Managing Smallpox Outbreak: Colonial Authorities and Medical Policies in Southwestern Nigeria, 1903–1960

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Of all the colonial involvements in Africa, public health and addressing outbreaks of infectious diseases were among the important issues in the handling of local administration for both colonial regimes and the medical community. Colonial efforts to deal with health in Africa were closely related to the economic interests of the colonialists. Health was not an end in itself, but rather a prerequisite for colonial development. Colonial medicine was primarily concerned with maintaining the health of Europeans living in Africa, because they were viewed as essential to the colonial project's success. The health of the colonized subjects was only a concern when their ill-health threatened colonial economic enterprises or the health of Europeans. Such was the case of smallpox epidemic and the subsequent reaction to its prevention and management. As a result, the control of smallpox marked the first occasion during which preventive health measures had been used successfully against an infectious disease. Against this backdrop, this article explores the British perception of smallpox which dictated the choice of anti-smallpox epidemic measures. Subsequently, the paper will examine colonial efforts at controlling and managing smallpox outbreak in Southwestern Nigeria through its various medical policies.

[Colonialism; Smallpox; Medical Policies; Nigeria]

Introduction

Much has been written about the link between health and colonialism and most of these recognized the rivalry that existed between western and indigenous medicine as an important dimension of the history of colonialism.[1] Because colonial medical services had as their earliest mission,

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1 Some of these works include A. CUNNINGHAM – B. ANDREWS (eds.), *Western Medicine as Contested Knowledge*, Manchester 1997; S. MARKS, What is Colonial about Colonial Medicine? And What has Happened to Imperialism and Health?, in: *Social History*

the protection of the health of the Europeans, medical services tended to concentrate in places where Europeans lived in large numbers; mostly in cities.[2] Western medicine openly represented itself as a triumphant and benevolent aspect of imperialism, implicitly justifying the manipulative exploits of colonialism. For example, Natalie A. Washington-Weik describes the genre of "tropical medicine" as not only created to allow Europeans to survive in foreign places, it also sought to paternalistically substantiate colonial notions of Africans, Native Americans, and Asians as exotic, "primitive", dangerous, and lacking capacity for self-care.[3] Accordingly, the success and failure of health intervention was measured more in terms of the colonies' production than by measuring the levels of health among the indigenous population.

Another aspect of this argument was that the colonial government usually did little to build rural health services for the general indigenous populations. Rural health services, when they did exist, were run by missionaries. Throughout, the European colonial encounter with the tropical territories in Africa and the impact of Christian missionary medical work on public health was central to the overall health care provision.[4] For most rural inhabitants, contact with Western medical services was limited to occasional medical campaigns such as mass vaccinations during outbreak of epidemics such as smallpox.

Smallpox, a viral disease, which was officially eradicated in 1979, was a significant infectious disease throughout history.[5] Smallpox posed the greatest threat to cities, where population was sufficiently dense to sustain the virus. It was also the first disease for which vaccine was developed by Edward Jenner in 1796 as an empirical tool, as the cause of the disease was yet unknown. Although, vaccines were developed for other disease in the 19th century, none was as widely promoted or

of Medicine, 10, 1997, pp. 205–219; W. ANDERSON, Where is the Postcolonial History of Medicine? Essay Review, in: *Bull Hist. Med.*, 72, 1998, pp. 522–530; R. SCHRAM, *The History of the Nigerian Health Service*, Ibadan 1971; K. D. PATTERSON, *Health in Colonial Ghana: Disease, Medicine, and Socio-economic Change, 1900–1955*, Waltham 1981.

2 S. FEIERMAN, Struggles for Control: The Social Roots of Health and Healing in Modern Africa, in: *African Studies Review*, 28, 2/3, 1985, pp. 73–147.

3 N. A. WASHINGTON-WEIK, *The Resiliency of Yoruba Traditional Healing, 1922–1955*. Unpublished Ph.D. Thesis, The University of Texas at Austin, 2009, p. 88.

4 J. MANTON, Tropical Medicine, in: V. BERRIDGE – M. GORSKY – A. MOLD (eds.), *Public Health in History*, Maidenhead 2011, pp. 74–89.

5 F. FENNER – D. A. HENDERSON – L. ARITA et al., *Smallpox and its Eradication*, Geneva 1988, p. 421.

administered as the smallpox vaccine.[6] Smallpox vaccination was also the only legally required form of vaccination in many areas of the world during the 19th and twentieth centuries. Furthermore, the use of law to implement smallpox vaccination constituted a novel form of colonial state intervention in public health.[7]

