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Sanitation and Hygiene in Pre-Colonial Osogbo

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Abstract **Original Research**

This study examines sanitation, hygiene, water management, and public health practices in pre-colonial Osogbo, Nigeria, challenging colonial-era portrayals of African societies as inherently unhygienic. Drawing on historical accounts, oral traditions, indigenous knowledge, and cultural practices, the study explores how Osogbo communities maintained personal, domestic, and environmental cleanliness before colonial contact. Findings reveal an organized sanitation system based on communal labour, designated refuse dumps, regular cleaning of markets, roads, water sources, and public spaces, alongside culturally embedded hygiene rules and taboos. Traditional authorities, elders, age grades, families, and religious institutions played important roles in enforcing sanitation standards and responding to health threats. Water sources were maintained through collective efforts, while epidemic control involved isolation, movement restrictions, and other preventive measures. The study concludes that pre-colonial Osogbo possessed a structured indigenous sanitation and public health system whose principles offer valuable insights for contemporary environmental health, community participation, and sustainable sanitation practices.

Keywords: Pre-colonial Osogbo, Sanitation and hygiene, Indigenous public health, Environmental health, Yoruba society.

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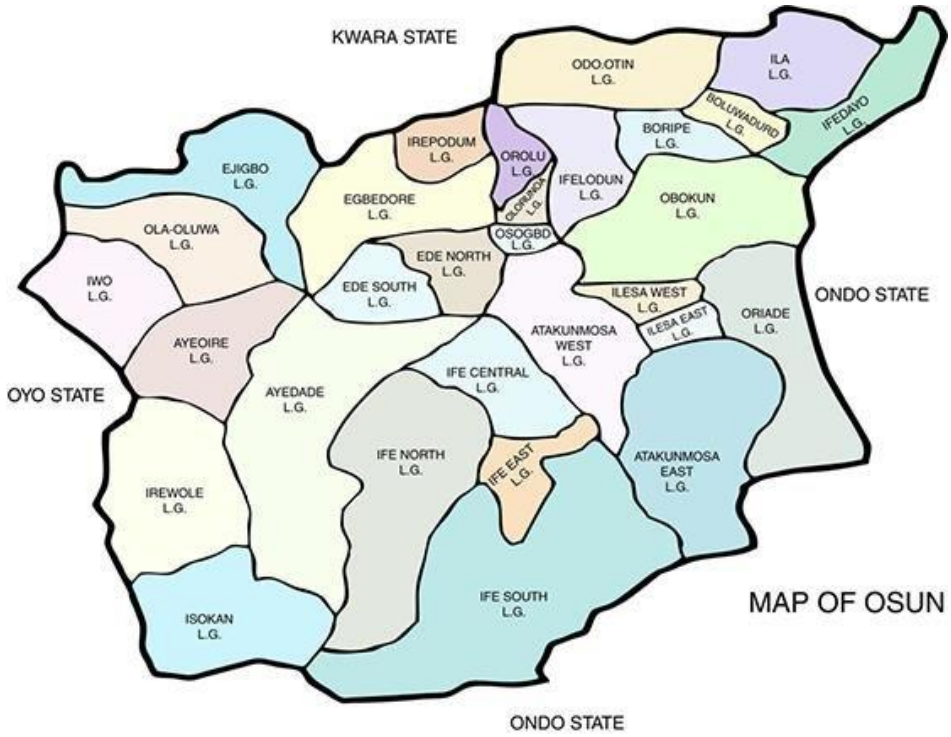
The Geography of Osogbo

Osogbo is a city located in southwestern Nigeria and serves as the capital of Osun State, a status it attained in 1991. The city hosts the headquarters of Osogbo Local Government Area (at Oke-Baale) and Olorunda Local Government Area (at Igbonna). Geographically, Osogbo lies about 88 kilometers northeast of Ibadan, 108 kilometers south of Ilorin, and 108 kilometers northwest of Akure. Strategically positioned, Osogbo shares borders with Ikirun, Ilesa, Ede, Egbedore, Ogbomosho, and Iragbiji, making it easily accessible from different parts of the state due to its central location. The city lies along the Osun River and sits on the railway line from Lagos, intersecting major road networks linking Ilesa, Ede, Ogbomosho, and Ikirun. Osogbo has an estimated population of about 200,000 people and covers a land area of approximately 126 square kilometers. The postal code of the city is 230. It experiences a tropical climate, with an average annual temperature of 25.5°C (77.8°F) and a mean annual rainfall of 1,361 millimeters (53.6 inches).[1]



Source: www.osunstate.gov.ng/geography.htm (2011)

