

Article

Politics of Public Water Supply and Guinea Worm Disease in Colonial Abakaliki, Southeast Nigeria

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Abstract

Guinea worm, variously called *nwori*, *akwara*, or *ehu* among the Igbo of Southeastern Nigeria, was particularly endemic in the Abakaliki area of Nigeria during the colonial era. Abakaliki was tagged the 'guinea worm reservoir' in comparison with other parts of Nigeria that equally experienced guinea worm disease. This was attributable to a severe lack of potable water supply in the area and a high rate of cyclops contamination. Scholars have focused attention on the microbiological causes, transmission, and consequences of various guinea worm eradication programmes; much has also been written about how the colonial administration contributed to the rapid spread of the disease, but there is little scholarly research on the post-eradication era. That is, whether those colonial factors have been addressed sustainably. Thus, this paper examines the role of the British colonial government in guinea worm endemicity vis-à-vis the contemporary governance structures. The paper adopts the qualitative method of historical research, relying mainly on data sourced from primary and secondary sources. Findings suggest that the colonial government's lack of commitment to providing a safe and adequate water supply, poor maintenance of public water sources, lack of effective health education, and discriminatory localisation of public water supplies contributed significantly to the spread of guinea worm disease in Abakaliki during the period of this study.

Keywords: Colonial Abakaliki, public water supply, guinea worm disease

Introduction

Before 1905, the Ezza, Ikwo, Izzi, and Mgbo villages of the Old Abakaliki Division were renowned for lack of both quality and sufficient water supply especially during dry seasons. This was despite the fact that there existed some *Okpuru* (ponds), springs, streams, and rivers. The people of these villages experienced extremely contaminated water supply for seven months of the rainy season every year and five months of acute scarcity of the same quality.¹ This persisted even in the colonial era. Rather than commit to improving the water quality of the area for the general populace, the British government adopted palliative measures and proposed low-cost water projects with extortionist water rates while they enjoyed relatively safe water supplies from springs in the Government Reserved Areas (GRA).

Due to the lack of potable water, waterborne diseases were endemic. One such disease in the Abakaliki area was guinea worm. Guinea worm is a whitish, roundworm with a smooth surface measuring 25mm and 60 – 90 cm long for the male and female species respectively.² It is scientifically identified as *Dracunculus Medinensis* and causes an infection called *Dracunculiasis*. Among the Hausa ethnic

¹ Daniel Nweze and Jacob Onele, *Stereotypes and Realities: The History of the Ezza People*, (Nsukka: Great AP Express Publishers Limited, 2020), 41.

² Owaka Eric Eze, A Technical Report on Nigeria Guinea Worm Eradication Programme (NIGEP), (B. A Thesis submitted to the Department of Applied Natural Sciences, Ebonyi State University, Abakaliki, 2008), 12.



group of Nigeria, it is locally known as *Kunukunu*; *Sobiya* in Yoruba, and *Nwori* in Igbo but locally called *AkwaraorEhu* in Abakaliki of Ebonyi State.³ The disease begins active manifestation on any part of the host's body after 8 – 12 months the individual contracted the larvae by drinking water infected with the cyclops. The major symptoms of the disease include the formation of blisters, itching, pain, and finally, the emergence of the mature worm from the affected spot. This has severe disabling effects on the victims. The people of Abakaliki however, ignorantly believed that the disease was caused by such factors as low blood temperature or bad blood and witchcraft and that it was incurable.⁴ Cyclops-contaminated stagnant water being the primary medium of transmission of the disease was isolated.

Scholarly works have focused attention on the microbiological causes, transmission, and consequences of various guinea worm eradication programmes; much has also been written on the colonial administration's contribution to the rapid spread of the disease, but there is little scholarly research on the post-eradication era. That is, whether those colonial factors have been addressed sustainably. Thus, this paper examines the role of the British colonial government in guinea worm endemicity vis-à-vis the contemporary governance structures of the post-independence period. The paper is divided into eight sections namely, the abstract, introduction, review of literature, theoretical framework, research methodology, a discussion on the colonial administration and public water supply in Abakaliki, public water supply and guinea worm disease in colonial Abakaliki, and finally a conclusion of the study.

Review of Related Literature

The challenge of public water supply and guinea worm disease in the Abakaliki Division has attracted the attention of scholars. For instance, F. D. Onwe-Moses argues that portable water supply scarcity and waterborne diseases in Abakaliki result from the geological formation of the area. For him, the predominance of sediments of shales, localised sandstone, siltstone, and limestone intercalations in the area are the major causes.⁵ In his view, the natural formation allows the underground to be saturated with water but permits very little of it to be yielded. He further argues that even though they are extensively fissured, the fissures are too finely lined to permit the free circulation of water.⁶ He also noted that the various solid mineral rocks found in Abakaliki contain different types of chemicals such as lead, zinc, sulphur, iron, silver, fluorite, pyrites, chalcopyrites, marcasites, ilmenite, gypsum, halite, kaolin, pyroclastics, limestone and clay which at very high concentrations become toxic to human health.⁷ He maintains that due to these soil

³ Kenneth Adibe Nwafor; I. O. Onyali; John O. Nkwuda; I. O. Ikpeze; Ijeoma Uzo Njoku; Zainab A. Oji, 'Communicating Bionomics of Cyclops in Communal Waters and their Guinea Worm Infection Status in Ebonyi State, Nigeria Fifteen Years After it was Declared Guinea Worm Free', *International Journal of Entomology and Nematology Research* 6 (1) 2022, 11 - 28.

