Sometimes women also use it shorten the bleeding process during their menstruation.*

**[TH12]**

*(...) it works for women who bleed non-stop from their menses, it helps to shorten the bleeding period.*

**[TH3]**

#### **4.3.3.5 Immune booster**

The effects of *Erythrina lysistemon* as an immune booster were discussed by one traditional healer and have not been previously available in literature.

*This concoction helps to boost your immune system and other things such as ulcers.*

**[TH1]**

#### **4.3.4 Observed ill effects**

The most commonly used parts of the plant for medicinal preparations are not harmful and therefore would not produce ill effects in the patient. Traditionally, *Erythrina lysistemon* is a medicine that is only used for healing and cannot be of harm to individuals. When asked about the ill effects of *Erythrina lysistemon*, the following responses were obtained:

*The only side effects that can be experienced is if the herbal medicine is mixed with other medicines it does not work well with and that may produce side effects.*

**[TH3]**

*No there are no ill effects.*

**[TH4]**

*No there is not, what I know is that mothers use it to help their infants defecate.*

**[TH5]**

*It poses no danger at all, because even when you use it to brush your teeth there is not a specific scale you use that will make the herb too strong or too weak.*

**[TH7]**

*No there is none*

**[TH10]**

*No there is none*

**[TH11]**

#### **4.3.5 Parts of the plant used for medicinal preparations**

The most common parts of the plant that has been used in medicinal preparation is predominantly the bark, specifically the stem bark referred to as *igxolo* in IsiZulu and

the roots. One traditional healer mentioned using the leaves and other parts of the plant.

*The bark of the common coral is commonly used. (...) The most used part is the bark although others also use the roots, because it grows to be a big tree it is much more difficult to get its roots hence the common use of its bark.*

**[TH1]**

*The bark or the roots.*

**[TH10]**

*The roots and sometimes the bark.*

**[TH11]**

*The bark.*

**[TH12]**

*The roots and bark are commonly used.*

**[TH2]**

*The roots.*

**[TH3]**

*Any part of the plant can be used, the roots, leaves and fruits can all be used.*

**[TH4]**

*The roots or the bark.*

**[TH7]**

*Mostly the bark. For this specific mixture that I have mentioned, the bark is used.*

**[TH8]**

*It is the bark.*

**[TH9]**

#### **4.3.6 General preparation of medicines**

The preparation method generally involves grinding the bark or root first, followed by boiling it in water prior to administration. One traditional healer mentioned burning the bark and using it as *insizi*. *Erythrina lysistemon* can also be mixed with other herbal medicines dependent on the intended use. Some of the medicinal herbs that it can be mixed with have been mentioned, it can also be used in the making of *intelezi*

*Firstly, you grind it. (...) It is the kind of medicine you mix with other red medicines. (...) It is prepared by boiling it and then using it as an enema. (...) It can be mixed with unsukumbili [*Hypericum aethiopicum*], African potato [*Hypoxis hemerocallidea*] and umathunga [*Eucomis autumnalis* - autumn pineapple lily]. These plants are first ground and boiled together for about 30 minutes, let the mixture cool first before drinking. (...) what I can add is that the bark can also be burnt into *Insizi*, but this is often mixed with other herbs.*

**[TH1]**

*When you are using the bark, you grind it first and then boil it for a little while, then you drink the water that you get from boiling the bark. If the child is not too happy with the sour taste because it does not taste so good, then you can just use it as an enema.*

**[TH10]**

*The roots or the bark are firstly ground and boiled in water, this plant can also be mixed with other herbal medicines but this depends on what you are using it for, for instance if you want to get rid of bad luck, there are medicines that are specific for this that you can mix it with*

**[TH11]**

*The bark is ground, boiled and the water drained thereafter is used (...) It can be used alone or with other medicines in intelezi.*

### **[TH12]**

*By boiling the parts of the plant. (...) The bark is firstly ground and placed in a pot of water and bring it to a boil. Afterwards, it is left to cool and used as an enema. (...) It is effective alone, but it also depends on what it is being used for and if you believe in its effectivity alone. Others mix it with fresh milk which can then be used as an enema or for drinking. (...) it is usually (mixed) with umthombe [*Ficus craterostoma* - forest fig] but it is dependent on what the child is suffering from, stomach cramps or other complaints. The forest fig is also boiled with Umsinsi and given to the child to drink or as an enema. Both these medicines do not cause any harm as umthombe is also useful in cleansing the blood and used similarly to any other herbal concoction.*

### **[TH2]**

*It is ground and then boiled. (...) There are plenty of other plant herbs that can be mixed with this plant maybe about 10 different plants that I will not mention all but I will mention only a few, there is intolwane and the roots are also used (...) It is the way it is prepared, the fact that no other modern medicines or chemicals like Dettol or bluestone are added to it during the preparation process. It is used alone just the way it is or mixed with other traditional herbal medicines. (...) I have it consumed with beetroot.*

### **[TH3]**

*You use it in an intelezi mixture, there are so many different herbs that are used for intelezi I cannot mention all of them.*

### **[TH4]**

*You boil it, wait for it to cool down and then brush your teeth with it.*

### **[TH7]**

*It is mixed with umbola [*Eucomis bicolor* - pineapple lily], umdoni [*Syzygium cordatum* – water berry], imbozisi [*Foeniculum vulgare* – fennel] and iAlamu to help get rid of poisoning [idliso].*

### **[TH8]**

*You use the bark, grind it, boil it, leave it to cool and then drink.*

**[TH9]**

*No, it works alone when used in new-born babies.*

**[TH5]**

*There is a lot of different medicines that it can be mixed with, for instance, you can make intelezi.*

**[TH6]**

#### **4.3.7 Most common patient age group**

Due to its broad and diverse scope of application, *Erythrina lysistemon* is used by people of all ages. Its effectivity as an enema makes it more applicable to children and infants and its application in female complaints would render it useful to older women as well.

*(...) by younger or older women*

**[TH4]**

*Children mostly, adults do use it as well, but I have treated mostly children with it.*

**[TH10]**

*Children mostly but adults as well, the thing is when patients come in, they will need the medicine for different reasons so it will not be specific to any age group.*

**[TH11]**

*As I have mentioned, this herb can be used by the mother and the child, so it is not specific to any age group.*

**[TH12]**

#### **4.3.8 Most common patient gender**

Similar to the patient age group, *Erythrina lysistemon* is applicable to both genders.

*Both male and female, if they both suffer from the same ailment, it can be administered in the same way to both genders.*

**[TH1]**

*They both use it similarly.*

**[TH11]**

*Both genders as this medicine works for everyone.*

**[TH12]**

*Both males and females use it similarly because it is used to clean on the inside.*

**[TH2]**

*Both genders equally*

**[TH3]**

*In children it is irrespective of their gender, but I think if it is being used by adults traditionally it would be mostly males.*

**[TH10]**

#### **4.3.9 Plant history**

The history of the utilisation of *Erythrina lysistemon* seems to have remained true over the years, with most traditional healers mentioning how it is still known for what it has always been used for in the past.

*I think it has always been used in the same way that it is used today.*

**[TH10]**

*No, I am not very familiar with the plant's history, but I can identify it and know how it is used.*

**[TH1]**

*I am not very familiar with its history, but I have heard other people say they others used to bath with the herb for protection.*

**[TH11]**

*In the past, they used to bathe with it or sprinkled around the homes for protection against enemies, but it was mixed with other herbs.*

**[TH12]**

*It is a tree that has always been there, the elders used it to provide shade and then they discovered that it was useful as a medicine, it can also be used for cleansing.*

**[TH2]**

*It is a tree that grows in the forest although I am not very sure of its history, but the seeds are used as beads in making ankle bracelets that are worn by younger or older women with other traditional outfits for dancing.*

**[TH4]**

*No, I only know that it is an indigenous plant, that grows on its own.*

**[TH8]**

*It has been used in the past especially by chiefs and kings for protection. Others used to even build their homes around a place where the trees were present to feel protected. Whenever it was present in a homestead everyone felt protected.*

**[TH9]**

## 4.4 MATERIA MEDICA OF ERYTHRINA LYSISTEMON

The materia medica symptoms of *Erythrina lysistemon* have been discussed below. The codes that were assigned to the provers during the proving are referenced. A diagrammatic hierarchy presentation of the symptoms produced during the proving is included in figure 4.4.

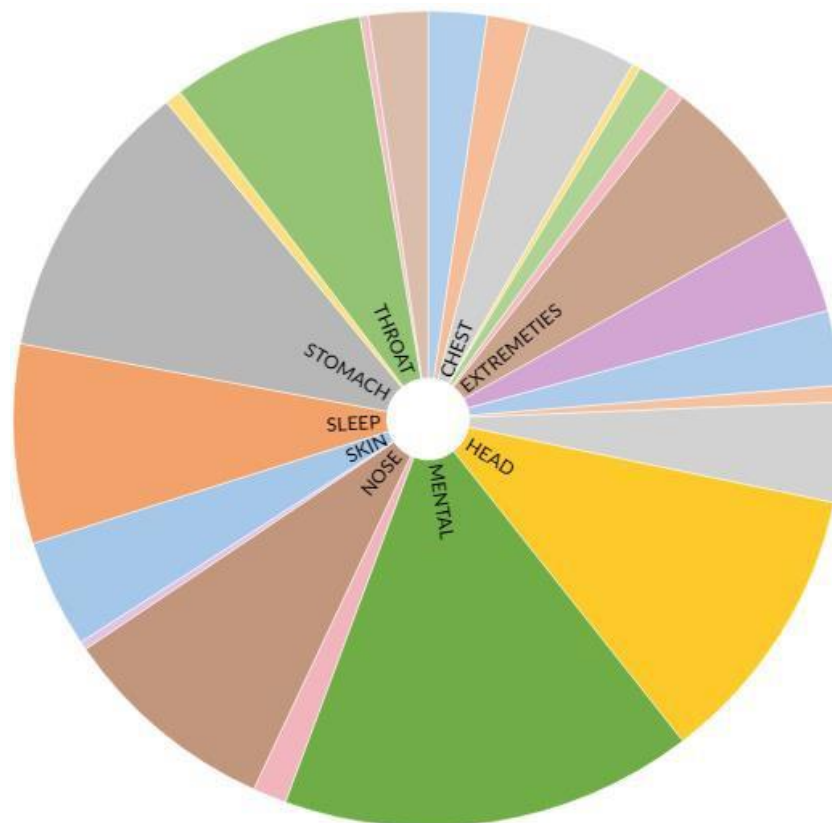


Figure 4.4 Hierarchy presentation of the main symptoms produced during the proving of *Erythrina Lysistemon* 30CH

### 4.4.1 MIND

#### 4.4.1.1 Irritability and frustration

Most provers experienced abrupt bouts of causeless irritability, short temperedness, and frustrations over trifles causing the individual to become snappy and intolerant. There was also an element of impatience within this sense of irritability.

*Did get a bit irritable and short with the boys today (...) Short tempered with kids but enjoy adults' company. (...) Was rather irritated with children today and snapped at them for no reason –almost like PMS symptoms although no period due right now. (...) Rather irritable this afternoon.*

**[17F]**

*I am short tempered and abrupt with people. (...) I am easily irritated especially if people do not do things the way I want them done.*

**[24M]**

*These diary writings are getting to me, pretty annoyed actually. (...) Met aunts-highly irritated with them the second we met. Don't want to be around people.*

**[29M]**

*..That irritates me about people. (...) Was a little irritated (no one in particular) and just not in the mood (really just lazy). (...) Arrived at the flat still very irritated, whole day was spoiled by one afternoon at tech. Decided to go for a run, get rid of some frustration. (...) I got very irritated with students and lecturers at tech. I absolutely hate this place with passion. Because of tech earlier this afternoon I am very irritated with everybody around me. Just want to stay out of everyone's way. AHHHH.*

**[28M]**

*Hate when people do things half-heartedly. When they agree to help you out and then you realise that their effort was less than minimal. It irritates the hell out of me. I cannot rely on anyone. (...) I have become very short fused with him [boyfriend] and the smallest thing seems like the tragedy of my life. I overreact and I am constantly thinking of leaving him. I don't know what is happening to me and I don't like it. I want that constant instability and irritability to go away.*

**[32F]**

*Everyone is irritating me.*

**[10F]**

*I have been very irritated the whole day and my head is spinning.*

**[30F]**

*I woke up feeling irritable and depressed and felt like being alone.*

**[14F]**

*Was irritable at work, could not concentrate, had no patience to read any documents, just wanted to go home.*

**[03F]**

*There is much emotional tension between us (my wife & I) and my parents which is proving to be quite taxing on the soul. I am feeling upset by that, frustrated too. (...) Definitely feeling strange-slight tension in body (almost a feeling of frustration). (...)*

*Cleaned house and feel normal again. Possibly the activity was a relieving factor.*

**[01M]**

#### **4.4.1.2 Anxiety**

There were episodes of nervous anxiety amongst the provers. The most expressed anxiety was about upcoming events such as job interviews or meeting with new people.

*I have an interview coming up with a company in the next few days. I feel that I am not as confident as I always am. (...) Did not sleep well last night. Kept on dreaming about this interview I had to go to. (...) Feeling slightly nervy this morning.*

**[26M]**

*I am in a bit of a hurry, feeling little anxious.*

**[28M]**

*Feeling anxious and worried.*

**[13F]**

*Worrying about UNISA [University] assignments and how I am going to complete them before deadline at end Aug. (...) Stressing about assignments and exams and time running out. (...) Still feeling a little panicky about getting all my prac teaching in before end Aug.*

**[17F]**

*Got a very restless/anxious feeling, was irritated with myself. Just wanted to go home. Got anxious/irritable, impatient too. Just wanted to go home*

**[03F]**

*It gives me an uneasy feeling- thinking of what the future is going to bring.*

**[32F]**

*Feel a sensation of excitability or anticipation of something.*

**[01M]**

#### **4.4.1.3 Delusions**

Delusions of not being loved by significant other and deluded feelings in the body were expressed.

*I think my boyfriend isn't attracted to me. (...) I think he [boyfriend] doesn't love me and that he's scared to tell me. I confronted him and he comforted me effectively. I'm just being silly. Don't know where it is coming from. Really don't have a reason to doubt his feelings or commitment to me. I also have become very insecure in my relationship. I constantly doubt my boyfriend's feelings for me. At one stage I thought he had an affair. All my suspicions are completely groundless.*

**[32F]**

*She doesn't care at all, haven't even responded to letter. Didn't even send sms on my birthday. That's what one gets after 3 and half years.*

**[28M]**

*I felt like there was something foreign in my body.*

**[26M]**

#### **4.4.1.4 Mood**

Changeable moods from one extreme to the another. Emotions are easily triggered.

*Felt relaxed and happy today. (...) Today has been an awesome day not sure why, but I'm really happy and carefree. (...) Felt inspired at clinic today.*

**[10F]**

*In good spirits today remained positive overall. (...) Seem to be very angry today*

**[13F]**

*My mood has actually been quite up-beat not feeling tired. (...) Rest of day went fine – no symptoms felt quite good.*

**[17F]**

*I haven't been myself lately. My mood swings from the highest high to the lowest low. I would be laughing 1 min and close to tears the next. (...) I got really emotional in the evening. I cried like a baby about nothing, which seems to be happening to me very often lately. (...) Extremely emotional. Cried very easily (which doesn't happen to me) about a minor problem.*

**[32F]**

*I really don't know what is going on with me- could I be bi-polar? In the morning I was chirpy and now I feel so glum. (...) I had a fight with my boyfriend. I don't know what got into me. It is the first time that I lashed out at him so badly. (...) Why did I persist on making him angry? I was totally aware that I was pushing his buttons but I enjoyed it. I'm sick.*

**[29F]**

#### 4.4.1.5 Company

Duality is expressed in this theme, there was desire for company and also a desire to be left alone expressed.

*I woke up feeling irritable and depressed and felt like being alone.*

**[14F]**

*Went to the clinic; had no patients but preferred it that way; wasn't in the mood to deal with them anyway. (...) Arrived home on absolute high. Had a great day with friends. (...) Had lunch with a friend. Absolutely awesome. (...) Don't want to go to an empty flat...*

**[28M]**

*Short tempered with kids but enjoy adults' company.*

**[17F]**

*I feel a strong need for some company.*

**[30F]**

#### 4.4.1.6 Activity/ Occupation

Exercise and regular activity are ameliorating factors with a sense of wellbeing after exercise sessions.

*Awake at 5am and full of energy. Have been feeling so much better since exercising. (...) Had a tough workout on new gym equipment.*

**[17F]**

*I went for a run, went well felt better afterwards.*

*I went to tui-titsu practice session. Really enjoyed that, want to definitely go more often (...) really feeling good after this morning's session (...) still feeling on high after this morning's practice session.*

**[28M]**

*Went to gym, I didn't get tired, worked hard (...) felt very productive (...) still felt energetic in the evening. (...) Went to gym, helped me relieve some stress.*

**[25M]**

*Have been exercising since beginning of this week and feel much better but don't think I'm pushing myself hard enough.*

**[32F]**

*Feel like I need to run to relieve some tension of sort. (...) It is as if there is a build-up of energy in my body that needs to be vented or released through physical activity.*

**[01M]**

*Much more tranquil then before; starting gym next week. Looking forward to exercising again. (...) Energy is up and running. Ready to get back to work again. I definitely have more stamina to work.*

**[29F]**

*Feeling much better today because I'm being productive. (...) Looking forward to a busy day at work. I like being busy because I don't get tired when my mind's occupied. (...) I woke up early and felt great. Had lots done by 10 o'clock. Love being productive.*

*Woke up at 10 o'clock. I hate wasting my weekend on sleeping. Usually by that time I would have done all I have to do around the house.*

**[32F]**

#### **4.4.1.7 Energy**

Extreme tiredness with a feeling of waking up unrefreshed.