Fig. 1: Map of Osun State showing all the Local Governments

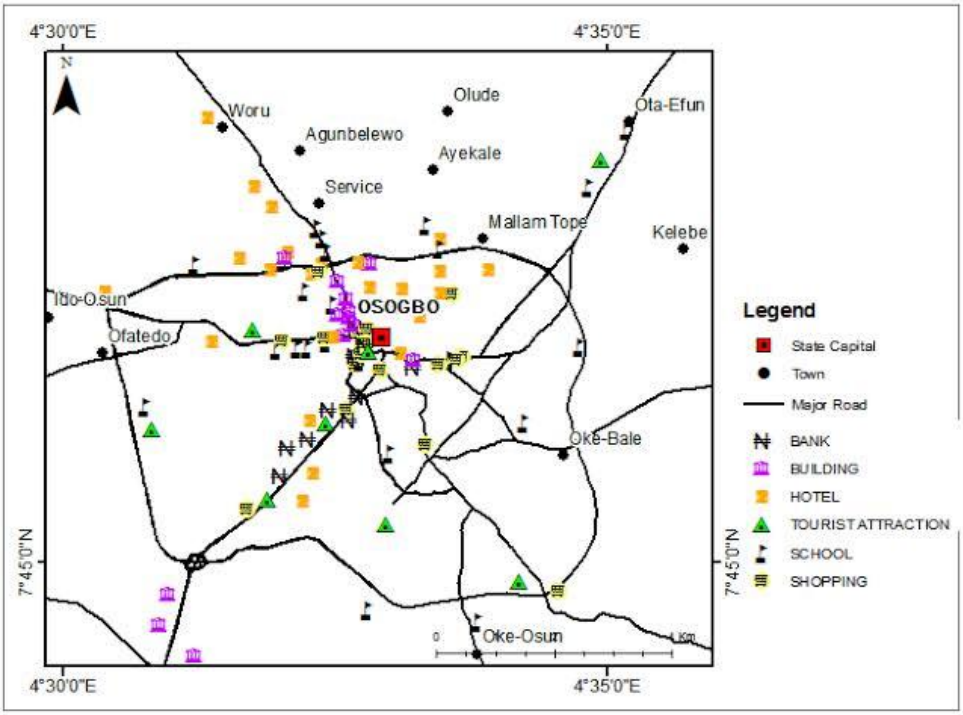


Fig. 2: Base Map of Osogbo showing different features

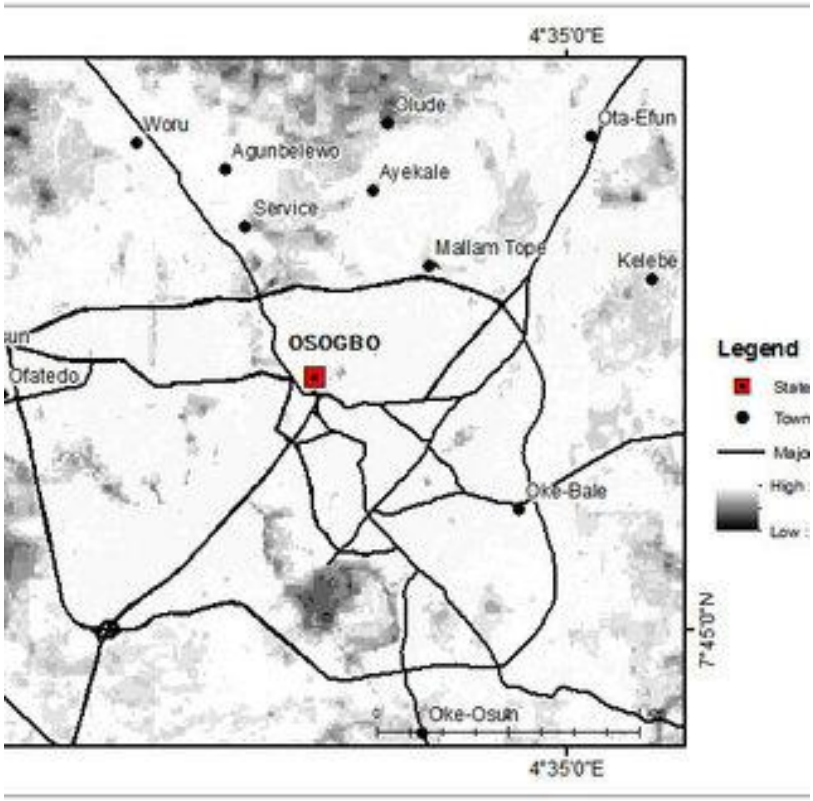
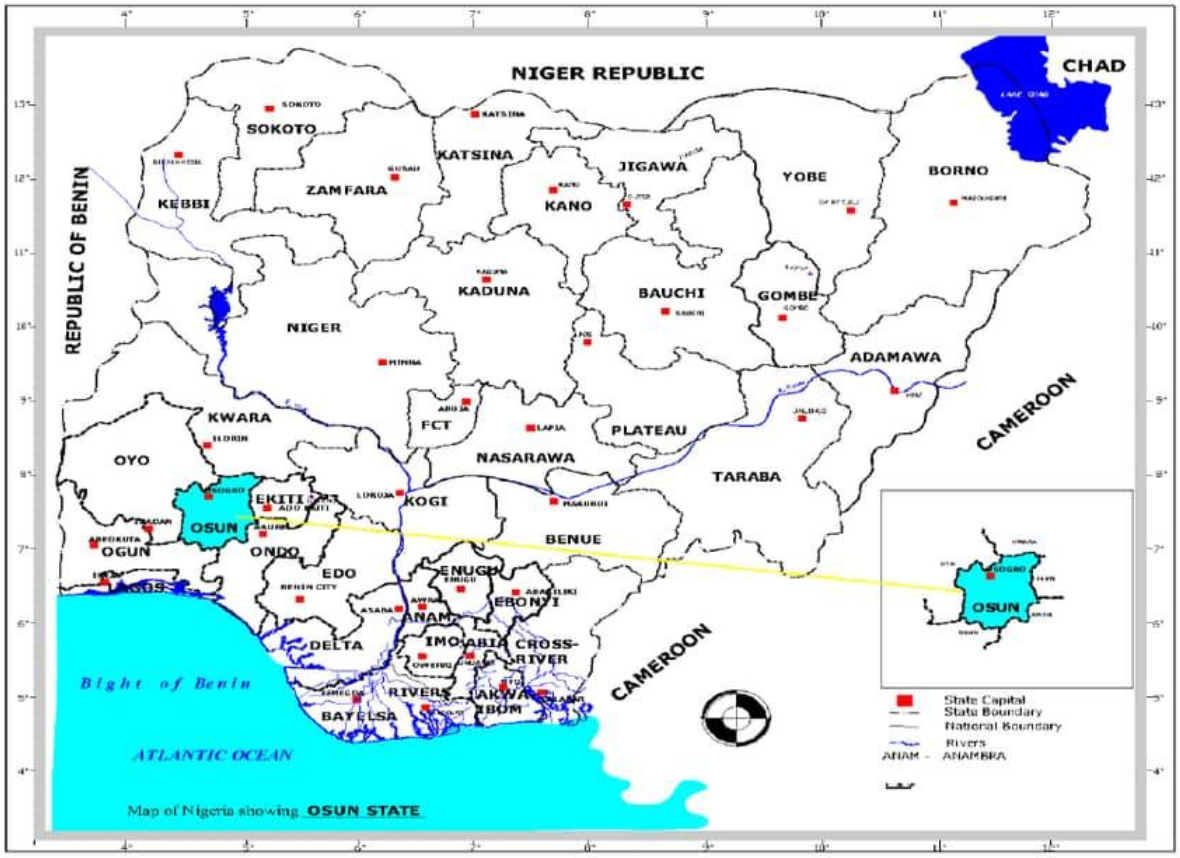


Fig. 3: Map of Osogbo Showing the Neighbouring Towns

Fig. 4: Map of Nigeria showing Osun State



Traditions of Origin of Osogbo

Like many other Yoruba towns and villages, the traditions of origin of Osogbo exist in different versions. The people's origins are mainly traced to two sources — Ipole-Omu and Ife. According to oral traditions, the earliest settlers were Timehin and a few other hunters. During the reign of Oba Olarooye at Ipole-Omu, the community experienced severe hardship due to recurring droughts. The persistent dry seasons caused widespread losses of crops, livestock, and even human lives, leaving the people distressed and demoralized.

Concerned by the dire situation, Oba Olarooye sought urgent remedies to prevent further devastation. He instructed Timehin, the chief hunter of Ipole, along with his fellow hunters, to embark on an expedition in search of a more fertile and hospitable land. Responding to this call, Timehin and his companions courageously ventured into the forest, eventually discovering the Osun River.

According to Yoruba tradition, Osogbo later became a refuge for people fleeing the Fulani invasion following the fall of the Old Oyo Empire. Consequently, the town's population grew rapidly through migrations from various Yoruba communities. Seeking a more open and centrally located area than their previous grove settlement, Oba Olarooye and his people abandoned their former site, including the thriving market, and relocated to what is now known as Ode-Osogbo. There, Olarooye built his new palace at Idi-Osun, while Timehin established the Ogun shrine, which is today called Idi-Ogun.

