AN APPRAISAL OF DISEASE CONTROL IN COLONIAL LAGOS: A CASE STUDY OF THE BUBONIC PLAGUE OF 1924

ADEOTI, Ezekiel Oladele  
Department of History and International Studies, Faculty of Arts, Lagos State University, Ojo  
deleadeoti@gmail.com or dellyz08@yahoo.co.uk

IMUOH, Uvu Augustine  
Department of History, University of Ibadan  
austenimuoh009@yahoo.com

Abstract  
This paper attempts an evaluation of the role of British colonial administration in the control of diseases in Lagos with specific reference to the bubonic plague of 1924. It adopts the historical narrative and analytical method as the framework for analysis. The paper argues that the indifference of the residents of Lagos to the anti-plague campaigns of the colonial government affected attempts to stop the spread of the plague. The paper concludes that fear, anxiety, suspicion, illiteracy and ignorance accounted for the delay experienced in eradicating the plague. As a way forward, the paper enjoins people to embrace government’s healthcare policies and programmes for a better living while governments at all levels should provide durable and affordable healthcare facilities for their subjects.

Keywords: Government, Infectious Diseases, Healthcare, Lagos Town Council, Wharf, Medical Officer

Introduction  
Prior to the outbreak of the bubonic plague, Lagos had witnessed tremendous outbreaks of so many communicable and non-communicable diseases such as malaria, smallpox, leprosy, cerebro-spinal meningitis, pulmonary disorder, cholera, typhoid, guinea worm, anaemia, hepatitis, scabies, among others (Spencer, 1964). However, malaria and smallpox were among many of the endemic diseases that had ravaged Lagos and accounted for most of the deaths recorded in the colony (Bode, A sanitary inspector (2015) Personal interview, Broad-street, Lagos, Nigeria). Nonetheless, the high incidence of epidemic in Lagos can be attributed to many factors, chief among which was the insanitary condition of the community especially Lagos Island which accommodated about 65 percent of the entire population of Lagos settlement in 1950 (Adele 2009). The area not only suffered from inadequate modern facilities commensurate with its teeming population but was also filthy, inhospitable and uninhabitable. Apart from the small size of the
Lagos Island, many parts of the colony were marshy and submerged. For example, areas like Oko-Awo, Alakoro, Sangrouse and Elegbeta where majority of the native population lived were not only filthy but also disease prone (Alli, A retired public servant, (2015) Personal interview, Agege, Lagos, Nigeria). For example, “Oko-Awo lies beyond the lagoon and very difficult to drain” (Nigerian Pioneer, 1924). The over-crowding in the Oko-Awo area was linked to the outbreak of epidemic diseases such as the tuberculosis of 1919 which claimed the lives of hundreds of people on the island of Lagos and consequently forced many people to migrate to Lagos Mainland (Alli, A retired public servant, (2015), Personal interview Agege, Lagos, Nigeria). Indeed, by 1922, it was reported that tuberculosis epidemic was “slowly but steadily becoming more prevalent in the town” (National Archives, Ibadan (N.A.I.), Annual Report, 1922). The report concluded by attributing the growing cases of tuberculosis epidemic in the city to over-crowding.

The anguish caused many families in Lagos by the 1919 influenza had hardly died down when the bubonic plague struck the colony in 1924. Interestingly, the plague was first discovered at Oko-Awo, which as earlier state witnessed the outbreak of the first tuberculosis epidemic in Lagos. The plague spread to Lagos a few days after it broke out in Sekondi in the former Gold Coast (now Ghana) on 15 March, 1924 (N.A.I., Sessional Paper No. 17 of 1925). The first evidence of the plague was contained in a report by a medical practitioner on 17 July, 1924 which revealed that “an unusual number of deaths had occurred in the Oko-Awo area of the colony and that practically a whole family had died” (N.A.I. CSO, 26/2). Initial attempts to trace the cause of the disease did not yield the desired result. A certain Hausa kola trader named Bogobiri who allegedly was infected with the plague while on a business trip to the Gold Coast was erroneously said to have died on 7 July 1924 of pneumonia while the deaths of three of his wives and three servants three days later were all attributed to diarrhoea, cough or fever” (N.A.I., Sessional Paper No. 17 of 1925).

