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# EXPLORING THE BENEFITS OF YORUBA INDIGENOUS KNOWLEDGE AND THE HERBAL MEDICINE SYSTEM

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***Abstract:*** **The Yoruba people are one of the West African's main ethno-linguistic or ethnic groups. They have an impressive indigenous knowledge and herbal medicinal system. They pre-occupied Oyo, Osun, Ekiti, Kwara, Ondo , Lagos and Koji state. The researchers developed seven (7) research objectives and seven (7) research questions to investigate the nature, forms, benefits and methods of preparing and administering Yoruba Herbal Medicine. Descriptive research design was adopted for the study, interviews and observations were the instruments used for data collections. Eight (8) herbal medicine practitioners were interviewed in Oyo and Ogun state. The result of the interviews was also presented and the researchers found that the Yoruba indigenous knowledge and herbal medicine system was characterized by the use of herbs, roots, leaves and other materials. It was concluded that indigenous herbal medicine is crucial to community development and sustainability in spite of the huge influences of modern western medicine. It was also recommended that traditional herbal medicine should be included in the Nigerian school curriculum from primary to tertiary education levels to enable the younger generations to be acquainted with indigenous herbs, roots, leaves, fruit, etc.**

***Keywords:*** **Exploring, Benefits, Yoruba Indigenous Knowledge, Herbal Medicine System.**

## I. INTRODUCTION

Indigenous knowledge is strongly embedded in mankind, community's local experiences and historical origin of man and its environment. It is universally distinct in every tribe, culture, custom and religion; it also plays a vital role in determining a community's identity. However, indigenous knowledge has numerous interpretations that are dependent on local settings. Consequently, every community's own experiences and knowledge allows them to make sense of what they engaged with or what they believed that supported their survival. In addition, folklores, idioms, proverbs, songs, rites of passage and rituals are examples of indigenous knowledge derived from life experiences and passed down from generation to generation. Matsika stated that indigenous knowledge exists and it is formed through the experiences of the local community in the process of managing conditions or contexts that challenge people's daily lives [13]. Indigenous knowledge, according to Battiste and Henderson includes know-how abilities, innovation methods, teaching and learning passed down from generation to generation [7]. The authors claimed that IK is a manifestation of the deep relationships that exist between people, ecosystems and other living beings and spirits who share their territories. They discovered that these multi-layered interactions serve as the foundation for preserving social, economic and diplomatic relationships by allowing people to share with one another. They concluded that indigenous knowledge is never static in its structure or substance but rather dynamic

Indigenous knowledge refers to the processes by which communities dealt with traditional values, local identities and indigenous belief systems and practices that have enabled them to survive man-made and natural disasters since the dawn of time. Odora stated that indigenous knowledge forms the backbone of social, economic, scientific and technological identities which are essential for

the survival of a group's historical and cultural heritage [17]. For millennia, indigenous peoples, particularly in Africa, have been subjected to invasion and persecution and their culture and knowledge have frequently been eclipsed by western knowledge pushed on them through socialization and western institutions. Nonetheless, some indigenous communities have managed to survive over time by adjusting to severe climatic conditions in a variety of ways and developing sustainable subsistence patterns.

According to Osemene, herbal medicines are drugs made from herbs or plants [19]. They are also commonly referred to as phytomedicines, plant medicines, green medicines, traditional medicine potions, traditional remedies, plant drugs and forest health products among others [4]. Their diverse forms of knowledge are deeply rooted in practitioner relationships with the environment as well as cultural cohesion, which has allowed many of the communities to maintain a sustainable use and management of natural resources to protect their environment and increase their resilience, their ability to observe, adapt and mitigate has helped many indigenous communities face new and complex situations that have often been severe. The belief in the supernatural as a source of sickness and disease, divination as the only instrument for diagnosis and the use of plant and animal for ceremonies, sacrifice or incantation as means of medicine and cure are all characteristics of African traditional civilization.

The Yoruba regions in Nigeria comprise Ekiti, koji, Lagos, Ogun, Ondo, Osun and Oyo state. They speak diverse dialects even within the same state. Their weather condition varies between the two distinct seasons, the dry season, stretching from November to February and the rainy season also stretching from March to October. Their major occupation includes farming (agbe), palm wine tapping (emu dida), blacksmithing (agbede), hunting (ode), fishing (iseapeja), wood carving (iseona) masquerading (egun), poetry (ewi kike),drumming (iseayan), native doctor (awo), trading (owosise), riding motor bike "okada"(kẹkẹ), thug (agbero) and so on. Their women are mostly involved in pottery, weaving, hairdressing, trading, etc. Nevertheless, civilization has brought white collar job to almost all the educated among them who desire to work in corporate offices. They are estimated to number around 30 million people throughout West Africa, with Nigeria accounting for roughly 21% of the entire population (Wikipedia 2009).