The Establishment of Colonial Medical Service in Southwestern Nigeria

In terms of neatly organized institutional narratives, the Colonial Medical Service was one of the branches of the Colonial Administration responsible for health of colonial staff and later the local populations in British Overseas Territories which emerged as a response to medical needs of the Europeans. Thus, the inception of British colonial administration in Nigeria generally led to the establishment of its medical service. Following the British annexation of Lagos in 1861, imposition of colonial control the whole of Yorubaland became imperative because Yorubaland was one of the major sources of raw materials and market for European finished goods. With this development Ibadan, Ijebu-Ode and Abeokuta came effectively under colonial rule in 1893. A significant development that accompanied colonial rule in Southwestern Nigeria was the establishment of modern curative and preventive medicine as provision of medical facilities in the colony became inevitable for the British colonial authorities. In Southwestern Nigeria, Dr Rice became the first medical officer, and his activities were restricted to providing healthcare to solely the Europeans.[8] The reason for this was strictly based on the colonial ideology of segregationist which rested largely on maximization of profit. The British colonial administration believed that provision of health facilities for the local population would reduce the profit margin of the colonizer. However, provision of healthcare to the local population was inevitable as they became indispensable to the running of colonial machinery, acquisition of raw materials and the production of agricultural goods required in Europe. As a result, at its inception, a section called the Native Hospital (which could be referred to as a dispensary) was attached to

6 In 1879, Louis Pasteur, a French Chemist, microbiologist, and pioneer of vaccines, pasteurization, and microbial fermentation, developed the first lab-produced vaccine for a disease known as chicken cholera. Between 1881 and 1885, he developed other vaccines for anthrax and rabies.

7 A. S. WOHL, *Endangering Lives: Public Health in Victorian Britain*, London 1983, p. 132.

8 National Archives Ibadan (further only NAI), *Nigerian Annual Report*, 1903, p. 31.

the European Hospital because it lacked a medical doctor and selective medical services were restricted to few Nigerian employees of European concerns.[9] Government hospitals and dispensaries expanded to other areas of the Southern Protectorates as European activities increased and spread to those areas. In 1901 for example, the colonial administration was compelled to establish a dispensary for the local population in Oranyan, Ibadan and a hospital in Agodi, Ibadan in 1915.[10] This was borne out of the need to secure the labour of the locals and the concern for the overall health of the European community.

World War I had a strong detrimental effect on medical services in Southwestern region and Nigeria due to the large number of medical personnel who were pulled to serve in Europe during the war years. After the War, medical facilities were expanded substantially and several schools for the training of Nigerian medical assistants were established. Nigerian physicians, even having trained in Europe, were generally prohibited from practicing in government hospitals except they were attending to fellow Nigerians. This led to protests and frequent involvement of doctors and other medical personnel in the nationalist movement; and demand for the establishment of more hospitals for the local populations and where Nigerian physicians could practice without restriction. Consequently, it led to the establishment of Native Administration Hospital, Adeoyo, Ibadan in 1926.[11] This development was the first attempt by the Colonial Administration to fully extend medical service to the local populations.

Colonial Concerns and Smallpox Vaccination Campaigns

Control measure against smallpox was hampered by at first the inadequate attention given to the disease and by the fact that vaccines were ineffective before the 1940s. In the pre-colonial Yoruba societies, attempt to control smallpox was done by transferring infected pus to healthy people usually through an incision on the wrist. The practice found it difficult to survive the colonial period because the colonial administration showed strong hostility against it as it was believed that it contributed to the spread of the disease. In its stead, the colonial administration introduced vaccination campaigns. The utmost goal of the colonial medical officers in Nigeria was to control or totally eradicate smallpox.

9 NAI, Oyo Prof. 4/6:41/1917, European Reservation in Ibadan.
10 Ibid.
11 NAI, Oyo Prof. 1:834, Teaching Equipment – Adeoyo Hospital.

This was since eradication had been achieved in most countries of Europe during the first half of the twentieth century using public health service model of vaccination and surveillance which was considered effective.[12] It should be noted that smallpox vaccine had been available for use in Nigeria since 1918 and had been effectively administered in the large coastal cities of Lagos and Port Harcourt. With the beginning of British colonial rule in southwestern Nigeria, colonial government officials had to address major and recurrent epidemics of smallpox on a tight budget.[13] Campaign against smallpox and other infectious diseases began shortly after the European "scramble for Africa" which occurred at the same time that "tropical medicine" was established as a field.[14] Therefore, campaign model was developed for two reasons; the first was to make an initial reduction in prevalence with inoculations as quickly and widespread as possible; and secondly, vaccination campaigns were also a response to outbreaks of the epidemic.[15]

Of importance to smallpox vaccination campaigns in southwestern Nigeria was the role of media through posters, loudspeaker vans, press, radio, and cinema. The posters were of the simplest nature, produced at very short notice by the colonial government printing press. "Get Vaccinated Today" and "Do not conceal cases of smallpox" were slogans on which they were based.[16] These posters were pasted in major cities of southwestern Nigeria to sensitize and campaign for smallpox vaccination. The first sets were printed in English and Yoruba (the indigenous language of most of the inhabitants of Southwestern Nigeria). Doubts were later expressed as to the value of the Yoruba posters. It was discovered that most of the people who were unable to read English were also unable to read Yoruba language. Moreover, there were large numbers of "native strangers" such as the Hausas and Igbos in cities like Lagos and Ibadan who were usually unable to read Yoruba. It was decided that further

12 According to FENNER – HENDERSON – ARITA et al., p. 318, the dates for the last case of endemic smallpox in these European countries were: Belgium: 1926; the United Kingdom: 1934; France: 1936; and Portugal: 1953.