⁴ David C. Okwudili, *The Political Economy of Rural Development: Studies in Rural Water Supplies in Anambra Villages of Abakaliki and Oraukwu, Nigeria, 1959-79* (Ph.D Thesis Submitted to the Graduate School of Politics, University of Sussex, 1983), 2.

⁵ F. D. Onwe-Moses, 'Geology and Mineral Resources of Ebonyi State, Southeastern Nigeria', *African Journal of Engineering and Environment Research* 1(2) 2020, 122 - 155.

⁶ Ibid.

⁷ Ibid.

and mineral conditions, the water supply in the area is both scarce and constantly contaminated.

John O. Nkwuda in *Nigeria Guinea Worm Eradication Programme (NIGEP) in Ebonyi State* also attributes the menace of guinea worm disease in Ebonyi State to contaminated water sources. Unlike Onwe-Moses' geological perspective above, Nkwuda opines that the major cause of the contaminations is mainly the insufficient availability of safe drinking water sources such as boreholes and protected wells. According to him, this resulted in guinea worm trends in Ebonyi State generally during the following years:

Table 1: Guinea worm trends in Ebonyi State, 1996-2002

Year	Number of Cases
1996	3370
1997	2641
1998	2691
1999	3519
2000	2754
2001	2092
2002	296

Source: John O. Nkwuda, *Nigeria Guinea Worm Eradication Programme (NIGEP) Ebonyi State*, 2001, 7.

Nevertheless, he illustrated how NIGEP and other agencies such as UNICEF, UNDP, UNICEP, WHO, and Yakubu Gowon Centre provided hand-dug wells, repaired damaged boreholes, and provided abate chemicals for the treatment of village ponds in the endemic areas.⁸ As a result of the above efforts, guinea worm cases were reduced in the state in 1997, 2000, 2001, and 2002 as indicated in the table above.

Luke O. Onemayinin his work, *Scientific Review of Guinea Worm in Ebonyi State* shares similar views with Nkwuda above. In examining the causes, consequences, and eradication of guinea worm disease in Ebonyi State, he notes that Ebonyi State was the most guinea worm endemic area of the Southeast geopolitical zone with about 3370 cases as of 1996.⁹ Among the Abakaliki villages of the state, he identifies cyclops-contaminated stagnant water bodies such as ponds and reservoirs as major transmission channels of the disease. Like Nkwuda, his research shows that the activities of the Nigeria Guinea Worm Eradication Programme (NIGEP) launched in Ebonyi state in 1998 contributed immensely to curbing the spread of the disease. According to him, the programme ensured the provision of filters, application of abate chemicals, health education, and rehabilitation of sources of water supplies such as boreholes and hand-dug wells.¹⁰

For Agha A. Ibiam, the provision of safe drinking water has been a sure means to eradicate guinea worm disease in not just Ebonyi State but Nigeria. However, in places such as Izzi villages of Abakaliki where boreholes, wells, piped-borne water,

⁸ John O. Nkwuda, *Nigeria Guinea Worm Eradication Programme (NIGEP), Ebonyi State*, (B. A Thesis Submitted to the Department of Microbiology, Ebonyi State University, Abakaliki, 2001), 7.

⁹ Luke O. Onemayin, *Scientific Review of Guinea Worm in Ebonyi State: Causes, Consequences and Eradication*, (A Seminar Paper Presented to the Department of Applied Biology, Ebonyi State University, Abakaliki, 2006), 4.

¹⁰ Ibid.

and other safe water sources were in short supply, health education through inter-personal communication became paramount. In his *The Role of Inter-Personal Communication in the Eradication of Guinea Worm in Ebonyi State: A Study of Izzi Local Government Area*, he reveals how the Village Volunteer Health Workers of the eradication programme convinced villagers to boil and filter their water before drinking, drink from the boreholes and hand dug wells provided by the government rather than from their contaminated Okpuru (pond). According to him, this changed the traditional beliefs and attitudes of 63 respondents representing 63 percent of the population surveyed.¹¹ Agha's findings suggest that lack of effective interpersonal health-based education was a contributing factor to the spread of guinea worm disease among Izzi and neighbouring villages of Abakaliki.