Their herbal medicine system was based on misconceptions and beliefs in supernatural events. People's hearts are either filled with fear or faith as a result of these sets of beliefs. In Yoruba land, there are possibly thousands of similar beliefs. They believed that all illnesses are caused by bad supernatural spirits. Familiar spirits, sorcerers, witches/wizards, oriental spirits, spirit gulch and religious spirits are some of the entities that are considered foes in Yoruba land. In most cases, the existence of wicked ones in African indigenous culture is true and this is a major source of fear and worry in African indigenous society, especially in Yoruba land. Even if one has a headache, the Yoruba will perceive it as an attack and will remark it thus: "won n saasieni yen ni" (he/she being bewitched).

According to Temitope and Ibrahim, the Yoruba's believed that heavenly bodies such as the wind, stars, sun and moon may influence the health and prosperity of every human being directly or indirectly. They believed in the existence of divinities, devils and ancestral spirits, as well as the numinous [24]. They also think that every tree and herb has spirits residing within it. The authors stated that the herbalist in Yoruba land believed that every plant or animal had an esoteric or original name at the moment of creation by Supreme God. The herbalist also believed that the majority of today's plants and animals were once humans and that their previous names and current conditions are encoded in Ifa. They can only be known and understood by members of the Ifa fraternity. The plants and animals become very 'happy' when someone who knows their names calls them and their medicinal effectiveness is increased. During herbal preparations for infant delivery, herbalists refer to "corchorusolitorius" as "gbamoyo," rather than its ordinary local name (ewedu).Herbalists were also said to be aware that all medical herbs and roots contain spirits, some of which are passive and others are active. An herbalist must speak incantations or even execute rituals before plucking a leaf with an active spirit; else, the herbs would not work.

Temitope and Ibrahim added that Africans believed that every inanimate item, grove, river and crossroad possesses demons or spirits that can be harmful to mankind and cause illness. The authors also said that Yoruba people believed in reincarnation and that an offense committed in a previous life might lead to disease in the present life [24]. Nevertheless, Traditional Medical Practitioners (TMPs) in Yoruba culture are also known by a variety of local names, including Olosanyin, Elegbogi, or Oniseegun, as well as Babalawo. Although Oniseegun and Oloogun are often used interchangeably, the Oloogun differ from Elegbogi in that they employ charms, amulets and incantations in their magical activities. They're even worse in the neighborhood where they live. General practitioners (gbogbonise), stroke and hypertension healers, bone settings (teguntegun), traditional pediatrician (eleweomo) and local traditional pharmacist (lekuleja) are among their several specialisations, as are charmers, diviners, necromancers and stargazers (ateyanrin).

Temitope and Ibrahim further stated that according to Yoruba folklore, "Orunmila was the first man to practice herbal medicine" [24]. This wisdom was said to have been given to him by God. Orunmila was said to have had a younger brother, Osanyin, who learned about medical herbs through assisting his brother in the preparation of herbal compositions. As a result, it was determined that Orunmila is the divinity of spiritual healing, whereas Osanyin possesses the gift of herbalism. Traditional medicine

knowledge, in whatever way it is learned, is passed down from generation to generation, that is, from father to son and mother to daughter, in order to keep the traditional medicine practices alive.

The Yoruba's have long had a strong sense of environmental responsibility. They don't interfere with nature carelessly very often [16]. Despite indiscriminate forest degradation and unsustainable forest product collection, the traditional cultural systems of the examined communities demonstrated in-situ conservation. They think that trees like Adansonia Digitata, Bombax Buonopozense, NewbouldiaLaevis and Melicia Excelsa are sacred and should be preserved in their natural environment. Plants such as NewbouldiaLaevis are revered in Yoruba culture, particularly for the installation of 'Oba's (Kings), traditional rulers and chiefs as well as the prevention of evil occurrences, purification and the cure of various maladies. Plants like these, among others, are well-protected and safeguarded from extinction. Modernization has had a negative impact on this component of wilderness protection, as it does on all parts of Nigerian society [16].

Awolalu and Dopamu stated that all of nature's features were established and placed there for a specific reason. The main goal is to provide humans with a healthy and beautiful environment. Some of these natural wonders also function as sanctuaries for various divine beings [6]. For example, the numerous spirits, hills, mountains, rivers, rocks, caverns, trees, brooks, lakes and thick woods are associated with the Yoruba world [6]. Sacred groves are the name given to these characteristics. The Osun grove near Osogbo, where hunting and fishing are prohibited, is an example of environmental protection [16]. In such a grove, the environment and the people are intertwined. Because of the spiritual presence that pervades the Yoruba community and the environment, any transgression of nature's integrity necessitates the performance of rituals to satisfy some of the spirits that live there.