Nevertheless, the death of the Hausa trader, his wives and servants elicited more concern and investigation as well as a post-mortem examination into all deaths that occurred in Oko-Awo. A similar investigation was also launched into the ‘sudden and suspicious deaths that occurred in other parts of the town (N.A.I., Sessional Paper No. 17 of 1925). These medical examinations which were aimed at ascertaining the presence or absence of bubons in the remains of the dead by both Dr. W.S. Clark, the Medical Officer of Health (MOH) and Yaba Medical Research Institute tested negative. However, a breakthrough was recorded on 28 July, 1924 when a medical examination on another dead body from Oko-Awo confirmed the presence of a plague in Lagos town (N.A.I., Sessional Paper No. 17 of 1925).

Between 28 July 1924 (when the plague was confirmed in Lagos) and 31 December), about 414 cases with 343 deaths were recorded. By 31 July 1924, the number of cases and fatalities had risen to 422 and 350 deaths respectively (N.A.I. Sessional Paper, No. 17 of 1925). The plague became more widespread and virulent towards the end of September. For example, out of the 41 new cases identified and admitted at the Infectious Diseases Hospital (IDH) in September 1924, 73 percent of them died (N.A.I., Sessional Paper No. 17 of 1925). Also 40 percent of the 63 persons treated at the hospital died in the month of October. (N.A.I. Sessional Paper, No.17 of 1925) However, the plague epidemic slowed down in the month of November with just 47 percent of 34 new cases dead (N.A.I., Sessional Paper No. 17 of 1925). The improvement in the number of cases and fatality rates especially from September through November of that year can be attributed to an improved knowledge and diagnosis of the disease by medical practitioners. Indeed, by the end of September 1924, the diagnosis of the plague case was made more clinical although the competence and experience of some of the medical personnel to diagnose the plague in infected persons remained low due probably to the strangeness of the plague (N.A.I., Sessional Paper No. 17 of 1925).
Flowing from the above the apparent lack of knowledge of the plague by some medical personnel involved in the control of the spread of the disease may also be attributed to the nature of the epidemic and the incompetence of the medical practitioners. The inability of pathologists in the colony to identify rat as the primary index case of the plague can be attributed to the fact that at the onset of the epidemic, “rats were examined microscopically” and found free of plague (N.A.I. C.S.O, 26/2). Apart from the bubonic plague, there were other epidemics such as pneumonia which also demanded equal attention from the colonial authorities (N.A.I., Sessional Paper No. 17 of 1925). No doubt, the hands of the colonial medical team were full and there was not much they could do given the situation on ground at that time.

Prior to the outbreak of the plague, some Europeans who visited Lagos in the 19th century had complained of the huge number of rats in the colony and the danger they posed to the lives of the people. For example, John Adams, an American sailor who reached Lagos in the 19th century had hinted that “the town swarms with rat from the lake which burrowed in the ground and are so deciduous that they most infrequently make their appearance under the dinner table while the guests were sitting at it” (N.A.I., Lagos Town Council, Annual Report of the Medical Officer of Health, 1924). The number of rats in Lagos increased in the closing decades of the 19th century and early decades of the 20th century with the construction of wharfs and establishment of warehouses, markets and stores which turned out to be easy hide-outs and breeding grounds for rodents. Although the Lagos Town Council tried to reduce the number of rats in the colony through the deployment of rat catchers, a Medical Officer of Health (MOH) regrettably warned in 1922 that:

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\text{rats are removable (sic) population and always breed up to limit of the food available for them and in a place like Lagos where there is practically no protection of foodstuffs against rats, the rat population must greatly exceed the town (John A., 1966)}
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Indeed, lack of effective storage system such as market stalls accounted for the high population of rats in Lagos. In the absence of ‘proper markets’ in the city, Lagos foodstuffs traders stored their wares mostly in their houses. It was a common sight to see large heaps of maize, cassava and yam tubers, etc. littered the floors of many homes in Lagos without any form of protection against rats invasion (N.A.I., Sessional Paper No. 17 of 1925).