13 SCHRAM, p. 141.

14 W. H. SCHNEIDER, Smallpox in Africa during Colonial Rule, in: *Medical History*, 53, 2, 2009, p. 195.

15 Ibid., p. 199.

16 P. L. S. CLARK, A Smallpox Epidemic in Ibadan: some Health Education Aspects, in: *International Report*, 1957. Available on www.deepdyve.com/lp/sage/a-smallpox-epidemic-in-ibadan-some-health-education-aspects-WKhVX02Dd3.

posters should be printed only in English.[17] Examples of such posters are seen in Figures I and II below. They are the illustrations by the Department of Public Health campaigning for vaccination:

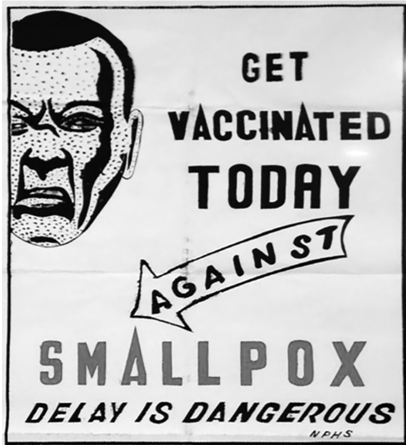

Figure I.
Source:
https://www.pinterest.com/pin/522769469220407970/
https://www.loc.gov/item/98507705/

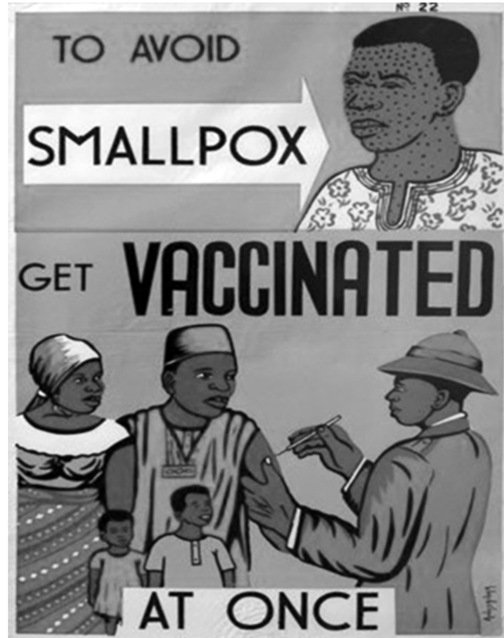

Figure II.
Source:
https://www.loc.gov/item/98507705/

Also, the Western Region Information Service possessed a fleet of vans fitted with public address apparatus.[18] This was indeed very effective as the rural and urban areas of Southwestern Nigeria were covered, and announcements in English and Yoruba reached people who were untouched by the press, radio, and posters. The press also devoted quite a lot of space to the epidemic. A daily news release was given to the newspaper editors by the Health Department. This release gave numbers of notifications,

17 Ibid.
18 Ibid.

discharges, deaths, and other information useful for the public. Radio stations (the Nigerian Broadcasting Service in particular) were very cooperative in the smallpox vaccination campaigns. Announcements of smallpox vaccination appeal and other information on vaccination were made. Furthermore, a feature programme was produced, in which the Medical Officer of Health was interviewed and tried to dispel some of the commoner smallpox fallacies.[19] The use of cinema for smallpox vaccination campaigns was limited. This is because gathering for social events at the cinema during an outbreak of smallpox could cause further spread of the disease. However, it was recorded that the Information Service showed a smallpox film on several occasions especially in and around Ibadan.[20]

British colonial officials introduced the use of dried cowpox lymph in 1918 in Southwestern Nigeria, although the viability of the lymph was poor that vaccination offered little protection against smallpox. Although, the introduction of imported lanolinated calf lymph in 1921 improved vaccination success rates somewhat, yet the vaccination campaign did not proceed according to the original British public health officials' plan, partly because the practice was resisted in Southwestern Nigeria. This reflected traditional religious beliefs associated with *Sopona*, the smallpox deity, although resistance was eventually reduced by police orders.[21] Resistance was due mainly to fear of Europeans and their medicine and possibly to some groups' preference for local methods of inoculation. The issue of vaccination in Yorubaland is worthy of commentary. As indicated earlier, the Yoruba way of managing and controlling smallpox was through inoculation years before western medical presence in the region. Nonetheless, western medical vaccines were perceived as invasive. A colonial report stated that *"Notwithstanding this (smallpox epidemic) the people show no enthusiasm for vaccination and were often hostile to it"*.[22] Thus, in reality, Yoruba's social acceptance of vaccinations despite numerous campaign strategies was minimal between 1922 and 1955. This resistance along with the inadequate health resources of the colonial medical service resulted in considerably fewer smallpox vaccinations. By 1921, it was reported that 297,823 people were vaccinated for smallpox in

19 Ibid.

20 Ibid.

21 Ibid., p. 159. In 1907, an Ordinance was passed forbidding the worship of the smallpox god, and heavy fines were inflicted upon many of its priests. As late as 1957, priests of *Sopona* continued this practice in Ibadan in southwestern Nigeria.

