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**‘FROM STINKIBAR TO ZANZIBAR’:
DISEASE, MEDICINE AND PUBLIC
HEALTH IN COLONIAL URBAN ZANZIBAR,
1870-1963**

MAY, 2009

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URBAN ZANZIBAR,
1870-1963**

AMINA AMEIR ISSA

**A Dissertation Submitted in Fulfillment of the Requirements for the Degree of
Doctor of Philosophy in History at the University of KwaZulu-Natal**

May 2009

DECLARATION

I declare that this dissertation has not been submitted to any other university and that it is my entirely own work that I have given due acknowledgement of all sources.

Amina Ameer Issa

Professor Julie Parle

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DEDICATION

I dedicate this dissertation to my children
Abdul-Aziz, Nusayba, Atifa and Mahmoud

And to my late father
Ameir Issa Haji (1939-1995)

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ABSTRACT

Until recently, scholars of Zanzibar history have not greatly focused on study the history of disease, western medicine and public health in the colonial period. This thesis covers these histories in urban Zanzibar from 1870 to 1963. In addition, it looks at the responses of the urban population to these Western-originated medical and public health facilities during the colonial period. The thesis starts by exploring history of Zanzibar Town during the nineteenth century looking at the expansion of trade and migration of people and how new pathogens were introduced. Local diseases became more serious due to population expansion. I also examine the arrival, introduction and consolidation of Western medical practices. The establishment of hospitals, the training of doctors and nurses and the extension of these facilities to the people are all discussed, as are anti-smallpox, bubonic plague, malaria and sanitation programmes before and after the Second World War. The thesis argues that the colonial government introduced medical institutions in urban Zanzibar with various motives. One of the main reasons was to control disease and ensure the health of the population. The anti-malarial, smallpox and bubonic plague campaigns are an example of how the government tackled these issues. The introduction of preventive measures was also important. The Quarantine Station, the Infectious Diseases Hospital and the Government General Hospitals were established. Other facilities were the Mental Hospitals and Leprosaria. The work of extending medical services was not only done by missionaries and the colonial state but was in great measure through the contribution of Zanzibari medical philanthropists, community, religious and political leaders. *Mudiris*, *Shebas*, family members and political parties also played a significant role. In the twentieth century, newspapers owned by individuals and political parties and community associations played a major role too. Zanzibari medical doctors, nurses, orderlies, *ayabs*, public health staffs were cultural brokers who facilitated the extension of biomedicine and public health measures. By the end of the British colonial rule in Zanzibar in 1963 Western medicine was an important therapeutic option for the people not only in urban Zanzibar but also in both Unguja and Pemba islands.

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ABBREVIATIONS

ASP	Afro-Shirazi Party
AMO	Assistant Medical Officer
BERLA	British Empire Leprosy Relief Association
BMH	British Military Hospital
CO	Colonial Office
CS	Chief Secretary
DMSS	Department of Medical and Sanitation Services
DMS	Director of Medical Services
FO	Foreign Office
EMS	Evangelical Mission Society for German East Africa
GMH	German Military Hospital
GHNS	Government Hospital for Natives and Subordinates
IDH	Infectious Diseases Hospital
INA	Indian National Association
HKJH	Hassanali Karimjee Jivanjee Hospital
HO	Health Office
KMH	Kidongo-Chekundu Mental Hospital
LEGCO	Legislative Council
MO	Medical Officer
MOH	Medical Officer of Health
PMO	Principal Medical Officer
PHD	Public Health Department
QS	Quarantine Station
SAS	Sub-Assistant Surgeon
SMO	Senior Medical Officer
UNICEF	United Nations International Children Economic Fund
UMCA	Universities' Mission to Central Africa
WMO	Women Medical Officer
WAMO	Women Assistant Medical Officer
WHO	World Health Organization
ZG	Zanzibar Government
ZNP	Zanzibar Nationalist Party
ZPPP	Zanzibar and Pemba People's Party

CHRONOLOGY OF THE OMANI RULERS, ZANZIBAR

Said Sultan	(1840-1856)
Majid Said	(1856-1870)
Barghash Said	(1870-1888)
Khalifa Said	(1888-1890)
Ali Said	(1890-1893)
Hamed Thuweyn	(1893-1896)
Khalid Barghash	(1896)
Hamoud Mohamed	(1896-1902)
Ali Hamoud	(1902-1911)
Khalifa Haroub	(1911-1960)
Abdalla Khalifa	(1960-1963)
Jamshid Abdalla	(1963-1964)

