



An Enquiry into the Indigenous Model of Preventive Healthcare in Western Nigeria

ALBERT O. ONOBHAYEDO, FELIX AYEMERE AIROBOMAN
University of Benin, Nigeria

Abstract. The traditional model of preventive healthcare has remained a neglected theme in academic discourse in Nigeria despite the space it occupied in the health practices of the people. This is largely because the system operated with a cultic flavour that tended to defy scientific explanation. This study, focusing on western Nigeria, gives account of developments in this domain of medicine and therefore incorporates elements such as divination, use of amulets and traditional inoculation. The study also examines other preventive healthcare services such as sanitation, isolation of patients and the use of herbal decoctions and the associated taboos. The study relies largely on the information obtained from the national archives Ibadan, Nigeria and oral interviews with some orthodox and traditional healthcare professionals.

Keywords: Preventive healthcare, Western Nigeria, Infectious diseases, Herbs, Divination, Inoculation

1. Introduction

This study interrogates the character and history of the indigenous model of preventive healthcare in western Nigeria. Western Nigeria, as conceived in the study, is the geographical area in the south-western end of Nigeria, bounded by the Atlantic Ocean to the South, the River Niger to the East, Republic of Benin to the West and Kogi and Kwara States of Nigeria to the North. Although there were multiple ethnic groups such as the Yoruba, Bini, Esan, Urhobo, Isoko, Itsekiri, Owon, Etsako and Ijaw, colonial regional arrangements constituted the area into an administrative unit – the Western Region. The web of inter-community interaction, which dates back to the pre-colonial times, made this constituency delimitation feasible and a combination of geographical factors, patterns of interaction and

colonial policies shaped the medical history of the people.

Preventive healthcare as practised by Western Nigerian communities was a complex phenomenon. The mystery, superstition, obscurity and art that characterised therapeutic procedures were amplified in preventive healthcare, making it a difficult terrain that researchers have preferred to avoid. Therefore, only a limited number of studies are focused on the history of the traditional model of preventive healthcare which obtained in Western Nigeria. Adekunle Ajose's work, *Preventive Medicine and superstition in Nigeria*, typifies such studies, although it was restricted in scope to mostly the Yoruba area of the region (Ajose, 1957). Outside Yorubaland, he only made cursory reference to a form of traditional inoculation in Esanland, as we shall see. Similarly, Ajovi Scott-Emuakpor's work, *The Evolution of Health Care System in Nigeria: The Way Forward in the Twenty-First Century*, also made some light reference to the pre-colonial dimension of preventive healthcare in Nigeria (Scott-Emuakpor, 2010). Therefore, in studies on Nigerian medical history in Western Nigeria, there has been a lopsided focus on curative medicine in Yoruba area. This is also evident in the work of Una Maclean, *Magical Medicine: A Nigerian Case Study* (Maclean, 1971).

Available records indicate that the earliest documentation of traditional medical practices is clearly lopsided in favour of curative medicine. The pioneer documents recorded by British colonial officials reflected this bias, and influenced by Western values, they derided traditional medicine as fetish, "black" and superstitious. In tandem with this line of thought, F. G. Hopkins, a colonial Chief Medical Officer, Lagos (1900), stated that "as time goes on the natives will begin to see how very inefficient their modes of treatment are as compared

with European methods... some of their modes being most barbaric” (National Archives Ibadan (NAI, Lagos Annual Report, 1900-1901). With such comments, the British colonial officials drew attention to the limitations of traditional medicine without taking into cognizance, the intricate relationship between health, medicine and culture in the healthcare delivery system of the people. Western Nigerian communities, viewed health as an all-encompassing experience, transcending the mere absence of diseases, embracing the entire gamut of an individual’s life. In this worldview, the environment loomed large as an important determinant of the health status of an individual. The environment that had to be groomed to ensure good health was conceived in a broad spectrum of spheres including the physical, social and spiritual dimensions. Diseases were believed to occur when one faltered in the management of any or all of these. By implication, preventive healthcare measures were projections of the people’s perception of ailments as derivatives of physical and socio-spiritual variables.

The value of the physical environment, largely, was visible in its role as the dwelling place of the people and source of medicinal plants, animals, minerals and other resources such as streams, rocks and rivers. The way the environment was manipulated either marred or enhanced individual or community health. Rivers and streams were preferred to ponds as sources of water, while sweeping was done habitually. All the communities of Western Nigeria paid attention to environmental sanitation. Such community service was integrated into the age-grade system where the “junior grades furnished messengers...other executants of the royal [and community] will” (Ryder, 1980). In Benin, the *Igbama* were charged with the responsibility of sweeping and clearing public squares, market places and around rivers and streams in their localities (Interview with Agbonogieva, 2014). In Esanland, the *Egbonughe* played this role. Western Igbo communities assigned the role to the youthful *otu-okwalague* grade. In Urhobo, Ukwuani and Ijo land, it was *ivrawa*, *otuirre* and *gegenkalawoma* respectively while among the Yoruba it was the *alagbase* (Agubosim, 1997, Oral interview with Okoh, 2014, Afeniyi, 2015). However, the impetus for cleanliness, apart from the desire to keep away snakes, derived primarily from aesthetic considerations rather than the knowledge of the relationship between the physical environment and common diseases such as malaria and yaws. The existence and significance of microbes as causative agents of diseases was not known. Since they did not invent magnifying instruments, physical observation was limited to the normal, unaided range of visual

perception, which could not reveal pathogenic microorganisms. Therefore, preventive measures were not deliberately adopted to eliminate pathogens. The smallest organisms that were understood to be implicated in ailments were worms. Abdominal pain, toothache and itching were often attributed to worms. Yet their life circle was hardly investigated or known. Hermetic diseases (worm infections) although known, were hardly prevented through sanitation programmes and policy.