After they researched *Related Poverty among Farm Households in Ebonyi State, Nigeria*, O. O. Ufiem, G. N. Umehand J. O. Alimba found that the Abakaliki farmer's poverty profile between 2004 and 2014 had a strong relationship with portable water supply gap. Their study suggests that inadequate safe water supplies adversely impacted their health, education growth, and standard and socio-economic performances.¹² One of the major waterborne diseases identified by the authors that significantly contributed to the poverty rise of the farmers is the guinea worm. The research reveals that even though the guinea worm had been fought by the federal government of Nigeria and international agencies to a near zero level, yet by 2004 it still contributed 4.4% to the poverty status of Abakaliki farmers.¹³

S. Ottenberg in his popular *Farmers and Townspeople in a Changing Nigeria: Abakaliki during Colonial Times, 1905 – 1960*, also examines the study area with particular focus on the social, cultural, economic, and political relationship among the indigenous peoples of Abakaliki Division, the stranger Igbo and colonial authorities. In his discussion regarding public water supply, he notes that two main rivers: Ebonyi and Okpauku (Anyim) rivers located in the southern and eastern parts of the region respectively characterise Abakaliki.¹⁴ In addition to these rivers, he also identified other water sources such as streams, ponds, and shallow wells which in his description are generally unsafe for consumption due to contamination with guinea worm. Even though in 1931 the colonial government built a dam at the edge of the town with an underground water supply channeled to the government station, according to him, 'the water proved so colloidal and unhealthy that the government forbade drinking it without first boiling it'.¹⁵ Nevertheless, his study submits that portable water scarcity continued in Abakaliki with a high incidence of guinea worm disease mostly in the rural areas.

The views of the above scholars are quite relevant to this paper. However, it is pertinent to state that while their studies, findings, and views contribute to

¹¹ A. A. Ibiam, *The Role of Inter – Personal Communication in the Eradication of Guinea Worm in Ebonyi State: A Study of Izzi Local Government Area*, (B. A Thesis submitted to the Department of Mass Communication, Ebonyi State University, Abakaliki, 2010), 39.

¹² O. O. Ufiem, G. N. Umeh and J. O. Alimba, 'Water Related Poverty among Farm Households in Ebonyi State, Nigeria', *International Journal of Environment, Agriculture and Biotechnology (IJEAB)*1 (2) 2016, 257 - 265.

¹³ Ibid.

¹⁴ S. Ottenberg, *Farmers and Townspeople in a Changing Nigeria: Abakaliki during Colonial Times, 1905 – 1960*, (Ibadan: Spectrum Books Ltd, 2005), 4.

¹⁵ Ottenberg, *Farmers and Townspeople*, 97.

knowledge concerning the causes, transmission, and eradication of guinea worm in Abakaliki, yet much research has not been done to unveil how British colonial government and administration contributed to the widespread of the disease. This paper thus examines the British colonial administration, with a particular focus on the public water supply in Abakaliki and how it contributed to guinea worm disease epidemics in the area between 1905 and 1960.

Theoretical Framework

Regarding the justification and effects of colonialism on African societies, numerous theoretical interpretations have been put forth by various scholars. A theory of the balance of power was proposed by Hensley and Taylor. They believe that colonialism could be understood via the lens of the dynamics of international power distribution using the theory. They contend that Bismarck's foreign policy in Africa, where he strove to preserve the balance of power politics in Europe on African land, was motivated by his desire to attain European hegemony between the great powers in the 19th century. They opine that this made hosting the renowned Berlin Conference in 1884–1885 necessary, wherein the right of ownership and sphere of influence was established through the effective possession of African territories.¹⁶ Rudyard Kipling, on the other hand, advanced the humanitarian theory. He emphasises in his well-known poem 'The White Man's Burden' that the goal of colonialism in African nations, including Abakaliki, was to satisfy Europeans' moral duty to bring the benefits of Christianity and Western civilisation to non-Europeans. He contends that because of this duty, civilised people must force those who lack civilisation to give up their comforts and possessions in order to save others.¹⁷

Additionally, the rationalisation of colonialism in Africa has been done through the use of Lenin's and Hobson's economic motive theory. This theoretical interpretation stands in stark contrast to the foregoing opinions expressed by Rudyard, Hensley, and Taylor. It makes the case that economic considerations provide stronger justifications for the European exploitation of Africans and the export of their resources abroad. According to Hobson, the rise of contemporary capitalism's expanding forces—capitalistic forces in Europe that kept laborers' wages as low as possible—led directly to imperialism. As a result, most people consume less than they should have. Moreover, these savings had to be put to use. It was discovered by investors that investing in less developed regions of the world, such as Africa and Asia, would yield the largest profits. Obtaining assistance from their governments was their sole means of defending their investments against the local populace. As a result, they took advantage of their political clout to force the annexation of regions where they had substantial investments. According to him, colonialism is the economic domination of a capitalist nation over the undeveloped nations of the world. This domination was in all ramifications selfish as the imperial nation was not ready to do anything for their host communities. Consequently, their home government became a device to exploit the masses. Lenin, inspired by Hobson, popularised the theory in his work, *Imperialism the Highest Stage of*

¹⁶ D. Foeken, 'On The Causes of the Partition of Central Africa, *Political Geography*14 (1)1995, 80 - 100.

¹⁷ Rudyard Kipling, *The White Man's Burden* (Lagos: Peoples Press, 1978), 203.