The second narrative of the tradition of origin claimed that Osogbo's early history is predominantly a tale of the spirit-world, chronicling the emergence of the spirits and fairies who shaped its foundation. Aligned with Yoruba traditions, which utilize myths

to elucidate the origins of ruling families in ancient Yoruba states, Osogbo traces its roots back to the era of Oduduwa. Oso-igbo, the goddess of Osun River, stands as the esteemed Queen and original founder of Osogbo. Renowned for her remarkable accomplishments, she fostered the settlement's establishment with magical prowess. Revered as the goddess of fertility, protection, and blessings, Oso-igbo was attributed with the extraordinary ability to grant children to barren women and heal the sick through the medicinal waters of the river, instilling inspiration among her people and fear in their adversaries.

On this background, not much is known about the aboriginals of Osogbo, before it was occupied by the migrants from Ipole-Omu and Ife.

However, Osun State, often referred to as the "State of the Living Spring," derives its name from the Osun River, a vital element intertwined with the goddess Osun and synonymous with prosperity and well-being. This designation stems from the river being not only the liquid embodiment of Osun but also the fountainhead of the people's wealth. Osun holds immense significance for Osogbo town, and the people's history is intricately connected with hers[3]. This cultural significance was vividly portrayed in a vibrant bead painting observed in a resident's showroom. The artwork depicted an elephant filled with circles, resting on the head of a stylized figure beneath. This scene held a dual interpretation.

Firstly, it symbolized Timehin, a fearless hunter and co-founder of Osogbo, who, according to legend, slew an elephant upon discovering the Osun River. Secondly, the elephant represented Obatala, the Yoruba deity associated with whiteness and creation, collaborating with Osun in artistic endeavors[4].

The bead painting served as a visual representation of the artist's identity as an Osogbo native. Rooted in a lineage tracing back to Timehin, the artist felt a profound connection to Osun, recognizing her as the source of his identity both as a native of Osogbo and as an artist whose practice is deeply rooted in Osun[5]. Osogbo stands out as a unique city where art has been ingrained in its history even before the advent of modern art. The city boasts a traditional art legacy that has been modified by contemporary artists, bridging the past, present, and future generations[6]. The recognition of the Osun grove as a UNESCO World Heritage site in July 2005 marked a significant moment for Osogbo and its heritage.

Sanitation and Hygiene in Pre-Colonial Osogbo

Before coming into contact with Europeans, the Osogbo people had standards of cleanliness for both themselves and their communities, just like other societies around the world[10]. Some early European explorers of Africa quickly disregarded and made negative comments regarding the health and sanitary conditions of coastal communities, while others blamed the influence of so-called European "civilization" for these unhygienic conditions. In the 1880s, European colonial official Molony-Kimberly noted that the interior towns, where Europeans had not yet arrived and where the native methods of preserving sanitation and hygiene were still in place, had far better sanitation than the West African littoral, where European "civilization" had influenced people's habits.[11]

In pre-colonial Osogbo, hygiene and sanitation were collective community responsibilities. The upkeep of public spaces — such as markets, the Oba's court, riverbanks, and footpaths — was carried out through coordinated communal efforts.[12] Special days were designated for town-wide sanitation exercises, during which every able-bodied resident participated in cleaning activities, while invalids were exempted. Refuse collection and disposal were also well organized. Community members gathered rubbish and burned it at designated dump sites, a process supervised by the elders, who managed the scheduling and division of sanitation duties.[13] Each clan within Osogbo had its own refuse dump site, and on assigned days, the youths would gather to burn accumulated waste, thereby making space for new refuse. These environmental sanitation days were fixed by elders, while the clearing of roads, footpaths, markets, and festival grounds was carried out by the youths under their supervision.[14]

To ensure full participation, town criers publicly

announced upcoming sanitation days.[15] Defaulters were punished through fines, confiscation of property, or exclusion from communal and cultural activities. Certain hygienic taboos also existed — for instance, residents were warned against littering with maize silk or defecating in the open. Instead, they were instructed to dig small holes for defecation and cover them afterward, a method that helped prevent contamination and produced natural manure.[16]

Domestic sanitation was gender-structured: women were responsible for keeping their homes and nearby surroundings clean, while men cleared footpaths and maintained communal latrines, all under the supervision of the Olori Ebi (family heads).[17] At the community level, sanitation was overseen by a public officer — a chief based at Ojule Oba-Ado in Balogun Agoro — who coordinated the broader sanitation system in Osogbo.[18]

Moreover, laws and taboos enforced by the ruling elite helped preserve public health and the environment.[19] It was forbidden to dump waste or defecate near rivers or water sources, and violations attracted penalties.[20] During epidemic outbreaks, Osogbo's leaders implemented strict public health measures such as restricting movement, banning gatherings and conjugal contact, and closing borders to prevent infected persons from entering the town.[21]

In all, pre-colonial Osogbo practiced a highly organized, community-driven sanitation system, guided by elders' supervision, traditional laws, and communal cooperation, ensuring both environmental cleanliness and public health.[22 23]

Sanitary and hygiene practices were nourished by the medico-religious nature of pre-colonial Osogbo health systems, which was similar to what was common in prehistoric Euro-Western societies.[24] For instance, many of the precolonial Osogbo's sanitary and hygienic practices were based on their fear of witchcraft, and their primary goal was to shield people from harmful influences. In addition to hiding excrement, urine, and other secretions because they were considered.[26]

Important festivals such as Osun Osogbo festival in pre-colonial Osogbo also had hygienic rules or practices connected to them. For example, the Osun Osogbo festival always start with the cleaning of every citizen of Osogbo community and clearing of the town called "*Iwopopo*"[27] to celebrate the Osun river goddess with pomp and pageantry. This featured rules regarding washing and presentation of the body and clean environment[28]. The Osun Osogbo festival suggests, among other things, related to purifying. sanctifying, and cleansing the community of both spiritual and physical contamination[29].

Similarly, the *Arugba* is the most important person during Osun Osogbo festival. Without her, the festival cannot be held. She carries this calabash to Osun Deity as it must be accepted. It is her purity that determines the worth of her sacrifice. To show the extent of how the people of Osogbo held public hygiene, it is them believe that cleanliness is an outer form of purity. However, for any lady to be chosen or selected as *Arugba* for Osun Osogbo festival for a particular year she must be a virgin, clean, outstanding and pure both physically and internally. This as matter of fact makes every girl or lady to always observed high level of personal hygiene and sanitation of their homes and environment[30].