Apart from the menace of rats, the outbreak of the bubonic plague is also a measure of the general insanitary condition of Lagos. Traditional sanitation in Lagos was crude and rudimentary (Bode, A sanitary inspector (2015) Personal interview, Broad-street, Lagos, Nigeria). There was improper disposal of waste and refuse. Indeed, in many parts of Lagos, the inhabitants of the colony disposed wastes indiscriminately on the streets, lanes or even compounds and by so doing exposed themselves to various kinds of diseases (Bode, A sanitary inspector, (2015) Personal interview, Broad-street, Lagos, Nigeria).

**Response of the Colonial Administration to the Bubonic Plague**

Following the discovery of rat as the primary cause of the bubonic plague, the colonial government embarked on various measures aimed at not only checking the spread of the disease but also the breeding of rodents. Over 510 health personnel including medical doctors, sanitary inspectors, nurses, nurse attendants, rat catchers and other labourers were employed for the purpose of inspecting, cleaning and disinfecting plague sites, removing the sick and burying the dead (N.A.I., Lagos Town Council, Annual Report of the Town Engineer, 1924). All the health officials
including European and African medical practitioners were inoculated so that none got infected by the disease. As a preventive measure, all the health officials were requested to “to rub their legs and arms with kerosene emulsion and wear boots, trousers and socks.” They were also advised to “tuck their trousers inside the socks and rub the outside with kerosene emulsion” ((N.A.I., Sessional Paper No. 17 of 1925).

In the bid to rid Lagos town of rat infestation, the colonial regime adopted both temporary and permanent measures. Temporary measures involved anti-plague inoculation, rat destruction, disinfection and temporary evacuation of infected homes. Inoculation of the people of the colony began with the establishment of inoculation centres around the city. About 90 people were inoculated in the colony in the first week of the exercise (N.A.I., Sessional Paper No. 17 of 1925). With respect to rat destruction which had commenced in the colony even before the outbreak of the plague, three rat stations were set up in each of the three most affected areas of the town namely Otto-Awo, Sangrouse and Elegbata. The stations were supervised by a clerk or sanitary inspector. A sum of two pence was paid on every rat taken to the station by an accountant who visited the stations twice daily. Rat catchers were grouped into 12, each under the supervision of a Royal Army Medical Corp (R.A.M.C.) Non-Commissioned Officer. Each group was provided with buckets so as to ensure that the number fixed to the rat lanes corresponded to the entry in the rat-catcher’s book (N.A.I., Sessional Paper No. 17 of 1925).

Another measure taken against rat breeding in Lagos by the colonial administration was disinfection of homes where plague epidemic had not occurred. Initial disinfection was done with sulphur. However, it was later dropped because “it was impossible to render large collections of connected huts sufficiently gas tight”. Nevertheless, efforts were made to destroy rats with kerosene emulsions.

Evacuation and enlightenment were also some of the temporary measures taken against the spread of the plague. In one instance, about 179 people in a building suspected of plague infection were evacuated and taken to Infectious Disease Hospital (IDH) in Ikoyi for close medical examination. Similarly, the colonial administration also made use of bills, circulars, public lectures, etc to spread knowledge about the plague. Also, information on the plague was disseminated by “inoculators in churches and mosques” as well as by “a bell man or crier”. These measures provided the people with ample knowledge on the spread of the plague and how to protect themselves against rat and flea infestation (N.A.I. CSO, 26/2). During the period, the colonial administration also attempted to fence off shops but dropped the idea due to the huge expenditure involved (N.A.I. CSO, 26/2). Nevertheless, the colonial administration also took steps to prevent the spread of the disease to other parts of Lagos through the erection of barriers and sheds at the Denton Bridge, Idumagbo, Epetedo, Ikoyi, New McGregor Canal and Five Cowrie Bridge. A ship known as Betty was given to the police to patrol the above mentioned areas and ensure compliance. All the ports of Lagos, Lagos Island and Iddo were declared infected from August 29 to December and from 18-19 December, 1924 (N.A.I., Lagos Town Council, Annual Report of the Medical Officer of Health, 1924). The drive to check the spread of the plague beyond Lagos community also led the colonial administration to impose restrictions on commercial traffic between Lagos and neighbouring town of Port Novo in Dahomey (Benin Republic). Under the restrictions which came into effect on 15 October, 1924, every European was kept under surveillance while immigration of natives from Lagos and canoe traffic was also prohibited (N.A.I. CSO, 26/2).