Capitalism. He argues that imperialism is the final stage in the evolution of capitalism when monopoly finance capitalism gives rise to surplus capital that cannot profitably be invested at home and must be invested in other countries. At this stage, the dominance of monopolies and finance has established itself; in which the export of capital has reached pronounced importance; the division of the world among the international trusts has begun; and the division of all the non-European world among the capitalist powers has been completed.¹⁸

Among the various theories above, the most suitable explanation of the nonchalant, discriminatory attitude of the colonial administrators to public water supply that contributed to guinea worm epidemics in Abakaliki is the economic motive theory as propounded by Hobson. This is quite apt as colonialism being a selfish tool that targeted the exploitation of the resources, labour, and consumption system of the colonised peoples was not intended for their welfare or development. Thus, investment in potable water schemes, sanitation, and health education was not conceived as lucrative as the capitalist control of the people's raw materials, labour, and market. After all, in their thinking, the lack of a safe and adequate water supply did not in any way hinder the achievement of the interests of the colonial government. Moreover, Guinea worm disease was not prevalent in the G.R.A as the colonial administrators enjoyed a relative supply of potable water from the springs.

Research Methodology

The paper adopts a qualitative method of historical research, which involves the analyses and interpretation of historical sources and evidence to provide insight into the particular enquiry. It relies heavily on data collected from archival materials, oral evidence, newspapers, textbooks, journal articles, and unpublished theses. Archival materials, such as official documents, reports, and letters, were obtained from the National Archives, Enugu. Some of the information from this source was quoted verbatim, paraphrased, or presented in tables for clarity, depending on its relevance and accuracy. Direct interviews and focus group discussions by the researcher with knowledgeable informants on the issues under investigation formed the main sources of the oral evidence. The foregoing are the primary sources of data used in the study. Data were also culled from secondary sources, including textbooks, journal articles, and unpublished theses sourced from the Department of History and International Studies, University of Nigeria, Nsukka, Ebonyi State University Libraries, Abakaliki, Ebonyi State Library, Abakaliki, e-libraries, and reputable online journal sites. These sources were used to interpret, analyse, or evaluate the primary sources and other secondary sources.

Colonial Administration and Public Water Supply in Abakaliki

After a series of indigenous resistance by the people of Abakaliki to colonial rule, the region was finally subjugated in 1905 by the British colonists. Hence, Abakaliki Urban was made the Divisional Administrative Headquarters. Alagu argues that one of the major reasons the British selected the area for this purpose was the

¹⁸Francis Paschal Nwosu, 'Colonialism in Africa: Theories and Practices', *Nigerian Journal of Arts and Humanities* 3 (2) 2023, 58 - 65. See also, C. Nnamdi Ajaebili, *Hegemonic Legacies: Imperialism and Dependency in Nigeria* (Nsukka: Great AP Express Publishers, 2013), pp. 9 -18.

availability of a good water supply and a dominating hill that served as a defense.¹⁹ As a divisional administrative headquarters, certain infrastructural facilities were provided for the British and their staff. Firstly, bungalows for the senior administrative officers, offices, and barracks for the Army and Police were constructed in the Government Station. These were followed by clerks' quarters for the clerks, interpreters, orderlies, cooks, stewards, and court messengers.²⁰ At various strategic locations, public buildings were erected including a Hospital, a District Medical Officer's house, a Guardroom, an Armoury, an Artillery store, six blocks at the barracks, and a house for the Commander of the Armed Forces.

Amidst the above infrastructures was a widespread shortage of portable water supply within Abakaliki and its surrounding rural areas. Water supply in these settlements had been described by E. G. Hawkesworth, the District Officer of Abakaliki Division, as most unsatisfactory.²¹ According to him, the water changes to different colours from drab to violet-red-brown at different times of the year, constantly contaminated by vultures, cattle, greasy scums, and bathing by people. The situation, however, was a bit different in the Government Station which was located near *Ugwu Agba* otherwise called Juju Hill by the British that produced springs of water. Hawkesworth's report in 1932 on the excavation done at the source of the water revealed that uncontaminated spring water oozed from cracks in soft rocks and could produce 2,000 gallons at minimum per day during the dry season.²² Nevertheless, the quantity was significantly insufficient for the daily water demands of the European and African staff population. Hence, there was a serious need for improved and steady water supply. However, as noted earlier, given the geological formation of the study area which does not permit sufficient and safe water supply, the colonial government decided, at the initial time, to abandon the idea of constructing groundwater schemes such as deep wells and boreholes because they regarded it as a fruitless expenditure of money and time.²³ All attention was rather directed to impounded water projects. These projects included the construction of reservoirs especially within the GRA. In this zone, constructions took immediate effect but with limited funds and resources, and poor maintenance culture. In 1930, a large cement-lined underground tank with a cover was constructed to receive and store quantities of clean water from the springs near the Medical Officers' and clerks' quarters.²⁴ In 1941, a small masonry dam with four taps below was constructed with £500 and an approved maintenance fund of £5.²⁵

Later in the late 1940s when all plans had been completed to make Abakaliki a Provincial Headquarters of Ogoja Province, the need for improved and adequate portable water supply for the area became a more serious concern. Hence, the geological survey unit, Public Works, and Engineering Departments made proposals to embark on both surface and underground water supply schemes.