Pre-colonial Osogbo people were concerned with personal hygiene in addition to maintaining a clean environment. Marcus Allen, an explorer and surgeon, wrote this observation about the Fante of the Gold Coast in 1874. The Fante's facial expression is anything but pleasant. Men and women both have teeth that are perfectly white and straight, and they take great care to clean them after every meal. Occasionally, though not often, a girl with distinctly attractive features may be encountered. He added that both sexes had exceptionally clean personalities and habits.[31] Marcus Allen noted that pre-colonial Osogbo towns shared the Fante's concern for personal hygiene. In precolonial Osogbo, every day the people of Osogbo must take a shower, if they come to see a spiritual master without properly showering, it will be an insult to his soul. It was a must for the people to take it as their bounden duty to have a clean body and clean clothes[32].

Burke asserts that pre-colonial southern Africans had "clearly defined hygienic rules and codes" and well-defined notions of what "constituted proper physical

appearance and personal manners." For example, he pointed out that precolonial Zimbabweans frequently smeared their bodies with a mixture of soil and various types of oil. Such practices were justified hygienically by the argument that they provided a protective layer that shielded the body from dirt and drying cracks.[33] In precolonial Osogbo society, women and children used charcoal-based lubricants, a another similar practice. They applied ashes and soot to their bodies, used a yellowish "powder" to powder their hair, and used fragrant herbs to adorn their skins—not only for aesthetic reasons but also to prevent illness.[34]

In some homes, wives were expected to wash their husbands' faces and hands in the morning; in other homes, there were small enclosures, sometimes divided into separate sections, that were used for washing men and women. Children were taught hygiene and manners; mothers bathed infants; and washing the body with water was a common practice in pre-colonial Osogbo society, a practice that was even made into a ritual affirmation of the conjugal relationship between men and women.[35]

Precolonial Osogbo people were able to bathe because of the regular rainfall pattern. This shows that, in contrast to what some Europeans have claimed, precolonial Africa did not have a concept of cleanliness. In order to address the issues of filth and unhygienic conditions, precolonial Osogbo society developed indigenous sanitary regulations and hygienic codes. Therefore, it would appear that the dominance of precolonial Osogbo customs that could promote sanitation and hygiene was replaced and diminished by the imposition of European colonial rule and the western values that went along with it.[36]

Precolonial Osogbo practiced cleanliness and things of beautification, the people of Osogbo used some beautification ornaments to beautify their houses regardless that they were mud and thatched houses. They cherished clean environment with trees planted around their homes to provide fresh air and fruits for consumption and nutrition. Osogbo people did not fall sick regularly. Furthermore, the age grades are a very important organ of social structure in pre-colonial Osogbo. They have distinguished themselves in performing such roles that aimed at enhancing the socio- economic life of the people. They helped in such traditional functions as maintenance of Iaw and order, settlement of disputes between warning members, protecting the town from external aggression and above all, constructions and maintenance of roads and markets, ensuring the cleanliness of local streams[37].

Water Situation in Pre-colonial Osogbo

The residents of Osogbo, southwest Nigeria, relied on both natural and artificial sources of water before colonization.[38] Whereas the latter included ponds and moats (dug-out canals), the former was made up of rivers, streams, and rainfall. In Osogbo town, almost every area relied on natural resources other than rainfall.[39]

Examining how precolonial Osogbo people addressed individual and public health challenges prior to British colonization in the 1890s reveals that, contrary to European depictions of the local population as diseased and dependent on Western sanitary science, the people of Osogbo were not powerless against the health threats posed by their environment. Recognizing the longstanding connection between cleanliness and health, a concept dating back to the time of the Greek physician Hippocrates, precolonial Osogbo people integrated personal and public hygiene into their cultural practices. This hygienic knowledge coexisted with the intrinsic human emotion of disgust, a universal response that likely evolved as a psychological safeguard against exposure to unclean substances.

While intuitive hygiene appears to be a universal concept predating culture, Mary Douglas, a social anthropologist, suggests that what societies considered disgusting varied globally. She argues that objects, actions, materials, and places associated with dirt are culturally constructed as a defense mechanism. As cultural norms are dynamic, the specifics of what is deemed filthy can change over time. Douglas emphasizes that where there is dirt, there is a system, as dirt results from a systematic ordering and classification of matter, involving the rejection of inappropriate elements[45]. This perspective underscores that both Western and non-

Western societies have certain things and practices as distasteful at different times. Importantly, it demonstrates that preindustrial societies developed unique social systems to protect people from perceived threats to health and well-being.

Over centuries, the Osogbo people established an indigenous social structure embedded in cultural norms emphasizing sanitation and hygiene values. This framework included a political system that addressed individual and public health matters through a kingship system of administration[46]. This traditional political institution was characterized by its monarchical, communal, and ethnic-based nature, coupled with legislative and judicial powers, as well as a complex system of checks and balances designed to prevent tyranny[47]. This structure endured until the onset of British rule in 1897.

Rivers and stagnant water bodies were cleared to remove plant that affect the taste, colour and purity of the water. During raining seasons when erosion and flood have introduced impurities (debris) into the rivers and stangnant waters, the unwanted elements are been cleared to remove them, to avoid making the water unfit for use. In dry season as well, the people of Osogbo used to cleared ponds from the stream in order to make it clean[40.] The people naturally considered rain and river water as cleaner sources of water for domestic use[41]. The Osogbo people's culturally-based water hygiene customs and nuances had nothing to do with the germ theory. As a result, rivers and ponds were cleaned for aesthetic purposes, frequently to please marine deities, rather than to get rid of germs, which the populace was unaware of at the time.[42] The young people performed these cleaning tasks, particularly as a prelude to some traditional celebrations like the Osun Osogbo festival in Osogbo. The traditional sources, which for the majority of the colonial era remained the town's main sources of water, were supplemented by the British colonialists when they installed water tanks and wells.

Concept of Physical Health and Well- Being in Precolonial Osogbo

Prior to the European imposition of their knowledge system on the health practices in western Nigeria, the Yoruba people relied on their traditional medicine to address health needs in the region. This approach persisted until the disruptions caused by the Atlantic slave trade and subsequent interstate wars which negatively impacted the indigenous health structures in Yorubaland. During this period, individuals and communities managed health issues based on local theories of well-being, leveraging their socio-political networks[44].

In Osogbo, a Council of Chiefs known as *ijoye*, representing each quarter (*adugbo*), played a crucial role in assisting the *Oba* in town governance. Their responsibilities included coordinating public works such as clearing bushes and footpaths and constructing bridges across swollen streams. At the precolonial Osogbo quarters, multiple compounds (*agbo-ile*) existed, each headed by its lineage head (*olori-ebi*). These elders and lineage heads, individually responsible for supervising collective works in their compounds and maintaining law and order on behalf of the king/chiefs, replicated their roles at the village, quarter, compound, and family levels. Given the absence of specialized bureaucratic public health institutions in precolonial Osogbo community, the family (*ebi*), as a sub-unit of the lineage, served as the government's closest arm to the local people. Consequently, healthcare initiatives began at the (extended) family level, with family members, lineage heads, and community chiefs collaborating with central authorities in the town to manage private and public health matters[48].