22 NAI, CSP 26/6076, Notes on Customs and Superstition of Indigenous Institutions.

Southwestern Nigeria.[23] Smallpox epidemic continued in Southwestern Nigeria during the first half of the twentieth century and beyond despite local inoculation for smallpox and continued efforts at smallpox vaccination by the colonial medical service.[24]

Sapara Williams and the Fight against Smallpox

The prohibition of Sopona worship and consequent eradication of smallpox in Southwestern Nigeria arose because of the role played by Dr Oguntola Sapara Williams. His assessment of Sopona priests was that priests used the death rituals as an excuse to pilfer smallpox victims' properties and keep these properties for themselves. Furthermore, he argued that inoculation practices further spread the disease and priest actually facilitated epidemic, as opposed to providing relief.[25] Until he joined the colonial service in 1896, the arm to arm method of smallpox vaccination by European medical practitioners was practiced and it was generally accepted by the native inhabitants of Lagos allegedly because the treated subjects *"smeared the wounds with palm oil and other unguents"* which rendered the secreted lymph useless.[26] Many saw it as a means of eliminating the productive class of the Lagos colony. Apart from that, many were also discouraged from smallpox vaccination because of the aftereffects of the exercise. Indeed, many inhabitants developed diseases such as sores, headache, and fever among others after each vaccination.[27] However, Dr Oguntola's major encounter with smallpox came with his appointment to the Epe Division in 1897.[28] Prior to his arrival of at Epe, the area was reputed for several outbreaks of smallpox epidemic. The spread of the disease was worsened by the activities of some self-acclaimed smallpox priests with claims to the healing of the disease. Since the

23 E. P. RENNE, *The Politics of Polio in Northern Nigeria*, Indiana 2010, p. 20.

24 O. ADENIYI-JONES, The Control of Communicable Diseases in Pre-School Children in Lagos, in: *West African Medical Journal*, 10, 4, 1961, pp. 320–326. In this article, Adeniyi-Jones reported that in 1961 deaths from smallpox *"are now relatively rare in Lagos owing to the wide acceptance of vaccination"*. While in 1958, there were 579 cases reported at the Lagos General Hospital, with twelve percent mortality, by 1960, there were only 32 cases with 6 deaths.

25 WASHINGTON-WEIK, p. 156; SCHRAM, pp. 140–141.

26 NAI, PRO C/O 147.85, Henderson to Lord Knutsford, June 2, 1892.

27 A. E. OLADELE – I. U. AUGUSTINE, The Contribution of Dr. Oguntola Odunbaku Sapara Williams to Colonial Medical Service in Lagos, in: *IOSR Journal of Humanities and Social Sciences*, 21, 4, 2016, pp. 50–54.

28 A. ADELOYE, *Nigerian Pioneers of Modern Medicine: Selected Writings*, Ibadan 1976.

activities of the smallpox priests were most times carried out in the dark, some of the priests were alleged to have wilfully infected some inhabitants of Epe, who could not meet their financial demands with smallpox. This was done by applying the scrapings of the skin rash of a smallpox patient to a yet to be infected person.[29] Apart from that, natives of Epe and even Lagos were also said to have infected their enemies with smallpox simply by pouring the dust from the grave of a smallpox victim to either the doors or windows of their adversaries.[30] Nonetheless, in their bid to retain their control of the smallpox disease, members of the *Sopona* cult resisted every attempt to vaccinate the people of Epe by public health officers.

However, the secrecy that surrounded the *Sopona* cult and death of the inhabitants of Epe from smallpox informed Dr Oguntola's decision to join the cult, primarily to study and understand the *modus operandi* of the society, thereby stamping out their activities. In his words: *"In 1897 when I took charge of Epe district, the town of Epe was known as the hotbed of smallpox epidemic. Finding that vaccination and other precautions seemed to fail, I joined the cult and having got into the mysteries I summoned the smallpox priests together, and threatened them with prosecution for disseminating the disease and used perchloride (sic) of mercury solutions. They left the town through disgust and since then, up till the time I left Epe, vaccination had scope for doing god work and then the town enjoyed immunity from smallpox, hitherto unknown."*[31]

