

Traditional Medicine in South Africa

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ABSTRACT

Traditional medicine may be regarded as the branch of medicine whose philosophy is rooted in the enhancement of body's own healing power through the use of natural means. It is the oldest form of health care system that has stood the test of time. In South Africa, traditional medicine encapsulates a myriad of health practices, approaches, knowledge, and beliefs. Most people in South Africa prefer using traditional medicine to Western medicine because they believe that traditional medicine is more efficient, accessible, and affordable. This paper focuses on the use of traditional medicine among indigenous rural and urban communities in South Africa.

KEYWORDS: *traditional medicine, herbal medicine, Western medicine, traditional healers, healthcare, South Africa*

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INTRODUCTION

Health is one major yardstick often used to determine real growth and development of any nation. It has been well said that “a healthy man is a wealthy man.” Since the dawn of mankind, diseases have been a leading cause of mortality and people have been taking medicines to fight illness. Humans have used natural products, such as plants, animals, and microorganisms in medicines to alleviate and treat diseases. Traditional medicine is variously known as ethno-medicine, folk medicine, native healing, complementary medicine or alternative medicine. An understanding of traditional medicine in any community should acknowledge its culture and history. African traditional healer plays a vital role in health care where people accept and believe that nature, humans and spirits are not separate. In most developed nations, traditional medicine it is often described as “folk medicine” or “alternative medicine,” offered as an alternative to conventional modern medicine. Although modern medicine may exist side-by-side with TM, herbal medicines have

often maintained their popularity for historical and cultural reasons [1,2].

South Africa is a country in Southern Africa and is the southernmost country on the African continent. It is a multiethnic society encompassing a wide variety of cultures, languages, and religions. It has three capitals, eleven official languages, and over 60 million people. The country's administrative capital is Pretoria, legislative capital is Cape Town, and judicial capital is Bloemfontein; the largest city is Johannesburg. The map of South Africa is shown in Figure 1 [3]. South Africa, being a member state of the World Health Organization, the African Union, and the Southern African Development Community, South Africa has been set on the path of institutionalizing African traditional medicine (ATM). In South Africa, trading in traditional medicines is a large and growing industry.

Traditional African medicine often carries with it a perception and stigma of being irrational and

ungrounded in scientific method in academia. People in South Africa, with an estimated 72% of the Black African population in South Africa, rely on this form of medicine. They have been using herbal plants for centuries to treat illnesses from colds to intestinal worms. Today, South Africa is home to more than 200,000 traditional healers who provide healthcare for more than 27 million people. They use plant, animal, and mineral substances based on social, cultural, and religious practices. As South Africa experienced its first Covid-19 wave, people have turned traditional medicines. In South Africa, there is currently a dual healthcare system: one based on traditional medicine and another based on Western medical practice. In modern times, colonialism, urbanization, and apartheid have blurred the distinction between the two systems. However, traditional and mainstream medicine have long been at odds.

TRADITIONAL MEDICINE IN SOUTH AFRICA

Every region of the world has had one form of traditional medicine at some stage in its history. Before the introduction of Western medicine, traditional medicine used to be the dominant medical system available to millions of people in South Africa in both rural and urban communities. Under apartheid and colonial South Africa, the practice of TM was deemed unscientific and illegal. It was considered to be uncivilized, suspect, scientifically unfounded, backward, and superstitious. During colonialism, many colonists accused traditional healers of practicing witchcraft, which led to the prohibition of the practice across various regions in Africa. This attitude was manifested in South Africa during the apartheid regime. For example, the South African Medical Association outlawed and outrightly banned traditional medical system in South Africa in 1953 [4].

In South Africa, traditional medicine encapsulates various health practices, approaches, knowledge, and beliefs. These include plants, animals, spiritual therapies, manual techniques. Traditional healers in South Africa are practitioners of ATM who fulfill different social and political roles in the nation. Since the country consists of several heterogeneous communities, there are many types of traditional healers, including the diviner (*sangoma*) and the herbalist (*inyanga*). They provide divination, healing physical, emotional and spiritual illnesses. They are officially and legally recognized in South Africa. *Sangomas* do not to advertise their business but rely on their reputation, word of mouth, and trust in their ancestors to bring them the right patients. They are

usually a tight-knit community and aren't always friendly to strangers who may not understand the Zulu language. The experienced *invanga/sangomas* are consulted for healing, and through them it is believed that ancestors from the spirit world can give instruction on how to heal illness. The healers supplement the advice from an ancestral spirit with their own knowledge, training, and experience. They may need to burn incense or sacrifice animals to appease the ancestors. Both men and women can be trained to become traditional healers. Training to be a *sangoma* or an *inyanga* requires hard work and takes months or years [5]. Figure 2 typically shows a patient visiting a *sangoma* [6]. One can seek help from the traditional healer Dr. Bukab by calling +2780181547, South Africa [7]. It should be noted that some Christians pray at the Church in the day and visit the *sangomas* at night [8].