The pitfalls arising from a poor understanding of the role of worms and pathogens was further compounded by the people’s ignorance about the relationship between mosquitoes, flies, lice, rats and diseases. These environmental agents were hardly reckoned with in disease prevention schemes. They perceived insects and rats as mere irritants and pests and, therefore, of little moment in preventive healthcare considerations. Although the relationship between the environment and ailments was poorly understood and articulated, the former was the reservoir of the flora and fauna from which concoctions, ointments, amulets employed in traditional herbal medicine derived.

Apparently, the people reserved a more important position for the socio-spiritual environment, where the interplay of individual conduct and perceived spiritual forces determined the state of personal and community health. Western Nigerian communities believed that individual conduct and taboos had direct correlation with health to the extent that any infraction on them attracted some ailments as punishment from God, divinities or ancestors. For instance, the Edo and Yoruba people held the view that adultery on the part of a wife had disastrous consequences for the family by attracting ill-health and subsequently death to her children and husband. The Yoruba invented the *magun* to expose the male transgressor and adulterous wife and, thus, save the husband and children from collateral punishment in the form of ailment or even death (Oral interview with Ogunebanmi, 2014). Other ‘sins’ that supposedly, had adverse repercussion for health included incestuous relationship, murder, witchcraft, putrefying of sacred places and violation of taboos in general. Diseases attributed to these were ‘diagnosed’ by diviners whose suspicion was usually aroused by intractable diseases like madness and bloated stomach that defile herbal treatment. A health-conscious individual, therefore, was one who worked within the ambit of laid down traditions. If such an individual, in spite of obedience to law and traditions contracted a stigmatised disease, diviners blamed witches and wizards instead of ‘sin’.

2. Origin of Preventive Healthcare System in Western Nigeria

The origin of preventive healthcare among Western Nigerian communities is yet to receive historical and scholarly attention. The root of the practice, therefore, remains a puzzle, shrouded in obscurity. Information gap and obscure issues, which beg the question of when and how confront any enquirer who seeks a profound knowledge of the subject and how preventive healthcare originated in Western Nigeria. One model of explanation is exogenous. This model traces the origin of healthcare practices in Western Nigeria to Egypt and the Nok culture. Tariq Sawandi is an apostle of this school of thought, which believes that the Yoruba during antiquity, lived in ancient Egypt before migrating to the west-coast of present day Nigeria, equipped with some aspect of Egyptian religious belief, customs and medicine. (Sawandi, <https://planetherb.com>)

This view was amplified in his article, *Yorubic Medicine: The Art of Divine Herbology*, where he drew an analogy between the Egyptian medicine and Yoruba medical practices. He espoused the view that the Yoruba medicine derived from Egyptian and Memphite medical theories formulated during the reign of King Menes. In Memphite and Egyptian theology, every plant or animal has spiritual and mystical values that transcend their physical and culinary essence. A priest or magical physician could tap this inner essence for “contagion or healing” (Sawandi, <https://planetherb.com>)

Tariq Sawandi’s position could be summed up in his claim that early in its history and development, Nile valley civilization created a way of life that attracted teachers, priests and ideas from other parts of Africa to enrich the original composition of the area. He believed that by the time the Yoruba people made their journey, led by the mystical prophet, Orunmila, from the Nile valley, Egyptian priests had accumulated centuries of herbal and medical knowledge. The Yoruba drew from this chest of wisdom and incorporated it into their religion and customs. The key point in this argument is that Egyptian knowledge coupled with Nok influence produced the outcome of Yoruba traditional medicine.

Aligned with this supposed exogenous flow of ideas is the attempt to trace some elements of the Benin civilization to migrants from the Middle East, who sojourned through Yorubaland, acquiring elements of Yoruba religion, politics and medicine. Jacob Egharevba belongs to this school of thought.

According to him, the Benin people settled in Ile-Ife before their movement into their present abode (Egharevba, 1960). Viewed from this perspective, it would appear that the cultural affinity between the Yoruba and Edo speaking people and the similarities in preventive healthcare practices were by-products of this historical connection, only reinforced by the subsequent social-political and economic interaction between the people.

Stretched further, the exogenous model of explanation has been projected through Benin to the medical practices of other Edo speaking people - Esan, Etsako, Isoko, Urhobo and Owan as well as their Anioma neighbours such as Agbor, Asaba, Ogwashi-uku and Ibusa that came under its influence. This school of explanation tends to see the ubiquitous hand of Benin in the emergence and evolution of socio-political practices, including medical forms and practices among the said groups.

By implication, a road map that suits the exogenous model of explanation of the origin and spread of preventive healthcare in Western Nigeria begins from Egypt or somewhere in the Middle East, goes through the Nok culture, links Yorubaland, thereafter, ancient Benin and then the rest of Edoland and neighbouring Niger-Delta groups. The common origin of medical practices of these groups may also be inferred from the obvious common grounds in terminologies relating to the “supernatural power who pervades existence in the sustenance and destiny [and wellbeing] of each existing thing”. It is called *ehi* in Edoland, *ori* in Yorubaland, *chi* in Igboland, *eli* in Hebrew and *di* in Mesopotamia, *chi* in china, *ki* in Japan, *gi* in Korea . (Ejim. 2006)

While it is historically expedient to acknowledge the spread of healthcare methods from one place to another and from one generation to subsequent ones, the complementary role of indigenous inventions must also be appreciated. Health being a primary concern to any aggregation of humans challenged the human spirit and survival instinct, leading to independent evaluation and interpretation of ailments and development of preventive and therapeutic methods. This is the endogenous (indigenous development) model of explanation. Oral testimonies from informants such as D. Odion, A. Ovuehor, N. Oluo and E. Adeoye lopsidedly subscribed to this school of thought. This line of explanation is amplified in such oral accounts, an indispensable source of historical data on the subject. Such informant claimed that traditional healing and preventive healthcare were invented by eponymous ancestors who combined their understanding of

nature with inspirations from the spiritual realm. (Oral interviews with Odion, Ovuenhor, Oluo, Adeoye, 2014). This aligned with Idowu's view that traditional doctors "often claim that they are taught medicine by divinities or generally, in dreams or in trance or during meetings with spirits in the forest" (Idowu, 1973). Such 'gifted' ancestors were believed to have worked as mediums and servants of the 'gods' and could draw on esoteric inspirations to acquire the knowledge of herbs, healing and preventive methods. They generally credited a substantial part of preventive healthcare measures to previous generation of herbalists and diviners who through observation, experimentation and esoteric experience generated medical ideas; implying that the body of knowledge and methods encapsulated in the art of traditional preventive healthcare were indigenous to the people. Whereas the informants earlier highlighted were vociferous about the endogenous origin of medical practices, scholars such as Maclean and Iwu were silent about the subject in their study (Maclean, 1971).