His findings were not only illuminating but also formed the basis for government's subsequent clampdown on the *Sopona* cult. Among his findings, Dr Oguntola discovered that the *Sopona* cult was made up of people with little or no knowledge of the diagnosis and treatment of the disease and the cult's *modus operandi* was to infect smallpox on persons or households who failed to yield to their blackmail. Dr Oguntola presented an unbiased report on the activities of the *Sopona* cult to the colonial governor of Lagos, Henry McCullum. His position was acceptable or appealing to the colonial regime that they instituted the anti-*Sopona* law[32] and enacted the Witchcraft and Juju Ordinance in 1917 and made the

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[29] O. SAPARA, Report to the Colonial Government on Smallpox Epidemic in Yoruba country, Lagos, September 1, 1909, *Daily Telegraph*, June 5, 1935, cited in A. ADELOYE, Some Early Nigerian Doctors and Their Contribution to Modern Medicine in West Africa, in: *Medical History*, 18, 1974, p. 288.

[30] OLADELE – AUGUSTINE, p. 20.

[31] SAPARA, Report to the Colonial Government on Smallpox Epidemic in Yoruba country, p. 20.

[32] WASHINGTON-WEIK, p. 156.

worship of smallpox an offense punishable by law through fine and imprisonment.[33] However, by the 1950s, there were still concerns that priests intentionally spread the disease. The minute from a council meeting noted that a chief told the council: *"about the bad practices of the Native Herbalists with regard to victims of smallpox. He said that owing to the believe (sic) among the people that the worshippers of the god of smallpox must take possession of all the properties of anybody who died as a result of attack of smallpox, the herbalists usually hide under this cloak to spread the disease so that as many victims as much properties will be taken by them."*[34]

Obviously, the colonial authorities attributed the spread of smallpox in spite of vaccination and aggressive vaccination campaigns to the activities of the *Sopona* cult. Vaccination officers were reportedly threatened by the Sopona priests in Yorubaland, they also complained of reluctance and resistance from the people which have been ascribed to the influence of smallpox priest.[35]

Colonial Medical Policies: An Era of Compulsory Vaccination as Preventive Measure

Smallpox vaccination was the only legally required form of vaccination in many jurisdictions during the period under study and the use of law to implement smallpox vaccination constituted a novel form of colonial state intervention in public health. Unlike other measures aimed at managing and controlling the spread of infectious diseases, such as quarantine and sanitation, smallpox vaccination laws were uniquely characterized by state-imposed application of a biomedical product against a public health problem and subjection of healthy individuals to a medical procedure for the sake of protecting public or collective welfare. This unique aspect occurred against the backdrop of widespread social resistance to the procedure. It is to be noted that prior to the declaration of compulsory vaccination, the colonial government had forbidden by law the worship of *Sopona*. It is believed that the *Sopona* priests were responsible for the spread of the disease when efforts to get people

33 SAPARA, p. 20. NAI, CSO 26/3/21055, Government of Nigeria, Order in Council 12/1917.

34 National Archives, Abeokuta, Native Herbalist Correspondence 1934–1953, Abeokuta Provincial Office, District 1, 657.

35 NAI, PRO. C.O. 657/7, Annual Medical Report of the Medical Department, 1935, p. 17.

vaccinated (via vaccination campaign) did not yield better result.[36] The usual malignancy exhibited by smallpox and the activities of the *Sopona* priests during the 20th century raised the question of compulsory vaccination in Southwestern Nigeria. The next questions that lay before the colonial administration were if compulsory vaccination be introduced and the place where it had to be introduced. As the first step, the colonial administration thought it ideal to introduce compulsory vaccination in rural areas[37] and compulsory vaccination of children less than twelve years. This policy was since out of total deaths resulting from smallpox, nearly sixty-four percent were children under twelve years of age and the belief that the activities of *Sopona* priest further spread the disease. The colonial administration continued to try various techniques to improve vaccination levels, including the introduction of the Vaccination Ordinance and Public Health Act of 1917 which prohibited "arm-to-arm vaccination", presumably referring to local methods of inoculation[38] and the Quarantine Act of 1926 which is till today. The primary law governing matters concerning public health crises in Nigeria.[39]

Vaccination law provided for compulsory smallpox vaccination. It stated that *"every adult and child shall be liable to be vaccinated"*. It provided that the parent of every child must present the child to a public vaccinator within three months of birth.[40] Also, visitors arriving in Nigeria either by land, sea or air were also subject to compulsory vaccination or to produce certificate of vaccination. In 1945, the Vaccination Ordinance was amended to include a schedule for compulsory vaccination of adults and children, and was to be organized by local political authorities.[41] These Native Authority officials were also responsible for determining penalties for non-cooperation, although specific fines for non-compliance were subsequently introduced.[42] Nevertheless, despite increase in vaccination numbers, cases of smallpox also increased during the late

36 B. O. ODUNTAN, Beyond "The Way of God:" Missionaries, Colonialism and Smallpox in Abeokuta, in: *Lagos Historical Review*, 12, 2012, p. 6.