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BRITISH ADMINISTRATORS, ZANZIBAR

British Consuls

Atkins Hamerton	(1840-1857)
Christopher Palmer Rigby	(1858-1860)
Lewis Pelly	(1861-1862)
Robert Lambert Playfair	(1862-1865)
Henry Adrian Churchill	(1865-1870)
John Kirk	(1870-1873)

Consuls-General

John Kirk	(1873-1886)
Claude Maxwell MacDonald	(1887-1888)
Charles Bean Euan-Smith	(1888-1891)
Gerald Herbert Portal	(1891-1893)
James Rennell Rodd	(1893-1894)
Arthur Henry Hardinge	(1894-1900)
Charles Norton Eliot	(1900-1904)
Basil Shillito Cave	(1904-1909)
Edward Clarke	(1909-1913)

First Ministers

Lloyd William Mathews	(1890-1901)
Alexander Stuart Roger	(1901-1906)
Arthur Raikes	(1906-1908)
Francis Barton	(1906-1913)

British Residents

Francis Barrow Pearce	(1913-1922)
John Houston Sinclair	(1922-1923)
Alfred Hollis	(1923-1929)
Richard Sims Rankine	(1929-1937)
John Hathorn Hall	(1937-1940)
Henry Guy Pilling	(1940-1946)
Vincent Goncalves Glenday	(1946-1951)
John Dalzell Rankine	(1952-1954)
Henry Steven Potter	(1954-1959)
Arthur George Mooring	(1959-1963)

GLOSSARY

Ayahs - nurse-aides

Bibi - A lady or mistress

Bi - Abbreviation of Bibi

Sheha - a village leader or headman

Mudir - a District Officer

Wakf - Muslim's charitable endowment: a gift of land or property made by a Muslim, intended for religious, educational, or charitable use.

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INTRODUCTION: DISEASE, MEDICINE AND HEALTH, 1870-1963

Introduction

From the early nineteenth century, as the port-town of Zanzibar became a meeting point of people from Europe, America, Arabia, India, and the East African coast and interior, the exchange of disease became common. This dissertation provides the first historical analysis of the relationship between Western medicine, colonialism and the provision of health services in colonial Zanzibar. It focuses on the history of diseases, colonial medical and public health services in Zanzibar Town from 1870 to 1963, examining missionary and military medicines and the provision of medical facilities not only in hospitals but also through public health strategies. Town sanitation, vaccination campaigns, anti-malaria and health education programmes will also be discussed. This study will examine, wherever possible, the attitude and responses of the local population to these medical facilities and public health measures identified with colonial medicine. It will show, through the use of archival records and interviews, the steps by which biomedicine became an important therapeutic option for many Zanzibaris in Zanzibar Town by the end of colonial rule in 1963.

Zanzibar consists of two sister islands, Unguja and Pemba (see Map 0.1 and 0.2). The bigger Unguja Island is also referred as Zanzibar Island. Zanzibar Town lies on the western side of the Unguja Island. The town comprises the Stone Town and Ng'ambo (the 'Other Side') areas (see Map 0.3). The town was about 3.16 sq miles in which Stone Town had 0.76 sq miles, and Ng'ambo had 2.40 sq miles in 1963. Stone Town was located on a triangular peninsula, which connected to the main island of Unguja through a neck of land at the southern end, and separated from it by a creek to the east. The creek was filled-in from 1935 until the early-1960s under the advice of the Director of Medical Services for health related reasons. Ng'ambo lies to the eastern side of Stone Town. It was a lowland area separated by a small sea, *Pwani Ndogo*. The 1958 census report showed that 58,000 people lived in the town, 13,300 in Stone Town and 44,700 in Ng'ambo.¹