The ability to prevent ailments was potentiated by initiation, family lessons and apprenticeship. Medicine men were often initiated into healing cults or into religious practices that had medical value in the traditional sense. By so doing, the power to heal and practice preventive medicine was believed to be transferred to a recipient, who concurrently was taught the appropriate incantations, herbs, animal parts and other paraphernalia of traditional medicine. The *babalawo* and the *onisegun* of Yorubaland played this role and worked in tandem with the deities (orisha). (Idowu, 1973) In Edoland, the traditional healers were called *oboh*. This tag was adopted by virtually all the peoples and dialects of Edoland, namely; Esan, Etsako, Owan and Urhobo. In Igboland, western of the River Niger, they were called *dibie*. The *oboh* and the *dibie* were master herbalists who could double as diviners. Traditional medicine was crafted in such a way that the potentials of the flora and fauna of every environment were tapped for preventive purposes and healing. Thus, traditional medicine was adapted to local conditions through herbal collection and divination. Often, they sought the intervention of the divinities and ancestors through divination, supposedly to acquire 'knowledge' about the therapeutic and prophylactic value of local plants, animal parts and minerals.

Although health craft was constructed locally, the invented methods easily spread from one town to another and from one culture area to the other. A traditional healer could be consulted by a patient from a neighbouring or distant community especially

if he was reputed to be a specialist in a particular medical domain. It was common to find a Benin or an Urhobo man consulting a herbalist in Esanland and *vice versa*. The Etsako, Owan and Esan people interacted with each other in a similar fashion, receiving and treating patient, irrespective of their place of abode. Inter-community interaction in divination and medicine also flourished in the Ogwashi-uku, Ubulu-Uku and Agbor axis of Igboland, west of the River Niger, as it was between Yoruba communities.

Even more potent in the spread of medical practices was the apprenticeship system, which enabled a traditional healer to receive apprentices from neighbouring communities. An apprentice was drilled for many years. Very often, they came into the household of their trainers as young lads, doubling as domestic servants. They were systematically exposed to the rituals, herbs, incantations and the art of healing and prevention of diseases, which, upon graduation, were taken back to their parent community. What the indigenous development model suggests, therefore, is that traditional medicine, preventive or therapeutic, evolved independently in the various culture groups of Western Nigeria. It acknowledges that there was interaction within and between the culture families and that local exigencies sometimes necessitated the borrowing and adapting of medical ideas to specific needs.

3. Nature and Factors of the Preventive Healthcare System in Pre-colonial Western Nigeria

Examined holistically, preventive healthcare had ample space in the consciousness of Western Nigerian communities as everyday living was conducted in alignment with the values and practices that were supposed to ensure good health. People made effort to harmonise their behaviour with the traditions of the land, which in their worldview represented the will of God, the divinities and the ancestors. Traditional preventive healthcare and religion, therefore, over-lapped in many spheres. The structure of the health system accommodated the deities. Priests, diviners and herbalists therefore, played a dual role of conducting religious rituals as well as prescribing preventive and therapeutic measures to maintain or restore good health.

The tag herbalist could only be used in a loose sense to describe medicine men because they often combined herbs with animal parts, earth or soil extracts and incantations. Three important factors shaped the course of preventive healthcare in

Western Nigeria. First was the cosmology of the various communities, which implicated the ancestors, the divinities, and accommodated spiritual exercises in community and individual health. The second was the absence of the “germ theory”, which would have implicated pathogens as causative agents of ailments such as dysentery, malaria and yellow fever. Curiously, Ebohon, a Benin priest has postulated that the Benin medicine man “believes in the germ theory” alongside the “supernatural theories of diseases” (Ebohon, 2010). The third factor was the mode of classification of ailments. Ailments that elicited feverish conditions without rashes and other visible conditions were generically categorized as fever irrespective of cause. Pains experienced in the thoracic region of the body were easily classified as chest pain without regards to the different organs encased within. A case of bloated stomach was usually thought to be inflicted on people by witches and wizards or by the divinities and ancestors as a retribution for “sins” and the violation of norms and values of society. In malignant cases affecting children, witchcraft attack, worms or the “accumulation of bad blood” in the body were suspected. (Oral interview with Ebosele, 2013) The general perception of the nature and factors of ailments determined the mode of preventive healthcare schemes.

4. Scope of Preventive Healthcare System in Western Nigeria

Preventive healthcare was administered through such means as herbal concoctions, inoculation, divination, amulets and the propitiation of spirits. Any or a combination of these could be used to manipulate the perceived factors of ailments to prevent their occurrence or reoccurrence. The people prepared concoctions from plants, animals or mineral products, as well as concocted ointments that they rubbed to ward of certain ailments or the evil forces that could attract them. They also practiced an indigenous form of inoculation. Traditional inoculation or cutaneous incision, derogatorily called scarification by British colonialists were made and laced with traditional inoculum as an antidote against some diseases.

Taboos were usually prescribed to enable people live aright and avoid the wrath of the gods and ancestors in the form of ailments. Where necessary, the appeasement of spirits and witches through propitiation rites was recommended by diviners. This procedure could be combined with the use of herbs.