*At work doing a puzzle in the daily news section of the to-night and falling asleep. (...) very tired. (...) Went to work still very tired all day. (...) Still yawning and feeling very tired.*

**[21M]**

*Was feeling tired at work, low energy.*

**[03F]**

*Feel very exhausted again. Just no energy, not able to apply myself to work.  
Definitely very tired. (...) Feeling exceptionally tired and exhausted, much more  
than usual. (...) Brain slow and tired too, I feel very very sleepy.*

**[01M]**

*Feeling tired. (...) Feel tired just want to sleep. (...) Feel very tired and sleepy.  
Very tired – drowsy. (...) Slept whole day. (...) Woke up tired.*

**[18F]**

*A little tired but ok. (...) Am feeling a bit tired so have gone to bed for a nap.*

**[17F]**

*Can't get myself moving.*

**[29F]**

*Feeling tired and drained  
Very tired, dozed off on couch for 5mins.*

**[07M]**

*Actually, feeling a little flat.*

**[26M]**

*Got tired pretty early. Fell asleep on the couch at 09:30. Very unusual especially  
because I woke up so late that morning. (...) I wouldn't have woken up if my  
sister hadn't woken me up. I slept for 12 hours. This is pretty unusual because  
I only need 7-8-hour sleep.*

**[32F]**

*When bedtime came, I felt so tired and physically exhausted but could not fall  
asleep straight away.*

**[25M]**

*Woke up feeling lazy – no intentions of getting out of bed. (...) Feeling very lazy.*  
**[06F]**

#### **4.4.1.8 Concentration**

Huge lack of concentration and an inability of focus on tasks.

*Feeling a little “spacey”, not quite with it. My mind is wandering, not focused on work. (...) Concentration & work are very difficult this morning, I’m unable to focus my attention on work or listening or even a basic conversation.*

**[01M]**

*My concentration was really bad today. I couldn’t remember names of people that I just met 5 min. ago. I had to write a list of things I need to do tomorrow just in case I get confused. Had spent a lot of time with the girl from the bank-took very long for me to remember and understand everything she told me.*

**[29F]**

*I seem to have some problems with spelling. Words look weird with proper spelling. I keep writing d instead of t and m instead of w and vice versa. I also switch first letters of words when I speak for example: ‘wovly lether’ instead of weather.*

**[32F]**

#### **4.4.1.9 Confidence**

Boosts or loss of confidence.

*Felt a surge of confidence. (...) Felt quite confident today in all that I was doing.*

**[11M]**

*Felt inspired at clinic today.*

**[10F]**

*I had a good day and felt very productive. Felt that whatever I put my mind into I will succeed. I have great confidence in my abilities (quite unusual for me- I have felt inadequate most of my life).*

**[32F]**

*I have an interview coming up with a company in the next few days. I am not as confident as I always am. I have been feeling this for the last couple of days. I wonder if this is related to the powders.*

**[26M]**

#### **4.4.1.10 Relationships**

Strain and tension in relationships

*There is much emotional tension between us (my wife & I) and my parents which is proving to be quite taxing on the soul. I am feeling upset by that, frustrated too. (...) Had a huge diplomatic attempt at sorting out issues with parents.*

**[01M]**

*I also have become very insecure in my relationship. I constantly doubt my boyfriend's feelings for me. At one stage I thought he was having an affair. All my suspicions are completely groundless.*

**[32F]**

#### **4.4.1.11 Religion**

A feeling of being inadequate

*I have been thinking about my faith, and I cannot help feeling as if I am not doing enough for God.*

**[14F]**

#### 4.4.2 **VERTIGO**

Short episodes of dizzy spells and light headedness aggravated by walking and working

*At work feeling slightly dizzy.*

**[06F]**

*Felt a bit light-headed, slightly drunk (...) A bit tipsy, a bit dazed.*

**[11M]**

*I have been very irritated the whole day and my head is spinning.*

**[30F]**

*Had a few dizzy spells during afternoon and evening. Everything turning and lasts a few seconds. (...) Been dizzy while walking in mall. Lasted for about 1 minute and happened 2 to 3 times.*

**[18F]**

*Possibly light-headed, but not sure.*

**[17F]**

#### 4.4.3 **HEAD**

Severe headaches accompanied by eye complaints

*Had a headache all night very heavy feeling headache in front of head. (...) Headache for 30 minutes. Severe pressing headache feels like ton of bricks on my head (...) Burning eyes and headache towards front of head and nose. Sharp piercing headache, also back of neck. Better for rubbing/massaging (...) Eyes heavy and burning (...) Burning eyes and headache towards the front of head and nose (...)*

*Eyes burning and tearing*

**[18F]**

*Headache bad, spread all over. Pressure all over. Worse for moving head, any small movement is bad. (...) Have throbbing frontal headache, behind eyes and a certain amount of stiffness in neck and back*

**[07M]**

*When I was getting ready to go to bed, I started to get a heavy headache. The heaviness and pain was concentrated on the left side of my head. My neck was also very sore. The pain started at my temple, behind ears, forehead, cheeks and between brows.*

**[03F]**

*There is a terrible, pressing headache around my occiput and forehead. I have never had a headache this bad. My eyes feel so heavy.*

**[29F]**

*Still have a headache across my eyes. If I push on my eyes it hurts – like that actual eyeballs are sore.*

**[17F]**

*Headache now stabbing pain in back of head below skull bone and directly behind eyes- this is unusual – battling to keep eyes open – which is very unusual seems to be encroaching into the temple area and above eyes – sharp, throbbing/stabbing pain as if needle being inserted. (...) Headache still present, but very strange! Pain in right temple BUT feels as if something running over eye and temple area. Same feeling as if someone cracking imaginary egg over your head. (...) Headache has reached a high sharp pain in back of neck crawling into head and lower back.*

**[06F]**

*I woke up with a very strong headache. The pain is on the left side of my head and radiates to the left eye (...) I had a headache for the whole day. The pain was unbearable.*

**[30F]**

*It was a dull headache slightly on the left-hand side of my head (...) had a glass of water, headache seemed to go away (...) I have also had a dull headache on the left side of my head. It seems to be coming in waves (...)*

*I woke up in the morning feeling like I had a hangover.*

**[26M]**

*Have a slight headache throughout skull, all over, dull in nature, very under tone.*

**[28M]**

*Head feels dull over temporal and front. (...) Head tight and sore at the back.*

**[10F]**

*Have a dull pain on the right side of my head seem to be aggravated by noise.*

**[13F]**

*I have a dull headache on the right side and is made worse by loud noises.*

**[14F]**

*I have had a slight headache on the right side and my right eye is puffy. (...)*

*Went for a walk by the ocean and another headache on the right side came on.*

**[30F]**

*Last night before falling asleep I felt a stabbing pain on the right side of my chest followed by the same sensation in my right temple. Throughout the day I felt stabbing pains in my right temple. They would come and go after few minutes (...) Feeling a faint stabbing in my left temple.*

**[32F]**

*By the time of 4o'clock I was pretty tired and a headache had already been developing at the back of my head. It got better after I ate. I thought that it was due to my hunger but another developed again after I got home (...) it was gone 30 min later.*

**[25M]**

*Woke up with slight headache and sneezing, but don't feel achy (...)*

*By 3pm was feeling really rotten. Cotton wool headache, backache, sore throat, tickling nose/sneezing – usual flu like symptoms (...) Realised I haven't had a headache all week.*

**[17F]**

#### **4.4.4 EYES**

Eye symptoms associated with allergies and conjunctivitis.

*Right eye infected, could not open it this morning, it is all puffy red and swollen.*

*Left eye stuck shut when I woke up. (...) Eyes very sensitive to light and they feel all dry and scratchy.*

**[10F]**

*My eyes feel so heavy.*

**[26M]**

*I have never had a headache this bad. My eyes feel so heavy.*

**[29F]**

*Eyes itchy and burning and tired*

*Itching eyes, nose, face, forehead.*

**[18F]**

#### **4.4.5 NOSE**

Runny nose with a clear discharge with some flecks of blood on blowing followed by post nasal drip. Congested sinuses.

*Found small pieces of dry blood when blowing nose (...) Little blood in nose when blowing.*

**[18F]**

*Woke up at 5:30am with post-nasal drip sore throat. (...) Woke up with slight headache and sneezing, but not feeling achy (...) By 3pm was feeling really rotten. Cotton wool headache, backache, sore throat, tickling nose/sneezing – usual flu like symptoms.*

**[17F]**

*Woke up with a terrible post-nasal drip. Sneezing in the morning- much worse than I usually get (...) Had my bouts of sinus attacks once I woke up this morning. (...) My sinuses are killing me. I have never had a headache this bad. My sinuses seem to be cleansing. Haven't noticed waking up sneezing today wow! (...) even the constant sneezing didn't get to me (...) Can't stop sneezing.*

**[29F]**

*Had several bouts of sneezing 3-4 times today (...) Nose just running away with me. Runny, clear mucus (...) Day was awesome in total, just had bit of runny nose (...) Nose blocked in right nasal passage; other side is runny (...) Nose getting all blocked up again (...) Started getting blocked nose, same as before also have a trouble hearing people, they need to talk louder.*

**[28M]**

*I usually sneeze and then the discharge starts. This time I was sneezing quite a bit but no runny nose (...) Started sneezing when I was in a very green area. No discharge though (...) A sneeze brought on the discharge. Followed by more sneezing.*

**[32F]**

*Sinuses blocked, blew nose. Strange pulsing in right nostril, high up, -15secs.*

**[07M]**

#### **4.4.6 FACE**

Itchiness of the face that runs throughout the whole body

*Face itching. (...) Eyes burning and tired and itchy face. (...) Itching eyes, nose, face, forehead. Especially next to nose (both sides) and forehead. (...) Itchy forehead and face – like being in the wind – burning, dry feeling. (...) Still a bit itchy on face and very itchy on elbows.*

**[18F]**

*Was told my face looks flushed, but it looks normal to me.*

**[01M]**

*Tingling in right cheek*

**[11M]**

*Since this morning I have had a tingling feeling in the corner of my right eye and cheek bone. (...) The whole day today right side of my face felt tingly as if it was about go into a spasm.*

**[32F]**

#### **4.4.7 MOUTH**

*Bottom right-hand side feels like I have a slight toothache.*

**[21M]**

*Clenching teeth while driving.*

**[07M]**

*I have a sour taste in my mouth.*

**[13F]**

*Slight bitter taste under tongue, for 1-2 minutes.*

**[03F]**

#### 4.4.8 **THROAT**

*Slight throat infection starting, slightly sore on swallowing, sniffing.*

**[07M]**

*As I was getting into bed, I felt soreness on the left-hand side in my throat (...) I was going to bed I had a slight sore throat. Only sore on swallowing (left hand side). (...) I woke up with a slightly sore throat (on the left-hand side).*

**[32F]**

*Woke up with a bit of a sore throat. (...) Woke up with a sore throat again. Like a flu sore throat. Seems to go away as day progresses.*

**[26M]**

*Woke up at 5:30am with post-nasal drip sore throat.*

*By 3pm was feeling rotten. Cotton wool headache, backache, sore throat, tickling nose/sneezing – usual flu like symptoms.*

**[17F]**

*Suddenly developed a sore throat.*

**[24M]**

*Sore throat. Feeling like getting flu.*

**[18F]**

*The dry raw throat sensation is back again, only very slight. It's the feeling of the onset of a cold.*

**[01M]**

*I have a scratchy sore throat better for cold water.*

**[13F]**

*I have a scratching sensation in my throat drinking cold water soothes it.***[14F]**

*Have a scratchy throat, coughed to clear.*

**[11M]**

*Irritating cough as if tickle in throat.*

*Nausea still present as if something clogged in throat and irritating cough.*

**[06F]**

*Glands are swollen and my throat sore more on the right, similar to how I felt when I had glandular fever. (...) Throat all swollen, can't swallow properly. Still feel like I have a lump in my throat and cannot swallow properly.*

**[10F]**

#### **4.4.9 STOMACH**

*My whole chest, stomach and back was itchy. After scratching it felt better. (...)*

*Woke up with cramps in tummy and gastro the whole night until about 5:55am.*

**[21M]**

*Woke up at 6am. Felt ok but had some stomach cramps and runny tummy – thought I might be getting gastro, but by lunch time feeling was gone. (...) Woke up at 5:30am feeling rather hungry and slight cramps in stomach again. Felt better by evening although still getting a bit of tummy cramps – like I really need toilet but then tummy is not runny.*

**[17F]**

*Tummy began to twist, had to go to the loo.*

**[03F]**

*Dull pain in stomach, similar to stomach ulcer pain – came and went.*

**[07M]**

*Felt like fried onions in my food which I never ever feel like. I hate onions.***[18F]**

*The whole day I have been ravenously hungry. I ate so much but can't get full. I woke up very hungry. I feel like I can eat any amounts of food with no effect. I was thinking of food the whole day but did not really feel like eating anything. Still have not eaten. Not feeling hungry. (...) Absolutely no thirst. I had a glass of water the whole day.*

**[32F]**

*I also have been stuffing myself with any food I can get my hands on. Stress does not usually increase my appetite. (...) I woke up feeling very hungry.*

**[25M]**

*Had mainly soup over the last couple of days, no appetite.*

**[10F]**

*Very thirsty for cold water, craving lots of sweets and salty stuff. (...) Everything seems to be making me nauseous, feels better if I rest a bit. (...) I can't seem to stomach fatty foods, making me feel nauseous, it helps when I eat ice.*

**[13F]**

*I have been drinking more water lately and have been craving chocolate and salty things.*

**[14F]**

*Eating/hunger wasn't really affected but a bit thirsty. (...) Feeling thirsty today, so drank quite a bit of water.*

**[17F]**

*Feeling very thirsty today for no reason.*

*Feeling very thirsty so far today.*

**[26M]**

*Think I am feeling more thirsty than usual.*

**[01M]**

*I also felt nauseous this morning. It also left after about an hour of being awake.*  
**[25M]**

*I woke up this morning feeling a little moggy not sure if it is a result of the food eaten at restaurant last night. (...) I also was feeling a bit nauseous in the evening. It was a deep nausea but not like I needed to vomit. Felt like there was something foreign in my body.*  
**[26M]**

*Woke up feeling a little nauseous, went back to sleep woke up feeling better.*  
**[14F]**

*Felt horrible and a bit nauseous all evening.*  
**[10F]**

*Nausea still present as if something clogged in throat and irritating cough.  
Feeling nauseas.*  
**[06F]**

#### **4.4.10 ABDOMEN**

*Have had a bit of wind today.*  
**[17F]**

*Feeling very bloated though not sure why.*  
**[26M]**

*Feel extremely bloated. Slight stool this morning.*  
**[29F]**

*Went to the loo, abdomen pain very slight. Worse for putting pressure on area.*  
**[06F]**

*Lower abdominal pain. Slightly pulsating and radiating +/- 5minutes.*

*Lower back pain and lower abdominal pain (left and right sides linking). Dull pain.*

**[03F]**

*Strange dull pain in diaphragm area.*

**[07M]**

#### **4.4.11 STOOL**

*Spluttering, spraying stool.*

**[21M]**

*Felt I had good bowel movement, went to loo twice.*

**[03F]**

#### **4.4.12 URINE**

*After urinating left with stabbing (strange) pains in lower abdomen- better for relaxing stomach worse for pulling stomach in.*

**[06F]**

#### **4.4.13 FEMALE GENITALIA/SEX**

*Noticed a white discharge today*

**[13F]**

*Period finished today. Did not have much bloating or cramps with this period.*  
**[17F]**

#### **4.4.14 RESPIRATION**

*Shortness of breath – better for deep yawning.*  
**[06F]**

#### **4.4.15 COUGH**

*Coughing and lots of phlegm on chest.*  
**[18F]**

#### **4.4.16 CHEST**

*Have a sharp pain in upper chest/abdomen. Sore in front and on my back. As I breathe in like a stitch, sharp, stabbing like a knife*  
**[11M]**

*Last night before falling asleep I felt a stabbing pain on the right-hand side of my chest. (...) Just felt a stabbing pain in heart (only lasted for few seconds).*  
**[32F]**

*I feel a stabbing pain in my heart. (...) I felt a stabbing pain in my heart this morning.*  
**[30F]**

*I woke up in the morning with tightness around my heart. Seemed to go away for a while.*  
**[26M]**

*My whole body is sore especially the left side of my chest.*

**[24M]**

*My whole chest, stomach and back was itchy. After scratching it felt better.*

**[21M]**

#### **4.4.17 BACK**

*My whole chest, stomach and back was itchy. After scratching it felt better.*

**[21M]**

*By 3pm was feeling really rotten. Cotton wool headache, backache.*

**[17F]**

*Have lower backache today especially when I bend forward, it is better if I apply warm compresses to the area, definitely aggravated by the cold.*

**[13F]**

*My back is getting sore as I am sitting in front of the computer (and I have not been sitting here for a long time).*

**[26M]**

*Upper backache now for 2hrs. Backache deep within the muscles of middle back below shoulder blades.*

**[06F]**

#### **4.4.18 EXTREMITIES**

*Still a bit itchy on face and very itchy on elbows. (...) Elbows itching especially the left one. (...) Elbows itchy and bumps on elbows, more on left. Better for scratching and rubbing lotion, but very dry and raised. No redness, just dry flaky skin. **[18F]***