¹⁹ Alphonsus Nweke Alagu, *Abakaliki Under British Colonial Rule, 1905 – 1960* (M. A. Thesis Submitted to the Department of History, University of Nigeria, Nsukka, 1989), 65.

²⁰ Alagu, *Abakaliki Under British Colonial Rule*, 67.

²¹ E. G. Hawkesworth, 'Abakaliki Water Supply', *NAE, AIDIST*, 6/1/259, 1932, 48.

²² Hawkesworth, *Abakaliki Water Supply*, 48.

²³ Okwudili, *The Political Economy of Rural Development*, 53.

²⁴ R. C. Wilson, *Abakaliki General Water Supply*, *NAE, AIDIST*, 6/1/259, 1930, 35.

²⁵ D. Smith, *Abakaliki Water Supply*, *NAE, AIDIST* 2/7/302, 1941, 12

Based on this, the colonial government made attempts to construct wells and boreholes, especially near streams and rivers. But the challenge of safe water supply scarcity was in no way ameliorated especially during the dry season. Consequently, the highly capital-intensive alternative of piped-borne water from the Eastern Aboine River to the public was given consideration. In 1949 two small portions of land on the eastern part of the government agricultural farmland were procured by the government for a water pumping station.²⁶ A proposal was made to construct a low dam of 4 feet high in the river to impound some eight million gallons of water with a power station and waterworks on a high ground $\frac{1}{4}$ mile from the river and 2 miles away from Abakaliki.²⁷ There was also an intake well containing two motor centrifugal pumps that delivered river water to the power station for engine cooling purposes at the rate of 15,000 gallons per hour. These facilities ensured that raw water delivered to the waterworks was chemically treated, settled, passed through slow sand and filters, and gravitated to a clear well under the pump house from where it would be delivered to a service reservoir of 50,000 gallons capacity situated on the Juju hill.²⁸ It was from this source that the impounded and treated water would be distributed to the populace across various locations using $3\frac{1}{2}$ miles of asbestos cement mains. However, as the District Officer reported, the government intended the scheme to be self-supporting.²⁹ This was partly because they considered it an unremunerative undertaking.³⁰ This considerably delayed the implementation of the project as the colonial government was reluctant to use the welfare fund while the native peoples were financially incapacitated to venture into such capital-intensive projects.

The scheme was estimated to cost £12,000 and £3,000 for establishment and conservation respectively and was meant to supply water to the inhabitants in the following locations:

Table 2: Proposed water distribution in colonial Abakaliki

Category of Users	Number of Gallons Per Day
Hospital	5,000
Hospital staff	300
Prison	2500
Warders	960
Police	1600
I.D. H	1000
N.A Works yard	200
Provincial Office, Police Office, Court Office, and Post Office	200
Total	11,760

Source: Public Works Department, Ogoja Province, Abakaliki, NAE, AIDIST 2/7/302, 1945, 49.

Generally, the proposed water scheme was meant to serve 12 European quarters, 50 government Clerks' quarters, 16 Native Administration (N.A) staff quarters, 6

²⁶ Ottenberg, *Farmers and Townspeople*, 247.

²⁷ Smith, Abakaliki Water Supply, 12.

²⁸ *Ibid.*, 108.

²⁹ *Ibid.*, 59.

³⁰ G. I. Jones, European Quarters – Abakaliki, NAE, AIDIST 2/7/302, 1943, 30.

hospital staff quarters of 60 beds each, a prison of 250 capacity, 24 warders' quarters, 40 police quarters, Infectious Diseases Hospital (I.D.H), court offices, post office, and 5,000 African population.³¹ Since the colonial government was not committed to financing the water project, the major challenge that confronted the execution of the proposed scheme was the possible and quickest means of realizing the money to be expended on the project. Thus, proposals for imposing water rates on both the European and African users based on institutions (quarters), taxable male and female, size of houses and number of occupants, quantity (gallons) of water used, use of selling stations or metering for distributions were made. Debates on the most reliable and quickest approach to be adopted, however, led to disagreements and controversies that further delayed the execution of the scheme. After much consultations and deliberations from the Public Works Department and Provincial Executive Engineer, however, the colonial government proposed annual water rates as presented in the table below:

Table 3: Annual water rates in colonial Abakaliki

Water Consumers	Annual Water Rate
12 European quarters	£10
50 Government and Native Administration Employees	10/ -
Metered Consumers	5/ - per 1,000 gallons
Hospitals, Prisons and Police Lines	£54
6 Government and Native Administration Offices	£10
General Water Rate for 300 Adult Males	5/ -
General Water Rate for 300 Adult Females	2/ 6d

Source: Intelligence Report on Abakaliki Water Supply; General Water Rate, NAE, AIDIST 2/7/302, 1945, 109.