The Yoruba's endeavors to protect and preserve the environment are frequently motivated by aesthetic and even financial reasons. This Western influence has ravaged and strangled most of Nigeria's communities, robbing them of their once-beautiful environments. Furthermore, the Yoruba idea of the environment is all encompassing, humans, animals, plants and "non-living beings" as a whole. As a result, in order for all of these entities to coexist peacefully, humans who perceive themselves to be in authority must be careful not to provoke or destabilize their surroundings and "co-tenants." The chameleon, for example, is a sacred being that cannot be killed in Yoruba land and even the tiniest of insects are considered to have rights to life [16]. According to [25] indigenous knowledge is a resource that people use to address local problems, healthy lives, prevent conflict, establish solidarity and govern local affairs. It is mostly expressed in languages that allows for the most correct comprehension of the information. Nonetheless, as societies modernized in response to global change and challenges, we have removed ourselves from indigenous ways of handling problems to the point where local remedies have been stigmatized as out-of-date, fetishized and outdated. As a result, we've overlooked and dismissed the value of indigenous knowledge as a resource.

## II. OBJECTIVES OF THE STUDY

The main objective of this study is to explore the benefits of Yoruba indigenous knowledge and the herbal medicine system. The following specific objectives were developed to put the study in the right perspective.

1. To ascertain what indigenous herbal medicine is all about.
2. To determine the origin of indigenous herbal medicine among the Yoruba communities
3. To identify the health benefits of indigenous herbal medicine among the Yoruba communities.
4. To ascertain the ingredients used for preparing indigenous herbal medicine among the Yoruba communities
5. To determine methods used for preparing indigenous herbal medicine among the Yoruba communities.
6. Identify ways of administering indigenous herbal medicine among the Yoruba communities.
7. To ascertain the challenges facing the use of indigenous herbal medicine among the Yoruba communities.

## III. RESEARCH QUESTION

1. What is indigenous herbal medicine all about?
2. What is the origin of indigenous herbal medicine among the Yoruba communities?
3. What are the health benefits of indigenous herbal medicine among the Yoruba communities?
4. What are the ingredients used for preparing indigenous herbal medicine among the Yoruba communities?
5. What are the methods used for preparing indigenous herbal medicine among the Yoruba communities?
6. What are the ways of administering indigenous herbal medicine among the Yoruba communities?
7. What are the challenges militating against the use of indigenous herbal medicine among the Yoruba communities?

## IV. METHODOLOGY

Descriptive research design was adopted for the study; this will enhance the use of interviews and observations to gather data on exploring the benefits of Yoruba indigenous knowledge and herbal medicine system. Eight (8) herbal medicine practitioners were interviewed in Oyo and Ogun State. The interview was personally carried out by the researchers also personal observations were made by the researchers to compliment the response of the respondents.

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## V. PRESENTATION OF THE RESULT OF THE INTERVIEWS

The interview results are presented thus:

**RQ1. What is herbal medicine all about?**

**Answer:** It simply means the use of traditional medicine or herbs "agbo" to treat and cure various ailments. Herbal medications are plant-based medicines manufactured from variety of plant parts, such as leaves, flowers, seeds, roots and so on.



Figure: 1. The picture above and below shows some herbal ingredients inform of leave, root, seed fruits. etc.



Figure: 2

The combinations of these processed seeds, roots, fruits and leaves is called "Agbo" in Yoruba land and it is used for treatment of various kinds of sickness and diseases. For example agboiba for curing malaria, agboatosi for curing gonorrhoea, agbowarapa for curing epilepsy, agboakokoro for curing toothache, agbopanju for treating urinary issues, agbo jedi for curing pile, agbo ale for enabling strong erection, agboidakole for curing quick ejaculation, agboomode for treating children infections children, agbojedojedo for treating typhoid, agboinurirun for treating stomach ache, agboiletutu for treating convulsion, agbooyioju for treating drowsiness, agboawoka for treating arthritis, agbogiri for treating seizures, agboyetutu for treating cold, agboopaeyin for treating back pain, agboito sugar for treating diabetes, agbomokole for treating long erection, agbobelubelu for treating sore throat, agboyorayora for weight loss, agbofundipo for vaginal tightening, agboporoporo for weight gain, agboinarun for dizziness, agboafato for man power, agbokokoroinueje for blood purification, agboeje for blood, agbooju for eye issues, agboejeriru for high blood pressure and agbotita for measles and so on.

**RQ2. What is the origin of indigenous herbal medicine among Yoruba communities?**

**Answer:** The origin and history of herbal medicine in health care services can be traced to as far back as humanity itself. God, angel, the hunter and animals and through spirit or occult are the major sources.

**1. God**

According to the Holy Bible, God is the creator and maker of herbal medicine. In Genesis 1:11-12,God said to the earth, "let the land bring forth grass, herb giving seed and fruit yielding tree after his kind, whose seed is in itself" and it did. So the earth produced grass and herb yielding seed after his kind and the tree produced fruit, the seed of which was also after his kind and God approved it. In addition, after God created man, God placed him in-charge of the Garden and everything in it. Genesis 2:5, 7, 8, 9, 15, 16 and 17. He explained to the man that some fruits and herbs are edible, while others are dangerous and can cause death. Psalm104:14-15 God makes the grass grow for the cattle and the herb grow for man's service, so that he may bring forth food from the ground and wine that makes man's heart glad, oil to make [his] face shine and bread that strengthens man's heart.