*Sharp pain in my left arm, quick, short.*

**[11M]**

*Must have slept wrong as I have pins and needles in my right arm, a numb right foot and a stiff neck muscle on the right-hand side of my neck. Fine by 6:00am after shower but my neck still a bit stiff. (...) Also haven't woken up with tight feet for a while so hopefully blood circulation improving. (...) No backache or sore/tight feet on waking anymore. Feel a bit stiff in feet and legs if I've been sitting too long.*

**[17F]**

*Muscles feel stiff.*

**[10F]**

*My muscles feel tight, calves all stiff especially on the right, feels better if I stretch them out.*

**[13F]**

*My calves were a little stiff especially the right one, they felt better when I stretched them.*

**[14F]**

*Feel tight spots around body too. (...) Body tightness is worse. Muscles feel tense, can't relax them. (...) Body feels heavy, slow, unresponsive to instructions from brain. (...)*

*I seem to have developed an infection on my pinkie finger. My finger is very sore just beneath the nail. I have applied pressure to the finger and there has been some discharge*

#### 4.4.19 **SLEEP**

*Woke up suddenly feeling very irritable and irritated. This has happened in the past BUT is accompanied by itchiness, which normally wakes me – this time no itching – lasted about 20 – 25 minutes when I started to doze off again.*

**[03F]**

*Woke up with cramps in tummy and gastro the whole night until about 5:55am.*

**[21M]**

*Woke up at 2:00am.*

*Woke up tired.*

**[18F]**

*Woke up to go to the loo.*

**[06F]**

*Woke up at 5:30am again (before alarm at 6am).*

**[17F]**

*Woke up feeling little tired. Had to drag myself out of bed 15 min. later.*

**[28M]**

*Woke up this morning feeling very tired.*

*Woke up this morning a bit tired.*

**[25M]**

*Slept for 12 hours!!! Very, very rare. Couldn't wake up to go to work. Completely exhausted. (...) Sleep is pathetic. Have major difficulties waking up.*

**[29F]**

*Felt tired when I woke up. (...) Woke up a lot during the night.*

**[10F]**

*Had a really bad night. Tossed and turned and could not fall asleep.*

**[17F]**

*Had an unsettling night. (...) Had a restless night dreamt a lot was very disturbed but can't remember my dreams. (...) Felt tired at 5pm.*

**[13F]**

*My sleep patterns have been rather disturbed lately and I am restless, I know that I have dreams but I can never remember them.*

**[14F]**

*Was asleep by 8:45 and slept "dead".*

**[10F]**

*Woke up feeling tired but ok. Slept well. (...) Can't sleep, feel wide awake and full of energy.*

**[01M]**

*I found it difficult to fall asleep. (...) Good sleep last night, could not wake up, did not hear alarm. Felt refreshed and ready to enjoy my day off.*

**[03F]**

*Am feeling a bit tired so have gone to bed for a nap.*

**[17F]**

*Had an afternoon nap, woke up feeling confused as to where I am and what time it was.*

**[10F]**

#### **4.4.20 DREAMS**

*Cannot remember dreams but know they were strange.*

**[10F]**

*Dreamt of a baby crying.*

**[13F]**

*Had a dream last night. Lots about artwork and kids painting and completing work. ...Sitting in the back of my dad's kombi with my maid Sylvia and my husband Tim. We were not married yet because I was trying to get him to notice me and purposely sat next to him so I could „fall asleep“ on his shoulder. The maid was complaining that she did not have enough space.*

**[17F]**

#### **4.4.21 SKIN**

*Tingly/itchy sensation over skin in spots (e.g., above the eye, then on forehead, then on abdomen). The sensation moves around and lasts for a variable amount of time (from a flash to a minute or more). Like a formication feeling. (...) Tingling type feeling, almost like crawling sensation under skin. Itchy type feeling, but not really. Random over body in spots mostly round head and face. Better for rubbing. (...) Although the tingling feeling feels like it need scratching, it does not help.*

**[01M]**

*Itch on left hand; top lip; scalp; knee; shin; shoulder. The itch not lasting – not persistent. (...) Itching in several areas, back right shoulder; scalp, forehead, elbow, left knee – itch not lasting.*

**[07M]**

*Body itchy around stomach and left side shin. (...) Itching on legs and now around right breast area. A sort of scratchy itch as if something walking on body, and on back. (...) Legs and waist area itchy. Skin feels very dry. (...) Have now scratched so much on legs that it is now bleeding. (...) Have noticed small pimples on inner legs around knee area.*

**[06F]**

*Noticed 2-3 very small fine pimples on my forehead between my brows. Some had a tiny white head; others were red and seemed to be still developing.*

**[03F]**

*Noticed forehead has red spots/pimples.*

**[07M]**

#### **4.4.22 FEVER**

*Feels like I have a high fever but am very cold.*

**[24M]**

#### **4.4.23 GENERALITIES**

*Body feels weak and shaky.*

**[10F]**

*Tired in the morning before breakfast. (...) Very thirsty for cold water, craving lots of sweets and salty stuff. (...) Craving chocolates.*

**[13F]**

*I have been drinking more water lately and have been craving chocolate and salty things.*

**[14F]**

*Craving chocolates. (...) Felt like fried onions in my food which I never ever feel like. I hate onions. (...) Feeling like I am getting the flu. (...) Skin generally dry.*

**[18F]**

*By 3pm was feeling really rotten. Cotton wool headache, backache, sore throat, tickling nose/sneezing – usual flu like symptoms.*

**[17F]**

*Better for movement.*

**[01M]**

## **4.5 CONCLUSION**

The results of the study were presented in this chapter with highlighted discussion of all emerging themes. With reference to the methodology described in Chapter 3, the results obtained from field interviews, the homoeopathic material medica and field interviews, will be subject to a comparative analysis in terms of:

- Areas of commonalities between the African traditional and homoeopathic medicinal applications of *Erythrina lysistemon*.
- Differences in application with respect to the two medicinal application systems.

The results will also be analysed in relation to the toxicology of *Erythrina lysistemon*.

## **CHAPTER 5**

### **DISCUSSION**

#### **5.1 INTRODUCTION**

In Chapter 4, the research results were presented based on the data collected. In this chapter, the results are discussed with respect to the aim of the study, which was to explore the relationship in terms of similarities and/ or differences between the homoeopathic and African traditional applications of *Erythrina lysistemon*. A toxicological view of *Erythrina lysistemon*, which may account for its applicational effects as a well as other documented traditional uses of *Erythrina lysistemon* obtained from the desktop review and discussed in the reviewed literature in Chapter 2 are included in this discussion. This chapter aims to discuss the following key points of interest

- Confirmation of documented *Erythrina Lysistemon* applications
- The undocumented *Erythrina lysistemon* applications.
- The relationship between the African traditional applications of *Erythrina lysistemon* and its toxicology
- *Erythrina lysistemon* applications in conjunction with other herbal medicines
- The relationship between the African traditional and homoeopathic applications of *Erythrina lysistemon*

#### **5.2 CONFIRMATION OF DOCUMENTED ERYTHRINA LYSISTEMON APPLICATIONS**

Most of the documented applications and modes of administration of *Erythrina lysistemon* were confirmed by the traditional healers that were interviewed, although the degree of applicational conditions may not be documented in detail as expressed by the traditional healers, these are discussed in detail in 5.2.

The metaphysical applications of *Umsinsi* according to Mbambezeli and Notten (2002), which states that traditional leaders would bathe in the water from *Umsinsi* bark for

protection and respect; tress are planted around the homesteads, waterholes and graves of Chiefs for protection, were both confirmed by TH10 and TH9 respectively.

*(...) Others use it to make themselves stronger and respected persons in their communities. [TH10]*

*It has been used in the past especially by chiefs and kings for protection. Others used to even build their homes around a place where the trees were present to feel protected. Whenever it was present in a homestead everyone felt protected. [TH9]*

Hutching (1996:145) states that it is an anti-sorcery medicine that can also be used as a trance inducer describing its efficacy in witchcraft. This was confirmed by TH6.

**TH6:** It is used for cleaning on the inside, most people use it in removing inyoni (...) You can bathe with it but only when it is mixed with other medicines, I am not sure if it works similarly when alone.

**Interviewer:** What medicines is it mixed with?

**TH6:** There is a lot of different medicines that it can be mixed with, for instance, you can make intelezi

**Interviewer:** what are the therapeutic effects observed with the use of this plant's medicine?

**TH6:** I usually use it when someone wants to get cleansed.

**Interviewer:** when does a person usually require to be cleansed

**TH6:** When they want to remove inyoni

Zukulu et al (2012) describes the application of *Umsinsi* as an emetic in removing metaphysical poison [*idliso*], this was confirmed and described in detail by TH8.

**TH8:** *It is mixed with umbola (Eucomis bicolor - pineapple lily), umdoni (Syzygium cordatum – water berry), imbozisi (Foeniculum vulgare - fennel) and iAlamu to help get rid of poisoning (idliso). It works effectively with these medicines because in most cases it basically cleans an individual on the inside.*

**Interviewer:** *If an individual has been poisoned how does it work?*

**TH8:** *some people are poisoned in their sleep especially if someone says they usually dream of eating, they would have been poisoned, others can tell on their own if they have been poisoned in that manner, when they are administered this concoction, that poison [idliso] rots within them and it can then come out.*

The notion of *Umsinsi*'s effectivity in removing *idliso* also confirms its application as a purifying emetic used to induce vomiting (Mbambezeli and Notten 2002). Several traditional healers, namely TH1, TH2, TH3 and TH11 confirmed that it can be used in cleaning and cleansing individuals.

*it helps in cleaning on the inside. When ingested it can even clean your kidneys. It is useful in multiple conditions. [TH1]*

*Since it is used for cleansing, it removes all the dirt on the inside including the dirt in your blood. (...) it can also be used for cleansing. (...) both males and females use it similarly because it is used to clean on the inside. [TH2]*

*It can be used to induce vomiting. When they are suffering from inyongo (excess bile) (...) Others use it to induce vomiting if they think they have been poisoned to get rid of the poison that is within them. [TH11]*

*Yes, I do, it works in a lot of conditions, it works for cancer, it works in cleansing, [TH3]*

The documented use of *Umsinsi*, whereby it is administered as a tea to ease the pains of child birth (Mbambezeli and Notten 2002) was confirmed by TH12.

*It is given infused with other herbs and given to women in labour to drink to ease the pain and quicken the process, it helps in the recovery process as well.*

**[TH12]**

The burning of the *Erythrina lysistemon* bark to disinfect open wounds as described by Mbambezeli and Notten (2002) was verified by TH1 on its effect on surgical wounds. TH12 also described its effect on cleaning wounds to allow for healing without infection.

*What I can add is that the bark can also be burnt into ashes make insizi, but this is often mixed with other herbs. When a woman has just given birth and they have stitches, this herbal mixture will help to speed the recovery process.* **[TH1]**

*You can use it to directly wash or clean a wound for the wound to heal quicker and to keep it clean.* **[TH12]**

Several other traditional healers were able to confirm the documented of *Erythrina lysistemon* applications in dealing with gastro-intestinal complaints, especially those associated with stomach cramps.

*Others use it to induce vomiting, but it is generally used as an enema in children with stomach cramps or those struggling with their bowel and with bad stools. The child can drink it or have it introduced as an enema. (...) It is usually with Umthombe [*Ficus craterostoma* - forest fig] but it is dependent on what the child is suffering from, stomach cramps or other complaints.* **[TH2]**

*It is an enema administered to young children to help with their bowel movement.* **[TH5]**

*One can drink the herb when they have stomach cramps and children can also drink this so that they can easily empty their bowels.* **[TH9]**

*It is used in young children who struggle with defecating, especially if the child shows signs of discomfort due to the stomach pains and has not been able to pass any stool in days. [TH10]*

Two traditional healers were also able to confirm the documented applications of *Umsinsi* in dealing with toothache and sprains.

*It is also useful in fractures and sprains [TH1]*

**TH7:** *It is used in treating teeth complaints*

**Interviewer:** *How does it help when you say it is used in the treatment of teeth complaints?*

**TH7:** *For toothache and gum swelling (...) You boil it and then use it to brush your teeth*

### **5.3 UNDOCUMENTED ERYTHRINA LYSISTEMON APPLICATIONS**

The degree of *Erythrina lysistemon*'s application as a cleansing and detoxifying agent has not been described in detail in the available literature. Mbambezeli and Notten (2002) describe *Erythrina lysistemon* as a purifying emetic. TH1 and TH2 further stated that it cleans one's blood and the kidneys. In cleaning the kidneys, it also relieves burning during urination (TH2). It is also able to deal with excess toxin build up from *isilonda* and *inyongo*.

*It is prepared by boiling and then using it as an enema, it helps in cleaning on the inside. When ingested it can even clean your kidneys. [TH1]*

*Since it is used for cleansing, it removes all the dirt on the inside including the dirt in your blood. [TH2]*

*It helps especially when one experiences burning during urination. [TH2]*

*It is used when someone wants to clean themselves on the inside, it can be used to induce vomiting. When they are suffering from inyongo. [TH11]*

*When one feels like there is something bothering them from the inside, usually things like isilonda. [TH4]*

Most of its modes of administration stated are in bathing, sprinkling, drinking and as a poultice. Its administration as an enema has not been discussed in literature although its effects in gastrointestinal complaints have been stated. Traditional healers discussed its application as an enema in dealing with bowel movement especially in children and infants.

*When an infant is struggling with their bowel movement, Umsinsi is boiled and used as an enema. (...) Others use it to induce vomiting, but it is generally used as an enema in children with a sore stomach or those struggling with their bowel and with bad stools. The child can drink it or have it introduced as an enema. [TH2]*

*It can also help in infants who have a difficulty passing stools, it is administered as an enema. [TH12]*

*It is an enema administered to young children to help with their bowel movement (...) No there is not, what I know is that mothers use it to help their infants to pass stools. [TH5]*

The application of *Umsinsi* in cancer has not be established or properly documented, although was stated by TH3.

*When someone is suffering from cancer, be it uterine, colon, spinal or throat cancer. I have seen recoveries in patients that I have treated, but as I have stated, it does not work alone, it is mixed with other herbal medicines for it to be effective in this way. [TH3]*

Applications of *Umsinsi* on skin complaints such as oily skin and skin eruption (pimples) are also undocumented in the literature, although, available literature points to its antimicrobial and purifying properties and its effect on sores and wounds may indicate its effect on pimples.

*It helps if you have pimples on your face or if you have oily skin. You steam with it. [TH1]*

TH1 discussed the effect of *Umsinsi* as an emetic in chest problems such as a tight feeling in the chest accompanied by a difficulty in breathing.

*The medicine can also be used to induce vomiting and for people with chest problems, for instance if you feel as though there's tightness on your chest or some sort of difficulty in breathing. [TH1]*

#### **5.4 RELATIONSHIP BETWEEN THE AFRICAN TRADITIONAL APPLICATIONS OF ERYTHRINA LYSISTEMON AND ITS TOXICOLOGY**

In understanding the medicinal applications of the crude *Umsinsi* bark in traditional medicine, the interview data obtained from traditional healers has been compared to the chemistry of *Erythrina lysistemon* previously discussed in section 2.4.4.

Juma and Majinda (2004) describe the anticancer activities displayed by *Erythrina lysistemon* extracts, erythrinaline alkaloids. TH3 confirmed the application of *Umsinsi* in combination with other herbal medicines in treating cancer.

**Interviewer:** What are the most common symptoms or conditions that are treated with the *Umsinsi*?

**TH3:** [In] Cancer

**TH3:** when someone is suffering from cancer, be it uterine, colon, spinal or throat cancer. I have seen recoveries in patients that I have treated, but as I have stated, it does not work alone, it is mixed with other herbal medicines for it to be effective in this way.

The applications of *Umsinsi* in cleaning open wounds and infections confirmed by TH1 and TH12 have been discussed by Khumalo et al (2017), crediting its effectivity to its prenylated pterocarpan and iso-flavonoids, that show that they are amongst the most potent plant-derived antimicrobial compounds, displaying antifungal and antibacterial activities, especially against *Candida mycoderma*, *Bacillus subtilis*, *Staphylococcus aureus* and *Escherichia coli*. This was correlated by TH1 and TH12. *Erythrina lysistemon* has also been used in treating dysentery, which often presents with stomach cramps amongst other symptoms. The symptom of stomach cramps in gastrointestinal complaints was discussed by several traditional healers (TH2, TH9 and TH10).

*What I can add is that the bark can also be burnt into ashes make insizi, but this is often mixed with other herbs. When a woman has just given birth and they have stitches, this herbal mixture will help to speed the recovery process. [TH1]*

*You can use it to directly wash or clean a wound for the wound to heal quicker and to keep it clean. [TH12]*

*Others use it to induce vomiting, but it is generally used as an enema in children with stomach cramps or those struggling with their bowel and with bad stools. The child can drink it or have it introduced as an enema. (...) It is usually with Umthombe [*Ficus craterostoma* - forest fig] but it is dependent on what the child is suffering from, stomach cramps or other complaints. [TH2]*

*One can drink the herb when they have stomach cramps and children can also drink this so that they can easily empty their bowels. [TH9]*

*It is used in young children who struggle with defecating, especially if the child shows signs of discomfort due to the stomach pains and has not been able to pass any stool in days. [TH10]*

Erythrina alkaloids have also proven to be effective in treating diabetes, in cholesterol gall stone prevention and have shown oestrogenic activities invitro (Khumalo et al 2017). Traditional healers discussed the applications of *Umsinsi* in cleaning the kidneys, dealing with excess bile production and in female complaints such as menstruation and delivery.