In response to prevalent health hazards in their tropical environment, Osogbo community developed cultural beliefs and practices grounded in individual innate feelings of disgust and collective local worm/insect theories of disease, rather than relying on practical knowledge of sanitary science.[49] Accepting dirt/filth as unwholesome, Osogbo adults imparted lessons on cleanliness to the younger generation, starting with personal and domestic hygiene at home. Recognizing the body, especially the stomach, as a space vulnerable to disease, they emphasized oral hygiene with the use of chewing stick (*pako)* derived from lime, neems, or orange twigs/stems. The chewing stick, known for teeth

whitening, enamel strengthening, and gum health, efficiently prevented tooth decay, gingivitis, and bad breath[50].

Bathing routines involved luffa sponges and black soap (*ose dudu*), crafted from plantain peel ashes mixed with palm oil or shea butter. These natural hygiene products contained medicinal compounds beneficial for reducing skin rashes and body inflammation among the Yoruba and Osogbo in particular. Similar indigenous skin and dental care methods were observed in the study of the people on the Gold Coast, where chewing sticks were used for oral hygiene, and dry grass sponges and herbs mixed with palm oil contributed to skincare[51].

The extensive knowledge of medicinal plants among these Africans led to dietary practices that enhanced their immune systems. The Osogbo people, for instance, incorporated waterleaf (*efo gbure*) into their diet to prevent heart diseases and consumed *efinrin* (African basil) for colon cleansing. The belief was that detoxifying the body with *efinrin* would eliminate harmful intestinal worms, promoting overall health[52]. These practices challenge the European narrative that portrayed Africans as unclean, emphasizing the advanced personal and social hygiene of the Osogbo people. In the context of nineteenth-century European ideals linking advanced civilization with cleanliness, the Osogbo people demonstrated remarkable foresight. Beyond bodily cleanliness, precolonial Osogbo town prioritized environmental cleanliness.

The sanitation of compounds was the responsibility of the *olori-ebi* of each lineage, while women took on the routine task of sweeping rooms and courtyards. To emphasise the importance of disposing of refuse, the Yoruba coined the saying: *"agbati ile ni i bi baale ile ninu*" (unpacked/undisposed refuse annoys the family head). Women collected and discarded rubbish outside and utilized aromatic plants and fruits like lantana camara (*ewonadele)*, lemongrass (*kooko-oba*), neem tree (*dongoyaro*), cloves (*kanafuru*), and lime peels (*osan ghanhin-ghanhin*) as bio-pesticides to ward off disease vectors. Some even hung bruised plants in their homes to repel harmful insects temporarily[53].

The Osogbo people developed a culture of discouraging uncleanliness through proverbs and aphorisms, creating a social environment that encouraged personal and domestic hygiene as a form of preventive medicine. Proverbs like "*ohun gbogbo l'obun o ni; bi i t'oorun ko*" (the unclean lack all but stench) indirectly shamed those emitting unpleasant odors. Specific proverbs targeting Osogbo women underscored their gendered roles in the family as home keepers and household managers. While some argue against a strict gendered division of roles in precolonial Yoruba society, empirical evidence suggests that women, especially mothers, played a key role in domestic chores, including laundry, sweeping, cooking, and childcare[54]. Given these responsibilities, society expected women to epitomize hygiene and sanitation within the family.

Rhetorical questions like "*ta lo maa fi obun ṣ'aya?"* and "*Ki l'obun maa bi*?" (who would marry a filthy woman and What would a dirty woman give birth to?) highlighted societal expectations for wives and mothers to embody cleanliness and instill hygiene consciousness in their children. Another proverb criticizing a woman for blaming her filthiness on mourning traditions further emphasized the societal importance of personal hygiene. These proverbs aimed to impart moral lessons and encourage good hygiene practices. Consequently, when hygiene-conscious individuals fell sick, explanations for their illnesses sometimes included taboo violations, showcasing the cultural significance placed on maintaining cleanliness and health[55].

As mentioned earlier, every facet of life in precolonial Osogbo was permeated with the potential for divine intervention. The strong belief in divinities and the Supreme Being led the people to attribute certain health issues to the breach of specific cultural taboos (*eewo)*. These taboos, encapsulated in poems and proverbs as communal directives, were underpinned by moral sanctions and served as unwritten guidelines that spanned the entire spectrum of Yoruba life. Within an environmental framework, these codes constituted moral and ethical principles designed to maintain social order and promote human well-being by fostering a conservative approach to nature (water, air, land,

etc.) to achieve ecological balance.

The Osogbo people regarded these codes as sacred social norms due to their inherent values, contributing to the preservation of social order and ethical conduct by proscribing practices deemed harmful in local traditions. They believed that violators, even if acting clandestinely, would face retribution from supernatural forces enforcing these rules, potentially affecting the individual offender, their family, or the entire community. While each Osogbo family and clan had distinct cultural taboos, certain prohibitions were shared across the community. One such taboo prohibited men from sitting on mortars, wooden cooking utensils, as it was believed that transgressors would suffer impotence. This code promoted food hygiene, specifically targeting men, perhaps reflecting the cultural importance Osogbo women attached to their cooking tools[56].

Due to the Osogbo practice of sleeping on mats placed directly on mud floors, another taboo forbade eating oranges in rooms to prevent juice spillage, which might attract insects and flies. The associated penalty instilled fear by asserting that any medicine, including herbal concoctions and powders belonging to the violator, would lose its efficacy. The underlying message implied that neglecting basic sanitation and hygiene principles would render any medicine or spiritual intervention ineffective against illness. Hence, the local saying, "*imototo bori arun mole, bi ọye ti mbori ooru,"* meaning cleanliness neutralizes diseases as harmattan dispels heat.

Regrettably, the Osogbo passed down many of these cultural taboos from one generation to the next with minimal elucidation of the fundamental science behind their adoption. The health and sanitation lessons often remained unintelligible, especially for inquisitive young individuals. Instead of emphasizing the objectives of the taboos in daily life, the Osogbo focused on the punitive measures. Throughout most of the precolonial period, the people obscured opportunities for basic hygiene and health education by mystifying the dangers of unhealthy behaviors. This inadequate explanation of the "sacred rules" led some Africans to question their relevance, labeling the hygiene ideas as irrational beliefs. Despite this, many believed that violating these taboos would incur supernatural punishments, ranging from material hardship and ill-health to misfortune or premature death. Local compliance with these indigenous codes, however, hinged heavily on individual conviction and belief in their efficacy. Interestingly, the introduction of the germ theory by the British in the late 1890s overshadowed the local knowledge emphasized in Yoruba cultural taboos. While the moral codes aligned closely with Victorian beliefs in the virtues of cleanliness and discipline, the mysteries surrounding African ethical principles allowed European missionaries and officials to dismiss germ theories, scientific knowledge, and Africa beliefs about diseases and ill-health as superstitions and myths[57].