Herbal medicine is derived from God; He created herbal medicine for the healing of man's body, mind, emotion, spirit, and psychological well-being. Revelation 22:2 stated that there is a tree of life on either side of the river, bearing twelve crops of fruit and yielding its fruit every month and the leaves of the tree were for the healing of the nations. Their fruit will be utilized for nourishment and their leaves will be used for healing, according to Ezekiel 47:12. Herbal medicine has been utilized for healing and disease prevention in Egypt, Rome, Greece, Japan, China, India, and other regions of the world since pre-historic times. They were part and parcel of every cultural tradition far before the advent of western medicine. In the days of yore, our forefathers depended largely on herbal medicine and healing methods for the treatment of ailments and the cure of various types of diseases.

**2. Encounter with Angels**

Angels also pass down some healing formulas to humanity. Several angelic experiences were discovered to have been documented in the Holy Bible and Holy Quran. One such instance was recorded in Tobit 6:4-8. "Cut the fish in half and take out its gall bladder, heart and liver," the angels said, keep these with you; they can be used as medication but the guts should be discarded." Tobias followed the

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angel's instructions. He then fried the fish, ate a portion and salted the remaining to take with him. They walked together until they got close to Media. What diseases can this gall bladder, heart and liver cure?" Tobias inquired and the angel replied, "A demon or an evil spirit that is distressing someone can be chased away by burning the heart and liver. The attacks will cease immediately and the person will no longer be tormented. The gall bladder can be used to treat someone who has a white film covering his or her eyes. Simply rub it in his or her eyes and blow on the film and he or she will be able to see well once more. "In Yoruba land, ~~angels~~ divinities are called "Irunmole", suggesting they are an intermediary between human beings and their creator and many of the herbalists who have the ability to communicate with them received medicinal plant knowledge from them.

**3. Through the experiences of hunters and animals**
Hunters, especially in African countries, have been reported as the original custodians of some effective traditional herbal recipes. For example, if the hunter shot an elephant and the elephant ran away and chewed a particular plant and did not die, it is assumed that the hunter noted the plant as a possible antidote for wounds or relieving pain. Also, when a domestic animal nibbled a leaf of a specific plant when sick and recovered and when another animal bit a leaf accidently and died, it will be assumed that the first leaf is for healing of ailments and the other toxic. Likewise, the knowledge of the use of coffee leaves (coffee spp) for blood clotting was said to have come from monkeys who were shot and rapidly raced to consume and rub coffee leaves on the wounds, which stopped the bleeding. Animals are now housed in laboratories and utilized to assess a novel drug's toxicity, therapeutic capabilities and pharmacokinetics.

**4. Through spirit or occult**
Astrology, alchemy and natural magic were frequently included in the title; a circumstance in which extra-terrestrial aliens can be communicated with through dreams, fantasies, guesses, visions and other means. Spirits can take on numerous shapes, such as an alligator, a human with one leg or one arm or a person using a walking stick, for example. If one comes across such a critter in the dark of night, it can be a valuable source of original herbal medicine information.

**RQ3. What is the relevance of indigenous herbal medicine in Yoruba communities?**
**Answer:** Herbal medicine is a special and prominent form of indigenous medicine, in which the traditional healer is known as the herbalist, specializes in the use of herbs to treat various ailments. Herbal medicines has been used throughout the beginning of human history and played a pivotal role in the prevention and treatment of various diseases. However, herbs are plants with roots, leaves, seeds, fruits or flowers. They are used for seasoning food, medicine purposes and colognes. It was reported that Yoruba land has one of the largest collections of herbs and medicinal plants in West Africa and all of which are proven to be effective for treating definite diseases aside from their culinary uses. Listed below are some of the common Yoruba indigenous herbs plants and their health benefits.

**1. Moringa Plant (Yoruba: Ewe Ile)**



Figure: 3

Moringa plant is a popular flowering tree known for its various medicinal benefits. Sometimes, it is referred to as "the miracle tree," which demonstrates how effective it is when it comes to the gastronomic, cosmetic and medicinal treatment. It is also being said, that Moringa plant contains tremendous source of amino acids, minerals, vitamins A, C, and E. There are lots of other health benefits associated with Moringa Plant, some of which are: It contains a reasonable amount of antioxidant properties which can help to combat free molecule that causes cell damage, inflammation, stress and other related conditions, it regulates excesses glucose and lipid in the body that may trigger complications that are harmful to the cardiovascular system, it can be used for the treatment of mouth ulcers, anemia, arthritis, asthma, constipation, diabetes, diarrhea, hypertension, kidney stones, stomach pain, stomach ulcers and thyroid disorders, it also expedites the healing of wounds, management of fatigue and stress. It was also reported that there are certain properties in Moringa plant that releases energy that boost the normal functioning of the body organs. It reduces bacterial and fungal infections and improves healthy eye sight, suppresses migraines, reduces tumor growth and the risk of kidney stones formation.