*It is prepared by boiling and then using it as an enema, it helps in cleaning on the inside. When ingested it can even clean your kidneys. It is useful in multiple conditions. [TH1]*

*Since it is used for cleansing, it removes all the dirt on the inside including the dirt in your blood. [TH2]*

*It is used when someone wants to clean themselves on the inside, it can be used to induce vomiting. When they are suffering from inyongo [TH11]*

*Yes, I do, it works in a lot of conditions, it works for cancer, it works in cleansing, it works for women who bleed non-stop from their menses, it helps to shorten the bleeding period. [TH3]*

*sometimes women also use it shorten the bleeding process during their menstruation. [TH12]*

*What I can add is that the bark can also be burnt into ashes make insizi, but this is often mixed with other herbs. When a woman has just given birth and they have stitches, this herbal mixture will help to speed the recovery process. [TH1]*

*It is given infused with other herbs and given to women in labour to drink to ease the pain and quicken the process, it helps in the recovery process as well.*  
[TH12]

## **5.5 ERYTHRINA LYSISTEMON APPLICATIONS IN CONJUNCTION WITH OTHER HERBAL MEDICINES**

Several traditional healers discussed the preparations and administration of *Erythrina lysistemon* in combination with other herbal medicines. A brief discussion on the applications of these herbal concoctions and how they relate to the applications of *Umsinsi* is included.

TH1 described the preparations and applications of *Umsinsi* bark with *unsukumbili*, *African potato* and *umathunga* in dealing with sores, ulcers and as an immune booster.

*It can be mixed with unsukumbili (Hypericum aethiopicum), African potato (Hypoxis hemerocallidea) and umathunga (Eucomis autumnalis - autumn pineapple lily). These plants are first ground and boiled together for about 30 minutes, let the mixture cool first before drinking. One should drink a quarter of a glass of this mixture twice a day. This concoction helps to boost your immune system and other things such as ulcers, but Erythina lysistemon only works for this condition when mixed with these other herbs. It also helps in quickening the recovery time for internal (ulcers) and external wounds. [TH1]*

*Unsukumbili – Hypericum aethiopicum* is used in kidney infections, venereal diseases, sores, and wounds (Mthethwa 2011). The African potato, *Hypoxis hemerocallidea* known as “*inkonfe*” in isiZulu is well known and used in urinary tract conditions including cystitis, benign prostatic hyperplasia (BPH), testicular tumors and prostate cancer. It has also been applied in lung diseases, such as lung cancer and tuberculosis. Other conditions including arthritis, psoriasis, cardiac diseases, intestinal parasites, burns, ulcers and HIV are all treated with the African potato. It can be applied directly to promote wound healing, with studies showing its efficacy in

enhancing T cell functioning, boosting the immune system and as an antioxidant with antidiabetic, anti-bacterial and anti-fungal properties (Anon 2016).

According to Notten (2002), *Eucomis autumnalis- umathunga*, is usually administered as an enema for lower backpain and wound therapy, especially in post-operative recovery and in healing fractures. Its decoctions are also used in various ailments, such as urinary diseases, stomach pains, fevers, colic, flatulence and in facilitating childbirth. Its toxicology also presents with anti-inflammatory and antispasmodic properties.

These herbs have converging applications such as wound healing, dealing with kidney problems and boosting the immune system amongst others, confirming the discussions from TH1 with regards to the applications of *Umsinsi* in this herbal concoction.

TH2 discussed the application of *Umsinsi* with umthombe [*Ficus craterostoma* – forest fig] in dealing with stomach cramps and in cleansing.

*It is usually (mixed) with umthombe, but it is dependent on what the child is suffering from, stomach cramps or other complaints. The forest fig is also boiled with Erythrina lysistemon and given to the child to drink or as an enema. Both these medicines do not cause any harm as umthombe is also useful in cleansing the blood and used similarly to any other herbal concoction. [TH2]*

*Ficus craterostoma* is used similarly to *Ficus natalensis*, which is often an ingredient in *imbembe*, which is taken during pregnancy to ensuring an easy birth. The roots can be prepared by soaking in water overnight and administered orally to cleanse the blood. The leaves are used as poultices for wounds, boils, warts, and other skin growths (Notten 2017). The documented application of Umthombe confirms TH2's discussion and relates to the applications of *Umsinsi* in cleansing the blood, child-birth and wound healing.

The applications of *Umsinsi* in an herbal concoction with *umbola*, *umdoni* and *imbozisi* in cleansing and removing *idliso* were discussed by TH8.

*It is mixed with umbola [Eucomis bicolor - pineapple lily], umdoni [Syzygium cordatum – water berry], imbozisi [Foeniculum vulgare – fennel] and iAlamu to help get rid of poisoning [idliso]. It works effectively with these medicines because in most cases it basically cleans an individual on the inside. [TH8]*

According to Dibakwane (2015), *Eucomis bicolor* is used in traditional medicine as a purgative and in treating colic. *Syzygium cordatum*, known as *Umdoni* in isiZulu, is used for respiratory ailments such as cough, tuberculosis, in female complaints including amenorrhea, in wounds and headaches and is a purgative used as an emetic in gastrointestinal complaints such as stomach aches, indigestion and diarrhoea (Fern 2014).

Imbozisi [*Foeniculum vulgare*] is believed to be an antidote to witchcraft and is used as in gastrointestinal complaints as a digestive tonic for flactulence and as a purgative. Other conditions include upper respiratory complaints, kidney stones and menstrual complaints (D'Souza 2014). The applications indicated for these herbs echo the applications discussed by TH8, especially for removing *idliso* via vomiting as most of these herbs are indicated as emetics and purgatives.

## **5.6 THE RELATIONSHIP BETWEEN THE AFRICAN TRADITIONAL AND HOMOEOPATHIC APPLICATIONS OF ERYTHRINA LYSISTEMON**

### **5.6.1 Head**

The desktop review of traditional applications describes *Erythrina lysistemon* as a purifying emetic that relieves headaches. *Erythrina lysistemon* can be described as a detoxifying agent, there is however no available literature on how the *Erythrina* alkaloids may be involved in this manner, although, most of the symptoms presented have to a relation to toxin build up. *Umsinsi*, as discussed by TH1, is considered a part

of red medicines [*imithi ebomvu*] which are medicines that can pull out ‘the bad’ or illness from a diseased individual.

*It is the kind of medicine you mix with other red medicines. [TH1]*

The traditional healers also described the sense of internal toxicity, the concept of *inyongo* and one being “dirty on the inside” with *Erythrina lysistemon* being used to cleanse such individuals. The ‘dirt’ described here is not limited to the toxin build but also in the metaphysical sense of *idliso* which will be discussed further below.

Whilst the materia medica establishes a similarity between the two medicinal applications, it also describes the headache of *Erythrina lysistemon* that is accompanied by a sore or stiff neck. The headaches are also described as heavy and terrible with stabbing and unbearable pains. In the materia medica of *Erythrina lysistemon*, the headaches can also be found radiating to the frontal, occipital and temporal regions with some sort of eye involvement. The neck stiffness expressed can be linked to the applications of *Erythrina lysistemon* in muscle pains as a muscle relaxant and its effect as an anti-inflammatory and analgesic medicine.

### 5.6.2 Stomach

The stomach cramps described by traditional healers are presented mostly in children and infants, in which *Umsinsi* can be prepared in a mixture with other herbs.

*It is usually (mixed) with umthombe [*Ficus craterostoma*/ the forest fig] but it is dependent on what the child is suffering from, stomach cramps or other complaints. Umthombe is also boiled with Umsinsi and given to the child to drink or as an enema. Both these medicines do not cause any harm as umthombe is also useful in cleaning the blood and used similarly to any other herbal concoction. [TH2].*

The concept of ‘cleaning on the inside’ is also mentioned here, where the traditional healer was referring to a child suffering from stomach cramps. The reviewed literature also mentions the effectivity of *Umsinsi* in dealing with stomach-aches and stomach

cramps, which can also be caused by *idliso*. This can only be removed by purging or induced vomiting using *Umsinsi* and is regarded as a form of cleansing.

The stomach cramps have also been found in the materia medica, these cramps are accompanied by loose stools and are relieved by the passing of stools. In African traditional medicine, *Umsinsi* is also used to allow for the passing of stools, this concept is also discussed under the abdomen section in 5.6.3 and in detail under the section on stool in 5.6.13.

<b><i>Proving symptom</i></b>	<b><i>Traditional healer experience</i></b>
<i>Felt better by evening although still getting a bit of tummy cramps – like I really need toilet but then tummy is not runny.</i> <b>[17F]</b>	<i>One can drink the herb when they have stomach cramps and children can also drink this so that they can easily empty their bowels</i> <b>[TH9]</b>

### 5.6.3 **Abdomen**

The abdominal pains described by traditional healers are often due to a disturbance in the bowel movement. *Umsinsi* is then administered as an enema to facilitate in the bowel movement and to relieve abdominal pains. One traditional healer described the applications of *Umsinsi* as being that of getting rid of *Isilonda*. In traditional healing, *isilonda* is a condition caused by waste product build up in the body leading to constipation, abdominal pain, tiredness, and other symptoms.

*When one feels like there is something bothering them from the inside, usually things like isilonda* **[TH4]**

Again, *Umsinsi* is seen as an herb that can be introduced via drinking or as an enema to clean one from ‘the inside’ and relieve them from their suffering.

The materia medica records similar symptoms with incidences of flatulence and bloating and complaints of lower abdominal pain that is worse for pressure and after urinating. The pain is described as pulsating and radiating.

#### 5.6.4 Urinary system

The urinary symptoms presented from both the field interviews and the materia medica were very limited. The materia medica presents with abdominal pains after urination whilst the traditional applications present with a burning sensation on urination. The theme of cleaning is also continued in the urinary system with the suggestion that *Umsinsi* helps with cleaning of the kidneys to deal with the burning urine.

*When ingested it can even clean your kidneys. [TH1]*

#### 5.6.5 Chest

Traditional medicine suggests the application of *Umsinsi* in inducing vomiting and for people with chest problems. The concept of induced vomiting here is also linked with the concept of purging, referred to as *ukugabha* in isiZulu, this is often conceived from the idea that the chest feels tight due to phlegm build up

The materia medica presents symptoms of shortness of breath and stabbing pains in the chest area. The stabbing and tightness is also felt around the heart. These symptoms for both medicinal systems are consistent with the plant toxicology.

<i>I woke up in the morning with tightness around my heart. Seemed to go away for a while. [26M]</i>	<i>For people with chest problems, for instance if you feel as though there's tightness on your chest or some sort of difficulty in breathing. [TH1]</i>
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#### 5.6.6 Respiration

The toxicology of *Erythrina lysistemon* suggest that, due to the high alkaloid content in the seeds, if ingested they can cause paralysis which can also lead to death by respiratory failure, suggestion paralysis of the respiratory organs. Both traditional healers and homoeopathy provers did not express indepth the applications of *Erythrina lysistemon* in respiration, the symptoms were linked to the chest problems as discussed in the previous section.

### **5.6.7 Female complaints**

The related literature of *Umsinsisi* toxicology revealed estrogenic effects invitro. This may be suggestive to its effect in assisting with the menstrual blood flow, especially for the women who bleed for long periods of time, where traditional healers are able to shorten the period of the menstrual bleeding.

Alongside other herbs, *Umsinsi* can also be used during delivery to aid in the birthing process, not only does it assist in this, it is also used post labour to help with the recovery process and with the surgical stitches.

One traditional healer suggested that the bark can be burnt, and the ashes used in conjunction with other herbs to apply on surgical stitches post-delivery. This is in line with the related literature suggesting the use of *Erythrina lysistemon* as an antibacterial to disinfect open wounds. The toxicology of *Erythrina lysistemon* has also highlighted its antimicrobial and anti-inflammatory properties.

The homoeopathic applications of *Erythrina lysistemon* in female related conditions are very limited, with only one symptom of a white discharge recorded in its materia medica.

### **5.6.8 Musculoskeletal system**

Traditionally *Umsinsi* is applied in fractures and sprains as suggested by its toxicology to have anti-inflammatory properties. Homoeopathically, there is tightness of muscles especially around the calves, where the tightness is relieved by stretching.

A deep muscle ache between the shoulder blades and lower back pain are also presented in the materia medica, the backpain is worse for bending forward and relieved by warm compresses. Interesting to note, is that the symptoms of *isilonda*, the condition caused by waste build up and treated with *Umsinsi* are abdominal pain and lower back pain. among other symptoms.

### 5.6.9 Skin

The traditional applications suggest that *Umsinsi* can be used to combat skin issues such as pimples and oily skin, when introduced through steaming. Steaming can be considered a cleansing technique; it helps open the pores of the skin and helps in loosening up any dirt build-up to allow for a deeper cleanse and for the herb to be easily absorbed.

*Erythrina lysistemon*s prenylated flavonoids prove to produce antimicrobial activity, hence they would be effective in dealing with pimples. Although the nature of the pimples is not described in traditional medicine, the material medica suggest that the pimples are fine white and are found on the forehead and other parts of the body such as the inner leg and knee. The skin is described as generally itchy in the materia medica, whilst an oily skin appearance is described in traditional medicine.

<i>Noticed 2-3 very small fine pimples on my forehead between my brows. Some had a tiny white head; others were red and seemed to be still developing. [03F]</i>	<i>It helps if you have pimples on your face or if you have oily skin [TH1]</i>
<i>Noticed forehead has red spots/pimples. [07M]</i>	

Other symptoms not indicated in traditional medicine that are produced in the materia medica include: a formication felt over the skin in various parts of the body with an itchy, tingling, crawling sensation that moves about the body randomly and is better for rubbing but not relieved by scratching. The tingling also brings about a sensation as though the face were about to go into a spasm.

### 5.6.10 Earache

With the alkaloids presenting with analgesic properties, infusions of the herb can be used to relieve earache as suggested by the related literature. There are, however, no

available earache symptoms presented in the material medica or any presented by the data from the field interviews.

#### 5.6.11 Toothache

Similarly to relieving earache, the available alkaloids present with analgesic and anti-inflammatory symptoms. Traditionally, *Umsinsi* is used to relieve toothaches accompanied by swollen gums. The material medica also describe its effectivity on toothaches that are accompanied by the clenching of teeth and a sour taste in the mouth.

<i>Bottom right-hand side feels like I have a slight toothache. [21M]</i>	<i>It is used in treating teeth complaints...For toothache and gum swelling. [TH7]</i>
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#### 5.6.12 Nausea and vomiting

As established, the bark of *Umsisi* is traditionally used as a purifying emetic for gastrointestinal tract discomforts. It can be used to induce vomiting for other various reasons, namely during the processes of cleansing. The notion of cleansing is usually conducted this way to relieve conditions such as *inyongo*, *idliso* and a build-up of phlegm.

In the material medica, the nausea picture echoes that of its traditional application with the nausea described as though there was something clogging the throat. The nausea is worse for eating fatty foods and presents with a sour or bitter taste in the mouth.

The sour or bitter taste can be indicative of its application in relieving *inyongo* (excess bile). The sour taste in *inyongo* is usually due to bile reflux through the oesophagus, it can also lead to the actual vomiting of bile, presented as a green-yellow fluid. No actual vomiting was however presented in the material medica.

<p><i>Nausea still present as if something clogged in throat and irritating cough. Feeling nauseas. [06F]</i></p> <p><i>Felt horrible and a bit nauseous all evening. [10F]</i></p>	<p><i>The medicine can also be used to induce vomiting and for people with chest problems, for instance if you feel as though there's blockages on your chest or some sort of difficulty in breathing. [TH1]</i></p> <p><i>It can be used to induce vomiting. When they are suffering from <u>inyongo</u> [TH11]</i></p>
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### 5.6.13 Stool

Although there is very little mention of the presentation of stools in the traditional applications of *Umsinsi*, with one traditional healer stating that it is indicative for “*those struggling with their bowel movement and with bad stools*”. [TH2], its main applications in the gastrointestinal tract and its mode of administration, as an enema, may indicate its relation to the presentation of the stools in the material medica,

The stools presented in the material medica are frequent “spluttering and spraying” stools. The stools are also loose and explosive with many references to diarrhoea. The curative action of an enema is to loosen and cause an almost immediate release of the stools. Due to the herb being presented in a fluid form, this fluid is expelled together with the stools.

### 5.6.14 Wounds and infections

According to literature, as a herb *Erythrina lysistemon* has been used as a poultice to treat sores, wounds and abscesses. It has also been used in cleaning open wounds to prevent the development of an infection and in clearing maggots in myiasis (Mukandiwa 2013).

TH1 mentioned its application in females on surgical stitches post-delivery and also mentioned its effectivity on curing sores on the inside and on the outside. Its effectivity

can be credited to its antibacterial and general antimicrobial activity due to the present alkaloids.

Infections under the nail with a discharge from under the nail evident on pressure being applied to the area were also presented in the materia medica to echo its traditional applications.

**5.6.15 Mental and metaphysical symptoms**

African traditional medicine is used for its physical therapeutic effects, as well as its metaphysical properties, as most diseases are credited to different causes, such as witchcraft (*idliso* and *inyoni*), toxin build up (*inyongo* and *isilonda*), the presence of bad spirits or as a form of punishment from the ancestors.

As the lucky bean tree, *Umsinsi* is used for its ability to produce good luck and rid of bad luck. It is believed to be an anti-sorcery medicine, which is understood to offer protection for the living and the dead as it has been planted around graveyards and homesteads (Hutching 1996:145). There is also mention of the herb being sprinkled around the homestead to get rid of bad spirits and offers protection against one's enemies, especially those that able to harm through witchcraft.