The permanent measures adopted against the spread of the disease include the destruction of overcrowded and insanitary buildings, construction of rat proof markets and the adoption of efficient
refuse disposal system. For example, the construction of a rat-proof market was aimed at discouraging native traders from storing their foodstuffs in their homes or on the streets. With respect to refuse disposal, the colonial administration experimented with the construction of refuse incinerators in some parts of the town such as Epetedo and Ebute Metta as a means of eliminating refuse from the city completely (N.A.I., Sessional Paper No. 17 of 1925).

Another permanent measure taken to protect the inhabitants of Lagos from the plague menace was the establishment of the Port Health Organisation. The health facility consisted of a Quarantine Station, a Wharf Disinfecting Station and four disinfecting machines (N.A.I., Sessional Paper No. 17 of 1925). The organisation was put under the control of a medical officer who acted as port manager. Another permanent anti-plague campaign adopted by the colonial administration was the construction of permanent homes for displaced residents of the town. A sum of £220,000 was earmarked for the cost of land, buildings, street, fencing, water supply and electric light. The houses were built of concrete walls and floors as well as corrugated iron roof, all of which were adjudged capable of warding off rats (N.A.I., Sessional Paper No. 17 of 1925).

The Impact of Colonial Administration on the Control of the Bubonic Plague

The outbreak of the bubonic plague in Lagos was a major test to the policies and programmes of the colonial administration on sanitation control and public health generally in the colony. Reminiscent of its role in previous outbreaks of diseases like the tuberculosis epidemic of 1919, the reaction of the colonial administration to the bubonic plague was swift, precise and orderly. Its quick response to the disease also demonstrated the colonial administration’s total commitment to the promotion of effective healthcare delivery in Lagos. Perhaps the bubonic plague would have killed more people had the colonial authority not taken the immediate remedial action to stop the spread of the plague at the time it did. The huge success recorded in the battle to reduce the population of rats and spread of the epidemic can be attributed to the assemblage of some of the finest and industrious medical personnel on its pay roll. Generally, about 41 European medical personnel participated in the struggle to protect Lagos inhabitants from the scourge of the plague (N.A.I. CSO, 26/2).

Despite its poor financial status, the colonial administration also provided the funds needed to prosecute its anti-plague measures. Unlike before when the administration blamed its inability to implement its sanitation policies in Lagos on paucity of funds, the colonial regime spared no penny in ensuring that the plague was brought under firm control within a short period. Indeed by December, 1926, the colonial administration had committed more than £50,000 to its anti-plague programme in Lagos in particular and Nigeria in general (N.A.I. C.S.O, 26/2). Apart from procuring vaccines, syringes and needles, the money was also used to pay the allowances of medical practitioners and other health professionals who participated in the anti-plague campaign, a development that further boosted the morale of the health personnel.