37 SAPARA, p. 20.

38 RENNE, p. 20.

39 Quarantine Act of 1926, 14 Laws of the Federation of Nigeria, Cap. Q2. Available on https://placng.org/i/wp-content/uploads/2020/04/Factsheet-on-Quarantine--Act-2004.pdf.

40 Ibid.

41 F. D. JAKEWAY, An Ordinance to Amend the Vaccination Ordinance, in: *Nigerian Gazette*, 1945, No. 16, pp. 273–275.

42 NAI, Compulsory Vaccination in Southern Provinces. Cited in RENNE, p. 20.

1940s and early 1950s which was as a result of the quality of lymph used. After 1921, lanolinated calf lymph was imported from the British Lister Institute which, due to shipment and climatic factors, was of variable potency. Consequently, attempts were made to manufacture lanolinated sheep lymph in Nigeria and in 1941 the Colonial Laboratory Service in Yaba, Lagos supplied smallpox vaccine for the entire country.[43] However, this vaccine was sensitive to heat, and under unrefrigerated conditions, it could lose its potency. It is important to note that the steady growth of colonial vaccination over the first half of the twentieth century marked changes in the ways the Yoruba people responded to smallpox epidemics. For once, vaccination came to replace gradually, if not eliminate entirely, a pre-colonial form of smallpox prevention called inoculation.

Sanitation: Colonial Smallpox Preventive Policy

Colonial sanitary officers believed that smallpox was a disease due to insanitary conditions, improve water, bad drainage, dirty living, and particularly to overcrowding. It is right therefore to posit that the first anti-smallpox sanitary measure adopted in Nigeria was the improvement of the environment and to do that, there was need to inculcate into the people a hygienic culture. In their control and management of smallpox, the British rightly prioritized sanitation and vaccination.[44] However, the contempt they felt for traditional healing systems impacted the expected response from local populations. This was particularly the case with the smallpox eradication campaign. As discussed above, smallpox was one of the diseases over which cult priests had the greatest control. The implementation of any policy of its control and management did not take this factor into account was likely to have a limited impact. This was what actually happened with the eradication campaign launched as soon as the colonial administration was established. Stiff penalties were attached to non-observance of the strict preventive measures enacted by administrative colonial authorities.[45] Thus, any case of smallpox had to be reported to administrative or medical authorities and failure to do so would incur a fine. As part of the sanitary measures taken, all the people

43 D. HORN, Notes on Smallpox in Nigeria: Vaccination Campaign Reports, 1949–1954, in: Nigerian National Archives, Kaduna, KAD-MOH 5/1, File 2, Vol. 1.

44 Interview with Pa Adeoye, a retired Principal, age 93, Ayekale area, Ibadan, April 15, 2016.

45 NAI, CSO 26, 43787/55, Director of Medical Service to Chief Secretary to the Government, Lagos, September 30, 1946.

living in a contaminated house had to be vaccinated as well as materials used by deceased people had to be buried with them or incinerated.[46]

A major sanitary problem in most rural areas of southwestern Nigeria during colonial period was shortage of clean water.[47] As a result, colonial subjects in southwestern Nigeria resorted to streams and rivers most of which were polluted by defecation and refuse disposal, thereby, believed to be a means by which smallpox and other diseases especially cholera is contacted.[48] Colonial public health and sanitation campaigns aimed partly at improving the health and survival of rates of the colonialists. Colonial administration, therefore, built urban water systems, and undertook smallpox vaccination programmes.[49] During the late colonial period, improved access to clean water significantly reduced the incidence of smallpox outbreak and waterborne diseases such as cholera. Also, to counter contagion, colonial medical personals began a thorough sanitation by literally scrubbing major cities in southwestern Nigeria and general vaccination was done from time to time.[50]

Colonial Medical Policies: Surveillance-Containment and Isolation as Smallpox Treatment Policies

The main colonial health intervention during outbreak of smallpox in Nigeria was vaccination and isolation. The goal of isolation is to prevent transmission of smallpox from an infected patient to non-immune individual while maintaining an appropriate care and comfort level for the patient.[51] Despite the increase in the number of vaccinations given to the populace, smallpox continued to ravage the Nigerian society and spread further. Several early observations of smallpox in Africa and accumulating evidence from smallpox vaccinators elsewhere soon suggested that isolation and surveillance-containment activities were of greater importance than mass and compulsory vaccination even during the attack phase of

46 NAI, CSO/26/3/21055, Shopona Worshippers, Secretary, Southern Provinces to the Chief Secretary of the Government, Lagos. May 22, 1925.

47 NAI, Annual Medical and Sanitary Report, Nigeria, 1927.

48 J. A. OLUYITAN, Sanitation in Ibadan, 1942–1999. Unpublished M.A. Thesis. Department of History, University of Ibadan, 2005, p. 20.