Prover 26M describes a nausea with a sensation as though there is something foreign in their body and both TH11 and TH8 discussed the applications of *Umsinsi* in inducing vomiting for individuals with *idliso*, which is something 'foreign' to them - a metaphysical poisoning introduced into them through witchcraft. TH6 also discussed the idea of a foreign *inyoni*, which can be introduced through vomiting.

<i>I also was feeling a bit nauseous in the evening. It was a deep nausea but not like I needed to vomit. Felt like there was something foreign in my body. [26M]</i>	<i>Others use it to induce vomiting if they think they have been poisoned [idliso] to get rid of the poison that is within them. [TH11]</i>  <i>It is used for cleaning on the inside, most people use it in removing inyoni [TH6]</i>
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The available literature discussed the applications of *Umsinsi* in behavioural depression, nervous complaints such as anxiety and mental disturbances. The mental picture in the materia medica echoed these applications, presenting with frustration and irritability, changeable moods, decreased energy and a difficulty in concentration, which can be linked to an excess waste build up in the system. The confidence that has been described in the materia medica as a surge of confidence can perhaps be attributed to its traditional applications, such that when one feels at luck, respected and protected they can easily feel confident.

## **5.7 CONCLUSION**

This chapter discussed the relationship between the homoeopathic and traditional applications of *Erythrina lysistemon* and in relation to its toxicology. The main areas of overlap between the two respective medicinal systems were highlighted and the main implications of *Umsinsi* have been identified as that of cleaning and removing excess toxins from the body. Its toxicology suggests its effectiveness in open wounds and infections. Traditionally, it is also viewed as a plant producing luck and offering protection.

## **CHAPTER 6**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **6.1 CONCLUSIONS**

##### **6.1.1 Research objectives**

In this study, two main objectives were set up:

The first objective was to identify traditional medicinal uses of *Erythrina lysistemon* from published sources and field interviews with traditional healers in the greater Durban area. In fulfilling this objective, the following questions were put in place,

- What are the traditional applications, preparation methods and modes of administration of *Erythrina lysistemon* [*Umsinsi*] that have been identified by traditional healers?
- To what extent is the traditional use of the plant able to be attributed to the documented pharmacology and/or toxicology of the plant material?

The traditional healers that were interviewed understood the applications of *Erythrina lysistemon*:

- In its ability to induce vomiting, as a detoxifying agent in cleansing one's self. Its ability to clean the blood and the kidneys, in dealing with excess bile.
- In gastrointestinal complaints dealing with stomach cramps and decreased or lack of bowel movement especially in children.
- In female complaints, in shortening the menstrual bleeding, during and post-delivery, in quickening the labour process and in post-surgical stitches.
- In cleaning of open wounds to prevent infection and quicken the recovery process.
- In skin complaints such as oily skin and in dealing with skin eruptions.
- In musculoskeletal complaints such as muscle sprains.
- In dealing with toothaches and gum swelling.

- Respiratory complaints, such as difficulties in breathing and tightness around the chest.
- Metaphysical applications, including protection from witchcraft, getting rid of bad spirits and getting rid of *idliso* and *inyoni*.

The preparation methods mostly comprise of grinding and boiling the bark of *Erythrina lysistemon*. The herb is either prepared alone or in combination with herbal medicines such as *insukumbili*, *umbola*, *umathunga*, *umdoni* and the African potato or in the making of *intelezi*. In administering the medicine, the most common methods established are orally [drinking- *ukuphuza*] either for healing or inducing vomiting [*ukuphalaza*], as an enema [*ukuchatha*], a poultice [*ukuthoba*], in bathing, sprinkling [*ukuchela*], steaming [*ukufutha*] and applying directly on the affected area.

A pharmacology review of *Eythrina lysistemon* revealed that the prenylated alkaloids and isoflavonoids render it effective with antimicrobial, anticancer, cholesterol gall stone prevention, oestrogenic, analgesic, anti-inflammatory, anti-diabetic activities. Accounting for most of its applications in traditional medicine.

The second objective was to explore the similarities and/ or the differences existing between the homoeopathic and traditional African medicinal systematic uses of *Erythrina lysistemon* in terms of the spheres of influence, sensations and other distinguishing features. The following research question was set up in fulfilling this objective:

- To what extent are there overlaps between proving symptoms and traditional indications of the plant material, suggesting a 'homeopathic' application within the traditional application?

The applications of *Erythrina lysistemon* in African traditional medicine did indeed present with areas of overlap and echoing applications to the materia medica. The application areas of overlap that included, but were not limited to, are the following:

- Head - headaches
- Stomach – stomach cramps
- Abdomen –pain and disturbances in the bowel movement
- Urinary system- pain and burning during urination
- Chest and respiration -tightness and difficulty breathing

- Musculoskeletal – sprains and cramps
- Female complaints
- Skin - pimples
- Nausea and vomiting
- Stool
- Wounds
- Mental and metaphysical symptoms

I would highlight how most of the studies done on the toxicology and pharmacology of *Erythrina lysistemon* have echoed its applications in traditional African medicine, where as in the scientific world, traditional medicine is often doubted and questioned and its effectivity sometimes credited to the placebo effect with the same applying to homoeopathic medicine. These medical systems have a long-standing history and have proven themselves over the years. *Erythrina lysistemon* has also been acknowledged in African traditional medicine and used for over a wide range of conditions, including the mental symptoms that have been reflected in available literature of the metaphysical symptoms.

#### **6.1.2 Limitations of the study**

The interviews were conducted in a single geographic area in Durban and does not represent the general traditional medicinal applications of *Erythrina lysistemon* across the whole Zulu culture. Furthermore, these applications may not be confirmed in other African cultures that have not been represented in this study.

#### **6.1.3 Strengths of the study**

The traditional healers, that were interviewed, confirmed almost all the medicinal applications available in literature and most of the applications were confirmed by more than one traditional healer. Some traditional healers provided more applications not available in literature that can be backed up by the plant's chemical composition rendering the information they provided reliable.

## **6.2 RECOMMENDATIONS**

The study of *Erythrina lysistemon* revealed application similarities between the traditional African and homoeopathic medicinal systems, therefore, the study recommends a comparative study between the traditional African and homeopathic medicinal systems in terms of their approaches to treatment of specific conditions that can be managed by both systems.

Similar to this study, a comparative study of other medicinal substances that have been proven in Homoeopathy and are used in African traditional medicine can be conducted.

The information attained from traditional healers that is not readily available in literature revealed the value of attaining knowledge from traditional healers, as there is a tendency for a greater dependency on science, without consulting with the indigenous people who have practical experience in using these medicinal substances everyday. This also suggested the need for a broader pursuit and active documentation of knowledge in indigenous systems.

One of the challenges of this study was gaining trust from the traditional healers for them to be comfortable enough to reveal their ways of practice. They were initially suspicious and some were not willing to share any knowledge without any incentive of any kind, therefore, for a future study that may include interviewing traditional healers, some sort of reward may be ideal and a proper explanation as to why the knowledge is being requested from them is highly required and essential.

As an IsiNdebele speaking individual, the assistance of an IsiZulu home language speaking colleague was greatly useful. It may also be intimidating approaching traditional healers as a singular individual. For these reasons, I would therefore recommend that should a similar study be conducted, they should seek assistance from an abled individual.

The transcription and translation of the data involved 3 different individuals who were familiar with the study. I would therefore suggest the same for future studies, to avoid misinterpretation and decontextualization of the translations, should the translator not be familiar with the data as most IsiZulu words tend to present with double or triple meanings.

The NVivo qualitative software used for data analysis in this study is of great use for similar studies but it can, however, decontextualise data and should be used with caution.

### **6.3 CONCLUSION**

In my pursuit to complete this study, I have developed a different view and understanding of traditional medicine and have a new appreciation for our continent and the vast knowledge that is available amongst the indigenous people that has not been discovered by science. I conclude that there is still a tremendous amount of indigenous knowledge in medicine, disease and health that still needs to be appropriately documented.

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# APPENDIX A – ETHICAL CLEARANCE

## CERTIFICATE

		<p>Institutional Research Ethics Committee Research and Postgraduate Support Directorate 2nd Floor, Benayn Centre Gate 1, Soko Biko Campus Durban University of Technology PO Box 1174, Durban, South Africa, 4001 Tel: 031 370 1071 Email: <a href="mailto:ipethat@dut.ac.za">ipethat@dut.ac.za</a> <a href="http://www.dut.ac.za/research/institutional_research_ethics">http://www.dut.ac.za/research/institutional_research_ethics</a> <a href="http://www.dut.ac.za">www.dut.ac.za</a></p>
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16 October 2019

Ms L. Nyoni  
33 Deneberma  
293 Bartle Road  
Umbilo  
Durban  
4001

Dear Ms Nyoni

**A comparative study of the relationship between the applications of Erythrina lysistemon (Umsinsi) within the Traditional African and Homoeopathic medicinal systems**  
**Ethical Clearance number IREC 129/19**

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

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

In addition, the IREC acknowledges receipt of your gatekeeper permission letter.

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 IREC according to the IREC SOP's.

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

Yours Sincerely

  
Professor J.K. Adam  
Chairperson: IREC



## **APPENDIX B – GATE KEEPER PERMISSION**

Warwick Triangle  
Muthi Market  
Durban  
4001

11 September 2019

### **RE: PERMISSION TO CONDUCT RESEARCH STUDY AT THE WARWICK TRIANGLE MUTHI MARKET**

Dear Ms Nyoni

I am pleased to inform you that you have been granted permission to conduct your research study at the Warwick Triangle Muthi Market.

If you encounter any challenges or require any further assistance, please do not hesitate to contact me on:

071 501 3719  
MR V. KHUMALO - MUTHI MARKET COMMITTEE MEMBER

Best wishes on your study.

## **APPENDIX C – LETTER OF INFORMATION**

### **(ENGLISH)**



### **LETTER OF INFORMATION**

**Title of the Research Study:** A comparative study of the relationship between the applications of *Erythrina lysistemon* (*Umsinsi*) within the Traditional African and homoeopathic medicinal systems.

**Principal Investigator/s/researcher:** Ms Linnet Nyoni,  
MHSc. Hom

**Co-Investigator/s/supervisor/s:** Prof. Ashley Ross,  
DTech. Hom

**Brief Introduction and Purpose of the Study:** The aim of this study is to determine the similarities or differences that exist between the homoeopathic and traditional uses of *Erythrina lysistemon* (*Umsinsi*), with the use of a homoeopathic proving data, a desk study and interviews with traditional healers.

**Outline of the Procedures:** Traditional healers from the Durban area will be interviewed to gain knowledge and an understanding of the traditional medicinal uses of *Erythrina lysistemon* (*Umsinsi*). I will conduct 15 to 20-minute-long interviews at your location. The interview sections may be repeated if I think there is need for such but I will contact and notify you beforehand.

**Risks or Discomforts to the Participant:** There will be no risks to you in the research study.

**Benefits:** I will receive a Master of health science degree in Homoeopathy qualification upon completing the research study and you as the participant will develop an insight into the applications of *Erythrina lysistemon* (*Umsinsi*) within Homeopathic and traditional African medicine.

**Reason/s why the Participant May Be Withdrawn from the Study:** You may be withdrawn from the study if you wish to do so. There will be no adverse consequences for you should you choose to withdraw.

**Remuneration:** You will not receive any money or other types of payments. Participation is completely voluntary.

**Costs of the Study:** You will not be involved in contributing towards the costs of the study; this will be the researcher's responsibility.

**Confidentiality:** Your identity will be safeguarded; anonymity will be used as you will be allocated a unique research code number. The informed consent will be kept separately from the audiotape recording to maintain confidentiality. The list of codes with all participant names attached will also be password protected. Data collected will be electronically stored with password protection for a period of 5 years and obliterated afterwards.

**Research-related Injury:** There is no expected research related injuries.

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

Please contact the researcher, Ms. Linnet Nyoni on 073 772 6758/ 031 205 0810, my supervisor Prof Ashley Ross on 031 373 2542 or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support, Prof S Moyo on 031 373 2577 or [moyos@dut.ac.za](mailto:moyos@dut.ac.za)

## **APPENDIX D – CONSENT FORM (ENGLISH)**



### **CONSENT**

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

- I hereby confirm that I have been informed by the researcher, Ms. Linnet Nyoni, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: IREC 129/19.
- 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, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized 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**  
**Thumbprint**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Time**

\_\_\_\_\_  
**Signature / Right**

I, Linnet Nyoni (Name of researcher) 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**

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

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature**

## **APPENDIX E – LETTER OF INFORMATION**

### **(ISIZULU)**



#### **INCWADI YOLWAZI**

**Isihloko socwaningo:** Ucwangingo lokuqhathanisa ubuhlobo phakathi kokusetshenziswa kwe-*Erythrina lysistemon* (Umsinsi) izinhlelo zokulapha ngemithi yesintu kanye ne-Homoeopathy.

**Umphenyi oyinhloko / umcwaningi:** Ms

Linnet Nyoni

**Umphathi:** Prof. Ashley Ross, DTech. Hom

**Isingeniso esifushane kanye nenhloso yocwaningo:** Inhloso yalolucwaningo ukuhlola ubudlelwane kwezinhlelo zokusebenza ze-*Erythrina lysistemon* (Umsinsi) phakathi kwe-homoeopathy kanye nokusetshenziswa ngokwendabuko, okuzosekelwa yi-homoeopathic proving, ukubuyekwezwa kwe desktop kanye nezingxoxo nabelaphi bendabuko endaweni yabo yokusebenza.

**Uhlaka Lwezinqubo:** Ngizoqhuba izingxoxo ezihleliwe nabelaphi bendabuko endaweni yaseThekwini ukuze ngithole ulwazi mayelana nokusetshenziswa ka-*Erythrina lysistemon*(Umsinsi) ngokwendabuko. Ngizoqhuba izingxoxo ezizothatha imizuzu engama-15 kuya kwengama-20 endaweni yokusebenza yomhlanganyeli wocwaningo. Izigaba zengxoxo zingabuye ziphindwe uma ngibona kunesidingo salokhu kodwa abahlanganyeli bazothintwa baziswe kwesikhathi.

**Izingozi noma ukuphazamiseka:** Ngeke kube khona izingozi kubahlanganyeli

abathintekayo kulolucwaningo.

**Izinzuzo:** Ngizothola iziqu ze-Masters in Health sciences in Homeopathy ekuphuthuleni lolucwaningo. Njengomhlanganyeli kulolucwaningi uzoqonda ukuthi (*i-Erythrina Lysistemon*) Umsinsi usetshenziswa kanjani kwi- Homoeopathy kanye nabelaphi bendabuko.

**Isizathu esingenza umhlanganyeli akhishwe ocwaningeni:** Ungakhishwa ocwaningeni uma ufisa ukuhoxa. Angeke kube namphumela omubi uma ufisa ukuhoxa.

**Umholo:** Akukho mali noma ezinye izinhlobo zenkokhelo ozozithola kulolucwaningo.

**Izindleko zocwaningo:** Wena mhlanganyeli wocwaningo angeke ube yingxenyekukhokheni izindleko zesifundo, lokhu kuzoba umthwalo womcwaningi.

**Okufihliwe:** Ubunikazi bakho buzofihlwa, ukungaziwa kuzosetshenziswa njengoba umhlanganyeli ngamunye uzonikwa inombolo yekhodi ethile yocwaningo. Izigcwadi zemvume zizogcinwa nokuhlukana ne-audiotape equkuthe izinkulumo ukuze ubuikazi bugcinwe bungaziwa. Uhlu lwamakhodi kanye namagama abahlanganyeli luzofihlwa nge-password Ulwazi oluqoqiwe luzogcinwa ngekompyutha ene-password isikhathi esingangeminyaka emihlanu bese iyacishwa emva kwalesisikhathi.

**Ukulimala okuhlobene nocwaningo:** Akukho kulimala okulindelekile okuhlobene nalolucwaninga.

**Abantu ozoxhumana nabo uma kuvele izinkinga noma imibuzo:**

Sicela uxhumane nomcwaningi, uMs. Linnet Nyoni ku 073 772 6758/ 031 205 0810, umphathi uProf Ashley Ross ku 031 373 2542 noma Institutional Research Ethics Administrator ku 031 373 2375.

Izikhazazo zingabikwa kuMqondisi: Research and Postgraduate Support, Prof S Moyo ku 031 373 2577 noma [moyos@dut.ac.za](mailto:moyos@dut.ac.za)

## **APPENDIX F – CONSENT FORM (ISIZULU)**



### **IMVUMO**

Isitatimende sokuvuma ukubamba iqhaza ocwaningeni:

- Ngiaqinisekisa ukuthi ngitshelwe umcwaningi, Nksz Linnet Nyoni\_\_\_\_(igama lomcwaningi), mayelana nokuphathelele nocwaningo, ukuziphatha, izinzuzo kanye nobungozi balolucwaningo – inombolo yokususa Ukuziphatha Kwezokucwaninga: **IREC 129/19**.
- Ngiyitholile futhi ngayifunda ngayiqonda kanye neminingwane yami ebhaliwe ngenhla (Incwadi yomhlanganyeli yolwazi) mayelana nokucwaninga.
- Ngiaqonda ukuthi imiphumela yocwaningo, kanye neminingwane yami ebala ubulili, ubudala, usuku lokuzalwa, iziqalo zamagama ami kuzokhanda umbiko wocwaningo.
- Ngenxa yezidingo zocwaningo, ngiyavuma ukuthi idatha eqoqwe kulolu cwaningo ingacubungulwa ohlelweni lwekhompyutha ngumcwaningi.
- Ngingakwazi, nganoma isiphi isikhathi, ngaphandle kokucwasa ukuhoxisa imvume yami nokuhlanganyela kulolucwaningo.
- Ngibenethuba elanele lokubuza imibuzo bese(ngokuzithandela kwami) ngisho ngokwami ukuthi ngikulungele ukuhlanganyela kulolucwaningo.
- Ngiaqonda ukuthi okusha okutholakale ngesikhathi lolucwaningo lwenziwa, okungenzeka kuphathelele nokuhlanganyela kwami kulolucwaningo ngizotshelwa ngako.