**2. Jute Leaf (Yoruba: Ewedu)**



Figure: 4

Jute leaf has a lot of benefits. It was reported that outside cooking, soup making and hair moisturizing. Some of the health benefits of Jute leaf are: It contains fatty acids, omega 3, vitamins B, magnesium and zinc that facilitate weight loss; it also contains vitamins that keep the skin moist. In

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the same vain, it averts loss of water through the skin; this reduces wrinkles that are the main causes of aging. Also, it contains calcium that strengthens the bone and teeth. The Omega 3 stabilizes blood pressure and prevents hypertension. Similarly, it helps to stabilize the hormone in women during PMS (premenstrual syndrome**)** and keep the menstrual cycle regularly. Finally, the presence of Omega 3 helps to improve the functioning of the brain.

**3. Green vegetable (Yoruba: Efo Tete)**



Figure: 5

The health benefits of green vegetable are amazing. As reported, these include some of the stated below: It contains a lot of calcium that maintains healthy bones. The presence of calcium plays a major role in eliminating excess sodium from the blood and sustains healthy blood vessels, thereby reducing the risk of high blood pressure, it is very rich in fibre and water, these helps to prevent constipation and promote a healthy digestive system. It is also a source of iron, which is vital for movement of oxygen around the body. This prevents fatigue, headaches, anemia etc. It also increase sperm health, cures diabetes and protects against viral infections, especially those that cause common colds.

**4. Okra (Yoruba: Ila)**



Figure: 6

Okra is a flowering plant known for its eatable seed shells. It is sometimes referred to as "lady's finger". Okra is a nutritional fruit as such it contains vitamins C and K1; it has many antioxidants that benefit the body. It reduces the risk of heart disease, it has anticancer properties, it lowers blood sugar; it is helpful for developing the brain and spine of a fetus, it also reduces the risk of serious health conditions like cancer, diabetes, stroke, and heart disease.

**5. Basil or Scent Leaf (Yoruba: Efinrin)**



Figure: 7

Scent leaf is a popular Nigerian medicinal plant. It is usually planted around homes to show how useful it is to human's existence. Some of the health benefits of scent leaf include: preventing of heart diseases, relieving colon-related pains and ear aches, treating internal disorders such as dysentery, diarrhea, stomach ache and vomiting, combating cold, cough and catarrh, treating fever and malaria, boosting digestive system, treating skin diseases such as ring worm, skin irritations, rashes and infections associated with teeth, eyes and mouth as well as, boosting sperm vitality and preventing infertility among others.

**6. Bitter Leaf (Yoruba: Ewuro)**



Figure: 8

Bitter leaf as the name implies, is an African plant with bitter or acrimonious taste. It is widely used for cooking in typical Nigerian homes, especially in Yoruba land. Some of the health benefits of bitter leaf include: It relieves stomach aches; by chewing the tender part of the stem or leaf stalk or by pounding its leaves and squeezing the juicy content into a cup. After which, mix about 3 tablespoons of the liquid and a pinch of salt in a cup and then drink it, it can also be used for treating malaria, typhoid fever, diarrhea and other related conditions, it reduces blood pressure and sugar level, it stimulates prostate cancer patients by increasing the flow of urine, relieving pain and also controlling the spread of the neoplastic cells, it combats pneumonia, it is also effective for treating lung disease. it enhances fertility (it is ideal food choice for women who find it hard to conceive) this is because bitter leaf carries detoxifying effects for preventing the pollution of the antibodies that fight myriads of diseases initiate tissue repair and regeneration, which also increases the fertility of the ovaries, managing insomnia, treating diabetes and infectious diseases such as sexually transmitted infections, eczema, ringworm, itching, allergies, etc. It improves the blood and lymphatic system, it increases appetite, it also enhances milk production in lactating

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mothers and treating of cough and respiratory tract infections.

**7. Aloe Vera (Yoruba: Eti-erin)**



Figure: 9

Aloe Vera is a homegrown medicinal plant known for its versatility; it can be used for cosmetics, cooking and more importantly, it has a lot of medicinal uses. Aloe Vera can be used for: lowering blood and sugar level, boosting liver and kidney function, moisturizing hair and scalp, treating skin allergies, sunburn, skin irritations, rashes, eczema, dermatitis and psoriasis, treating oral mucositis, mouth ulcers and canker sores, speeding up the healing process of wounds and fire burn injuries, treating constipation and some other related conditions.

**8. Girdle Pod (Yoruba: Irawo Ile)**



Figure: 10

Girdle pod is a perennial herb found in almost all parts of Nigeria. It has a lot of health benefits which includes, treating of hemorrhoids, amenorrhea, hepatic, etc. It can also be used for treating ringworm, scabies, itching, craw-craw, dermatitis, etc. Girdle pod relieves headaches, body ache and toothaches, it treats sexually transmitted diseases [STDs], gets rid of dandruff and eczema.