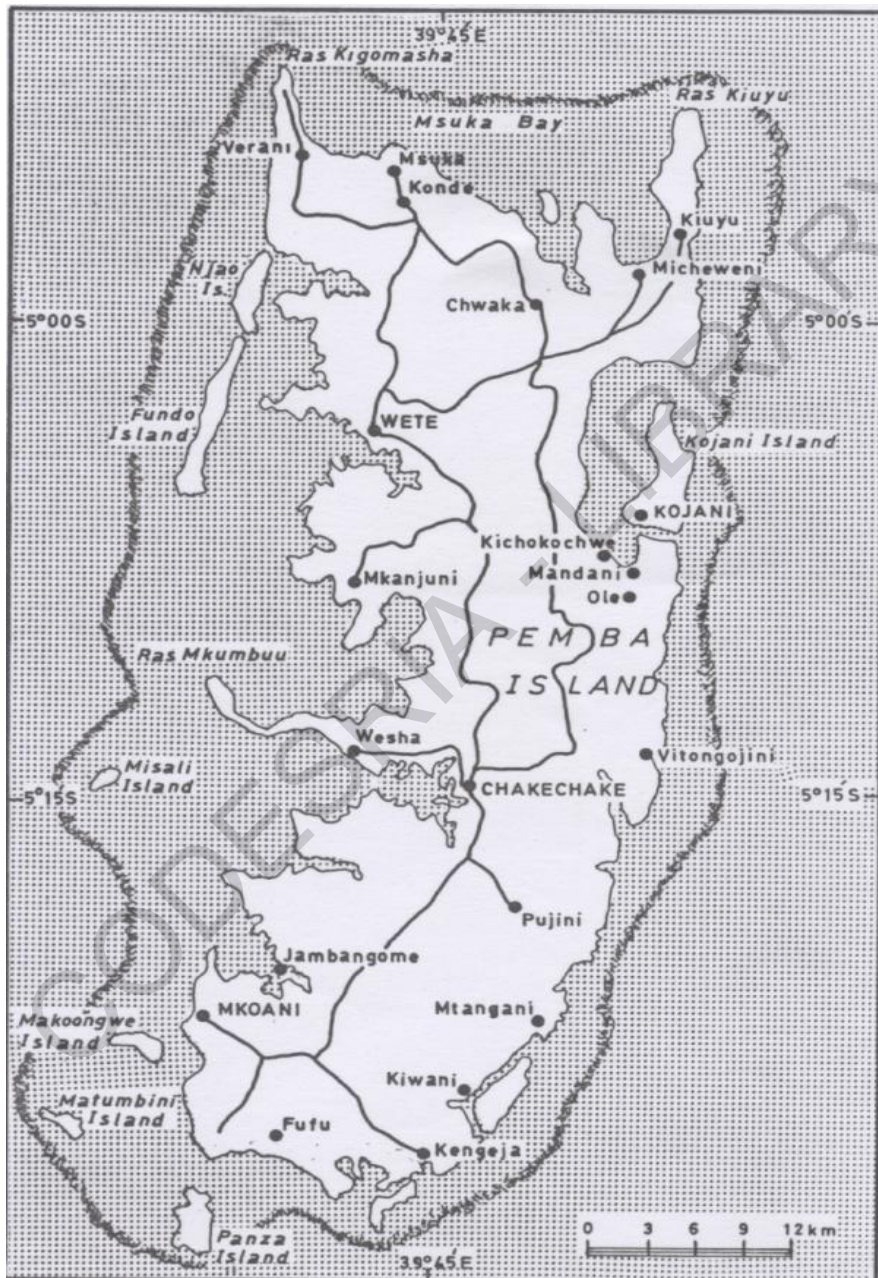
¹ Zanzibar Government, *Survey of the Town* (Zanzibar: Zanzibar Government Printer, 1960), p. 19