\_\_\_\_\_  
**Igama eligcwele lomhlanganyeli**

\_\_\_\_\_  
**Usuku**

\_\_\_\_\_  
**Isikhathi**

\_\_\_\_\_  
**Isignesha**

Mina, \_ Linnet Nyoni\_\_\_\_ (igama lomcwaningi) ngiaqinisekisa ukuthi lo mhlanganyeli uye waziswa mayelana nokuphathelele nocwaningo, ukuziphatha, izinzuzo kanye nobungozi balolucwaningo ngokugcwele.

Linnet Nyoni

\_\_\_\_\_  
**Igama eliphelele lomcwaningi**

\_\_\_\_\_  
**Usuku**

\_\_\_\_\_  
**Isignesha**

\_\_\_\_\_  
**Igama eliphelele loFakazi (uma likhona)**

\_\_\_\_\_  
**Usuku**

\_\_\_\_\_  
**Isignesha**

\_\_\_\_\_  
**Igama eligcwele le-Legal Guardian (Uma likhona)**

\_\_\_\_\_  
**Usuku**

\_\_\_\_\_  
**Isignesha**

## **APPENDIX G – INTERVIEW GUIDE (ENGLISH)**

### **Traditional African medicinal applications of *Erythrina lysistemon* (*Umsinsi*)**

1. What are the most common symptoms or conditions that are treated with this plant?
2. What are the modes of administration?
3. What therapeutic effects have you observed with the use of this plant?
4. Are there any observed ill effects?
5. Which parts of the plant are generally used for medicinal extraction?
6. How do you generally prepare the medicine?
7. Which patient age group is most treated with this medicine?
8. Which patient gender is most treated with this medicine?
9. Do you know about the history of the plant?
10. Do you have any other knowledge around the utilization of the plant medicine?

## **APPENDIX H – INTERVIEW GUIDE (ISIZULU)**

### **Umhlahlandlela wokuxoxa**

#### **Ukusebenzisa i*Erythrina lysistemon* (Umsinsi) kwezokwelapha ngesintu**

1. Yiziphi izimpawu noma izimo ezelatshwayo?
2. Yiziphi izindlela ezahlukene zokuphatha imithi?
3. Yimiphi imiphumela yokwelashwa oyibona ngokusetshenziswa kwalesi sitshalo?
4. Ingabe kukhona noma yimiphi imiphumela emibi ebhekene neziguli zakho ngemuva kokusebenzisa lesi sitshalo?
5. Yiziphi izingxenye zesitshalo ezisetshenziselwa isizinda somuthi?
6. Uvame ukulungiselela kanjani imithi?
7. Yiluphi uhla oludume kakhulu lweziguli zakho ezithola lomuthi?
8. Yibuphi ubulili obudume kakhulu kuziguli zakho obuthola lomuthi?
9. Uyazi ngomlando wesitshalo?
10. Yiluphi olunye ulwazi ongafuna ukulifaka mayelana nokusetshenziswa komuthi walesisitshalo?

## **APPENDIX I – INTERVIEW TRANSCRIPTIONS**

### **Durban Warwick Triangle Muthi Market**

#### **TRADITIONAL HEALER 1 (TH1)**

**Interviewer:** Yiziphi izimo noma izimpawu ezelashwayo?

**TH1:** *Umsinsi*, igxolo lakhona, uyalithatha uligaye noma uliqobe. Uwumuthi owuhlanganisa neminye imithi ebomvu. Usiza uma *unezinduna* ebusweni noma unamafutha ebusweni- *uyagquma* ngawo, usiza lapho nje.

Uphinde uphalaze ngawo nangaphakathi uyasiza futhi, uma unenkinga esifubeni sakho, *asithi* isfuba sakho siyavaleka usiza lapho ke ufika uvule isfuba sakho.

Ungaphinde uwuhlanganese neminye imithi yokuchatha, *ukuzihlanza* ngaphakathi, uyawubilisa ebese uchatha ngawo, uhlanza zonke indawo, izinso zakho nokunye okungabe kungcolile ngaphakathi. Uma uchama umchamo ongcolile, uyagezeka umchamo wakho.

Wenza into eziningi kahle kahle nje, awenzi nto eyodwa.

**Interviewer:** Uma uthi uyawuhlanganisa, yimiphi eminye imithi owuhlanganisa nayo?

**TH1:** Omunye owuhlanganisa nawo unsukumbili, *unguduza* (i-african potato) ufake nomunye umuthi okuthiwa umathunga obomvu, ukuhlanganisa ndawonye konke lokhu uyakugaya ukuqobe ukubilise kubile *imizuzu engamashumi amathathu* (engama -30) ebese uyakupholisa bese uyakuphuza, ikota (u-1/4) yeglass kabili ngosuku. Usiza ekwakheni amasosha omzimba uma uhlanganiswe nale mithi, awuzimeli wodwa, unsukumbili wona welapha noma upholisa izilonda ezingaphakathi nezingaphandle uphinde usize *ngokwelulamisa* ngokushesha.

**Interviewer:** Yibuphi ubulili obudume kakhulu kuziguli zakho ezithola lomuthi?

**TH1:** *Bobubili ubulili*, abesilisa nabesifazane – uma benesifo esifanayo bangakwazi ukuwusebenzisa ngedlela efanayo, ungasetshenziswa umuntu wesifazane nowesilisa ngendlela efanayo.

**Interviewer:** Uyawazi umlando walesitshalo?

**TH1:** Hhayi cha, umlando waso anguwazi kahle, ngazi isihlahla uma ngisibona nokuthi sisetshenziswa kanjani, into esetshenziswa kakhulu igxolo lakhona, abanye basebenzisa impande kodwa mina ngisebenzisa igxolo kakhulu. *Umsinsi* yisihlahla esikhulu futhi kubanzima ukuthi ukhiphe impande, kanti kulula ukuthola igxolo lakhona.

**Interviewer:** Yiluphi olunye ulwazi ongathanda ukulusho mayelana nokusentshenziswa komuthi walesisitshalo?

**TH1:** Okunye engingakusho okusalile ukuthi uyakwazi ukuwushisa, ushisha igxolo, uyawushisa ubeyinsinzi, awuwushisi wodwa uyawuhlanganisa. Uma usuka esibhedlela unomthungo ubuya kobeletha, uyakwazi ukuthatha insizi uyikhothe njengenzizi yokukhotha ukusiza umthungo usheshe *uhlangane*. Noma uma umuntu uma ephukile noma enyelile uyasiza ukuthi asheshe *alulame*.

Wona uwusizo empilweni yomuntu ngandlela eziningi.

## **TRADITIONAL HEALER 2 (TH2)**

**Interviewer:** Yiziphi izimpawu noma izimo ezelashwayo?

**TH2:** izimpawu ezelashwa ngomsinsi, ingane uma inamasimba amabi uyaphekwa *Umsinsi* ichathwe ngawo.

**Interviewer:** Yiziphi izingxenye zesitshalo ezisetshenziselwa isizinda somuthi?

**TH2:** Kusetshenziswa impande negxolo futhi liyasebenza.

**Interviewer:** uzilungiselela kanjani zona impande?

**TH2:** uyazipheka.

**Interviewer:** Uyawazi umlando wasitshalo?

**TH2:** Yisihlahla nje esasivele sikhona emandulo, abantu abadala babesenza umthunzi, basebesibona ukuthi kufanele ngabe siyakwenza ukuthi, siyageza futhi.

**Interviewer:** Yiluphi olunye ulwazi ongathanda ukulusho mayelana nokusetshenziswa komuthi walesisitshalo?

**TH2:** Njengoba sigeza, sisuke sisusa nje into engcolile ngaphakathi egazini. Abanye bayasisebenzisa ekuphalazeni, kodwa sona kahle sichatha ingane uma inamasimba amabi *noma* ilunywa isisu, iyaphuza iphinde ichathe.

**Interviewer:** Yibuphi ubulili obudume kakhulu kuziguli zakho ezithola lomuthi?

**TH2:** Bonke bayakwazi ukuwusebenzisa, abesilisa nabe sifazane bonke bawusebenzisa ngokufanayo *ngoba* usuke *uhlanza* ngaphakathi.

**Interviewer:** Uvame ukuwulungiselela kanjani lomuthi?

**TH2:** Uyawupheka. Ufaka amanzi ebhodweni, angabi maningi kakhulu, *kuyangokuthi* uzokwenzani, kodwa ayikho inkinga ngoba ngeke uwusebenzise *ngokweqile* (uwu – overdose). Bese uyawuqoba, uma unaso isigquli uwugqule busuyawufaka ebhodweni uwubilise uwubeke uphole bese uyachatha ngawo-ke. Abanye mabethanda bawufaka nobisi, *iLong life* nalo luyangena ekuchatheni, ma ufuna ukuphuza nakho ungawuphuza unobisi kodwa nawo ukhipha umchamo oshisayo nanoma yini, into engamanzi eshisayo ngaphakathi nesegazini.

**Interviewer:** Ayikho eminye imithi ohlanganisa nayo?

**TH2:** Uyasebenza wodwa kodwa futhi kuyangokuthi wena uwazelani nokuthi uyakholelwa kuwona uwodwa nokuthi uwusebenzisela, abanye *bayawuhlanganisa* neminye imithi.

**Interviewer:** Abajwayele ukuwuhlanganisa bona bawuhlanganisa nani?

**TH2:** Kujwayele ukuba umthombe kodwa *kuyangokuthi* ukuthi ingane inani, iyalunywa noma isongelene. Umthombe nawo bayawupheka, bawubilise nomnsinsi besebeyayiphuzisa ingane noma bayichathe ngawo, yinto engena bungonzi ngoba nomthombe uhlanza igazi, sesingathi njengomhlabele kanje.

**Interviewer:** Siyabonga

### **TRADITIONAL HEALER 3 (TH3)**

**Interviewer:** Yiziphi izimpawu noma izimo ezalashwa *Umsinsi*?

**TH3:** Ezilashwa *Umsinsi*, ngokwesintu angithi?

**Interviewer:** Yebo

**TH3:** Umdlavuza

**Interviewer:** Yiziphi izindlela ezihlukene zokusebenzisa umuthi?

**TH3:** Indlela zokuwusebenzisa? Umuthi angithi ucelwa kuqala emakhosini, ukuze uthole imvume

**Interviewer:** Uvame ukuwulungiselela kanjani?

**TH3:** Siyawuqoba besesiyawubalisa ube yimbiza

**Interviewer:** Ayikho eminye imithi ohlanganisa nayo?

**TH3:** kuba yimithi yesiZulu. Akufakwa muthi oyi-chemical.

**Interviewer:** Yiziphi ingxenye zesitshalo ezisetshenziselwa isizinda somuthi?

**TH3:** Impande embiwa phansi

Miningi futhi imithi ehlanganiswayo, angizikuzisho zonke izihlahla ngoba vele imithi iba miningi mhlambe ibawu-10 kodwa ngizoshona noma embalwa nje. Kuba *nentolwane*, impande yakhona nayo imbiwa phansi.

**Interviewer:** Uyawazi umlando wesitshalo?

**TH3:** Yebo ngiyazi, wenza izinto eziningi, uyangena kowo *mdlavuza*, uyangena ekugezeni umuntu, eyangena emithini yokuthi uma umutu eya esikhathini opha enganqamuki

**Interviewer:** yibuphi ubulili obudume kakhulu kuziguli zakho obuthola lomuthi?

**TH3:** Ngokulinganayo

**Interviewer:** Yiluphi olunye ulwazi ongathanda ukulusho mayelana nokusetshenziswa komuthi walesisitshalo?

**TH3:** Yindlela yokuwulandela, indlela owenziwa ngayo, kungafakwa imithi yesilungu, ake ngenze isibonelo, imithi enje ngo-bluestone noma oma-dettol, usetshenziswa nje wona njengoba unjalo, kuyiwona nje wodwa noma neminye imithi yesintu.

**Interviewer:** kukhona yini eminye imithi ohlanganisa nayo?

**TH3:** Mina kulomuthi lo ngiyawufaka ubeetroot

**Interviewer:** Kumsiza ngani umuntu uma ezokudla lokhu?

**TH3:** umuntu uma ephethwe *umdlavuza* kungabe ngeyesibeetho, yesisu, yomgogodla noma eyomphimbo, lapha sengisho ngoba ngibona ebantwini esengike ngabasiza ngababona belulama, kodwa phela awusebenzi wodwa angithi usuka usuwuhlanganiswe neminye imithi emininginingi, njengoba besengishilo nje.

**Interviewer:** Ingabe kukhona imiphumela emibi etholwa iziguli zakho ngemuva kokusebenzisa lesi sitshalo?

**TH3:** Imiphumela engaba mibi ukuthi uma bezohlanganisa neminye imithi engahambisani nayo.

**Interviewer:** Siyabonga.

#### **TRADITIONAL HEALER 4 (TH4)**

**Interviewer:** Uyawazi umlando womsinsi?

**TH4:** Siyazimilela isihlahla ehlathini, angazi kabanzi ngomlando waso. Kodwa kudala babesisebenzisa kumakhehlewane, bayifake ezinyaweni zabo uma beyosina. Babekusebenzisa uma bezogida, izintombi noma abantu abadala, omama.

**Interviewer:** Yiziphi izimpawu noma izimo ezelashwa ngomsinsi?

**TH4:** Uma kunemoya emibi egcekeni uyachela ngaso kodwa hayi sona sodwa, uyasixuba.

**Interviewer:** Usixuba nani?

**TH4:** usifaka entelezini ma ngingathi ngikutshele ukuthi usixuba nani kungashona ilanga sihleli lapha.

**Interviewer:** Bese wenzani-ke ngaso masusixubile

**TH4:** Uyachela

**Interviewer:** Yiziphi izingxenye zesitshalo ezisetshenziselwa isizinda somuthi?

**TH4:** Makungabe egula umuntu ungasebenzisa konke, impande nezithelo zakhona.

**Interviewer:** Yiziphi izindlela ezihlukile zokuphatha umuthi?

**TH4:** Uyachela, uma uthanda uyageza ngawo noma uwuphuze

**Interviewer:** Usume uwuphuzelani?

**TH4:** Uma ngabe kunezinto ezikuphethe kabi ngaphakathi, into ezifana nezilonda

**Interviewer:** Yiluphi olunye ulwazi ongafuna ukulifaka mayelana ngokusetshenziswa komuthi walesisotshalo

**TH4:** Ungakwazi ukuvika umuntu uma ngabe bemgwazile, ungakwazi ukuzivikela ngaso ezitheni.

**Interviewer:** Ingabe kukhona noma yimiphi imiphumela emibi engabhekana neziguli zakho?

**TH4:** Ayikho imiphumela emibi.

#### **TRADITIONAL HEALER 5 (TH5)**

**Interviewer:** Yiziphi izimpawu noma izimo ezelashwa ngomsinsi?

**TH5:** Uchatha abantwana, uma umntwana ezalwa ukuze akake amakaka amahle

**Interviewer:** Yiziphi izindlela ezihlukene zokuphatha umuthi

**TH5:** Uchatha ngawo

**Interviewer:** Yiziphi izingxenye zesitshalo ezisetshenziselwa isizinda somuthi

**TH5:** cha angazi kahle, ngisangakubuzela nami kodwa angazi.

**Interviewer:** Uma uchatha ingane, usebenzisa wona umnsinsi wodwa noma kukhona eminye imithi ohlanganisa nayo

**TH5:** Hayi usebenza wodwa ima ingane isazelwe.

**Interviewer:** Ingabe kukhona noma yimiphi imiphumela emibi uma uzosebenzisa lomuthi

**TH5:** hayi ayikho, into engiyaziyo ukuthi oma bayawusebenzisa besiza ingane

**Interviewer:** Uyawazi umlando wesitshalo?

**TH5:** Anguwazi

### **TRADITIONAL HEALER 6 (TH6)**

**Interviewer:** Yiziphi izimpawu noma izimo ezalashwa ngomsinsi?

**TH6:** *Umsinsi* wona wenzela ukuthi *ukuhlanza* nje, abantu bajwayele ukuwusebenzisa ekukhipheni inyoni

**Interviewer:** Yiziphi izindlela ezihlukene zokuphatha umuthi?

**TH6:** Uyageza ngawo kodwa masuhlanganisiwe, anguwazeli ukuthi uyageza uma uwodwa.

**Interviewer:** Uwuhlanganisa nani?

**TH6:** Miningi imithi, angisho ukuthi mhlambe ngifuna ukwakha intelezi.

**Interviewer:** Yimiphi imiphumela yokwelashwa oyibona ngokusetshenziswa kwalesisitshalo?

**TH6:** Mina ngijwayele ukuyisebenzisa uma umuntu ethi ufuna *ukuzihlanza*

**Interviewer:** Umuntu usuke *ezihlanza* ngoba kwenzenjani?

**TH6:** Mhlambe uma efuna ukukhipha inyoni

**Interviewer:** Yiziphi izigxenywe zesitshalo ezisetshenziselwa isizinda somuthi?

**TH6:** Hhayi mina angazi

**Interviewer:** Uyawazi umlando wesitshalo?

**TH6:** Cha umlando wakhona angiwazi kahle

**Interviewer:** Yiluphi olunye ulwazi ongathanda ukulusho mayelana nokusetshenziswa kwemithi yalesisitshalo?

**TH6:** Cha alukho

### **TRADITIONAL HEALER 7 (TH7)**

**Interviewer:** Yiziphi izimpawu noma izimo ezelashwa ngomsinsi?

**TH7:** Hhayi mina ngazi ukuthi ulapha amazinyo

**Interviewer:** Usiza kanjani, uma uthi ulapha amazinyo?

**TH7:** Ubuhlungu noma ukuvuvukala kwezinsini

**Interviewer:** Yiziphi izindlela ezahlukene zokuphatha lomuthi?

**TH7:** Uyawubilisa uxubhe ngawo

**Interviewer:** Yiziphi izingxenye zesitshalo ezisentshenziselwa isizinda somuthi?

**TH7:** Usebenzisa impande noma amagxolo akhona.

**Interviewer:** Uvame ukuwulungiselela kanjani umuthi?

**TH7:** uyawubilisa uwulinde uphole bese uxubha ngawo

**Interviewer:** Uwusebenzisa wodwa noma kukhona imithi ohlanganisa nayo?

**TH7:** usebenza wodwa

**Interviewer:** Uyawazi umlando wesitshalo

**TH7:** Hhayi angiwazi-ke umlando waso, uma uthi umlando kahle kahle ubuza ini

**Interviewer:** Ukuthi mhlambe kudala babewusebenzisela, kanjani, abantu abadala bawazelani nokuthi kuze sisetshenziswe lesisihlahla sasisetshenziselwani kudala

**TH7:** Hhayi cha mina ngisazi ngalendlela esisebenza ngayo

**Interviewer:** Yiluphi olunye ulwazi ongathanda ukulufaka mayelana ngokusetshenziswa komuthi walesisitshalo?

**TH7:** Cha nguwezela lokho nje kuphela

**Interviewer:** Ingabe kukhona noma yimiphi imiphumela emibi ebhekene nezigulu zakho ngemuva kokusebenzisa lesi sitshalo?