The traditional healthcare system offers a cheap, individualized, and culturally appropriate alternative to the costly Western medicine. In this system, ancestral worship is intertwined with people's health. In South Africa's traditional medicine system, dosages are based on individual handfuls and plants may be included because in a dream ancestors told a traditional healer (an *inyanga*) to add them.

ATM practitioners are extensively used in South Africa and are an indispensable component of the national healthcare system. South Africa consists of a wide diversity of tribes which is reflected in the way medicine is practiced. It has a rich tropical and temperate flora, harboring approximately 24,000 species. In South Africa, almost 60% of the population consults traditional healers, in preference to modern medical doctors. This is large reliance on the traditional medicine due to a number of factors: accessibility to the plants, affordability, conveniently located within the community, and extensive local knowledge among the local communities. The South African medicinal plant trade is a thriving at grassroots level. Medicinal plants are commonly sold at informal street markets or indoor shops. A large portion of South African medicinal plants have not been scientifically validated [9]. South Africa has significant progress in institutionalizing African traditional medicine and integrating traditional and complementary medicines.

HERBAL MEDICINE

There is currently a renewed interest in African-plant-based medicinal herbs for the prevention and treatment of various pathologies. Traditional herbal remedies are commonly used as alternative medicine by a large number of people worldwide. The use of traditional herbal medicine has a very long historical

background that corresponds to the Stone Age. There is a widespread use of herbal medicines by Africans living with HIV/AIDS. Medicinal plant use in South African traditional medicine occurs on a sliding scale from physical to spiritual uses. Indigenous people of Southern Africa use herbs to cleanse the body and treat a variety of maladies. Many herbal remedies are closely guarded secrets, inextricably linked with spiritual life.

South Africa's vegetation boasts an abundance of herbs which can be used for healing of all kinds. The modern trend in traditional medicines reflects an increase in the sale of herbal mixtures rather than those prepared from single plants. Some of the plant parts and derivatives used in traditional medicines are listed as follows [10]:

- **Bitter Aloe:** This is known as *umhlaba* in Zulu and Sotho. It is used as a traditional medicine. The leaves or roots are boiled in water and used for the treatment of eczema, stress and eye infection.
- **Acacia Senegal:** This is also known as gum Arabic. It is native to semidesert and drier regions of sub-Saharan Africa, but widespread from Southern to Northern Africa.
- **Aloe ferox:** This is native to South Africa and Lesotho and is considered to be the most common Aloe species in South Africa. It is commonly used for its laxative effect and as a topical application to the skin, eyes, and mucous membranes.
- **Asteracea:** This is commonly known as wormwood or desert wormwood (known in Arabic as *shih*, and as *armoise blanche* in French). It is a greyish strongly aromatic perennial dwarf shrub native to the Northern Africa, Arabian Peninsula, and Western Asia.
- **Aspalathus linearis:** This is an endemic South African spice. It is cultivated to produce the well-known herbal tea, also commonly known as *rooibos*. It has been used as a refreshment drink and as a healthy tea beverage.
- **Centella asiatica:** This is a medicinal plant that has been used since prehistoric times. It is used in many healing cultures, including Ayurvedic medicine, Chinese traditional medicine, Kampo (Japanese traditional), etc.
- **Catharanthus roseus:** This is a well-known medicinal plant that has its root from the African continent. The interest in this species arises from its therapeutic role, as it is the source of the anticancer alkaloids vincristine.

- **Momordica charantia:** This is also known as bitter melon. It is a tropical vegetable grown throughout Africa. The leaf may be made into a tea and juice. It is common folklore remedy for diabetes.
- **Pelargonium sidoides:** This is native to the coastal regions of South Africa. It is an important traditional medicine with a rich ethnobotanical history.
- **Datura stramonium:** This is a wild-growing plant in the family Solanaceae. It is indigenous to the Americas and has been introduced into many tropical and subtropical regions.
- **Vachellia karroo:** This belongs to the *Acacia* genus of the family Leguminosae. The plant has been used as traditional medicine by many local inhabitants of Southern Africa and is a common woody species in South Africa.

Some of the medicinal plants of South Africa are displayed in Figure 3 [11]. Figure 4 some bottles filled with traditional medicines on display [12]. Some of the traditional medicines are available from traders in South Africa's largest traditional medicine market, the Faraday Street market in Johannesburg.