Map 0.1: Unguja Island



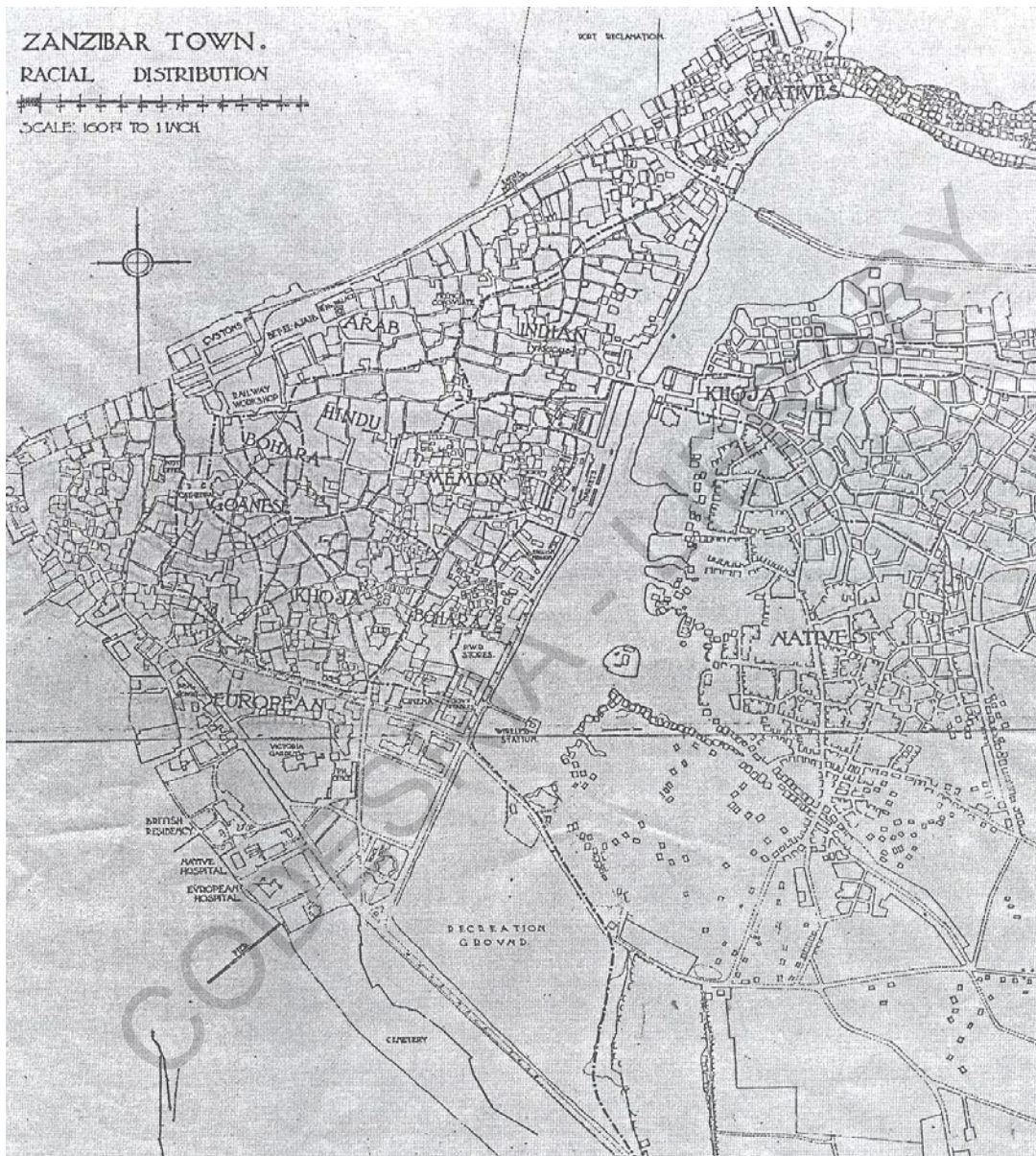
Source: ZNA AW 3/1: Unguja Island, 1960.

Map 0. 2: Pemba Island



Source: ZNA AW 3/2: Pemba Island, 1960.

Map 0. 3: Zanzibar Town



Source: ZNA AW 3/4: Zanzibar Town, 1922.