The above-proposed scheme could not be actualised until the late 1950s. This was because the people of Abakaliki declined to accept any imposed water rate irrespective of how pure the water proposed scheme would produce. In addition to their preference for their local and contaminated water sources, the people of the study area refused to comply because the distribution pattern and imposed water rates were unfavourable to them. Thus, until 1959 public water supply in colonial Abakaliki especially in the areas outside the GRAs, remained badly coloured, fouled by vultures and cattle; contaminated with guinea worm, unwholesome greasy scums, slime; and highly nauseating.³²

Public Water Supply and Guinea Worm Disease in Abakaliki

Colonial administration in Abakaliki was acutely short of provision of social services, particularly water supply. During the first two decades of colonial rule, the

³¹ G. I. Jones, Water Supply for Abakaliki, NAE, AIDIST 2/7/302, 1945, 58.

³² Hawkesworth, Abakaliki Water Supply, 48.

administrators had focused on pacifying and “civilizing the native” rather than the potential for urbanisation.³³ They perceived good governance to mean the maintenance of law and order at all costs. Even when they thought it was necessary to provide the people with improved quality water as seen in the late 1950s, it was targeted at village nucleation and integration purposes with the ulterior motive of ensuring law and order.³⁴ The people of Abakaliki had a peculiar settlement order characterised by mother (*Ndiufu*) and colony (*Ndiagu*) villages as in Ikwo, for example. While *Ndiufu* villages depict the original settlements founded by their ancestors, *Ndiagu* settlements signify areas acquired by the descendants through warfare and occupied primarily for agricultural production. As Okwudili noted, these settlements were scattered at an average interval of half a mile apart which gave the colonial authorities an impression of disorder.³⁵ The ulterior motive contradicted remarkably with the peoples’ pattern of settlement. Hence the British policy of village integration as well as other policies faced serious resistance. As a result of this, a greater number of the proposed water supply schemes failed to yield any meaningful result.

Beyond the above indigenous resistance to water schemes, the colonial government and staff contributed considerably to the water challenges faced by the people. One of those remarkable water-related challenges was widespread guinea worm disease across various settlements. For instance, the few reservoirs constructed in some locations were not properly and regularly maintained. Consequently, over time they fell into disuse within a few years of construction resulting in a quick reversion to Cyclops-contaminated water sources. In the *West African Pilot* of 20th April 1943, the issue of lack of adequate and timely maintenance of the reservoir in Abakaliki was reported to attract the attention of the Resident Officer of Ogoja Province at the time, L. Sealy-King. In response, Sealy-King wrote the Abakaliki District Officer, H. L. M. Butcher thus:

... from information reaching us, we understand that nothing has been done to alleviate the position of water supply in Abakaliki ...; we understand that, so far, only the African population of the area face the water problem since the European population is said to be well supplied with clean water. We do not cherish this sort of arrangement because it is undemocratic.³⁶

Even though the above report was refuted by the District Officer, it was, however, obvious that there was poor maintenance of water sources in the African-populated areas. This could have resulted from the fact that the European population was supplied with clean water from the springs. The foregoing attitude contributed immensely to the spread of guinea worm disease as the people were forced to rely heavily on their guinea worm-infested water supplies.

Again, the colonial government’s claim that they could not embark on the construction of groundwater supply schemes such as wells and boreholes due to the geological formation of the area can only be accepted with a pinch of salt. This is

³³ Ottenberg, *Farmers and Townspeople*, 72.

³⁴ Okwudili, *The Political Economy of Rural Development*, 81.

³⁵ Okwudili, *The Political Economy of Rural Development*, 62.

³⁶ L. Sealy-King, ‘Extract from the *West African Pilot*: Water Supply at Abakaliki’, *NAE, AIDIST/6/1/260*, 1943, 101.

because they could afford both the technological and financial resources needed to execute the projects if they so desired. But as a profit-motivated adventure, the colonial administration in Abakaliki, as elsewhere in Igboland, was not intended to engage in self-acclaimed fruitless expenditures of money and time. Thus, rather than fund the execution of the Eastern Aboinewater scheme that could distribute guinea worm-free water to the larger population of Abakaliki, they proposed the imposition of arbitrary water rates on the people. Hence, the rejection and crises that followed delayed the scheme with a resultant effect of guinea worm epidemics in the Abakaliki district. Between 1932 and 1947, 99.5 percent of the people across and Ikwo villages of Abakaliki district were reported to have been severally infected with guinea worm disease.³⁷ The people were neither consulted nor their socio-economic conditions considered before the imposition of the water rates. This particular colonial attitude added more force to the resistance posed by the people to every colonial policy introduced in the region including water schemes.

Further, the colonial administration's poor sanitary control of water usage in Abakaliki also contributed to the constant contamination of water with guinea worm disease in the area. For instance, in 1940, the Medical Officer of Health, E. N. O'Neil reported incidents of barracks children and other persons who had access to the reservoir bathing and washing filthy clothes in the water.³⁸ Similarly, in 1943, it was also reported that prisoners emptied conservancy buckets at the lakeside (water supply), boys and girls badly defecated near the water supply as well as used the same as swimming pool while so many duck fowls, after feeding themselves on the human excreta, flew into the water supply to wash and drink.³⁹ The foregoing received no serious attention from the colonial government except for the option of fencing the water supply with multiple steel spikes or broken glasses. The only best option of permitting public access to the European supply in the G.R.A which had excellent sanitary conditions was neglected. Other sources of water supply such as streams and rivers were indiscriminately polluted by contamination through clothes washing, swimming, and net-fishing without stringent restrictions by the government.⁴⁰ The majority of the people who polluted the water supplies had guinea worm infections. With the colonial government's lack of effective sanitary control over the water bodies, guinea worm disease in Abakaliki multiplied tremendously. This attitude appears deliberate as they were hardly affected due to the lack of guinea worm in the Government Station. Uchenna Nwigwe corroborates the above when he stated that, 'the British were interested only in their own welfare; they did not care much whether we died of guinea worm or not because they drank from a better source of water'⁴¹.