Nevertheless, health issues attributed to natural or spiritual causes, including taboo violations, were addressed through herbal remedies and other religious/cultural practices. Home remedies were prevalent in precolonial society, with most Osogbo adults acquiring knowledge of medical herbalism to treat common ailments. This knowledge aimed to reduce dependence on traditional healthcare providers, allowing individuals to prepare and use therapies at home for minor illnesses. However, those with health conditions that resisted domestic treatment sought the assistance of local healers.

According to Roberts, addressing such illnesses meant entrusting oneself, as a patient, to experts who utilized divination and possession to tap into the occult forces surrounding them[58]. These indigenous "doctors" employed medico-religious therapies to eliminate the root causes of ailments, taking into account the patient's social circumstances. Similar to the Druids, who served as both priests and physicians in pre-industrial Britain, precolonial Yoruba, and specifically Osogbo, featured priests or priestesses (*babalawo or iyanifa*) who functioned as diviners and healers. Concurrently, Osogbo herbalists (*onisegun/adahunse/elegbogi*) diagnosed and treated various diseases and health issues, offering consultations on medical and religious therapies. Their methods included skin scarification, the wearing of anti-demon charms, and ritual cleansing, with propitiatory sacrifices sometimes performed to

appease offended deities on behalf of the sick[59].

These health-seeking practices among the Osogbo were not indicative of African exceptionalism; ironically, some aligned with the beliefs of Euro-American biomedicine's founding figures. Felix Mensah draws parallels between African cultural practices and Western health-seeking behaviors, revealing the spiritual dimension to disease and health acknowledged by figures like Hippocrates. Mensah challenges the artificial divide often imposed by Eurocentric scholars between science and myth, as well as between spiritual and medical practices. The evidence indicates that medieval Europe and America shared similar fluid supernatural conceptions of illness and health. For instance, nursing mothers in sixteenth and seventeenth-century Britain, like their African counterparts, relied on anti-demon amulets to prevent infant diseases. Hippocrates' acknowledgment that certain diseases defied rational and medical theories emphasizes the place of African scientific/health knowledge in the global context[60]. The analysis sheds light on Osogbo people's health-seeking methods, showcasing their approaches that cured diseases and ensured human well-being. Beyond family-level preventive and curative health systems, each quater and clan developed practical public health measures to protect human health and environmental well-being[61].

While the term "public health" was absent in precolonial African societies, comparable expressions, practices, and systems existed to safeguard the public against health threats. Scholars, such as Gloria Waite, have demonstrated that political authorities collaborated with local priests/priestesses to advance public health at the village and town levels[62]. Public health in precolonial Africa involved merging religious and medical knowledge to protect people, as individuals tied their health and social well-being to the political power held by leaders[63]. In precolonial Osogbo, political leaders and priests/priestesses acted as public health officials, demonstrating their esoteric knowledge of religion and health. They wielded power over people's well-being through the execution of public health measures for human and land productivity[64]. This connection between leadership, public health, and prosperity explains why figures like Mario Azevedo argued that a chief or king unable to control a disease outbreak or bring rain could face ostracization, deposition, or even death[65].

Similar views have been expressed about Yorubaland, with references to the Oyo Empire where the Council of Chiefs (Oyo-Mesi) held the authority to demand the king's head (Alaafin) if he proved powerless against epidemic diseases or large-scale disasters[66]. Throughout the continent, traditional leaders employed public sanitation as a preventive tactic, resorting to spatial, religious, and place-based measures to contain diseases when preventive measures failed.

The precolonial Osogbo, implemented distinct public health measures, as they did not function as a unified political entity. The importance of hygiene was paramount, and public sanitation served as the primary defense against health threats. Osogbo as a Yoruba- speaking town has proverbs frequently referenced "*aatan*" (dumpsite), indicating the prevalence of a rudimentary waste disposal infrastructure in the town before the 1897. The Osogbo people adhered to the belief that regardless of the Agbo *Ile* (clan), it must have a dumpsite *("ilu ki i kere ki o ma ni aatan").*

Consequently, each quarter had one or more *aatan*, strategically located in secluded bushy areas. The bush provided cover for the wastelands and those utilizing them. This basic system sustained many settlements since the waste primarily comprised leaves and food leftovers, often consumed by domestic animals before decomposing. While not all Yoruba towns managed waste facilities flawlessly, the Osogbo people were more organized. They occasionally set fire to dumpsites to prevent wind dispersal, a practice less coordinated towns neglected, leaving heaps of rubbish for scavenging animals[67].Shaping the utilization of these waste sites was the belief that "aatan kii ko ile k'ile" (dumpsites never reject any trash). While this concept mainly concerned the types of wastes acceptable on dumpsites, it also implied that precolonial Osogbo people did not segregate human wastes from other

refuse.

Fecal waste received little consideration for healthier management, leading to instances of open defecation on dumpsites. Dumpsites were often located away from residences, prompting some individuals living far from these sites to dispose off their trash in nearby water bodies or bushes[68]. Despite its simplicity, this infrastructure helped Africans manage public health threats associated with filth. In addition to providing dumpsites for waste management, Osogbo traditional rulers played a crucial role in advancing public health by mobilizing quaters to maintain cleanliness in public spaces. Osogbo Chiefs collaborated with lineage and clan heads, heads of social groups, and guilds to ensure the cleanliness and safety of public facilities, including marketplaces, town squares, community shrines, and water sources[69]. The parakoyi, the head of the traders' guild, coordinated trade and environmental sanitation in the village and town markets. Collaboration with other leaders within the markets ensured that traders maintained cleanliness in their spaces and properly disposed off refuse.

One early written account of Yoruba public sanitation which Osogbo belong, comes from the recaptive African Reverend Samuel Johnson. In his 1897 book, he described how sellers cleaned their stalls before and after business hours, occasionally burning accumulated wastes. While Johnson's perspective may have been influenced by Western modernist ideas of hygiene, he acknowledged the imperfect system without providing details on its prevalence before the Atlantic slave trade disrupted Yoruba social systems. Nevertheless, oral history from elders in Osogbo indicates that, long before the Atlantic slave trade, the Osogbo people had social mechanisms to enforce unwritten market hygiene regulations, ensuring both buyers and sellers adhered to these standards.

Osogbo leaders underscored their intolerance for filth in the market through proverbs like "*Afinju wo'ja, a rin gbendeke,"* emphasizing that cleanliness was associated with civility. Filthy traders found it challenging to sell goods, as potential buyers avoided dirty shops, perpetuating social exclusion and forcing untidy traders to work as porters for the tidy to make a living[70]. This mechanism communicated to people entering or exiting markets that there was pride in maintaining a clean environment, with cleanliness equated with civility.