The demographic and ethnic history of Zanzibar Town presents definitional challenges. The existence of ethnic groups, indigenous and immigrant, of race and of class, and their bearing upon one another across time is a contested topic. Jonathon Glassman has pointed out that:

The project of building a racial state... had begun with the Omani sultans who conquered Zanzibar... marginalizing the indigenous chiefs [the Mwinyi Mkuu, the Shehas and the Diwanis]. The Sultans also sponsored the settlement of Arab planters and political elites and of Indian financiers, and the import of plantation slaves from the African mainland. Thus the groundwork was laid for the major ethnic divisions of colonial Zanzibar: Arabs, Indians, indigenous islanders and African mainlanders.²

In 1873, the British forced Barghash Said (r.1870-88) to abolish the slave trade in Zanzibar. Although the British declared Zanzibar a British Protectorate on 1st November 1890, real and effective control of Zanzibar took place in 1897 when the institution of slavery was abolished and a wage labour economy introduced. From 1890, the British became responsible for the foreign affairs of Zanzibar, leaving the internal administration to the Omani Sultans. In reality, the British controlled all the affairs of Zanzibar. Soon after the declaration of Protection, Sir Gerald Portal, who was the British Resident between 1891 and 1893, took control of the Sultan's finances. He also divided the administration of Zanzibar into various departments such as Public Works, Treasury, Army and Police, Agriculture, Medical, Customs and Port Office.³ By 1891, Gerald Porter began a wider programme for bringing Zanzibar's finances and administration under control. The Sultan's expenditure was reduced in order to fund administrative works. Other financial reforms were provided for new schedules of duties for the utilization of an improved port system, and a tax upon stone houses in Zanzibar Town. All British officials and Indian administrators were paid their salaries through local funds.

This study covers the period from 1870 to 1963 for both economic and political reasons. By the 1870s, missionary medical services were well established among Europeans and African

² Jonathon Glassman, 'Sorting out the Tribes: The Creation of Racial Identities in Colonial Zanzibar's Newspaper Wars', *Journal of African History*, 41, 3 (2000), pp. 395-428. The quotation is on p. 401-2.

³ For further information on British administrative policy after the declaration of Zanzibar Protectorate see the work of L. W. Hollingsworth, *Zanzibar under the Foreign Office 1890-1913*, especially Chapter four: 'Reorganization of the Administration by Sir Gerald Portal, 1891-1892.'

emancipated slaves. From the late-1880s, some wealthy Indian merchants endowed money for the constructions of hospitals. The Omani political elites also introduced modern public health facilities. From 1900 to 1930 medical services were financed through internal state revenue. The facilities did not extend quickly enough to meet demand because state revenues were small. It depended primarily on clove and copra selling in Asian markets. The First World War (1914-1918) and the Great Depression from 1929 to 1935 resulted in the prices of cloves fluctuating, mostly downwards, during the 1920s and 1930s. The destabilised price of clove exports impacted negatively on revenue and hindered the smooth operation and expansion of medical facilities. From 1940, and especially after the Second World War, the British abandoned the principle that public health provision in Zanzibar had to be financed out of local revenues, and provided funding for health facilities. In part, the British had little option since the Asian clove market collapsed during the Second World War, and there was a period of long stagnation in the 1950s. The British colonial government was forced to administer medical and health services partly to ensure the good health of its subjects and partly because townspeople began to demand these services.

The colonial medical services in Zanzibar dated to 1894 with the creation of a Department of Hospital and Medicine. In the same year, the Department of Sanitation, which was under the control of a British civil engineer, was established. The department's principal mandate at the time was to contain epidemic diseases that were likely to occur in Zanzibar due to its place in international commercial activities. Also, malaria was common in Zanzibar and threatened the life of the people. The establishment of this department, dealing with the health of the population, became essential after the introduction of colonial rule in Africa. Studies of the political economy of health in colonial Africa have shown that the provision of medical services in colonial Africa was determined within the context of expanding capitalist relations of production in Africa. As Ann Beck showed in her 1970s study, tracing the growth of medical services and colonial attempts to deal with diseases in colonial Tanganyika, "although the medical department was essentially non-political, it was subject to social, economic and political influences that determined its ability to deal with diseases".⁴

⁴Ann Beck, 'Medicine and Society in Tanganyika, 1890-1930; A Historical Inquiry', *Transactions of the American Philosophical Society*, 67, 3 (1977), pp. 1-59, p. 5.

The two departments came under a Principal Medical Officer, (PMO) until 1923 when the title changed to become a Director of Medical and Sanitary Services (DMSS). From 1934 until 1961, the title changed again to Director of Medical Services (DMS). In 1961, a Ministry of Housing and Health Services was introduced when Zanzibar attained her 'Self Government'.