³⁷ Okwudili, *The Political Economy of Rural Development*, 2.

³⁸ E. N. O'Neil, *African Water Supply*, NAE, AIDIST 2/7/302, 1940, 11.

³⁹ O'Neil, *African Water Supply*, 25.

⁴⁰ Okwudili, *The Political Economy of Rural Development*, 80.

⁴¹ Uchenna Nwigwe, 75 Years old, Traditional Ruler, Interviewed at Ikwo, Ebonyi State, on 12th October, 2023.

Plate 1: Guinea worm-infected foot



Source: Extracted from Sandy Caincross, Ralph Muller, and Nevio Zagaria's *Dracunculiasis (Guinea Worm Disease) and the Eradication Initiative*. <https://doi.org/10.1128/2FCMR.15.2.223-246.2002>.

Moreover, the colonial government's nonchalant attitude to the provision of health education especially as it concerned hygiene and water treatment before usage contributed to the sporadic multiplication of guinea worm cases in Abakaliki. As noted earlier, the people of Abakaliki were ignorant of the fact that guinea worm disease was caused by drinking cyclops-contaminated water. In most villages, it was even superstitiously passed across to naughty children that it was a punishment from the gods for their actions. In a news report by the World Health Organisation (WHO), Samuel Alo was reported to have expressed this idea when he said, 'When my elder brother Moses had guinea worm, I was not surprised because he used to pilfer fish from our mother's pot and small yams from our father's barn...; as a child in primary school, I was told that guinea worm was a punishment for naughty children'.⁴²They had no knowledge of cyclops, its medium of transmission, or measures for its prevention. Consequently, they ignorantly preferred drinking from their cyclops-contaminated *Okpuru* (pond) than the hand-dug wells or boreholes.⁴³The *Okpuru* was locally constructed with steps for easy access, poorly fenced just to prevent intruders, and had no strict punitive measures against persons that misused it at will. Rather than implementing an intensive health education programme to change people's attitudes and beliefs, the colonial

⁴² World Health Organisation (WHO), 'Down to Zero: Nigeria Stops Guinea Worm Disease in its Tracks'. <https://www.afro.who.int/news/down-zero-nigeria-stops-guinea-worm-disease-its-tracks>. Accessed 20th December 2023.

⁴³ Ezekiel Nwafor, 65 Years old, Retired Civil Servant, Interviewed at Presco, Abakaliki, Ebonyi State on 14th October 2023.

government opted for the treatment of reported guinea worm cases by administering Procaine Penicillin, Streptomycin, and Lyncocin.⁴⁴

Plate 2: Guinea worm traditional extraction method



Source: <https://articles.nigeriahealthwatch.com/guinea-worm-eliminated-in-nigeria/> Accessed 22nd December 2023.

Plate 3: Guinea worm emerging from a patient's ankle



Source: <https://www.gettyimages.com/photos/guinea-worm>, accessed 22nd December 2023.

⁴⁴ Ezekiel Nwafor, Interview Cited.

Another colonial attitude to public water supply in Abakaliki that did not in any way help to ameliorate the guinea worm crisis in the area was their discriminative localisation of public water supplies. For instance, for the official population and other persons, the main reservoir was situated at a point in the government reservation where it was surrounded by houses and roads that made it prone to constant pollution. Some hand-dug wells, on the other hand, were built shallow and in locations where they yielded very negligible quantities of water during the dry season. In some places, they were provided for either administrative purposes or as a political reward to the British influential loyalists who wielded authority, and of esteemed social status.⁴⁵ Due to the politics underlying the provision of the wells, many were not easily accessible as they were situated hundreds of meters away from people according to the whims and caprices of the attractor. In another instance, some were situated in the locality of the influential figurehead regardless of the remoteness to peoples' households. In Abakpa, Kingsway and other African settlements where portable and adequate water supply were in short supply due to inadequate provision of wells and boreholes, guinea worm disease cases were more frequent. According to Joseph Ogbonna, it was impossible to see a household without at least one victim of guinea worm infection.⁴⁶ However for the European population, the European supplies were situated in strategic spots in the G.R.A. where they were protected from pollution and contamination.⁴⁷

Post-independence Situation

Due to the foregoing lapses recorded on the part of the British colonial authorities in the provision of safe drinking water to the people of Abakaliki, guinea worm disease became rampant among the inhabitants during the post-colonial era. During the period, 40-90% of adults in each household were infested and incapacitated with guinea worm disease.⁴⁸ Hence, scholars, researchers, and analysts have commonly used such terms as "endemicity", "reservoir" and "widespread" to describe the menace. In 1988, the region recorded 175, 433 cases of the disease and within the next eight years, additional 3370 new cases were reported.⁴⁹ Between 1997 and 2008 when the last four cases were reported, the study area further recorded 12,596 cases.⁵⁰