Herbs were considered to be of significant medical value. Depending on their properties, the leaves, bark, stem or roots of their trees were used. Medicinal plants ranged from spices, shrubs and fruit trees found around homes to large forests trees. Spices were common biomedical products in virtually all Western Nigerian communities and were particularly useful in preventive healthcare. Spices and condiments bore a clear relationship with preventive healthcare and were thought to fortify the body against many ailments. The indigenous people, therefore, developed different methods of processing and administering them. Spices derive their flavour from essential oils (Encarta Encyclopaedia. 2009) But this was not understood in pre-colonial Western Nigeria and the processing of such plants did not include the identification and extraction of such oils for medical purposes (apart from palm kernel-oil and shea-butter) Rather the relevant parts such as leaves, roots, and seeds or a combination of all were used as ingredients. Any disease that was susceptible to treatment with spices could largely be prevented or minimised if such a spice was consumed as soup for prophylactic reasons.

According to B. C. Ndukwu and N. B. Ben-Nwadibia, “the indigenous people value the plants more for their ethno-medicinal uses than for spicing foods” (Ndukwu, Ben-Nwadiba, www.opensuic.lib.siu.edu) The spices that were commonly used among Western Nigerian communities could be classified into three namely: pepper, leaves and bulbs. Pepper came in various names, such as African pepper, Guinea pepper, Benin pepper, red pepper and alligator pepper. Leaves included “scent leaves” of various names, while onion and garlic were the main bulbs used. To ease analysis, the spices used and their medicinal nature are tabulated as follows:

Table I: Spices Used in Preventive Healthcare in Western Nigeria.

S/N	Scientific Name	Native Name	English Name	Use in Preventive Medicine
1	<i>Denniettia Tripetala</i>	Yoruba-Igberi, Igbo- Nmimi, Edo – Ako, (Urhobo-Imako)	Pepper Fruit	Leaves and fruits chewed to enhance appetite and prevent common cold, fever and worm infestation
2	<i>Xylopia Aethiopica</i>	Yoruba – Eeru, Igbo – Uda, Edo – Unien (Urhobo-Ureri)	Ethiopian Pepper,African Pepper,Guinea Pepper	Prevent wounds from becoming septic, enhances appetite, ward off abdominal pain and worm infestation. Occasional injection as soup is also thought to promote fertility and prevent post-partum hemorrhage
3	<i>Pargularia Doemia</i>	Igbo–Utazi, Yoruba– Teji, Esan-Urianene	Unknown	The stem, Leaves and root bark are used to cure or help the body to deal with cough, fever, catarrh and diarrhea
4	<i>Ocimum Americanus</i>	Edo – Esewon, Igbo- Uchanwu, Yoruba – Effinruin-wewe, Esan-Ebalumonkho	Scent leave	The roots and leaves are used in a decoction believed to be a strengthening tonic.
5	<i>Ocimum Bacilicum</i>	Edo – Esewon, Igbo- Uchanwu, Yoruba, - Efirinpo or Efiriajija	Sweet basil, Harry Basil	The roots and leaves are used in a decoction believed to be a strengthening tonic.
6	<i>Ocimum Canum</i>	Edo – Esewon, Igbo- Uchanwu, Yoruba, - Efirinpo or Efirin-ajase	Scent Leave	The roots and leaves are used in a decoction believed to be a strengthening tonic.
7	<i>Ocimum Gratissimum</i>	Edo – Esewon, Igbo- Uchanwu, Yoruba, - Efirinpo or Efirin-gidi	Tea, Bush	strengthening music
8	<i>Tetrapleura Tetraptera</i>	Igbo – Oshosho, Yoruba – Aridan, Edo – (Benin-Ighimiakia, Esan – Ighirehimi)	Unknown	A pinch of burnt and ground pod taken from time to time was thought to prevent convulsion in children and flatulence especially in pregnant women and nursing mothers
9	<i>Allium Cepa</i>	Edo – Alubasa, Yoruba – Alubasa, Igbo - Yabasi	Onions	Often added to decoctions used in dealing with worm infestation
10	<i>Piper Guineensis</i>	Edo – Ebeahihin, (Urhobo-Uririe), Igbo – Oziza, Yoruba – Ata-iyere	Benin Pepper	Thought to cure or prevent intestinal worms and strengthen the body against fever, common cold
11	<i>Capsicum Annum</i>	Edo – Esin, Igbo – Ose, Yoruba – Ata-jije or Ata-eiye	Chilly, Red Pepper	Thought to cure or prevent intestinal worms and strengthen the body against fever, common cold.
12	<i>Capsicum Frutescens</i>	Yoruba – Ata-jije, Tatashie, Igbo – Ose-oyinbo, Edo – Isie	Red Pepper	Believed to cure or prevent intestinal worms and strengthen the body against fever, common cold.
13	<i>Aframomum Melegueta</i>	Edo - Esin-edo, (Urhobo - erhie)Yoruba – Oburo, Igbo – Ose-oji	Alligator Pepper, Grains Of Paradise, Guinea Grains	Thought to prevent or cure intestinal worms and strengthen the body against fever and common cold. Also features regularly in divination in Edoland.

Source: Adapted from Ndukwu, B. C., and Ben-Nwadiba, N. B., *Ethno-Medicinal Aspects of Plants used as Spices and Condiments in the Niger-Delta Area of Nigeria*. www.opensuic.lib.siu.edu

Ndukwu and Ben-Nwadibia's study was ethnographic rather historical. They did not historicise their study in time perspective but pointed out spices used in contemporary time that were unarguably inherited from the past – fragments of the surviving elements of the pre-colonial healthcare delivery system. Indeed, herbs including spices were used extensively as prophylaxis for common ailments. They were administered as general elixirs of life that enhanced resistance to common ailments, including “fever” and dysentery. Among the indigenous Western Nigerian groups, the use of spices and herbs for preventive and curative purposes, over-lapped. Drugs that were prepared for fever, dysentery, yaws and leprosy, for instance, were not only used for curative purposes. They became readily available and other members of the family could be given preventive shots. Virtually every ailment had alternative drugs, which were sometimes administered simultaneously. Such alternative drugs were sought and used when a hitherto recommended one failed. Archival records indicate that beyond spices, alternative herbs and materials used in pre-colonial Western Nigeria included the following:

Table II: Popular Plants and Materials used as Ingredients in Traditional Medicines.