Right from the beginning, there was confusion over the organization of departments dealing with health and medicine as there were significant areas of overlaps in their functions. There was often a mix up and repetition of the same work. The Health wing of the Department of Medical Services was concerned with both what might be termed "personal" and "impersonal services". Personal services are those services which were directed to the individuals and their families, for example, smallpox and plague vaccination, child and mother's health, treatment of worms, malaria, yaws and anaemia. The impersonal services are the services which indirectly affect the health of the population, such as housing and sanitation conditions and campaigns against malaria, and yaws. Leaving aside the Quarantine facilities in the harbour, the treatments of diseases were under the Department of Hospital, which had the initial tasks of building hospitals, dispensaries and clinics in the town and later in rural areas. From its beginning the Department of Hospital and Medicine was involved in supplying medical facilities related to the needs of the colonial state in Zanzibar. First priority was given to the European community and to soldiers in Zanzibar Town. Before the Second World War, much of the work of the Department of Hospital and Medicine was financed not by the British Colonial Office but through local funds and individual donations. This was typical of British colonies in East Africa: Indian philanthropists helped to finance the provision of medical services in Tanzania, Kenya and Uganda.⁵

In 1913, when the Protectorate administration passed from the Foreign Office to the Colonial Office, the British acquired greater control of internal affairs of Zanzibar. Interestingly and as already mentioned, before the Second World War, much of the work of the Department of Medicine and Sanitary Services was financed by local funds and by not

⁵ For the works of Indian philanthropists in East Africa, see Robert Gregory, *The Rise and Fall of Philanthropy: Asian Contribution* (New Brunswick, NJ: Transaction Publishers, 1992).

the British colonial office. After the Second World War, Britain introduced the 'Development Plans' and financed economic and social developments, including the health sector. The 1963 Zanzibar independence was followed by the Revolution in 1964 which overthrew the Omani Sultanate. Although Zanzibar joined with Tanganyika on 26 April 1964 to form the Republic of Tanzania, it maintained its own Ministry of Health. Zanzibar was supported by Socialist and Communist countries which influenced health policies. East Germans staffed the hospital. The former Hassanali Karimjee Hospital was named after the Russian president and became the V. I. Lenin Hospital.

The central aim of this dissertation is to examine the provision, imposition and reception of Western medicine in urban Zanzibar from 1870 to 1963. The early chapters trace the health status of the town and the erratic, often missionary-led measures of health care. Thereafter, it turns to the institution of colonial public health and medical programmes, investigating three main issues. The first fundamental issue concerns public health facilities which were provided during the colonial period by the British. This includes town sanitation, vaccination campaigns, and anti- malaria and health education programmes. This study will look into which public health facilities were provided during the early period of colonial rule and which ones were provided later and why. It also examines their popularity among Zanzibaris in Zanzibar Town as well as their effectiveness in achieving the aims that they had set for themselves.

The second broad issue to be examined is the establishment of medical institutions in Zanzibar, by missionaries sometimes in partnership with the colonial government. Attention will be paid to medical institutions such as the Government General Hospital, the Asylum and later the Mental Hospital and the Leprosarium. The provision of these institutions raises a whole set of questions and issues around the patients who attended these institutions; the development of scientific medicines for the treatment of leprosy and mental health; the facilities provided during the early period of the colonial rule, before 1945 and those which were provided later and why; who provided these facilities and what were their motives for establishing these facilities. Were they purely for philanthropic reasons? Were they

influenced by colonial policies? Was there a degree of self-interest involved? As this dissertation will show, the factors that motivated individuals were not straightforward.

The third area of investigation is the responses of Zanzibaris to medical and public health campaigns. Were medical and public health facilities accepted from the outset? When did townspeople begin to attend hospitals? Were there gender differences given the reluctance to some Muslim women to enter the public sphere? When, for example, did townswomen begin to give birth in the hospital? The 1930s were a crucial period in changing attitudes towards Western medicine for it was in that period that local agents such as community and political leaders, merchants and educated elites help to popularize Western medicine. The biomedical services were extended through women's networks. The attitude of patriarchal and religious leaders was important in extending these services. Western medicine was mediated through several "cultural brokers". Their role was critical in popularizing and expanding the appeal of Western medicine.