**TH7:** Awuna bungozi, ngoba uma uzoxubha akuna skali oskalayo ukuthi mhlambe ujiya kakhulu noma ubentekenteke njengamanzi, awuna bungozi.

### **TRADITIONAL HEALER 8 (TH8)**

**Interviewer:** Yiziphi izimpawu noma izimo ezelashwa ngomsinsi?

**TH8:** Umnsinsi uwuhlanganisa nombola, uphinde uwuhlanganise nomdoni, nemboziso enkulu nencane ngoba zibili vele mesuzofaka kancane iAlamu, kube wumuthi wokukhipha idliso. Manje vele uwusebenzisa nalemithi ngoba *Umsinsi* wona udinga *ukuhlanza* izinto ezingaphakathi esikhathini esiningi.

**Interviewer:** Manje umuntu uma kade bemdlisile uzowusebenzisa kanjani

**TH8:** Angithi kukhona umuntu othi udliswe elele, udliswa ngesilwane, uma uthola lowo muntu odlisiwe noma ezibonela yena ukuthi unendliso noma wena uma uthi waphupha udla, athi umuntu yebo ngihlale ngiphupha ngidla, usukedliswa ngesilwane vele lowo muntu, uma umsebenzisela lezo zinto ke lowo muntu lelodliso liyabola ngaphakathi liphume

**Interviewer:** Yiziphi izingxenye zesitshalo ezisetshenziselwa isizinda somuthi?

**TH8:** Kuwona umnsinsi?

**Interviewer:** Yebo

**TH8:** Isikhathi esiningi amagxolo. Kahle kahle uma wenza lomuthi usuke usebenzisa amagxolo wodwa kuyoyonke lemithi

**Interviewer:** Ingabe kukhona imiphumela emibi osuke wayizwa ngokusebenzisa *Umsinsi*?

**TH8:** Cha

**Interviewer:** Awuna bungozi?

**TH8:** Cha awunabo ubungozi

**Interviewer:** Ingabe kukhona enye indlela yokusebenzisa *Umsinsi* ngaphandle kokuthi ukhiphe udliso?

**TH8:** Mina ngiwazi ngakulesosigaba nje, mhlambe ungathola omunye ozothi umnsinsi mhlambe uyawenza umkhumiso wezilwane ngoba asiwazi ngezindlela ezifanayo.

**Interviewer:** Uyawazi umlando walesisitshalo?

**TH8:** Cha mina ngazi ukuthi umnsinsi *wokuzimilela*

**Interviewer:** Siyabonga

### **TRADITIONAL HEALER 9 (TH9)**

**Interviewer:** Yiziphi izimpawu noma izimo ezelashwa *Umsinsi*?

**TH9:** Usetshenziselwa ubuhlungu bomthungo uma umuntu wesifazane eqeda kubeletha noma uma umuntu esezobeletha kodwa ingane ingafuni ukuphuma, uyasiza ekutheni umuntu wesifazane asheshe abelethe ikakhulu uma esenesikhathi eside esezinhlungwini.

**Interviewer:** Yimiphi imiphumela yokwelashwa oyibona ngokuwusebenzisa ngalendlela?

**TH9:** Balulama kalula, nezinhlungu zibangcono

**Interviewer:** Yiziphi izindlela ezihlukene zokuphatha lomuthi

**TH9:** Uyawupheka bese uyawuphuza. Uyakwazi ukuthoba ngawo futhi

**Interviewer:** Ingabe kukhona noma yimiphi imiphumela emibi ebhekene neziguli zakhongemuva kokusebenzisa lesisitshalo?

**TH9:** Awunabo ubungozi, mhlambe uma uwuphuza ngeke uzwakale umnandi kodwa vele imithi eminingi injalo.

**Interviewer:** Yiziphi izigxenye zesitshalo ezisetshenziselwa isizinda somuthi?

**TH9:** Kusetshenziswa igxolo

**Interviewer:** Uvame ukuwulungiselela kanjani umuthi?

**TH9:** Uthatha igxolo, uligqule bese uyalibilisa liphole uphuze

**Interviewer:** Uyawazi umlando wesitshalo?

**TH9:** Kudala babewusebenzisa ekuzivikeleni, ikakhulu abantu abadala noma ngithi amakhosi ikakhulu ayewusebenzisa ekuzivikeleni, abanye babesakha imizi lapho okunomnsinsi khona ukuze bekwazi ukuvikela kalula ngawo, Uma vele ukhona ekhaya abantu babezizwa bevikelekile.

**Interviewer:** Yiluphi olunye ulwazi ongathanda ukulufaka mayelana ngokusetshenziswa komsinsi?

**TH9:** Uyakwazi ukuwuphuza uma uphethwe isisu, uyasiza ikakhulu enganeni ephethwe yisisu ukuthi ikwazi ukukaka kahle. Kodwa yilokho kuphela engikwaziyo

## **TRADITIONAL HEALER 10 (TH10)**

**Interviewer:** Yiziphi izimpawu noma izimo ezilashwa ngomsinsi?

**TH10:** Usiza enganeni encane enezinsuku izelwe ingakwazi ukukaka, uma ibonaka ukuthi ilunywa yisisu, uyayibona nje ingane ephethwe yisisu uma ikhala ukuthi iphethwe yisusi ikakhulu uma izoqeda izinsuku ingakwazanga ukukaka

**Interviewer:** Yimiphi imiphumela yokwelashwa oyibona ngokusetshenziswa komsinsi?

**TH10:** Ingane ivele ikwazi ukukaka nje ngosuku olufanayo, uyakwazi ukuyinikeza lomuthi namhlanje ekuseni, ntambama nje izobe sikakile isidlala. Usebenza ngesikhathi esincane.

**Interviewer:** Yiziphi izindlela ezahlukene zokuphatha lomuthi?

**TH10:** Uyaphuzwa kuphinde kuchathwe ngawo

**Interviewer:** Yiziphi izigxenywe zesitshalo ezisetshenziselwa isinda somuthi?

**TH10:** Kusetshenziswa igxolo noma impande

**Interviewer:** Uvame ukuwulungiselela kanjani lomuthi?

**TH10:** Uthatha igxolo uliqobe ebese uyalibilisa okwesikhashana nje, uphuza lawo manzi aphuma uma uqeda bilisa igxolo. Uyakwazi ukuwuphuza kodwa uma ingane ingakwazi ukuwuphuza ngoba eziwuthandisisi ngako ke uyakwazi ukuchatha ngawo futhi

**Interviewer:** Yiziphi izindlela ezahlukene zokuphatha imithi ngaphandle kokuphuza nokuchatha ngawo njengoba ubusushilo?

**TH10:** Abanye bayakwazi ukugeza ngawo umabethanda

**Interviewer:** Ubasiza ngani uma bezogeza ngawo?

**TH10:** Ukuzihlanza nje uma bezizwa bengcolile, abanye baziqinisa ngawo ukuthi babengabantu abahloniphekile emphakathini

**Interviewer:** Yiluphi uhla oludume kakhulu lweziguli zakho oluthola lomuthi?

**TH10:** Izingane kakhulu, kodwa abantu abadala nabo bayakwazi ukuwusebenzisa, mina ngisiza kakhulu izingane.

**Interviewer:** Yibuphi ubulili obudume kakhulu kuziguli zakho obuthola lomuthi?

**TH10:** Uma kuyingane, awunakho ukuthi yingane yomfana noma ngeyintombazane kodwa ngicabanga ukuthi ngokwesintu kubantu abadala usetshenziswa kakhulu ngabantu besilisa

**Interviewer:** Ingabe kukhona noma yimiphi imiphumela emibi ebhekene neziguli zakho ngemuva kokusebenzisa lesi sitshalo?

**TH10:** Ayikho imiphumela emibi

**Interviewer:** Uyawazi umlando womsinsi?

**TH10:** Ngicabanga ukuthi kudala wawusetshenziswa ngalendlela esiwusebenzisa ngayo nanamhlanje

**Interviewer:** Yiluphi olunye ulwazi ongathanda ukulufaka mayelana ngokusetshenziswa komsinsi?

**TH10:** Hhayi akukho okunye, konke engikwaziyo sengikushilo

### **TRADITIONAL HEALER 11 (TH11)**

**Interviewer:** Yiziphi izimpawu noma izimo ezelashwa ngawo *Umsinsi*?

**TH11:** *Umsinsi* usetshenziswa uma umuntu efuna ukuhlanza ingaphakathi, uma ezizwa engcolile, uyawusebenzisa ukwazi nokuphalaza ngawo. Ikakhulu uma umuntu ephethwe yinto efana nenyongo

**Interviewer:** Yiziphi izindlela ezihlukile zokuphatha lomuthi?

**TH11:** Wona-ke umnsinsi uyaphuzwa kodwa abanye bageza ngawo

**Interviewer:** Yiziphi izingxenye sezitshalo ezisetshenziselwa isizinda somuthi?

**TH11:** Kusetshenziswa impande noma igxolo

**Interviewer:** Uvame ukuwungiselela kanjani lomuthi?

**TH11:** Uthatha igxolo uligqule bese uyalipheka, ulipheka emanzini, uma uthanda, lomuthi uyakwazi ukuwuhlanganisa neminye imithi kodwa lokho kuya ngokuthi

uwusebenzisela. Uma uzogeza ngawo, asithi mhlambe ufuna ukukhipha isinyama, ikhona eminye imithi vele ehambisana nalokho, uwuhlanganisa naleyomithi.

**Interviewer:** Yiluphi uhla oludume kakhulu kuziguli zakho ezithola lomuthi?

**TH11:** Izingane kakhulu kodwa nabantu abadala bayawusebenzisa, phela abantu uma bezofuna umuthi, bawufunela izinto ezechukile yingakho ngithi usetshenziwa yizingane nabantu abadala

**Interviewer:** Yibuphi ubulili obudume kakhulu kuziguli zakho obuthola lomuthi?

**TH11:** Bawuthola ngokufanayo, abantu besilisa nabesifazane

**Interviewer:** Ingabe ikhona noma yimiphi imiphumela emibi ebhekene neziguli zakho ngemuva kokusebenzisa lomuthi?

**TH11:** Cha, ayikho imiphumela emibi

**Interviewer:** Uyawazi umlando wesitshalo?

**TH11:** Umlando waso lesishlahla anguwazi kodwa mhlambe yilokho ukuthi abantu bageza ngaso ukuze bekwazi ukuzivikela

**Interviewer:** Yiluphi olunye ulwazi ongathanda ukulufaka mayelana ngokusetshenziwa komuthi walesisitshalo?

**TH11:** Abanye bayawusebenzisa umnsinsi ekuphalazeni. Uma umuntu ecabanga ukuthi udlisiwe, uyawuphuza aphalaze ngawo akhiphe udliso elusuke lingaphakathi.

## **TRADITIONAL HEALER 12 (TH12)**

**Interviewer:** Yiziphi izimpawu noma izimo ezelashwa ngoMsinsi?

**TH12:** Usiza uma owesifazane eqeda kubeletha ukuze asheshe alulame, uyawuphuza, aphinde awusebenzise enganeni uma inamasimba amabi, ingane yona ichatha ngawo.

**Interviewer:** Yimiphi imiphumela yokwelashwa oyibona ngokusetshenziwa komsinsi

**TH12:** Omama umthungo uyashesha ukuvaleka, kwesinye isikhathi bawusebenzisa uma befuna ukunqamula ukopha kwegazi uma besesikhathini igazi liphuma lingapheli. Ingane nayo uma ingakwazi ukukaka uyasiza kakhulu ukuthi ikake.

**Interviewer:** Yiziphi izindlela ezihlukene zokuphatha imithi?

**TH12:** Uyawuphuza uphinde uchathe ngawo, uyakwazi ukugeza uphinde uthobe ngawo

**Interviewer:** Yiziphi izingxenye zesitshalo ezisentshenzisela isizinda somuthi?

**TH12:** igxolo

**Interviewer:** Uvame ukuwulungiselela kanjani umuthi?

**TH12:** Angithi usebenzisa igxolo, uyaligqula, ulibilise. Usebenzisa amanzi akhona

**Interviewer:** Uwusebenzisa wodwa noma kukhona imithi ohlanganisa nayo?

**TH12:** uyakwazi ukuwusebenzisa wodwa kodwa futhi ungawusebenzisa neminye imithi ekwakheni intelezi

**Interviewer:** Uyawazi umlando wesitshalo?

**TH12:** Emandulo abadala babegeza baphinde bachele ngawo ukuqinisa imizi yabo nasekuzivikeleni ezitheni zabo

**Interviewer:** Ingabe kukhona noma yimiphi imiphumela emibi ebhekene nezigulu zakho ngemuva kokusebenzisa lesi sitshalo?

**TH12:** Cha, ayikho

**Interviewer:** Yibuphi ubulili obudume kakhulu kuziguli zakho obuthola lomuthi?

**TH12:** Lomuthi usebenzela wonke umuntu ngakho bonke bawuthola ngokufanayo

**Interviewer:** Yiluphi uhla oludume kakhulu lweziguli zakho ezithola lemuthi?

**TH12:** Njengoba bengisho ukuthi ungakwazi ukuwunikeza ingane nonina, kusho ukuthi usebenzela abantu abadala nezingane ngokufanayo

**Interviewer:** Yiluphi olunye ulwazi ongathanda ukulufaka mayelana ngokusetshenziswa komuthi walesisitshalo?

**TH12:** Oh, besengikho hlwe ukukusho lokhu, Umnsinsi uyakwazi ukuwusebenzisa ekugezeni isilonda, uyasiza ekuthini isilonda sisheshe siphole

**Interviewer:** Siyabonga

## **APPENDIX J – INTERVIEW TRANSLATIONS**

### **Durban Warwick Triangle Muthi Market**

#### **TRADITIONAL HEALER 1 (TH1)**

**Interviewer:** what are the most common symptoms or conditions that are treated with this plant?

**TH1:** The bark of *Umsinsi* is commonly used, firstly you grind it. It is the kind of medicine you mix with other red medicines. It helps if you have pimples on your face or if you have oily skin. You steam with it.

The medicine can also be used to induce vomiting and for people with chest problems, for instance if you feel as though there's tightness on your chest or some sort of difficulty in breathing.

It can also be used as enema when mixed with other herbal medicines. It is prepared by boiling it and then using it as an enema, it helps in cleaning on the inside. When ingested it can even clean your kidneys. It is useful in multiple conditions.

**Interviewer:** What other herbs do you mix it with?

**TH1:** It can be mixed with unsukumbili [*Hypericum aethiopicum*], African potato [*Hypoxis hemerocallidea*] and umathunga [*Eucomis autumnalis* - autumn pineapple lily]. These plants are first ground and boiled together for about 30 minutes, let the mixture cool first before drinking. One should drink a quarter of a glass of this mixture twice a day. This concoction helps to boost your immune system and other things such as ulcers, but *Erythina lysistemon* only works for this condition when mixed with these other herbs. It also helps in quickening the recovery time for internal (ulcers) and external stitches wounds.

**Interviewer:** Which gender group amongst your patients is mostly treated with this medicine?

**TH1:** Both male and female, if they both suffer from the same ailment, it can be administered in the same way to both genders.