Beyond marketplaces, Osogbo leaders also focused on communal water sources, essential for public health. Relying on communal streams, springs, and rivers, protected by sacred cultural beliefs and religious prohibitions, precolonial Osogbo people believed that wounds or injuries immersed in flowing streams or rivers would never heal[71], emphasizing the connection between clean water and public health.

Similar to the discussed taboos, this concept discouraged behaviors detrimental to people's health by dissuading those with open wounds on their hands or legs from contaminating water sources while fetching water. In addition to relying on taboos, the youths actively maintained the safety of communal water sources. Prior to the rainy seasons, they cleared away dead leaves, overgrown weeds, and debris. They also established separate footpaths leading to the water sources, allowing simultaneous access for various activities and minimizing contamination. To further prevent pollution, individuals fetched drinking water upstream before downstream activities like fishing, laundering, or swimming[72].

However, the unrestricted access to these water sources also posed contamination risks from domestic animals such as goats, sheep, and pigs, which occasionally drank from the sources after scavenging in community dumpsites. Improperly disposed waste could also be carried into the water by the wind. The Osogbo people were aware of this, as reflected in the saying, "*agbe ni i je egbin omi*" (the gourd takes the water sediments). Nevertheless, people utilized water from these untreated sources under the belief that contaminants would not persist as long as the water remained in motion.

Other Sanitation-Related Taboos in Pre-Colonial Osogbo

Other taboos include: spitting saliva or vomit; standing at crossroads; leaving trash overnight;

stepping on melon shells; locking the window of a room containing an unburied dead body; seeing the decaying body of a dead animal; and disposing of any cuttings, including urine, placenta, phlegm (also known as "*kelebe*"), feces, menstrual discharge, umbilical cord, and sperm.

"No drawing of water from the well at night'" as one could easily slip and fall in. "No sitting on the edge or top of a well", as one could release foul-air and pollute the well water.

"No drawing of water from a well while using a chewing stick". The chewing stick could drop into the well and contaminate the water.

"No standing at a cross - junction or road, as doing so will disturb "*esu*". Cross - junctions are traffic nodes with too many vehicles and one may be knocked down.

"A cup placed on a water pot must not be used for drinking; one should bring one's personal cup or bowl for drinking". This prevents the spread of diseases through inadvertent contact with another's saliva.

"No walking across a person lying-down", as one could knock one's leg against the body of the person, miss one's step and fall down.

"A menstruous woman must not prepare meals". This prevents food contamination with menstrual blood/discharge.

"Water pots for drinking water must never be empty otherwise the river god will afflict ailment on the owner". This is to ensure availability of water for use by a sick person in an emergency.

"No plaiting or shaving of hair along the passage and around cooking area. This will anger "*eleda* the god of life". This is to prevent hair from getting into foods, drinking water or edible things and cause food poisoning.

"No eating in the open". "No walking while eating". If one does this, unseen spirits will empty the contents of the offender's stomach, so that his/her hunger will remain unsatisfied. This helps prevent flies from coming in contact with the food.

"Housewives must not cook with their heads uncovered. Cooking with the head uncovered will cause headache". This prevents hair from falling into the food.

"Women should not talk while removing the pin feathers of a fowl being prepared for cooking. Doing so will cause the pin feathers to grow again on the fowl's body". This prevents contamination from saliva.

"No sitting on a mortar. This can cause death through the immediate excretion of the entire contents of the stomach". This extreme prohibition preserves the hygiene condition of the mortar used to prepare food.

"No sweeping of the ground at night, as it annoys the gods". It is difficult to see and sweep effectively in the dark.

"Males should not step barefooted on melon waste peels. This can lead to loss of the genitals". This is to prevent accidental fall, which may cause injury to any part of the body.

"No keeping of the back and inner fibre/seeds of over-ripe pawpaw in the house over-night. One will be over-run by small-pox". This prevents termites, red and soldier ants from being attracted to the house and attacking residents.

"No leaving of melon peels uncleared over-night. Leaving them out will cause the housewife to have bad dreams in the night". Uncleared melon peels attract many flies, which carry diseases.

"A pregnant woman must not go out at mid-day when the sun is at its peak, or at the dead of the night, as evil spirits will enter the womb and displace the foetus". This is to prevent the woman from developing high temperature/headache from the burning sun.

"No walking barefooted on an unswept floor early in the morning. This will cause swollen feet". It allows biting vermin to be cleared from the area when it is too dark to see them.

"No walking or kneeling on refuse heaps". The germ infection on the knee called "*kulatan*" could develop from kneeling on refuse.

"No carrying of refuse with the bare hand. Doing so will cause the shaking or trembling of that hand".

This prevents touching of contaminated/poisonous materials which may cause diseases.

"Stones should not be thrown against walls or used for writing on building fences. It will cause the sudden death of the offender". This prevents gradual cracking of walls/fences and the generation of dust in the compound.

"No eating of a food item that dropped on the floor. One will be afflicted with "*segede*" - the abnormal swelling of the cheek/neck". This is to prevent eating contaminated items.

"No urinating in front of the house or beside walls or fences". This helps keep away bad odours from the house[73].

"No falling on faeces, as one will instantly transform into a lepper". This prevents unorganised defecation or littering or faeces around the house. Faeces are to be covered. In rural farms, holes are dug in the ground into which a person passes excreta, or such holes are completely covered with leaves and grasses.

The right hand, which traditionally is used for eating, is never to be used to clean the anus after passing excreta or to handle dirty objects. It is forbidden to eat with the left hand. Also, the right hand is not to be used to blow or decongest the nose.

The cornerstone of hygiene is cleanliness (*imototo*), and taking a bath every day is a required habit. It is thought that not taking a bath causes sickness. *Ose dudu*, or traditional black soap, is used for its therapeutic and anti-disease qualities. Cleaning one's teeth with an orin stick made from plants that have antibacterial qualities is the first thing a person does in the morning. Addressing an adult without having had their teeth cleaned is regarded as disrespectful. In precolonial Osogbo culture, women swept the compounds, men frequently used hoes to clean the area, and both trash and weeds were taken to the akitan, or community refuse dump, to be burned.

The "*akitan*" is regularly raked, weeded and burnt. The degraded soil ash is used as manure on farms[74]. Timing also played a role, with individuals fetching their drinking water early to avoid disturbances. Throughout the town, youth leaders mobilized their age groups to maintain footpaths leading to community shrines, market areas, and festival centers, such as *Odo Osun*. These public works were often supervised by community chiefs. Town hunters contributed to public health by safeguarding individuals from animal attacks and defending towns against potential invaders[75].