S/N	Scientific Name	English Name	Native Name
1	<i>Kola Acuminata</i>	Kolanut	Igbo – <i>Oji</i> , Edo – <i>Ebhele</i> , Yoruba – <i>Obi</i>
2	<i>Carica papaya</i>	Pawpaw	
3	<i>Musa paradisiaca</i>	Plantain	Edo - <i>Oghede</i> , Yoruba – <i>Agbagbe</i> , Igbo – <i>Ogede jioko</i>
4	<i>Musa acuminata</i>	Banana	Yoruba – <i>Omini</i> , Edo - <i>Oghede</i> , Igbo – <i>Ogede</i>
5	<i>Ricinus communis</i>	Castor oil plant	
6	<i>Cucumis meloinodorus</i>	Casaba	Yoruba – <i>Gbaguda</i>
7	<i>Vernonia amygdalina</i>	Bitter leave	Igbo – <i>Onugbu</i> , Edo – <i>Oriwo</i> , Yoruba- <i>Oruwo</i> ,
8	<i>Citrus aurantifolia</i>	Lime	Yoruba – <i>Osan-wewe</i> , Edo – <i>Anumei-eguegue</i> , Igbo – <i>Olome-nkilisi</i>
9	<i>Baphia nitida</i>	Camwood	Yoruba – <i>Osun</i> , Edo – <i>Alo</i>
10	<i>Dirca palustris</i>	Leather Tree	Yoruba - <i>Igi awo</i> ,
11	<i>Potassium nitrate</i>	Luby or cooking potash	Yoruba – <i>Kaun</i> , Edo – <i>Akaun</i> , Igbo,- <i>Akanwu</i>
12	-	Honey	Igbo – <i>Nmanu-awun</i> , Edo – <i>Amelon</i> , Yoruba – <i>Oyin</i>
13	<i>Lagernaria siceraria</i>	Calabash Plant	Igbo – <i>Agbe</i> , Yoruba- <i>Igba</i> , Edo – <i>Uko</i>
14	<i>Gossypium</i>	Cotton Plant	Igbo – <i>Olulu</i> , Edo – <i>Olulu</i>
15	<i>Vitellaria paradoxa</i> ,	Shea Butter	Yoruba – <i>Ori</i> , Edo – <i>Orievo</i>
16	<i>Parkia biglobosa</i>	Locust Seed	Yoruba - <i>Iru</i> , Edo – <i>Ugbore</i> , Igbo - <i>Ogili</i>

Source: Compiled from information available on NAI. Lagos Annual Report. Medical Department. 1899 and NAI. Lagos Annual Report. Medical Department. 1900-1901 as well as Interview with Pa Agbonogieva Utekon Elder, 75years. Benin City. July 12. 2014 and Ogunbanmi Damisi, 60years, Ondo, February 4, 2014. and Nwankwo, Oluo. Traditional Healer. 69 years. Agbor. April 16. 2014.

With the aid of such plants, some common ailments such as fever, dysentery, yaws leprosy and smallpox that plagued pre-colonial Western Nigeria were managed.

The reports of British medical officer who served in Western Nigeria as far back as the 1899 provide documentary evidence of the indigenous mode of prevention and treatment of fever. According to Maquire's 1899 report, the root of bitter leave (*igi oruwo* in Yoruba, *onugbu* in Igbo and *oriwo* in Edo) was scrapped and boiled in water and palm- oil. The liquid was taken as a drink, about four ounces being taken in the morning. (NAI, Lagos Annual Report, 1899) In an alternative method recorded by Hopkins, lime-leaves were ground with cayenne pepper and salt. (NAI, Lagos Annual Report, 1899) Lime-leaves were also reported by H. MacDonald to have been used to produce a variant of anti-fever concoction. In this method, "lime-leaves, plenty of egg shell, soot obtained from roofs of houses were fire have been used and a good quantity of red and black pepper" were beaten up in a mortar and dispensed along with corn meal. (NAI, Lagos Annual Report, 1899). The use of lime leaves and roots of bitterleaf plant was also a common practice among the Edo, Delta and Igbo, west of the River Niger, groups. They were often ground together with red pepper or alligator pepper and taken as soup or drink. A decoction from lemon grass was also used in Edo, Delta Igbo and Yorubaland as panaceas against fever. Whenever available in a home, smaller measures of such medicines were administered as preventive shots to family members and even guests. The

practice was also applicable to drugs meant for other ailments like dysentery.

Dysentery was one of the prevalent diseases in pre-colonial and colonial Western Nigeria. Various concoctions were prepared and administered for preventive and curative purposes. One of the methods stated in C. Jerkins Lumpkin report of 1899 indicated that banana was sun-dried, pound and mixed with salt. (NAI, Lagos Annual, 1899). The resulting powder was green in colour and the dose was left to the caprice of the patient. MacDonald also reported another method, which involved the use of the seed of calabash plant that was mixed with locust seed ("*iru*" in Yoruba, *ogi* in Edo and *ogili* in Igbo), shea-butter and salt to produce a medicinal soup that was taken for two days to effect cure or taken casually to prevent dysentery. The same level of efficacy was attributed to a soup made out of shea-butter, *egusi* (melon seed) salt, okra and the scent leave. The use of such soups, cut across our area of study with slight local variations. However, a more common practice in Edo, delta and Western Igbo communities was the grinding of pepper and or alligator pepper with bitter leave and locust beans cake to form a paste, which was licked rather than drunk by a patient or even by a healthy person to prevent dysentery. (Oral interview with Agu, 2014)

One method was peculiar to the Yoruba, especially those of Ibadan extraction: the earth thrown up by the specie of earthworm called *ekolo* in Yoruba language was mixed with water and drunk as a remedy against dysentery. Colonial health officials, condemning this as an exercise in "geophagy", doubted its benefit.