Unlike the nonchalant and discriminatory attitude of the colonial authorities, the government of the Eastern Region of Nigeria made frantic efforts to end guinea worm spread in the region. Between July 1964 and June 1967 alone, a total of six reservoirs were completed capable of supplying 10,000 people, or one percent of the population, with potable water.⁵¹ During the 1975/76 financial year, a total of N28, 448,184.49 was released to the former East Central State Water Board for making

⁴⁵ Joseph Ogbonna, 60 Years old, Clergy, Interviewed at Abakaliki, Ebonyi State on 15th October 2023.

⁴⁶ Ogbonna, Interview Cited.

⁴⁷ A. H. Leah, 'Abakaliki Water Supply – Final Report and Estimate', NAE, AIDIST 6/1/260, 1945, 153.

⁴⁸ A.B.C. Nwosu, E.O. Ifezulike and A.O. Anya, "Endemic dracunculiasis in Anambra State of Nigeria. *Annals of Tropical medicine and parasitology* 16 (1982), 187-300.

⁴⁹ A. A. Ibiam, The Role of Inter-Personal Communication in the Eradication of Guinea Worm in Ebonyi State: A Study of Izzi Local Government Area, (B.A Project Submitted to the Department of Mass Communication, Ebonyi State University, Abakaliki, 2010), 40.

⁵⁰ Ibid.

⁵¹ Okwudili, The Political Economy of Rural Development, 105.

bulk purchases of water supply materials and equipment for reconstruction and construction of urban and rural water supply schemes and for contract payment.⁵² As a result, Herbst and NduSCO Construction Limited was awarded the contract for that of Abakaliki valued at ₦11,235.00.⁵³ In 1976, with the establishment of the Anambra-Imo River Basin Rural Development Authority (AIRBRDA) by General Olusegun Obasanjo led Federal Military Government through Decree Number 24 of 1976, and the efforts of the Authority, a total of 127 boreholes were estimated to have been drilled at different locations for private and commercial purposes.⁵⁴ Further, in 1985, the above projects were complemented with the construction of small earth dams at Ikwo, Izzi, and, Ohatekwe for impounding water for domestic use or irrigation.⁵⁵ The administration of Jim Nwobodo was also committed to public water supply schemes in the Abakaliki region. In 1981, his government built the Ezilo Regional Water Scheme at Ezilo,⁵⁶ the present-day Ishielu Local Government Area of Ebonyi State.

In addition to the foregoing efforts, the Federal Government of Nigeria in 1988 established the Nigeria Guinea Worm Eradication Programme (NIGEP) with the mandate to eradicate guinea worm disease nationwide after signing a Memorandum of Understanding (MOU) with former United States President, Jimmy “Carter’s Global 2000” in the same year.⁵⁷ UNICEF, UNDP, CDC, the Bill and Melinda Gates Foundation, and many other donors and non-governmental organizations also played important roles in the fight against guinea worm diseases in the country, including Abakaliki.

Conclusion

Abakaliki topography and geological formation, no doubt, do not support a sufficient yield of safe water supply. However, it is important to note that a guinea worm-free water supply was possible in the area. But due mainly to the self-centred administrative nature of the British colonial government, guinea worm infection became an epidemic in the area. The colonial government had played discriminatory politics in the provision of portable water supply for the inhabitants of the Ezza, Ikwo, Izzi, and Mgbo villages of the old Abakaliki Division. This is featured in their lack of sincere commitment to the provision of safe and adequate water supply, poor maintenance of public water sources, lack of effective health education, and discriminatory localisation of public water supplies across the villages as illustrated in the paper. Thus, if the colonial government had played its role very well in terms of public water supply, the 3,370 and 313,047 cases of guinea worm recorded for Ebonyi State and Southeastern Nigeria in 1996 and 1989 respectively would not have occurred.

⁵² Federal Ministry of Information and Culture, “Grants for Urban and Rural Water Supply”, National Archives Enugu, MIL/WH, 6/1/8, 1976, 129.

⁵³ Federal Ministry of Information and Culture, “List of Contracts Awarded under the Federal Military Government: Matching Grant”, National Archives Enugu, MIL/WH, 6/1/8, 1976, 18.

⁵⁴ E. E. Emehara, *The Anambra - Imo River Basin and Rural Development Authority (AIRBRDA), 1976 – 2001*, (Ph.D Thesis Submitted to Department of History and International Studies, University of Nigeria, Nsukka, 2006), 215.

⁵⁵ *Ibid.*, 121.

⁵⁶ E. Ezedigboh, “Water Resources in Ebonyi State”, *Afikpo today* 2 (9) 2004, 70.

⁵⁷ L. N. Nweke, *A report of monitoring of guinea worm activities in Enugu State, UNICEF Zone A, in collaboration with Enugu State Ministry of Health*, (Enugu: Center for Disease Control, 2004), 47.

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