**9. Ringworm Bush or Candle Plant (Yoruba: AsunwonOyinbo)**



Figure: 11

Ringworm bush contains antibacterial, antifungal, anti-inflammatory, anti-tumor, analgesic, diuretics, laxative and other properties that are recognized to be effective for boosting human health and prevention of diseases. Some of the health benefits of ringworm plant are treating skin diseases and infections such as itching, pruritus, eczema, itches, ringworm, etc. It cures snake bites and other poisonous and venereal epidemics, it boost appetite and relieves constipation, it can also be used for treating asthma, bronchitis and dyspnea, it is effective for treating sickle cell anemia, hypertension and diabetes, it boost food digestion and treatment of intestinal worm infestation and gonorrhea, it is also a good remedy for treating cough, cold, acne and so on.

**10. Wild Lettuce (Yoruba: EfoYarin)**



Figure: 12

Wild lettuce is among the most popular plant in Nigeria. It is known for its healing and analgesic qualities. Its health benefits includes: It eliminate pains such as muscle pain, arthritic pain, colic pain, joint pain and muscle spasms, it handles indigestion, pre-menstrual symptoms in women such as anxiety, uneasiness and pains, it relieves anxiety and stress, it improves quality of sleep, eradicates respiratory diseases; such as asthma, bronchitis and cough, it relieves headache and migraine, it cures skin infections and diseases such as itching and irritation.

**11. Mint Leaf (Yoruba: Ewe Minti)**



Figure: 13

Mint leaf is most common with Yoruba people in Nigeria. Its health benefits include: treating nasal congestion, boosting immune system, relieving morning sickness, nausea and vomiting in pregnant women, aids digestion of food, cures stomach ache, abdominal pains, fever and malaria, and bad breath among others**.**

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**12. Water Leaf (Yoruba: Gbure)**



Figure: 14

Water leaf is commonly used for cooking. Its health benefits include: It promotes weight loss, repairs body tissues, improves bone and teeth health, aids digestion, strengthens immune system, soothes inflammation, prevents atherosclerosis and heart disease, enhances cognitive ability, cures constipation and indigestion, improves the blood clotting, promotes heart health and promotes clear vision.

**13. Goat Weed (Yoruba: ImiEsu or Akoyunyun)**



Figure: 15

Goat weed enhances sexual performance, treats erectile dysfunctions that are caused by nerve injury, improves energy and memory, stabilize the immune system and reduce risk of cancer, prevents postmenopausal bone loss, cures ear defects, it also cures fever, atherosclerosis, nerve pain, fatigue and osteoporosis among others.

**14. Siam Weed (Yoruba: Awolowo or Akintola Leaf)**



Figure: 16

The health benefits of Siam Weed includes: It prevent diabetes**,** maintain the heart, maintain the reproduction organ in women, prevent cervical cancer, treat peptic ulcers, cures diabetes and mellitus disease, treats various injuries and stops bleeding.

**15. Lemon Grass (Yoruba: Ewe Tea or Kooko Oba)**



Figure: 17

Lemon grass also referred to as "fever grass" is a perennial plant with tinny, long leaves that is indigenous to many West African countries. As the name suggests, lemon grass smells like lemon, but it tastes milder and sweeter. This herb is used for gastronomies as a flavoring agent due to its potent flavor. It was reported that lemon grass is a good source of vitamins A, B and C, folic acid, magnesium, zinc, copper, iron, potassium, phosphorus, calcium and manganese. The health benefits of lemongrass include relief from stomach disorders, respiratory disorders, fever, aches, infections, insomnia, rheumatism and edema. it was also reported that the defensive antioxidant activity of the lemon grass herb protects against antibiotic-resistant staphylococcus aurous and helps in maintaining optimum cholesterol levels, cellular health, nervous system, healthy skin and immune system. It is also effective for treating type 2 diabetes, cancer and obesity, while also aiding in detoxification. It is extensively used in aromatherapy and helps to combat fatigue, anxiety and body odor.

**16. Pumpkin Leaf (Yoruba: Elegede or Agbeje)**



Figure: 18

Pumpkin leaf is one of those locally greens that is valuable in Yoruba land, apart from culinary, it was reported that pumpkin leaves contain a lot of vitamins and minerals, which includes vitamin E, vitamin B6, vitamin A, vitamin C, potassium, calcium, folic acid, iron, magnesium, phosphorus, thiamine, niacin, dietary fibers, riboflavin, copper, manganese and proteins. The unbelievable health benefits of pumpkin leaf are: It fights against cancer, increases fertility, prevents infection, lower cholesterol, tackles convulsion, combats diabetes, an anti-aging agents and other related illnesses.