(NAI, Lagos Annual Report, 1899) However, a recent study in Rockefeller University, led by Zachary Charlop-Powers, posits that the biosynthetic content of soil may be the source of the world's next generation of antibiotics. The study provides insight into the natural world, taking samples from all manner of soil even that "under your feet" to create what has been referred to as "drugs from dirt" (Sinha, 2015). The Yoruba practice could be investigated within this context for possible scientific benefit.

The Yoruba also dealt with yaws through a mixture of "*idi*" root, lime-leaves and honey, - boiled together and used the same day internally and externally on the eruptions on the skin. It could also be robbed prophylactically. Some parents preferred early occurrence of the disease in a child because they observed that it never reoccurred, although they had no explanation for it (NAI, Lagos Annual Report, 1899).

Similarly, there were herbal decoctions considered efficacious in the management of leprosy. In Yorubaland, an indigenous plant called "*fu*" was used. It was selected from the bush and the bark split off ritualistically on four sides - north, south, east and west. The herbalist placed four cowries on those sides and repeated an incantation. The essence of the cowries was to pay the plant for its service in healing. Slag from the blacksmiths furnace was then placed in the bottom of a pot and mixed with the compound. The urine of a young lad to which the ordinary blue-dye had been added was poured over this, along with small quantity of water. The mixture was covered and allowed to stand for seven days. The infested person then drank with his hand first and thereafter washed the leprosy spot with the compound (NAI, Lagos Annual Report, 1899). Apart from its contagious nature and its tendency to disfigure the patient, leprosy was looked upon as a curse from the gods or punishment for a dreadful offence that the patient may have committed. Many communities in Yorubaland and the Edo and Anioma axis also considered it hereditary. A case arising in a family could deter marriage to someone from that family. Therefore, families usually ostracised those with visible ulceration to save themselves from ridicule. A secondary reason was to prevent its possible spread to other members of the family. An ostracised leper usually set up a camp close to a farm land but was surreptitiously visited by family members, a habit that negated the desire to prevent the spread of the disease by seclusion. Another limitation of seclusion is that it was not rigidly enforced and there was no mechanism for detecting early stages of the disease, which were potentially as infectious as the large

ulceration stage. Syphilis also resulted in some form of ulceration in the genitals, differentiated but sometimes confused with leprosy.

As early as 1899, Macdonald had documented the treatment and management of gonorrhoea and syphilis by the natives. To deal with the former, young banana dried in the sun, alligator pepper, with about the same amount of bitter-cola, a good quantity of *potassium nitrate* were burnt in a pot and ground. The resulting powder was served with hot or cold corn meal - *agidi*. Alligator pepper, bitter-kola and potassium nitrate were also useful in the management of syphilis. They were mashed together with the stigmata of maize (corn silk), husk of locust-bean pod and a whole egg for ingestion and external application on the ulcer.

Smallpox was another disease with external eruptions. A native decoction was prepared for external application to heal smallpox rashes and prevent further attacks. It involved the grinding together of Indian corn, ripe banana, scent leaves; the product of which was mixed with plenty of oil, especially of palm-nut extraction and the excrement of bush cat (NAI, Lagos Annual Report, 1899). External application of clay or white chalk on the eruption and the drinking of palm wine were also encouraged in Edoland, Igbo area, West of the Niger, and the Urhobo of the Niger delta. (Oral interview with Ebosele, 2013)

Dropsy, also known as oedema also manifested externally, characterised by swelling of the feet. Locust-bean pod was boiled together with corn meal and iron filing and drunk. Occasional preventive shots were recommended for pregnant women. The decoction produced diarrhoea and diuresis. (NAI, Lagos Annual Report, 1899)

These medications, although primarily meant to effect cure had secondary application in preventive healthcare as smaller and irregular doses were dispensed for prophylactic purposes. There were no hard and fast rules about this. The extent of prophylactic use in a household was at the discretion of the parents or recipient. Discretion was also exercised in the choice of alternative preventive healthcare measures since disease prevention was expressed in other gamut of traditional medical practices such as divination, social etiquette, inoculation, and amulets, under the management of healers, priests and elders.

5. Divination

Divination expressed the people's belief in the influence of extraneous spiritual entities on individual and community health. To begin with, the very force that is responsible for creation is reckoned to be responsible for ecological equilibrium. In the people's perception, good health was predetermined by the assumed harmony in creation. Ill health was perceived as an aberration from the natural order, hence the recourse to preventive measures, restoration and replenishment. At times of distress or a mere anticipation of it, divination was resorted to as a leeway of reconnecting with the creator, the divinities and ancestors for spiritual intervention. Divination was also a way of taming malevolent spirits and witches who were thought to be capable of unleashing the venom of deadly diseases on people. Divination was expected to yield esoteric information on measures that could restore health at the individual and community level. Beyond this, it was a core component of preventive healthcare scheme in our area of study. It tapped on the wisdom, experience and insight of the diviner about the nature and factors of ailments. Their revelations were supposed to be infallible pieces of information from benevolent spirits by means of certain rituals, incantations and tossing of some ritual objects, which could be the shell of particular seeds, kola nuts, palm kernel and bones of prescribed animals such as crocodile. The paraphernalia of divination may also include calabash, effigies, chalk, pieces of red, white or black cloth, palm-nuts, the mystified regalia of the diviner and various drawings and mascots (Oral interview Adeoye, Agbonogieva, 2014)