The Literature Review

The conceptualization of this dissertation has been fostered by the late twentieth century historiography and social science concerning Zanzibar, colonial health policies under comparable conditions, and the relative importance of preemptive authority and social accommodation.

In colonial Africa, the early public health campaigns were involved in controlling epidemics that occurred sporadically with both causes in and effects for the movement of people whose options were framed by colonial infrastructures. The renewed epidemic of bubonic plague, for example, erupted in China in 1894 and extended in many areas in Europe, Asia and Africa through shipping. Plague had arrived in East Africa in 1897 at Mombasa port with Indian indentured labourers employed in the construction of Uganda Railway. Megan Vaughan in *Curing their Ills, Colonial Power and African Illness* explains that bubonic plague epidemics occurred in British Central and East Africa due to the expansion of colonial economy. The Railway lines facilitated the increase of black rats from the coast to the

mainland. From the 1920s, cotton ginneries that were established in Uganda created conditions for the breeding of these rats.⁶ The anticipations and delayed arrival of bubonic plague is an important topic in this dissertation. Other diseases in Zanzibar Town which have had global manifestations and thus a large literature were smallpox and malaria in particular.

Scholars of the history of public health in colonial India and Africa also show that the early public health campaigns were 'militaristic' and 'interventionist'. The lack of funds and appropriate knowledge of surroundings and environment contributed to the introduction of these measures. Sometimes, Africans resisted these public health measures which were new to them. In explaining the anti-bubonic plague campaigns in India during the late-1890s and the mid-1910s, David Arnold in *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* observes that the international pressures to ban commercial activities with Indian goods led to the introduction of draconian measures. The government was reluctant to spend more funds in controlling the disease. Force was used to segregate and detain the victims in the hospitals. Urban cleaning campaigns which focused on sprinkling disinfectant powder in alleyways and tenements were introduced. The government destroyed infected clothes and slums while fairs and pilgrimages were prohibited. Indians opposed these measures. They resisted hospitalization, segregation and physical examinations. From the early twentieth century, the colonial government relied on local agencies such as *vaidyas* (Hindu practitioners), *bakims* (Muslim practitioners), and middle class elites to make people accept public health measures. These intermediaries in turn appropriated Western medicine to achieve their economic and political goals.⁷ Mark Harrison, another scholar of public health in India, asserts that the involvement of Indian middle-classes in Municipal Councils, District and Local Boards helped to pressurize the government to extend public health measures during the plague period. Central and provincial governments led by Indian elites

⁶ Megan Vaughan, *Curing their Ills: Colonial Power and African Illness* (London: Polity Press, 1991), p. 40.

⁷ David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth Century in India* (California: California University Press, 1993), pp. -203-7, 214, 226 and 234.

spent more money on Indian health. The British provided little funds for the health of Indians.⁸

In both East Africa and India, anti-smallpox campaigns were introduced from the late nineteenth century, fearing a decline of the population. In India, smallpox vaccination campaigns took very long although the vaccination was invented since the late eighteenth century. These campaigns faced political and cultural barriers. Vaccinations were accepted when local people were employed as vaccinators in the campaigns.⁹ Marc Dawson demonstrates that in colonial Kenya, the early twentieth century anti-smallpox campaigns faced problems of funding, the difficulty in maintaining an effective vaccination system and African resistance. By the 1920s, the government intervened to stop smallpox epidemics by distributing relief through highly developed infrastructure.¹⁰

Malaria, which was endemic in Africa, received the attention of European medical experts from the late nineteenth century. Malaria had threatened the health of European administrators who worked in Africa. Since the early nineteenth century, European soldiers died in large number when they tried to penetrate in West Africa. Gordon Harrison's *Mosquitoes, Malaria and Man: A History of the Hostilities since 1880* examines the development of aetiology and transmission of malaria. It cites the important works of early European malariologists such as Alphonse Laveran, Ronald Ross, Robert Koch and Giovanni Battista, who pioneered research on malaria. Harrison also focused on the history of anti-malaria campaigns during twentieth century, including the success of vector control programmes in Panama and Brazil and the anti-malaria campaigns in Italy which focused on quinine distribution. In 1931, in Natal, South Africa pyrethrum was introduced for the first time as an anti-malarial measure. Harrison also focused on the history of DDT and involvement of

⁸ Mark Harrison, *Public Health in British India: Anglo-Indian Preventive Medicine, 1859-1914* (Cambridge: Cambridge University Press, 1994) especially Chapter 7.