APPLICATIONS OF TRADITIONAL MEDICINE

Traditional medicine has been used by humankind worldwide for the treatment of various diseases since long before the advent of western medicine. TM has been used in South Africa to cure several diseases including the following typical examples.

- **Diarrhoea:** This is one of the most common cause of illness and a leading cause of child death in the world. It remains a major concern in South Africa resulting in high mortality rates when left untreated. It is one of the leading causes of morbidity and mortality in South African children. There is an ongoing research to finding novel and useful anti-diarrhoeal therapeutic agents and products in herbal medicines that are widely used by indigenous people to treat diarrhoea and other related diseases [9].
- **COVID-19:** Since the global surge of the COVID-19 pandemic in December 2019, governments and private efforts have been made to develop a vaccine that will curb the spread of the virus. In South Africa, COVID-19 has resulted in additional pressure to already strained health systems. There has been high interest in the use of traditional medicines for COVID-19 since the pandemic started. The involvement of traditional health practitioners has proven to be a

vital force in the management of previous pandemics such as HIV/AIDS, TB and malaria. The World Health Organization and the African Union Commission for Social Affairs have issued statements welcoming traditional medicines for COVID-19 [13].

- **HIV / AIDS:** This is spread globally, affecting Africa more significantly than other regions of the world. The HIV/AIDS epidemic has greatly impacted South Africa's healthcare system, hampering its ability to scale-up the provision of antiretroviral therapy. One way to provide comprehensive care and prevention in sub-Saharan African countries has been through collaboration with traditional healers. The use of medicinal plants is the most common traditional medicine in general practice throughout Africa. When a crisis like HIV/AIDS strikes, the need to seek the help of the indigenous healers becomes clear. The AIDS crisis requires a concerted effort of all involved. The policies and programs put forth by the government must respect and acknowledge the full practice of indigenous healing if they want collaboration to be effective [14-16].
- **Cancer:** The ever rising cancer burden and prevalence of cancer is placing enormous pressure on health infrastructure worldwide. Cancer dominates the sub-Saharan African burden of disease. It has a significant health impact on the South African population. Natural plant-based products have for long have been used traditionally for treating cancer. Approximately 7% – 48% of cancer diagnosed patients take herbal medicines post diagnosis [17].

Other applications of TM in South Africa includes dental plaque, tuberculosis (TB), depression, epilepsy, and mental diseases

BENEFITS

Herbal medicine is increasingly gaining recognition and attention in South Africa, where herbal remedies are sold for stimulating, maintaining, and promoting health apart from treating diseases. Thus, the traditional healers contribute a lot to the battle against diseases and maintenance of health and well-being. Other benefits of TM in South Africa include:

- **Alternative Treatment:** Since modern medicine cannot cure all diseases, traditional medicine can intervene in the areas where modern medicine is weak or does not exist. It provides an alternative for the majority of Africans who cannot afford modern medical care. It provides solutions to some ailments (such as malaria, epilepsy,

madness, and/or HIV/AIDS) that lack effective modern medical treatment. This have made the practice to be lucrative. Many South African prefer TM due to lack of trust in western medicine. Some are so skeptical to try western medicine.

- **Affordability:** Use of traditional medicine is often attributed to its relative ease of access and affordability when compared Western medicine. Affordability may not be the major factor in individual's decision to use TM.
- **Popularity:** Traditional medicines are getting significant attention in global healthcare community. According to the World Health Organization (WHO), herbal medicine has become a popular form of healthcare as natural medicinal products are gaining increasing popularity and are used worldwide as complementary alternative therapies.
- **Holistic Treatment:** Traditional medicine in South Africa is a holistic discipline involving the use of indigenous herbalism combined with aspects of African spirituality. This holistic understanding of ill-health among some ethnic groups in South Africa makes traditional medicine prevalent and resilient amidst its encounter with western medicine that relegates it as demonic, non-scientific, crude, and unethical. *Sangomas* take a holistic look at social factors that could cause illness and as well as the physical symptoms.

CHALLENGES

Although TM has not been officially recognized in most countries, it remains a much neglected part of global healthcare due to many challenges it faces. In spite of the abundance of raw materials and inherent benefits of traditional herbal medicine, the development of traditional herbal still poses a number of challenges in South Africa. Many herbal mixtures on the market are of low quality and unreliable efficacy and their preparations are poorly documented. The benefits of most of the herbal mixtures have not been confirmed by clinical data. Many urban and rural dwellers rely on TM because of its accessibility but often fall victim to quacks or con-artists. Other challenges facing TM in South Africa include the following [18-20]:

- **Prejudicial viewpoints:** There has been limiting and polarized beliefs that affected the development of traditional medicine in South Africa. The rational use of traditional medicine is not well-defined, and often relies on ritual, mysticism, and spiritual and moral principles

which are difficult to explain. This common misperception has its origins partly in the colonial constructions and attitudes towards indigenous medicine. These beliefs have been carried into the academic research field without a true and thorough assessment of the scientific principles in operation in traditional medicine. The challenge for scientists is to engage traditional medicine practices with an open mind.