As a health consultant, the diviner (Igbo – *idibia*, Yoruba – *babalawo*, Edo – *oboh*) was relied upon to prognosticate on any ailment, recommend preventive measures or predict impending diseases. During consultation, the client may make his worries known to the diviner directly. However, the latter, in order to inspire more confidence in the client, may request that the reason for the consultation be whispered or hushed over a medium (*uta* in Edo) which could be a cowrie, or palm-kernel or a piece of bone (NAI, Lagos Annual Report, 1900-1901). His mentor spirits were expected to decode the inaudible complaints, communicating same and possible remedy to the diviner. However, cynics, even in traditional circles, believe that the diviner trickily deciphered the inaudible complaints through a series of questions that indirectly gave him insight into the fears of the complainant. In relation to preventive healthcare and well-being, questions such as the following could be asked during consultation:

- Who or what is responsible for my illness?
- What do I do to avert premature death?
- Will I be poisoned or harmed if I visit a named person or place?
- Who are my enemies including witches and wizards?
- What are the plans of my enemies as regards my health?
- How do I ward off the attack of witches and wizards?
- How do I prevent the occurrence or reoccurrence of a particular disease? And
- Who are those working against my material progress and how do I stop them?

The response usually took the shape of an advice or prognostication that addressed the questions and fears expressed by a client. An amulet, charm or some sacrifice may be prescribed. Through such means, an individual, family, or an entire community may come to believe that they are fortified against certain ailments, accidents, poisons. In medical terms, divination is difficult to evaluate, save for the psychological relief that it provided and the occasional prescription of personal hygiene. Very often, prognosis from divination was misleading and counter-productive. Accordingly, prophylactic measures prescribed were sometimes hazardous to health, even when they were given a specialist and cultic flavour (Oral interview with Adeoye, 2015). The limitation of divination and cultic practices were exemplified by activities of the *shopono* cult of the Yoruba communities.

Literally, *onishopono* means the owner of smallpox or priest of the *shopono* cult. He resided in a small farm and was reclusive as smallpox patients went to him with money, palm-oil and ram. The ram was supposed to be used for propitiatory sacrifice for the patient's benefit but was in reality kept by the *onishopono* as a prerequisite for rendering his services. In an attempt to cure the patient, cowries were broken and added to a bowl of maize. The mixture was deposited in a street with the incantation "baba, help this person - your child who is sick... keep away evil spirits from the sick man" (NAI, Lagos Annual Report, Medical Department, 1899). Besides being perceived as a source of remedy, it was a popular belief that *shopono* spread smallpox by certain charms. In order to prevent this, patients visited the diviner with sacrificial gift and performed 'prophylactic' rituals. Those caught in the matrix of *shopono* belief system never stopped under a "shady tree in the heat of the day as the evil spirit of smallpox was supposed to reside there". (NAI, Lagos Annual Report, 1899)

It was also believed that smallpox patients should not eat fowl; if someone maliciously puts fowl in his food, he died, and if he puts the feather of a fowl in the fire the disease will spread to others. It was also thought that the disease could be prevented by drinking water into which a piece of crocodile bone (*cada*) had been placed (NAI, Lagos Annual Report, 1899). The *shopono* complex yielded a modicum of prophylactic effect from the practical steps taken to isolate patients with smallpox in the camp of the *shopono* priest who was also empowered to burn or confiscate the infected clothes of a patient. However, a *Shopono* priest could use such fomites to covertly infect some people so as “to enrich himself with their belongings” (Ajose, 1957). So, smallpox continued in epidemic proportions, assuming its most virulent dimension during the dry season, and especially the harmattan period.

In Esanland, smallpox was managed through a ritual dance, usually recommended by diviners in honour and pacification of *oje*, the divinity believed to be implicated in smallpox contagion, prevention and healing. Besides, Esan people also performed variolation on the children with cutaneous incision on the back of the left hand or forearm (Ajose, 1957). Therefore, the prevention of diseases was not only sought through divination but through inoculation as well.

6. Inoculation

The main character of traditional inoculation was the lacing of incisions with substances, which supposedly had prophylactic value. This practice has been derogatorily referred to as scarification as though the scar left behind was the *raison d'être* for the practice. The Western model of vaccination also, often, produces scars but was never denigrated as such. Most Western Nigerian communities believed that a broad spectrum of ailments, machete-cut, gun-shot, snake-bite, convulsion, and even accidents could be prevented by inoculation. The idea was to create a little opening on the skin to allow the introduction of an inoculum into the body. Such medicines were expected to interact with the human system and fortify it against the target condition. An informant, talking about the efficacy of anti-machete inoculation, related the following incident he witnessed:

As a result of boundary dispute between two communities in Esanland, a friend was cajoled into accepting traditional inoculation against machete-cut. After the exercise, the inoculator, brandishing a sharp machete invited him for a test blow. The latter took to his heels. He returned when he thought the

matter had been forgotten only for the inoculator to sneak in and strike him with the sharp machete that simply bounced off his body without a cut (Oral interview with Egbaze, 2014).

Ironically, the same medicine man behind this seeming successful anti-machete inoculation was tried and imprisoned for manslaughter after a trial gunshot killed a client as a result of the failure of the anti-gunshot inoculation he had administered (Oral interview with Egbaze, 2014). With this kind of incident and the secrecy that enveloped the business, the efficacy of traditional inoculation was difficult to determine. People did not openly associate themselves with the practice. Usually, it was a clandestine business between the practitioner and his client as no one wanted to be labeled or stigmatised as diabolical. However, Daniel Odion, a traditional healer explained that the secrecy involved did not derive from the fear of stigmatisation but from the attempt to conceal the act like “a protective under-vest” that should take an assailant by surprise. He explained further that if traditional inoculation was common knowledge, an assailant would come prepared with an antidote against the medicine and render the individual in question vulnerable (Oral interview with Odion, 2014).

