

African Traditional Medicine: A Primer

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ABSTRACT

African traditional medicine is a holistic health practice that uses indigenous herbalism combined with some aspects of spirituality. It involves the direct application of herbal remedies, animal parts, or mineral materials for healing purposes. It is still the main source of healthcare delivery in almost all Africa nations in spite of the growth of religious enlightenment, western civilization, and modern medicine. It is often regarded as an alternative or complementary system of medicine. This paper provides an introduction on African traditional medicine.

KEYWORDS: African traditional medicine, folk medicine, ethno-medicine, alternative medicine

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INTRODUCTION

The desire to achieve good health cuts across national boundaries. Every region of the world has had one form of traditional medicine at some stage in its history. According to the World Health Organization (WHO), 80% of the emerging world's population relies on traditional medicine. Traditional medicine (TM) refers to health practices that incorporate plant, animal, and mineral to treat, diagnose, and prevent illnesses. It is basically a system of health practice that is based on indigenous knowledge. 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. 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 most developed nations, traditional medicine it is often described as "folk medicine" or "alternative medicine," offered as an alternative to conventional modern medicine [1].

Africa is the cradle of mankind with cultural diversity African traditional medicine (ATM) is regarded as the oldest of all therapeutic systems. Traditional medicine is a major socio-economic and socio-cultural heritage for Africans with a long history of use.. Before the advent of Western medicine, Africans had developed their own effective way of dealing with health issues. Traditional African medicine (TAM) refers to indigenous forms of healing that are practiced all over the continent of Africa. It is the accumulation of knowledge and practices based on the cultural experiences

used to maintain health as well as treat physical and mental illnesses. ATM is fundamentally different from modern medicine or other TMs such as Chinese traditional medicine and Indian traditional medicine. African traditional medicines are used for various illnesses and deceases including fever, malaria, headache, heartburn, pain, indigestion, boils, allergies, appetite stimulant, blood diseases, asthma, childbirth difficulties, cholera, cancers, depression, epilepsy, psychiatric disorders, skin cancer, etc.[2].

COMPONENTS OF TRADITIONAL MEDICINE

Regardless of the cause of illness, there is a solution in ATM, which seeks to strike a balance between the patients' body, soul, and spirit. As shown in Figure 1 [3], African traditional medicine is a holistic healthcare system that has three components or levels of specialty: divination, spiritualism, and herbalism [4].

➤ **Spiritualism:** ATM has spiritual and non-spiritual components. Africans have a unique way of understanding the visible world around them and the invisible, supernatural world of spirits, powers, and diseases. Illnesses and diseases are often regarded as having both natural and supernatural causes; they must be treated by physical and spiritual means including divination, incantations, animal sacrifice, exorcism, and herbs. Diseases are mostly attributed to witchcraft/sorcery, gods or immortal ancestors, natural, as well as inherited. Illness is believed to be related to

supernatural causes such as angered spirits, witchcraft, or evil spirits. If the cause of the disease is perceived to be spiritual, the healer may use talisman, charm, amulets, and a spiritual bath to drive the evil spirits away from the victim. The spiritual healer may be diviners or fortune tellers, who may be seers, alfas, and priests.

- **Divination:** African spirituality sometimes involves diviners. Divination involves consulting the spirit world or communicating with the spiritual forces, such as the ancestors, spirits, and deities. It is regarded as a way to access information that is normally beyond the reach of the rational mind. Sacrifices are often offered at the request of the spirits, gods, and ancestors. During the colonial rule, traditional diviner-healers were outlawed and divination was declared illegal because they were regarded as practicing magic and witchcraft. Some Christians also find divination as superstitious, incomprehensible, and unacceptable.
- **Herbal Medicine:** This is the non-spiritual component of ATM. For centuries, man has used plants as the primary therapeutic agent in medicine. Herbal medicine is the cornerstone of traditional medicine. Today, about 65% of the world's population relies on medicinal plants as an integral part of their healthcare. In Africa, indigenous plants play an important role in treating various diseases. African traditional medicine across the continent extensively uses plant extracts which are believed to be efficacious. The leaves and fruits are the most commonly used plant parts to bring about cures. Herbalism is the application of herbs, roots, leaves, and other botanical products for treatment. Herbal medicine includes herbs, herbal preparations, and finished herbal products that contain parts of plants or other plant materials as active ingredients. Figure 2 shows some herbal medications [5]. Most of the herbs commonly used for the prevention and treatment of various illnesses are easily accessible, affordable, and available to the local community and well tolerated by the patients, with minimal side effects. Traditional healers, also known as the herbalist in this case, often prescribe medicinal plants or herbs [6]. A typical African traditional healer is shown in Figure 3 [4].