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**17. Neem leaves (Yoruba: Ewe Dogoyaro)**



Figure: 19

Neem leaves generally known as "Dogoyaro" leaves in Nigeria have several health benefits. It is well known not only for its medicinal properties but also for taking care of the environment. It was reported to contain nimbin, nimbinen, nimbolide, nimandial, ninbinene and other useful compounds that have anti-fungal, anti-bacterial and anti-inflammatory agents. Among other things, the leaf is used to cure leprosy, eye disorders, bloody nose, loss of appetite, intestinal worms, stomach ache, skin ulcers, diseases of the heart and blood vessels (cardiovascular disease), fever, diabetes, gum disease (gingivitis) and liver problems. It also contains powerful antifungal agents that destroy fungi which cause athlete foot, ringworm and nail fungus. The leaves and its juice provide us with wonderful beauty benefits such as moisturizes the skin, cures acne, skin toning, used for boosting hair growth, used for oily skin, skin pigmentation and cure nail ailments.

**18. Lime (Yoruba: Oronbo Wewe)**



Figure: 20

Limes are high in vitamin C and antioxidants; both of which offers health benefits. Eating limes or drinking the juice can improve immunity against sickness and diseases**,** it reduce heart disease risk factors, prevent kidney stones, aids iron absorption and promote healthy skin. It was advised that anyone who is allergic to citrus fruit should avoid lime.

**19. Mango tree (Yoruba: IgiMangoro)**



Figure: 21

Mango is one of the trees that are common in Yoruba land. Its leaves are rich in vitamin C, B and A. They are also rich in numerous other nutrients. The leaves have prevailing antioxidant properties as such it contains rich content of flavonoids and phenols. They are used for treating diabetes, restlessness, lower blood pressure, ear aches, respiratory problems, gall and kidney stones, hiccups and throat problems as well as stomach tonic.

**20. Pawpaw (Yoruba: Ibepe)**



Figure: 22

It is a very common fruit in Yoruba land as it tends to grow naturally. Papayas contain high levels of antioxidants vitamin A, vitamin C and vitamin E. it contains high antioxidants that may reduce the risk of heart disease. The antioxidants prevent the oxidation of cholesterol. When cholesterol oxidizes, it's more likely to create blockages that lead to heart disease.

**21. Guava (Yoruba: Guaba or Gilofa)**



Figure: 23

Guava tree contains high level of potassium and soluble fiber that ensures free flow of substance within the body. Guava leaf lowers blood pressure and reduces cholesterol level, it also lower blood sugar levels, it maintains and boost the functioning of the heart, it helps to relieve painful menstruation, it enhances the digestive system, it aids weight loss and fights against cancer among others.

It was also discovered that in Yoruba land, just like the other parts of the word, Ayurveda, Siddha, Unani, Amchi are used for management and treatment of different sickness and diseases. In addition, a large number of herbs and herbal formulations are used as rejuvenators. Rasayana therapy is the specialized practice of Ayurveda, which deals with the improvement of the mental and physical health of individual, increase longevity, intellectual capacity, strength and also keep the patients free from diseases. According to WHO, at least 80% of people in Africa still rely on medicinal plants for their healthcare. In Nigeria and certainly the entire West Africa, herbal medicine has continued to gain momentum; some of the advantages are

low cost, affordability, availability, acceptability and apparently low toxicity.

**RQ4. What are the ingredients used for preparing indigenous herbal medicine among the Yoruba Communities?**
**Answer:** Several ingredients are used for preparing herbal medicine but it depends largely on type of ailments to be treated. Some commonly used methods in Yoruba kingdom are:
1. Fruits and seeds that contain phytochemicals and essential oils that is highly active.
2. Plant Roots: Many African plant species have medicinal roots that are mushy or woody.
3. Bulbs: A bulb is an underground structure made up of numerous leaves of fleshy scales, for example allium sativa (garlic) and allium cepa (onions) etc.
4.Rhizomes: Woody or fleshy underground stem that grows horizontally and brings out their leaves above the ground, e.g., zingiber (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.
5. Tubers such as cassava potatoes, coco yam, and yams, are swollen fleshy underground structures that grow from stems/roots.
7. Back: The exterior protective layer of a tree's stem or trunk. It includes a high concentration of phytochemicals with significant therapeutic value. Medicinal barks can be found on a variety of plants.

**RQ5. What are the methods used for preparing indigenous herbal medicine among the Yoruba communities?**
**Answer:** The methods of preparation indigenous herbal medicine varies according to places, nature of ailment, tribes, culture and religion. The plant materials may be used fresh or dry. A particular method may be chosen to increase efficiency and decrease toxicity. According to the herbal doctors, there are different methods of preparing herbal medicine. Some of these are discussed below:
1. Extraction is the process of separating a material from its matrix. The first and most important step in the creation of plant formulations is extraction.
2. Infusions: This process is carried out by macerating the crude medication in cold or hot water for a brief length of time. To avoid deterioration, a preservative such as honey might be used.
3. Decoction: In traditional medicine, this is the most popular method for creating herbal remedies. The chemical elements of the herbal material are dissolved or extracted into the hot liquid after the herbal material is boiled in water.
4. Tinctures: This is the alcoholic infusions which if concentrated may be diluted before administration.
5. Ashing: The dried parts are incinerated to ash, then sieved and added to water or food etc.