49 NAI, Annual Medical and Sanitary Report, Nigeria, 1931, p. 25. See also, A. APPIAH – H. L. GATES (eds.), *Encyclopedia of Africa, Volume 1*, London 2010, p. 303.

50 S. L. KOTAR – J. E. GESSLER, *Smallpox: A History*, North Carolina 2012, p. 326.

51 Interview with Dr. Allen Adegbaju, 50+ years, Infectious Disease Hospital, Yaba, Lagos State, February 8, 2015.

smallpox outbreaks. This method was adopted to vaccinate all susceptible individuals in a prescribed area around an outbreak.[52] The idea is also to form a buffer of immune individuals to prevent the spread of the disease. Recognized smallpox cases were placed in hospital isolation rooms or camps and their close contacts were vaccinated and kept under observation. The natural pattern of smallpox transmission facilitated the success of the surveillance-containment approach. Since the patient could not transmit virus until rash first developed, early isolation of obviously infected individuals became effective in reducing spread of the disease.

The first observation of this sort probably occurred during a smallpox outbreak in which 87 cases were reported in Iyapa, a town under Akure Division in 1943.[53] An investigation was started immediately in the area, a surveillance system was immediately instituted which identified 80 cases in Iyapa town itself. Consequently, an isolation camp was built, and mass vaccinations were performed at Iyapa and surrounding villages where cases occurred.[54] However, isolation and containment strategy for controlling smallpox outbreak relied upon prompt notification and appropriate hospital accommodation to allow cases to be isolated, contacts to be contained and premises to be disinfected. Methods of isolation and containment were refined and acquired important places within the public health arsenal, but throughout, vaccination remained a key focus in efforts against smallpox. This is because, vaccination was the only specific preventive measures available to colonial authorities and was therefore central to the twentieth century efforts to prevent and control smallpox epidemic not just in Southwestern Nigeria, but throughout the country.

Surveillance-containment and isolation strategies were not always desirable options for many colonial subjects because colonial subjects viewed admission into the isolation camps amounting to social death and many of them accepted the fact that local medical care offered a more complete package that promised lifelong immunity at both the temporal and "unseen" realms. In the end, surveillance served multiple purposes ranging from finding the remaining cases of circulating infection, measuring, and mapping uptake of vaccine, detecting emergence of resistance, and identifying populations at risk.

52 Interview with Dr. Arije (Medical Practitioner), age c. 40 years, Department of Public Health, Obafemi Awolowo Teaching Hospital, Ile-Ife, April 10, 2015

53 NAI, Ondo Prof 1/1 521, Small-pox Outbreak in Ekiti Division, 1934–46, Letter of the District Officer to the Resident, Ondo Province, Akure, March 23, 1946.

54 Ibid.

Colonial Threats: Report Cases of Outbreak or Face the Consequence

As discussed earlier, the activities of the Sopona priests led to the enactment of the Witchcraft and Juju Ordinance of 1917 which subsequently proscribed their activities in Southwestern Nigeria. In a bid to enforce the ban on *Sopona*, the attention of colonial officials including the Director of Medical and Sanitary Services, the Governor of the Southern Provinces, and the Governor of the Colony and Protectorate of Nigeria was engaged which brought about stricter laws and threats by the colonial government. One of such stricter laws was to prosecute anyone caught worshipping *Sopona* or permitted the worship of the smallpox god. For example, in 1924 *Oba* Adeola of Ipokia was deposed for permitting the worship of *Sopona* in his district. In the same vein, Akinloye, the *Oba* of Ilaro and also the *Oba* of Ado *"who was considered to be one of the most enlightened of the district heads"* were charged with the same of offence and were fined £50 each by a Provincial Court and were suspended under the Collective Punishment Act.[55] Also, in the same year, twenty-five people were arrested and convicted of practicing *Sopona* worship in the Ilaro Division of Abeokuta Province and the maximum penalty for this offence was £50 fine or six months imprisonment.[56] It turned out that their arrest followed the appearance of smallpox cases which Sanitary and Police authorities linked to *Sopona* worship.[57]

In the same vein, the Olode of Ode Ekiti and his chiefs were accused of concealing cases of smallpox outbreak in Ode Ekiti by sending victims of smallpox epidemic out to their farms during the day and bringing them home at night and they were consequently fined £10 or 3 months imprisonment.[58] It is important to note that this policy did not only affect the traditional rulers and chiefs, their subjects were also affected as it evident in law. In the light of many cases such as these across the Southern Provinces, the edict of 1917 was amended and included in the Amended Criminal Code Ordinance of 1928. The law stipulated a two-year imprisonment for *"offences in relation to witchcraft and juju"* in the hope that more serious sentences may stop the worship of *Sopona* which was

55 NAI, CSO/26/3/21055, Shopona Worshippers, Secretary, Southern Provinces to the Chief Secretary of the Government, Lagos, May 22, 1925.