In addition to addressing challenges related to human and land productivity, Yoruba leaders also took measures to manage epidemic diseases, recognizing the outbreak of such diseases when a significant number of young and seemingly healthy individuals succumbed to them. While certain health issues like malaria among infants prompted families to seek remedies from herbalists (elegbogi and elewe omo), other concerns such as increasing deaths among the elderly were not considered epidemics by central authorities. The Yoruba attributed the deaths of elders to old age, and high infant mortality was not recognized as a public health problem because the prevailing belief was that infants, considered to be from the spirit world (abiku), were destined to pass away before reaching puberty. Unless traditional healers performed specific rituals, the belief held that these spirits would be reborn into the same family.

However, when young individuals started dying from unfamiliar diseases that couldn't be explained, traditional leaders initiated public health measures to control and eliminate such threats. The chief priest or priestess, responsible for the health sector, along with the king or chief and other political elites, determined the appropriate actions to safeguard the public from these diseases. During most of the precolonial era in Yorubaland, these measures were predominantly religious and cultural. In cases where these measures proved ineffective, some communities opted for outright relocation from the disease-prone environment. Sacrificial rituals were a common method employed by the Yoruba to appease their gods and restore public health. These rites, influenced by divinatory prescriptions, were either conventional (recurring) or obligatory (expiatory and propitiatory).

Similar to Western Christians viewing public health practices as a form of atonement for sins committed against supernatural beings, the Yoruba and Osogbo

in particular believed that epidemic diseases were a consequence of disharmony with ancestors or deities due to sins, pollution, or violation of taboos. They believed that rectification could only occur through the offering of animals, or food sacrifices to the responsible deity. Consequently, spiritual worship involving state-sponsored rituals, led by local priests or priestesses, became an integral part of the public health response.

Scholars in the field of public health have highlighted that pre-colonial leaders' responses to epidemic diseases and public misfortunes went beyond religious and spiritual initiatives. For instance, Mari Webel's research on the Buganda people in East Africa reveals that spatial measures were added to their medico-religious public health initiatives during outbreaks of African trypanosomiasis (sleeping sickness). The Ganda authorities created sick homes on elevated grounds, similar to the fever hospitals established by the British in Calcutta in 1838. This practice of isolating the sick in locations resembling the recovery houses of nineteenth-century Europe suggests that Africans had practical public health measures in place before the colonial period[73].

Traditional leaders in Osogbo employed various measures to safeguard public health, encompassing strategies such as quarantine, dusk-to-dawn curfew, movement restrictions, visitation limitations, gathering regulations, and the expulsion of cursed individuals from the community. In the event of epidemics, such as smallpox (igbona/olode), the king or chief sought assistance from the Sopona cult—a group of specialists dedicated to treating smallpox by appeasing Sopana, the god associated with the disease. Infected households were quarantined, recognizing the Osogbo belief that smallpox could spread through victims' clothing or corpses. These public health interventions and the accompanying indigenous knowledge closely paralleled those observed in pre-industrial America, Asia, and Europe, reflecting a comprehensive approach rooted in socio-cultural perceptions of various threats.

The history of Osogbo and Yoruba land reveals instances of stigmatization and the expulsion of lepers (adete) from towns, particularly in the context of the less common but mildly contagious leprosy disease (ete) in precolonial Nigeria. Historian John Iliffe notes that, compared to Ethiopians or Hausa, the Yoruba displayed an uncommon ruthlessness in expelling leprosy sufferers from their towns. This harsh approach was not solely based on health considerations but stemmed from cultural and religious beliefs deeply ingrained in Yoruba society. The Yoruba regarded leprosy as a filthy disease due to the visible skin sores, lumps, bumps, and deformed bodies of those afflicted. The perception of leprosy as a punishment from the gods aimed at tarnishing the identity and family reputation of the sufferers influenced this negative attitude. In a society that prized good character and cleanliness, the socializing of individuals under divine punishment was deemed unsafe. Many herbalists and healers shared this perspective, fearing that attempting to cure leprosy could strain their relationship with the divinities. Furthermore, treating leprosy for a fee was considered unethical and dishonorable, possibly due to the economic hardships imposed on sufferers, limiting their ability to work.

Given the economic constraints and the threat lepers posed to communal cleanliness and reputation, Osogbo leaders believed it was in the public interest to sever ties with them. The stigma associated with leprosy was also employed as a social control mechanism to dissuade young adults from certain behaviors. Elders likened certain life choices to leprosy, warning that individuals who ignored caution would face isolation from family and friends, dealing with the consequences alone. Contrary to external observations, the use of expulsion as a public health strategy against leprosy and other individual diseases in precolonial Osogbo was not seen as cruelty. Instead, local authorities prioritized public health over individual concerns that family units could handle. Banishing individuals with questionable behaviors or abilities, such as witches and thieves, was a common practice to safeguard the health, safety, and wellbeing of their community. This preventive health measure proved effective in managing public health issues before the colonial era.

The success of this health system was evident when Euro-American slave merchants arrived to procure healthy black labor in the challenging West African environment. Ironically, the healthiness of these Africans made them appealing to European capitalists and slave traders, considering them suitable laborers for agricultural plantations in the "New World." However, the subsequent expansion of the Atlantic slave trade in Yorubaland during the late 1700s led to ecological stress and the deterioration of the local public health system in the region.

In summary, Osogbo's traditional practices in sanitation and hygiene serve as a reservoir of knowledge, illuminating the intricate relationship between humans and their environment. This indigenous wisdom constitutes a vital wellspring of folk science and proactive environmental health and sanitation methods, warranting preservation for ongoing relevance. The discerning and purposeful implementation of African sanitation practices, particularly evident in rural communities like Osogbo, Nigeria, has fostered robust health and sustained a well-organized sanitation system with contemporary validity. Their indigenous waste management strategies, marked by effectiveness and reliability, contribute to the characteristic cleanliness of paths, streets, and public spaces. Wastes found designated sites for disposal, and the maintenance of dump sites operated collaboratively and participatory. The sustenance and continued relevance of traditional environmental health and sanitation practices hinge on the conscious application and revitalization of traditional or indigenous education. This educational avenue, deeply rooted in African societies, becomes a conduit for passing down indigenous knowledge, emphasizing the importance of instilling the "knowledge of sanitary and aesthetic norms" in children. In precolonial Osogbo, a poetic saying underscores the significance of females being vigilant about their sanitation responsibilities, linking cleanliness to marital prospects.

This chapter delved into sanitation and hygiene in Osogbo before her contact with the colonialists. It examined the beliefs surrounding diseases and ill-health, offering a documentation of the pre-colonial health system in Osogbo. This historical exploration is pivotal for comprehending disparities in health concepts, methods, and the scope of public health, illuminating the intricate interplay between human and environmental health in Osogbo. Contrary to the racialist ideas prevalent in nineteenth-century Europe, the Osogbo had an advanced public sanitation and health system before 1907.

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