**Interviewer:** Do you know about the history of the plant?

**TH1:** No, I am not very familiar with the plant's history, but I can identify it and know how it is used. The most used part is the bark although others also use the roots, because it grows to be a big tree it is much more difficult to get its roots hence the common use of its bark.

**Interviewer:** Do you have any other knowledge around the utilization of the plant medicine?

**TH1:** what I can add is that the bark can also be burnt and made into *insizi*, but this is often mixed with other herbs. When a woman has just given birth and they have surgical stitches, this herbal mixture will help to speed the recovery process. It is also useful in fractures and sprains. This medicine is useful in many ways to people's health.

## **TRADITIONAL HEALER 2 (TH2)**

**Interviewer:** what are the most common symptoms or conditions that are treated with this plant?

**TH2:** When an infant is struggling with their bowel movement, *Erythrina lysistemon* is boiled and used as an enema.

**Interviewer:** which parts of the plant are generally used for medicinal extractions

**TH2:** The roots and bark are commonly used

**Interviewer:** How do you prepare the medicine?

**TH2:** By boiling the parts of the plant

**Interviewer:** Do you know about the history of the plant?

**TH2:** It is a tree that has always been there, the elders used it to provide shade and then they discovered that it was useful as a medicine, it can also be used for cleansing.

**Interviewer:** Do you have any other knowledge around the utilization of the plant medicine that you would want to add?

**TH2:** Since it is used for cleansing, it removes all the dirt on the inside including the dirt in your blood. Others use it to induce vomiting, but it is generally used as an enema in children with a sore stomach or those struggling with their bowel movement and with bad faeces. The child can drink it or have it introduced as an enema.

**Interviewer:** which patient gender is mostly treated with this medicine?

**TH2:** both males and females use it similarly because it is used to clean on the inside.

**Interviewer:** How do you generally prepare the medicine?

**TH2:** it is prepared by boiling. The bark is firstly ground and placed in a pot of with water and bring it to a boil. Afterwards it is left to cool and used as an enema. Others mix it with fresh milk which can then be used as an enema or for drinking. It helps especially when one experiences burning during urination.

**Interviewer:** are there any other herbal medicines that it is mixed with?

**TH2:** It is effective alone, but it also depends on what it is being used for and if you believe in its effectivity alone. Others do mix it with other herbs.

**Interviewer:** Those who mix it, what do they mix it with?

**TH2:** it is usually (mixed) with umthombe [*Ficus craterostoma* - forest fig] but it is dependent on what the child is suffering from, stomach cramps or other complaints. The forest fig is also boiled with *Erythrina lysistemon* and given to the child to drink or as an enema. Both these medicines do not cause any harm as *umthombe* is also useful in cleansing the blood and used similarly to any other herbal concoction.

### **TRADITIONAL HEALER 3 (TH3)**

**Interviewer:** What are the most common symptoms or conditions that are treated with the plant medicine?

**TH3:** Traditionally?

**Interviewer:** Yes

**TH3:** Cancer

**Interviewer:** What are the different modes of administration

**TH3:** the first thing with herbal medicine is asking for permission from the ancestors

**Interviewer:** How do you generally prepare the medicine?

**TH3:** It is ground and then boiled

**Interviewer:** Are there any other herbal medicines that you mix it with?

**TH3:** It is traditional medicine, there is no other chemicals that are added.

**Interviewer:** which parts of the plants are generally used for medicinal extraction.

**TH3:** The roots

There are plenty of other plant herbs that can be mixed with this plant maybe about 10 different plants that I will not mention all but I will mention only a few, there is *intolwane* and the roots are also used

**Interviewer:** Do you know about the history of the plant?

**TH3:** Yes, I do, it works in a lot of conditions, it works for cancer, it works in cleansing, it works for women who bleed non-stop from their menses, it helps to shorten the bleeding period.

**Interviewer:** which patient gender is most treated with this medicine

**TH3:** Both genders equally

**Interviewer:** Do you have any other knowledge around the utilization of the plant medicine.

**TH3:** It is the way it is prepared, the fact that no other modern medicines or chemicals like Dettol or bluestone are added to it during the preparation process. It is used alone just the way it is or mixed with other traditional herbal medicines.

**Interviewer:** what other herbal medicines do you mix with?

**TH3:** I have it consumed with beetroot

**Interviewer:** How does it help when taken this way?

**TH3:** when someone is suffering from cancer, be it uterine, colon, spinal or throat cancer. I have seen recoveries in patients that I have treated, but as I have stated, it does not work alone, it is mixed with other herbal medicines for it to be effective in this way.

**Interviewer:** Are there any observed ill effects from using this herbal medicine?

**TH3:** The only side effects that can be experienced is if the herbal medicine is mixed with other medicines it does not work well with and that produce side effects.

**Interviewer:** Thank you.

#### **Traditional Healer 4 (TH4)**

**Interviewer:** Do you know about the history of the *Erythrina lysistemon*?

**TH4:** It is a tree that grows in the forest although I am not very sure of its history, but the seeds are used as beads in making ankle bracelets that are worn by younger or older women with other traditional outfits for dancing.

**Interviewer:** What are the most common symptoms or conditions that are treated with this plant's medicine?

**TH4:** If there are some bad spirits around, it is usually sprinkled around the homestead, but it works when mixed with other herbs.

**Interviewer:** Which other herbs do you mix it with?

**TH4:** You use it in an *intelezi* mixture, there are so many different herbs that are used for *intelezi* I cannot mention all of them.

**Interviewer:** And then what do you do when you have it mixed with these other herbs?

**TH4:** You sprinkle it around the homestead

**Interviewer:** Which parts of the plant are used for the medicinal extractions

**TH4:** Any part of the plant can be used, the roots, leaves and fruits can all be used.

**Interviewer:** What are the modes of administration for the medicine?

**TH4:** It is used in sprinkling around the homestead, in a bath or in drinking.

**Interviewer:** How is it useful when one drinks it

**TH4:** When one feels like there is something bothering them from the inside, usually things like *isilonda*

**Interviewer:** What other knowledge would you like add around the utilization of the plant as a medicine?

**TH4:** One can protect themselves from their enemies especially if they have used traditional medicine against the individual.

**Interviewer:** Are there any observed ill effects with the use of this medicine?

**TH4:** No there are no ill effects.

#### **TRADITIONAL HEALER 5 (TH5)**

**Interviewer:** What are the most common symptoms or conditions that are treated with the *Erythrina lysistemon*?

**TH5:** It is an enema administered to young children to help with their bowel movement

**Interviewer:** What are the different modes of administration for this medicine?

**TH5:** it is administered as an enema

**Interviewer:** which parts of the plant are generally used for medicinal extractions?

**TH5:** I am not too sure about that.

**Interviewer:** When you are using it as an enema, are there any other herbal medicines that you mix it with?

**TH5:** No, it works alone when used in new-born babies.

**Interviewer:** are there any observed ill effects with the use of this plant medicine?

**TH5:** No there is not, what I know is that mothers use it to help their infants to pass stools.

**Interviewer:** Do you know about the history of the plant?

**TH5:** No, I do not.

#### **TRADITIONAL HEALER 6 (TH6)**

**Interviewer:** what are the most common symptoms or conditions that are treated with *Erythrina lysistemon*?

**TH6:** It is used for cleaning on the inside, most people use it in removing *Inyoni*

**Interviewer:** What are the different modes of medicinal administration?

**TH6:** You can bathe with it but only when it is mixed with other medicines, I am not sure if it works similarly when alone.

**Interviewer:** What medicines is it mixed with?

**TH6:** There is a lot of different medicines that it can be mixed with, for instance, you can make *intelezi*

**Interviewer:** what are the therapeutic effects observed with the use of this plant's medicine?

**TH6:** I usually use it when someone wants to get cleansed.

**Interviewer:** when does a person usually require to be cleansed

**TH6:** When they want to remove *Inyoni*

**Interviewer:** Which parts of the plant are generally used for the medicinal extraction?

**TH6:** I am not very sure about that

**Interviewer:** Do you have any knowledge about the history of the plant

**TH6:** No, I have no knowledge of its history

**Interviewer:** Is there any other additional knowledge you would like to add around the utilization of the plant medicine.

**TH6:** No that is all

### **TRADITIONAL HEALER 7 (TH7)**

**Interviewer:** What are the most common symptoms or conditions that are treated with *Erythrina lysistemon*?

**TH7:** It is used in treating teeth complaints

**Interviewer:** How does it helps when you say it us used in the treatment of teeth complaints?

**TH7:** For toothache and gum swelling

**Interviewer:** What are the different modes of the medicinal administration?

**TH7:** You boil it and then use it to brush your teeth

**Interviewer:** Which parts of the plant are generally used for medicinal extraction?

**TH7:** the roots or the bark.

**Interviewer:** How do you generally prepare the medicine?

**TH7:** You boil it, wait for it cool down and then brush your teeth with it.

**Interviewer:** Do you use it alone or are there any other herbal medicines that it is mixed with?

**TH7:** It is used on its own

**Interviewer:** Do you have any knowledge about the plant's history?

**TH7:** I am not sure about that, but what exactly are you asking for?

**Interviewer:** How it has been used in the past and how it came to be known as to how it works.

**TH7:** Oh no, I only know it for what I have mentioned

**Interviewer:** Is there any other additional knowledge around the utilization of the plant medicine?

**TH7:** no, that is all I know

**Interviewer:** Is there any other ill effects observed with the use of the plant's medicine

**TH7:** It poses no danger at all, because even when you use it to brush your teeth there is not a specific scale you use that will make the herb too strong or too weak.

### **TRADITIONAL HEALER 8 (TH8)**

**Interviewer:** what are the most common symptoms or conditions that are treated with *Erythrina lysistemon*?

**TH8:** It is mixed with umbola [Eucomis bicolor - pineapple lily], umdoni [Syzygium cordatum – water berry], imbozisi [Foeniculum vulgare – fennel] and iAlamu to help get rid of poisoning [idliso]. It works effectively with these medicines because in most cases it basically cleans an individual on the inside.

**Interviewer:** If an individual has been poisoned how does it work?

**TH8:** some people are poisoned in their sleep especially if someone says they usually dream of eating, they would have been poisoned, others can tell on their own if they have been poisoned in that manner, when they are administered this concoction, that poison rotes within them and it can then come out.

**Interviewer:** which parts of the plant are used for the medicinal preparations?

**TH8:** for *Erythrina lysistemon*?

**Interviewer:** Yes

**TH8:** Mostly the bark. For this specific mixture that I have mentioned, the bark is used.

**Interviewer:** Are there any ill effects, you may have observed from the use of this plant's medicine

**TH8:** no

**Interviewer:** Is the herb not harmful in any way

**TH8:** No, it is not

**Interviewer:** are there any other applications for this plant besides being used in poisoning?

**TH8:** no, I am only familiar with its applications in this regard, I am sure others will tell you of the different applications because we do not all use it in the same manner.

**Interviewer:** Are you familiar with the history of the plant in any way?

**TH8:** No, I only know that it is an indigenous plant, that grows on its own.

**Interviewer:** Thank you for your time.

**TRADITIONAL HEALER 9 (TH9)**

**Interviewer:** What are the most common conditions that are treated with this plant medicine?

**TH9:** It is mostly used in women who have just delivered in treating their surgical stitches and in labour to quicken the process and make it less painful.

**Interviewer:** What are the therapeutic effects, you have observed with the use of this plant in this way?

**TH9:** the women recover quicker with less pain

**Interviewer:** what are the modes of administration for this medicine?

**TH9:** you boil it and then drink it. It can also be applied directly on the area.

**Interviewer:** are there any ill effects with the use of this plant's medicine?

**TH9:** No, there is none

**Interviewer:** which parts of the plant are used in the medicinal preparations?

**TH9:** it is the bark

**Interviewer:** How is the medicine generally prepared?

**TH9:** you use the bark, grind it, boil it, leave it to cool and then drink

**Interviewer:** Are you familiar with the plant's history

**TH9:** it has been used in the past especially by chiefs and kings for protection. Others used to even build their homes around a place where the trees were present to feel protected. Whenever it was present in a homestead everyone felt protected.

**Interviewer:** Is there any other additional knowledge you would like to add around the medicinal use of the plant?

**TH9:** one can drink the herb when they have stomach cramps and children can also drink this so that they can easily empty their bowels. That is all I am aware of.

**Interviewer:** Thank you

### **TRADITIONAL HEALER 10 (TH10)**

**Interviewer:** what are the most common conditions that are treated with this herb?

**TH10:** It is used in young children who struggle with defecating, especially if the child shows signs of being uncomfortable due to the stomach pains and has not been able to pass any stool in days

**Interviewer:** what are the therapeutic effects observed after treatment with this medicine?

**TH10:** The child can pass stool the same day. The medicine can be administered in the morning and before the end of the day, the child would have passed stool and be feeling much better. It is very effective and works over a short period of time.

**Interviewer:** What are the different modes of medicinal administration?

**TH10:** they can drink it and have it used as an enema.

**Interviewer:** Which parts of the plants are used for the medicinal preparations?

**TH10:** The bark or the roots

**Interviewer:** How do you generally prepare this medicine?

**TH10:** When you are using the bark, you grind it first and then boil it for a little while, then you drink the water that you get from boiling the bark. If the child is not too happy with the taste because it does not taste so good, then you can just use it as an enema.

**Interviewer:** Are there any other different modes of administration besides drinking it and having it administered as an enema.

**TH10:** Others do bathe with it

**Interviewer:** How does it help when they use it in this way

**TH10:** to cleanse one's self, others use it to make themselves stronger and respected persons in their communities.

**Interviewer:** Which patient age group is likely to use this medicine

**TH10:** Children mostly, adults do use it as well, but I have treated mostly children with it

**Interviewer:** Which patient gender have you treated mostly with this medicine?

**TH10:** In children it is irrespective of their gender, but I think if it is being used by adults traditionally it would be mostly males.

**Interviewer:** Are there any observed ill effects with the use of this plant medicine?

**TH10:** No there is none

**Interviewer:** Are you familiar with the history of the plant?

**TH10:** I think it has always been used in the same way that it is used today

**Interviewer:** Is there any other knowledge around the medicinal use of this plant that you would like to add.

**TH10:** No, I think I have mentioned everything that I know of.

#### **TRADITIONAL HEALER 11 (TH11)**

**Interviewer:** What are the most common conditions that are treated with *Erythrina lysistemon*?

**TH11:** It is used when someone wants to clean themselves on the inside, it can be used to induce vomiting. When they are suffering from *inyongo* [excess bile]

**Interviewer:** What are the different modes of administration

**TH11:** it is for drinking, but others do bathe with it.

**Interviewer:** Which parts of the plants are used for the medicinal preparations?

**TH11:** the roots and sometimes the bark

**Interviewer:** How is the plant medicines generally prepared?

**TH11:** the roots or the bark are firstly ground and boiled in water, this plant can also be mixed with other herbal medicines but this depends on what you are using it for, for instance if you want to get rid of bad luck, there are medicines that are specific for this that you can mix it with.

**Interviewer:** Which age group is most likely to use this medicine?

**TH11:** Children mostly but adults as well, the thing is when patients come in, they will need the medicine for different reasons so it will not be specific to any age group.

**Interviewer:** Which gender is mostly treated with this medicine?

**TH11:** they both use it similarly

**Interviewer:** Are there any other ill effects, you have observed with the use of this plant's medicine

**TH11:** No there is none

**Interviewer:** Are you familiar with the history of the plant

**TH11:** I am not very familiar with its history, but I have heard other people say they others used to bath with the herb for protection

**Interviewer:** Is there any other additional knowledge you may have about the use of this plant that you would like to add?

**TH11:** Others use it to induce vomiting if they think they have been poisoned to get rid of the poison that is within them.

### **TRADITIONAL HEALER 12 (TH12)**

**Interviewer:** What are the most common symptoms or conditions that are treated with *Erythrina lysistemon*?

**TH12:** It is given infused with other herbs and given to women in labour to drink to ease the pain and quicken the process, it helps in the recovery process as well. It can also help in infants who have a difficulty passing stools, it is administered as an enema.

**Interviewer:** What are the therapeutic effects, you have observed with the use of this medicine?

**TH12:** for women who have been in labour, the stitches heal quicker, sometimes women also use it shorten the bleeding process during their menstruation. It assists in children to easily pass stools as well.

**Interviewer:** What are the different modes of the medicinal administration?

**TH12:** It can be used for drinking, as an enema or applied directly on an affected area.

**Interviewer:** Which parts of the plants are used for the medicinal preparations?

**TH12:** The bark

**Interviewer:** How is the medicine generally prepared?

**TH12:** The bark is ground, boiled and the water drained thereafter is used.

**Interviewer:** Is it used on its own or are there any other medicinal herbs that it is mixed with

**TH12:** It can be used alone or with other medicines in intelezi.

**Interviewer:** Do you know about the history of the plant.

**TH12:** In the past, they used to bathe with it or sprinkled around the homes for protection against enemies, but it was mixed with other herbs.

**Interviewer:** Are there any observed ill effects observed with the use of this plant?

**TH12:** No

**Interviewer:** Which gender is mostly likely to use this plant medicine?

**TH12:** Both genders as this medicine works for everyone.

**Interviewer:** Which patient age group is most likely to use this medicine?

**TH12:** As I have mentioned, this herb can be used by the mother and the child, so it is not specific to any age group

**Interviewer:** Is there any other knowledge you would like to add around the medicinal use of this plant.

**TH12:** Oh, I almost forgot to tell you about this, that you can use it to directly wash or clean a wound for the wound to heal quicker and to keep it clean.

**Interviewer:** Thank you