Some of the plant parts used in African herbal medicines are listed as follows [4]:

1. **Roots:** The fleshy or woody roots of many African plant species are medicinal. Most of the active ingredients are usually sequestered in the root bark rather than the woody inner part.
2. **Bulbs:** A bulb is an underground structure made up of numerous leaves of fleshy scales, e.g., *Allium sativa* (garlic) and *Allium cepa* (onions).
3. **Rhizomes:** Woody or fleshy underground stem that grows horizontally and brings out their leaves above the ground, e.g., *Zingiber officinale* (ginger), which is used for respiratory problems; *Imperata cylindrica* (spear grass) for potency in men and *Curcuma longa* (turmeric), an antioxidant, anti-inflammatory, and anticancer drug.
4. **Tubers:** Swollen fleshy underground structures which form stems/roots, e.g., potatoes and yams such as *Dioscorea dumetorum* (*ona-igbo*) for diabetes and *Gloriosa superba* for cancer.

5. **Bark:** The outer protective layer of the tree stem or trunk. It contains highly concentrated phytochemicals with profound medicinal properties. A host of plants have barks of high medicinal value.
6. **Leaves, stems, and flowers** of many plants are also medicinal.
7. **Fruits and seeds** also contain highly active phytochemicals and essential oil.
8. **Gum arabic** is used extensively in organic products and is a food additive. It is also used widely as an ingredient in foods like candies and soft drinks.

Preparing herbal medicines may vary around the continent. Common methods of preparation include extraction, mixing, infusions, and ashing. The sick person is often counseled by the herbalist on the dos and don'ts of treatment.

The primary healers in traditional African medicine are herbalists, diviners, and midwives. Herbalists use animal parts, plants/herbs and minerals to cure diseases. For examples, plants are often used to treat diseases such as malaria, which is one of the most prevalent diseases in the world. Diviners employ spiritual means to determine the root cause underlying any sickness or bad luck. Midwives use herbs and indigenous plants in aiding pregnancy and childbirth. Traditional African healers may employ counselling, charms, incantations, and casting of spells [7].

TRADITIONAL MEDICINE FROM SELECTED NATIONS

ATM has evolved over centuries of years. It has continued to receive increasing acceptance in African nations. Its practices vary significantly from country to country, and from region to region within Africa. The following nations are representative of the practice of ATM in some selected African nations.

- **South Africa:** South Africa consists of a wide diversity of tribes which is reflected in the way medicine is practiced. 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 is 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 [8]. South Africa has significant progress in institutionalizing African traditional medicine and integrating traditional and complementary medicine.
- **Nigeria:** The various ethnic groups in Nigeria have different health care practitioners beside their western counterparts, whose mode of practice is not unlike in other tribes. The Yorubas call them "babalawos," the Igbos call them "dibia," while the Northerners or Hausas call them "boka" [4]. Although healthcare in Nigeria is largely based on the modern medicine, the traditional health care is alive and well in both rural and urban areas because African traditional healers provide cheap, affordable, and accessible healthcare services [9]. Integrating or harmonizing traditional medicine with modern medicine has contributed immensely to the development of healthcare delivery in Nigeria.

- **Ghana:** Ghanaians believe in the physical and spiritual aspects of healing. Herbal spiritualists are known as “*bokomowo*” and are common all over the nation. They deal with in occult practices, divinations, incantations, and prayers. Taboos are part of African traditional religion. They are essentially things or behavior that are forbidden by a community. Although most Ghanaians accept modern science-based medicine, traditional medicine is usually the first approach to treat any illness, especially in the rural areas. Lack of access to medical facilities, financial situation, education, not having enough medical doctors dictate type of healthcare they select [4].
- **Zambia:** The traditional medicine in Zambia is an interaction between biomedicine, Christianity and an indigenous system. Christianity is part of traditional medicine developing in Zambia today. The term ng'anga is widely used to denote “doctors” in an indigenous sense. Ng'anga was perceived as an administrative nuisance for the colonial government, frowned upon as characteristically oriented towards belief in occult, witchcraft, and spirits. Regulation of ng'anga practice has not led to the prospect of their integration in to national healthcare [10].

REGULATION OF TRADITIONAL MEDICINE

Health, safety, quality, and efficacy are universal concerns with regards to the regulatory requirements of traditional medicine. Inappropriate methods of collection, processing, and storage have all contributed to the negative impact of African medicine. Medicinal plant products may be contaminated with pollution, pesticides, microbial contaminants, heavy metals, and adulterants. The absence of regulation of the medicinal plant trade in aspects such as collection, processing, and storage prevents African natural plant products from competing well in international markets. The regulation of traditional medicinal plant use embodies three fundamental aspects: quality, safety, and efficacy. The quality of medicinal plants varies considerably across nations. Good agricultural practice (GAP) is the first step in ensuring quality [8]. The safety of many herbal medicines has recently become a concern. ATM should be made as safe as possible because of the large numbers of people who use it. The traditional medicines claims to treat or cure HIV/AIDS effectively. There is need for research in order to improve the efficacy of ATMs.

TRADITIONAL AND MODERN MEDICINE

Western or modern medicine is the conventional approach to medicine in western nations. Its therapy is based on allopathic principles. In Western medicine, the traditional view that illness was caused by spiritual forces is no longer popular. Although modern medicine has been successful in developed nations, it does not have the same positive impact in many developing African nations because hospitals and medical facilities are difficult for many Africans to get to due to poor road and transportation systems. Modern medicine can be too expensive and affordable for the average African [11].