A similar practice was the inoculation of people against snake venom. The inoculant was usually a powdery substance made out of snake parts, particularly the dry and pulverised skull (Oral interview with Agbonogieva, 2014). Inoculation against snakes was more popular among male adults especially farmers and hunters. The most feared snakes were the puff adder and the cobra. The efficacy of anti-snake inoculation is difficult to verify just as it was with anti-convulsion inoculation mostly practiced in Edoland.

Convulsion was seen as a harbinger of death commissioned by malevolent spirits or witches to kill a child. It was regarded as a principal factor in the very high level of infant mortality that was experienced among Western Nigerian communities. One preventive measure that pervaded the communities was to keep a child warm, where necessary, by the fire-side and not to expose him to excessive cold. Shivering was thought to be a precursor of convulsion. Keeping a convulsing child warm was not very effective preventive measure as an individual tended to suffer several attacks in his childhood. Alternative measures were sought. The Bini took the prevention of convulsion to the realm of traditional inoculation. Virtually every child had little incisions made on his cheeks, with an inoculum

rubbed in. Some incisions were made on either side of the cheek. This was usually a professional invasion of the body, which only trained hands were allowed to dabble into. The composition of the inoculum was usually the medicine man's secret and patronage was encouraged by the testimonies of previous beneficiaries. Anti-convulsion inoculation in Benin did not end as a pre-colonial enterprise; it remained popular throughout the colonial period. It is still a common practice today, in spite of the fact that its effectiveness is difficult to ascertain. Also difficult to verify was the efficacy of Amulets, a common component of preventive healthcare in Western Nigeria.

7. Amulets

Amulets were objects charged with prayers, chants, anointing or rituals by a medicine man to be worn or kept by a client, supposedly, to protect him against diseases, injury, poison, witchcraft or bad luck. They were either biogenic (derived from plants and animals) or inorganic. Extracts from sasswood, an iroko tree, the lock of a priest or priestess, cowries, tortoise shell, snail shell, palm frond and crocodile bones were among the biogenic material commonly fashioned into amulets. An amulet made of crocodile bone was popular in Yoruba land and employed as an antidote against smallpox. Tortoise shell and snail shell were usually fashioned into amulets to be worn in battle. Palm fronds knotted in a prescribed fashion, were hung somewhere in the house or the sentinel of a door to ward off evil and to attract good luck. Palm frond could stand alone but it was often combined with other resources. The sasswood, the iroko tree, the lock of a priest and priestess and ritual objects obtained from a shrine were woven onto amulets mostly to repel witchcraft attack and associated diseases (Oral interview with Adeoye, Agbonogieva, Oluo, 2014).

Inorganic materials, especially iron, brass and bronze, chalk were also associated with the craft of amulet making. They were commonly fashioned into rings, pendants, pegs, bells and beads. Special rings were usually worn for protection against accidents and assault and could empower an individual in self-defense. Pendants and beads were worn around the neck, waist or ankle and could also be attached to the hair for protection. The use of amulets had an esoteric content. The essence of the materials involved transcended their natural properties. They were believed to have mystical qualities. For instance, iron was associated with the divinity, *ogun*. In this worldview, appearance and essence were seen as two sides of the same coin, hence the materials

involved had to be manipulated physical and spiritually. Efficacy was, therefore, difficult to determine. Apart from reference to spiritual essence, verification and evaluation was difficult because there was no institutionalised body akin to the modern ministry of health that was charged with the duty of formulating policies, coordinating and setting standards for the use of amulets. It was, largely, left to the whims and caprices of preventive healthcare practitioners. The standard attained by any person was mostly a product of his talents, knowledge gained during training and on-the-job experience.

In spite of their modest contributions to healthcare, Nigerian traditional healers were often berated for being very secretive and unscientific. This denigration resonated in colonial records, crystallising in the belief that traditional medicine is characterised by supernatural causation, pre-scientific, and, therefore, irrational (Feuer, 1985). The critics of indigenous medicine have so far failed to realise that the so-called "black art" was a seed that had the potentials, like the folk medicine of Europe and Asia, of gradually acquiring a base in science. At its nascent stage of development, some of the basic principles, which constituted the foundation of modern science were already being applied to traditional medicine, which characteristically, reinforced medical know-how with ancestral experience. The practice of inoculation is an *exemplar gratia*. This was a practice in invasive 'medicine', aimed at fortifying the body against certain ailments. This procedure, as we have seen, was known in Western Nigeria long before vaccination was developed in Western medicine. The practice of using extracts from a snake to prepare anti-snake inoculum was only a step away from modern scientific approach where snake venom is used to create anti-snake venom. In Jorge Davalos' postulation, "any good anti-venom starts with its opposite" which is venom (Davalos, 2014)

Albert Onobhayedo and Augustine Nwaokocha have argued that traditional medicine also commonly called folk medicine was a "universal experience, representing the modest space given to health and illness in the culture of all the peoples of the world" (Onobhayedo, Nwaokocha, 2007). They stated that the primordial medical practices in Africa, Europe and Asia reflected the perception of the people about the nature of diseases and possible remedy. Such primordial health traditions harboured superstitious ideas and appealed to extraneous forces. Therefore, the Western Nigerian experience would be better understood within the context of the universal character of folk medicine. Along this line,

Onobhayedo and Nwaokocha argued that the secrecy associated with traditional medicine among Western Nigerian communities was a “subterfuge for a traditional patent system”, because some traditional healers perceived their discoveries as intellectual properties over which some patent right ought to be exercised. Patent protection was sought by a secretive and cultic mystification of certain discoveries, such that the knowledge was shared with the children of the herbalist and selected trainees only (Onobhayedo, Nwaokocha, 2007). Secrecy was more intense in the area of preventive healthcare, which accommodated divination and the use of charms and amulets. Upon their incursion into our area of study, the Europeans denigrated such indigenous medical practices, as misleading and unscientific. They, therefore, came along with the ideas that prevailed in Europe at that time, some of which (especially the treatment of malaria with limb bloodletting, emesis and purgation) did also fail the test of science and time.

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