- **Toxicity:** Although herbal medicines are beneficial and popular among South Africans, they are not completely harmless. The inappropriate use of herbs has resulted in numerous fatalities, sometimes involving children. The unregulated use of herbal medicines may put the health of their users at risk of toxicity. The users appear to be ignorant of their potential toxicities. Toxicity is not about the amount, but about the type of drug or chemical involved.
- **Acute Poisoning:** Poisoning incidents are one of the leading causes of morbidity and hospitalization in many nations. The incidents may be accidental or deliberate. Accidental poisoning may result from error in judgment, carelessness, negligence, or an unexpected situation in the home, or at workplace as in the case of intoxication due to treatment. In deliberate poisoning, the victim is intoxicated on purpose. Plants containing alkaloids such as aconitine, strychnine and other toxic substances have been used in criminal poisoning. Although traditional medicines caused fewer cases of acute poisoning incidents, they contributed considerably to fatal outcomes. Acute poisoning due to plants and traditional medicines is reported as major causes of hospital admissions in some African countries including Nigeria, South Africa, and Zimbabwe [21].
- **Safety:** The act that herbs are of natural origin does not guaranty their safety. Herbal medicines are perceived to be safe with no adverse effects by most of the users. Safety of herbal medicines is erroneously attributed to their natural sources. This misconception is limited by scientific evidence from studies done to evaluate the safety and effectiveness of traditional medicine products and practices.
- **Lack of Scientific Validity:** The lack of scientific validity has definitely been an impediment. There is no peer-reviewed scientific evidence that herbal plants are an effective treatment for some diseases. There has been no examination of how these plants are used in

traditional healing, in what dose, and in conjunction with what other plants. Of course, there is a scientific basis to many African traditional medicine practices.

- **Secrecy:** Secrecy still surrounds the use of the South African traditional medications. Prescriptions and practices of traditional medicine tend to be very secretive and localized. There are some reasons for secrecy. Chabalala, for example, would not reveal which herbs, aside from *Artemisia afra* and cannabis, that the government is investigating to treat COVID-19.
- **Regulation:** The prescription and use of traditional medicine in South Africa is currently not regulated, with the result that there is always the danger of misadministration, especially of toxic plants.
- **Lack of Standardization:** The standardized procedure is at odds with the opaque and complex belief system that underpins African traditional medicines. Standardization is the process of developing technical standards based on the consensus of different parties involved such as users, companies, standards organizations, and governments. The Africa Center for Disease Control and Prevention and the African Union Commission for Social Affairs endorsed protocols for traditional medicine clinical trials and developed a standard protocol for a multi-center, double-blind clinical trial to evaluate the safety and efficacy of herbal medicine.

CONCLUSION

Traditional medicine refers to the healing practices of the body and mind. Traditional healers of the Traditional Healers Organization (THO) of South Africa treat patients with a mix of cannabis and other herbs. For the economy of South Africa to realize the full benefits of TM, the government must genuinely pursue the objective of regulation, rebranding, and standardization of TM products as well as promote cooperation between traditional and modern medicine practitioners. To achieve the integration of traditional medicine into the conventional health systems, the central government needs to show political will by setting up regulatory strategies and develop official policies that provide for the scientific evaluation and certification of traditional medicines.

South Africa has taken the lead in medical plants by setting up a National Reference Centre for ATM in Cape Town. The country joins the rest of Africa in celebrating 31 August 2018 as the African Traditional Medicine Day. More information about traditional medicine in South Africa can be found in the books in [22-26] and the following related journals:

- South African Medical Journal
- South African Journal of Botany
- Journal of Herbal Medicine
- Journal of Ethnopharmacology
- Journal of Alternative and Complementary Medicine
- Journal of Medicinal Plants for Economic Development.
- African Journal of Traditional, Complementary and Alternative Medicines
- Traditional Medicine and Modern Medicine
- Journal of Traditional Medicine & Clinical Naturopathy
- African Journal of Infectious Diseases

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Figure 1 Map of South Africa [3].



Figure 2 A patient visiting a *sangoma* [6].



Figure 3 Some medicinal plants of South Africa [11]



Figure 4 Bottles filled with traditional medicines on display [12]