The determination of the colonial administration to keep Lagos free of the disease was also evident in the amendment of some health acts such as the 1895 health ordinance. In a bid to reduce overcrowding in many houses in Lagos, section 45 of the Public Health Ordinance of 1895 was amended to empower a designated health officer to fix “the number of human beings or animals which may occupy a particular premises or room” (N.A.I. COMCOL, /13/, 1930) Similarly, the colonial administration also took steps to provide accommodation for Africans displaced by its anti-plague campaign. Indeed, the establishment of the Surulere Housing Estates was aimed at providing accommodation for the internally displaced persons of the town by the colonial administration’s slum clearance scheme of 1955 in central Lagos.
One very important outcome of the colonial government’s efforts to checkmate the spread of the plague was improved relations between European and African medical practitioners. During the campaign to eliminate the plague in Lagos, both European and African medical practitioners worked together harmoniously with one another. Moreover, there was no discrimination in payment of the allowances of European and African medical professionals who participated in the campaign. Both the European and African medical practitioners were paid the sum of one guinea each for their role in the anti-plague campaign (N.A.I. CSO, 26/2). Prior to the outbreak of the plague, the colonial administration was accused severally of racial discrimination in the appointment and promotion of staff in its establishments in the colony. Although the colonial administration succeeded in tackling the spread of the epidemic, there are allegations that the regime was racially inclined in its approach to the control of the disease. Some health practitioners argued that Britain should have taken a pre-emptive step against the outbreak of the disease in the Lagos colony after it had occurred in Ghana, a sister British West African colony. While a quick diagnosis of the causes of the plague would have helped in saving more lives, it should be noted that the colonial administration had taken pre-emptive measures to prevent the plague from spreading to Lagos and so cannot be held responsible for the loss of lives witnessed at the early stage of the outbreak of the disease. Rather the uncooperative attitude of the inhabitants of the colony played a significant role in the high fatalities recorded in the town. Although many Lagosians turned up for inoculation, there were others opposed to some of the measures proposed and adopted by the colonial administration to reduce the spread of the disease and rat population in the colony. Many of the residents of the Lagos colony covered traps set for rats by rat catchers with baskets, basins or calabashes, etc. because of fears and erroneous belief that their houses would be destroyed if rats were found in them (Babasanya, a Senior Sanitary Inspector (2015), Personal Interview, Broad Street, Lagos, Nigeria). Similarly, the programme to evacuate residents of a building where the plague was suspected suffered some setback as some families hid the sick from medical personnel and other professionals involved in the anti-plague campaign. This attitude was displayed by the natives to the policy to disinfect buildings as anti-plague measure. In a bid to allay the fears of Lagos residents over the destruction of their houses, the colonial administration created the Anti-Plague Compensation Board in 1926. By August, 1927, the board had disbursed the sum of £1.9 million as compensation to owners of houses demolished as part of its anti-plague campaign (N.A.I. CSO, 26/2). This enabled those affected to put up new structures in other parts of the town after the epidemic had subsided. Another criticism levelled against the anti-plague measures of the colonial regime was that they affected the growth of commerce between municipal Lagos and its neighbours; notably Port Novo. Although the restrictions on movement between the Lagos Lagoon and Port Novo disrupted commerce or trade between the two, it cannot but be said that such measure was precautionary and played a major role in preventing the spread of the plague to Port Novo. As part of its anti-plague measures, the colonial administration ensured that all ships billed for Port Novo were thoroughly examined by Port officers before leaving the Lagos colony. Although there were cases of over-zealousness by some of the medical officials involved in the anti-plague campaign, the fact that by 1930 there was no reported case of the plague in Lagos and Nigeria showed the effectiveness of the colonial administration in preserving the lives of Lagos inhabitants from the scourge of diseases such as the bubonic plague (Udoh, a Private Medical Practitioner (2015), Personal Interview, Ilasamaja, Lagos, Nigeria).
Conclusion
The attitude of the colonial administration to the outbreak of the bubonic plague in Lagos was in tandem with its programme to preserve the health of everyone living in the colony and its adjoining communities. Although the plague was the first of its kind in Lagos and even Nigeria, it presented a strong challenge to the commitment and capacity of the colonial administration to institutionalise an effective healthcare system in Lagos. In its struggles to stem the spread of the disease, the colonial regime made use of the services of both foreign and local health professionals and by so doing checked allegations of racism that accompanied British occupation of Lagos in 1861. Interestingly, some of the anti-plague measures adopted during the struggle to stamp out the plague were to form the bases of methods of treatment and prevention of subsequent epidemics even after the end of the colonial era.

Beyond the successful handling of the plague is the need for people to embrace government’s policies and programmes that directly affect their health. There is also the need for the people to observe the basic principles of sanitation and hygiene in their homes or compounds. On the other hand, government should provide effective drainage, waste and sewage disposal systems for the people and hence checkmate the outbreak of communicable diseases such as the bubonic plague.

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