Traditional African medicine often carries the perception and stigma of being irrational and ungrounded in scientific evaluation. Medicinal plant are incorrectly understood as reflecting superstition with no scientific basis [12]. African traditional medicine should improve and reach a stage

where it can compete well with the Western medicines. To achieve this, some African nations are making concerted efforts to improve African traditional medicines through research. The World Health Organization (WHO) and the African Union (AU) are promoting scientific research into ATM. However, some critics argue that subjecting African traditional medicines to scientific research would be tantamount to a form of colonization and imperialism [13].

BENEFITS

The use of medicinal plants has increased significantly in developed nations such as United States, Canada, Europe, and Australia with the predominant perception that herbal medicines are harmless and free of side effects [14]. The medicines, which was once described as primitive, is now globally recognized as mankind's saving grace. Since modern medicine cannot cure all diseases, traditional medicine can intervene in the areas where modern medicine is weak or does not exist.

African traditional medicine has been increasingly used by various communities in Africa due to its efficacy and increasing awareness. It is beneficial for therapy. It is “holistic” in the sense that it addresses issues of the soul, spirit, and body. 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 of effective modern medical treatment. This have made the practice to be very lucrative. Many Africans prefer TM due to lack of trust on western medicine. Traditional healers in rural areas are beneficial because they are conveniently located within the community. ATM provides a platform through which cultural heritages are preserved. The pharmaceutical industry has come to realize the value of traditional medicine and now are collaborating with traditional healers on the medicinal effects of widely used plants. ATM will remain as a part of the healthcare option available to Africans.

CHALLENGES

Just like Western medicine, African traditional medicine faces some challenges. The major barriers to using of African medicinal plants are their poor quality control and safety. The dosage is often vague and the medicines are prepared under unhygienic conditions. Only a few of the African traditional medicinal plants have robust scientific and clinical proofs. There is still a scarcity of information addressing their active ingredients/constituents, quality assurance, efficacy, and standardization. Several herbal medicines have been found to have toxic effects. The mode of transmission of traditional medicine by word-of-mouth has hindered its progress. The literature and knowledge on African traditional medicine are highly scattered and the adverse effects of widely used plants are not documented. There is concern regarding quality, safety, and efficacy of African traditional medicine.

CONCLUSION

The global trade in traditional medicines is increasing in both developing and developed nations. Although traditional medical practices are still in transition, it has a bright future which can be achieved through integration, harmonization, modernization, and standardization. In order for traditional medicine to move to the next level, there is a need for improved collaboration between traditional practitioners

and modern healthcare professionals. There is a need to integrate it on modern medicine.

Due the local demand of ATMs, it has been suggested that medical schools in Africa should include them in their curriculum as alternate medicines. Some universities such as Obafemi Awolowo University in Ile Ife, Nigeria, the University of Nigeria, Nsukka, Nigeria, and some institutions in Ghana and South Africa are already doing this [15,16]. Some efforts are being made to develop a unified indigenous knowledge systems database for ATM.

More information on African traditional medicines can be found in numerous books in [17-26] and the following journals related to it: *Journal of Traditional Medicine & Clinical Naturopathy* and *Journal of Ethno pharmacology*.

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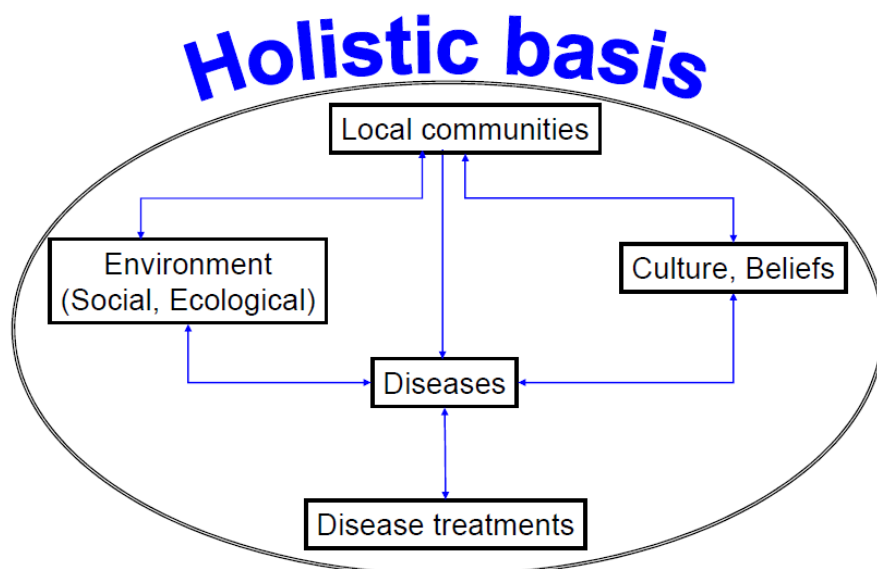


Figure 1 African traditional medicine is a holistic healthcare system [3].



Figure 2 Herbal medications [5].



Figure 3 A typical African traditional healer [4].