56 Ibid.

57 Ibid.

58 NAI, Ondo Prof 1/1 521, Small-pox Outbreak in Ekiti Division, 1934–46, Letter of the District Officer to the Resident, Ondo Province, Akure, March 23, 1946.

believed to be the major way of spreading smallpox.[59] A cursory look at this development showed clearly that colonial authorities attributed the spread of smallpox to the activities of the *Sopona* cult. More so, colonial vaccinators often complained of threats and resistance from *Sopona* priest and the people which colonial officials attributed to the reluctance of the people to accept vaccination due to the influence of smallpox priests.[60]

Assessing the Effectiveness of these Colonial Medical Policies

The extent and persistence of reported cases of smallpox outbreak are clear from the statistics provided. It is also clear that these measures-controlled smallpox, even if they failed in eliminating the disease or preventing serious epidemics as late as the 1960s. In hindsight and on a broad level, smallpox was not eradicated during colonial rule because developments facilitating the spread of the disease such as population growth and movement, outpaced efforts at monitoring, isolation, and prevention through vaccination. After its initial launching in 1904, the vaccination campaign was subject to periodic evaluation. The first evaluation, carried out in 1906, coincided with a major eradication campaign. The report by the colonial health department admitted that the operation was not a success. In terms of coverage, only school children, mostly in urban areas of the southern region of the country, were vaccinated. Worse, the quality of the vaccine administered was not beyond question. Some observations and recommendations were made about these serious shortcomings. About the poor coverage by the vaccination campaign, the basic factor was identified as *"indifference, indeed even resistance, of indigenous populations"*. It was suspected that "fetish priests" of being the agents of resistance against vaccination. They used their influence over their adepts to prevent them from getting vaccinated because *"their benefits are reduced when they have few patients to treat, smallpox being their assured commission money"*. Such a local reaction to the campaign was to be expected from *Sopona* priests, the traditional healers of smallpox. But, as argued above, the contempt for traditional medicine prevented the French colonial authorities from taking this reality into account in their campaign strategy. While it is easy to vaccinate school children, it is an arduous task to vaccinate in rural

59 NAI, CSO 26/3/21055, Enclosure 3, Nigeria Dispatch no. 1252 of December 19, 1928.

60 NAI, Annual Medical Report of the Medical Department, 1935, CSO 5 657/7. Cited in O. B. ODUNTAN, Culture and Colonial Medicine: Smallpox in Abeokuta, Western Nigeria, in: *Social History of Medicine*, 30, 1, 2016, pp. 1–23.

areas where belief in the power of the god of smallpox was solidly established. Since coercive means could not be used to have people vaccinated, the report cautiously recommended patience: little by little and step by step, the population came to understand the benefit of vaccination. It is not unlikely that *Sopona* priests' hostile attitude to vaccination against smallpox contributed to the persistence of the disease. It should also be noted that indigenous populations were to be persuaded that modern medicine was more helpful in tackling smallpox than their traditional medical prescriptions. This was not the approach adopted by the colonial administration. Its harassment of the so-called fetish priests and other coercive measures turned out to be counterproductive. The vaccination campaign, despite the official feeling of satisfaction underlining many reports from district officials, failed to reach most of the population. Only in the 1950s was vaccination's impact fully felt, and thereafter smallpox became a minor cause of death in southwestern Nigeria. Therefore, the role of medical intervention in the control and management of smallpox clearly became established.

A major part of the decline in smallpox deaths resulted from the introduction of Compulsory Vaccination Acts and other strategies including surveillance-containment and isolation which obviously were effective in the control and management of smallpox during its outbreaks. A degree of legislative coercion produced a perceptible further decline in smallpox mortality, long after vaccination had been introduced. The extent and persistence of reported cases are clear from the statistics provided. It is also clear that these measures-controlled smallpox, even if they failed in eliminating the disease or preventing serious epidemics as late as the 1960s. In hindsight and a broad level, smallpox was not eliminated during the colonial rule because developments facilitating the spread of the disease such as population growth and movement outpaced efforts at monitoring, isolation, and prevention through vaccination.

Conclusion

This paper fills the gap in the literature by exploring the hegemonic strategies used by the British colonial officers to establish the legitimacy of western medical practice concerning smallpox vaccination and to eliminate the practice of traditional inoculation, and the selective responses and initiatives of the people affected by the medical measures, especially the local healers who sought to ensure the continuity of healing beliefs and practices that were features of the African culture. The study of

smallpox thus raises specific questions about the significance of medical innovations, including vaccination, in reducing mortality and morbidity and broader questions concerning the role of medicine as an institution of social control in the context of the medicalisation of the colonized, the medical profession as its agent, and medical knowledge as a discourse among competing discourses. The failure of compulsory vaccination to prevent further outbreaks of smallpox epidemics or to reduce smallpox mortality had to do not only with the resistance against or "indifference" of the indigenes and their healing experts toward western medicine but also with the ineffectiveness of the vaccination programs and the lack of potency of the vaccine itself.