**RQ6. What are the ways of administering indigenous herbal medicine among the Yoruba communities?**
**Answer:** There are several ways through which herbal medicine can be administered. Some of the common ways include:
1. By inhaling: That is by breathing in the air when it is boiled or the smoke, or gas from the herbs into your lungs.
2. By drinking: When mixed with cold or warn water or in form of tea.
5. By robbing: It can be robbed on the entire body or affected parts of the body or eyelid.
4. By insertion: Herbal medicine can be inserted into the nostril, ear, anus and urinary organs, etc.
5. It can be used for bathing.
6. By sprinkling: It can be sprinkled on food, someone, on the ground and the entire compound, etc.
7. By marking it on someone, or tie it on the neck or wrist of the victim.
8. Placed on door post
9. Buried in the compound and so on.

**RQ7. What are the challenges of indigenous herbal medicine among the Yoruba communities?**
**Answer:** The following are observed to be the challenges of indigenous herbal medicine in Yoruba land among others:
1. Poor documentation, organisational and preservation: This has resulted in improper identification by young generations who inherited the ideas from their fathers.
2. Lack of recognition by the government for implementation of traditional medicine activities.
3. Non-inclusion in school curriculum: Herbal medicine is expected to be an academic discipline to be studied in schools the same way English medicine is legalised and formalised.
4. Nonchalant attitudes towards developing a standard for formal recognition of Traditional Health Practitioners (THP).
5. Lack of national policies for the conservation of indigenous herbal medicinal plant.
6. Lack of Knowledge: The challenge of lack of knowledge of herbal medicine by health care regulatory authorities, agencies and the entire public. a lot of people are spending huge amount on English drug because they don't know the potency of indigenous herbal medicine.
7. Lack of standard for collaboration between practitioners of conventional and traditional medicine.
8. Limited research data: The problem of lack of record for explanation.
9. Oral Tradition/Documentation: Indigenous herbal medicines are not dually documented but inherited orally from generation to generation.

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10. Non active law for protection of intellectual property rights and indigenous herbal knowledge in Nigeria.

## VI. OBSERVATIONS BY THE RESEARCHERS.

1. It was observed that most of the herbal doctors are very dirty, scary and unkempt and this could be the major reason for lack of interest and low patronage and use of herbal medicine by the public.
2. It was observed that the processes involved in collecting the leaves, roots, seed and so on are not document and this is because the herbal doctors could neither read nor write in English or their local dialect. So inheriting such ideas in case of emergency death of the custodian would be difficult.
3.It was observed that after the herbs has been prepared, plastic bottles are picked from along the street with no proper washing, not considering what the bottle was first used for or who used them. The liquid herbel medicine are missed into the bottle without proper gadge. Also, each of the content in the bottles can cure morethan five aliments according the herbel practioners. To them,there is no over dosage, no NAFDAC number and so no side effect.



Figure: 24

4.It was observed that some of the images in some of the herbel homes are scary and does no potray any sign of remedy or solution to some who is seeking solution.



Figure: 25

## VII. RECOMMENDATIONS

The following were recommended:
1. Traditional medicine should be included in the Nigerian school curriculum from primary to tertiary levels.
2. There should be a forum and enabling environment provided for effective collaboration between orthodox medical doctors and traditional medicine practitioners and the public.
3. Protection of intellectual property rights and indigenous herbal medicine should be encouraged by the Nigerian government
4. Establishment of regular training programmes or something like Nigerian or National Institute of Traditional Medicine Practitioners to train and educate the herbal doctors.
5. The federal government should create a budgetary allocation for traditional medicine practitioners in the National Health Budget.
6. The federal and state government should establish units or departments for formal collection and documentation of the details of the working of medicinal plants from the existing oral tradition in order to guard against its extinction or possible adulteration.
7. Libraries and librarians in their little ways should make effort to collect materials on oral history, oral tradition and all forms of indigenous knowledge and make them available in all formats to any user who needs such materials.
8.Rebranding, packaging and marketing: The federal government and the federal ministry of health should establish governmental agencies that will take care of both the rebranding repackaging and effective marketing of the traditional herbals productions both within and outside the country.
9. Government and the ministry of health should organise and sponsor trade fairs and exhibitions annually at the state, national and international levels.

## VIII. CONCLUSION

Indigenous knowledge is crucial for sustainability of every community as it reveals to the future generations who they are and where they were coming from. The indigenous herbs provide cheap alternative to those who cannot afford English medicine. In Yoruba land like every other part of the world, there was a rich indigenous knowledge and indigenous herbal medicine system in place. This has been in existence from time immemorial and because of its close tie effectiveness to the people, the threat of English medicine, globalization and westernization has not succeeded in wiping it out.

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