⁹ Arnold, *Colonizing the Body*, p. 158.

¹⁰ Marc Dawson, 'Socio-economic Change and Disease: Smallpox in Colonial Kenya, 1880-1920', in Steven Feierman and John Janzen (eds.), *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992), pp. 90-103, p. 101-102.

international health agencies such the Rockefeller Foundation, the League of Nations and WHO in the anti-malaria eradication programmes.¹¹

Abdallah Mkumbukwa in 'Socio-Economic Change and Malaria in Zanzibar' has shown that colonialism transformed malaria in Zanzibar. The introduction of clove plantations altered peasants' health and general nutrition. Further, the introduction of a labour migration system had the long-term effect of reducing peasants' immunity to malaria and other diseases. The development of infrastructure and communication facilitated the movement of people which caused the spread of malaria. The colonial government responded by introducing malaria control programmes to reduce the fear of labour extermination.¹² While discussing malaria control measures during the colonial period, Mkumbukwa maintains that the measures were mainly introduced in urban areas and improvement in sanitary services was aimed merely at reducing the mosquito vector and human host contact.¹³ The introduction of a colonial economy changed the health of people in Zanzibar and, as Mkumbukwa has demonstrated, malaria became more widespread due to urbanization. Chapter Five examines the involvement of the colonial government in Zanzibar, the contribution made by the Colonial Office, WHO and UNICEF and the responses of local Zanzibari people to these anti-malarial measures.

Joop Garssen, a statistician who worked at the Ministry of Health in Zanzibar in the 1990s, refuted the stereotypical statements by scholars of colonial medicine in Africa that it was inferior, elitist and provided along racial lines. He concludes that "the stereotypical statements regarding pre-independence health care have all been shown to be either untrue, except possibly for the earliest years of European presence, or highly exaggerated".¹⁴ This dissertation will show, nevertheless, that racial discrimination was common in the provision

¹¹ Gordon Harrison, *Mosquitoes, Malaria and Man: A History of the Hostilities since 1880* (London: John Murray, 1978).

¹² Abdallah Mkumbukwa, *Socio-Economic Change and Malaria in Zanzibar, 1915- 2000* (Unpublished M. A. Dissertation, University of Dar es Salaam, 2006), p. 91.

¹³ Mkumbukwa, *Socio-Economic Change and Malaria in Zanzibar, 1915- 2000*, p. 91.

¹⁴ Joop Garssen, *Policies and Practices in Pre- and Post-Independence Health Care: The Case of Zanzibar* (Demographic Report, Faculty of Spatial Sciences, University of Groningen, The Netherlands, 1993), p. 47.

of medical facilities in colonial Zanzibar and, more important, that class differentiation was used as criteria for admission into hospitals.

European missionaries', government administrators' and doctors' reports reveal that race and class determined the provision of health care. The best care was provided for European officers, followed by rich Indians and Arabs, with poor Indians, Africans and Arabs receiving the worst care. For instance, the general hospital had different spaces for 'Europeans', 'Subordinates', (mainly Indian and Arab junior staff) and 'Natives' (mainly 'Africans,' poor 'Arabs' and 'Indians').¹⁵ Different spaces were allocated for people of different races in the missionary hospitals, Quarantine Station and Infectious Diseases Hospital, and at the Lunatic Asylum (later the Mental Hospital). Tapio Nisula, a medical anthropologist, mentioned that class discrimination became dominant in the provision of health and medical facilities in colonial Zanzibar. He observes that "there were rulers who had better access to health than the majority of islanders, and there were those who could buy alleviation by using their wealth and by referring to their better racial status".¹⁶

In discussing the healing system in colonial and post-colonial urban Zanzibar, Nisula has shown that the biomedical services were mainly based on hospitals and dispensaries. These services were not capable of assisting people who were troubled by spirits.¹⁷ Although this dissertation focuses on biomedicine it was clear from interviews that the urban population had several options. Most interviewees maintained that people usually chose the measures which suited them best. People preferred to go hospitals after the indigenous healers failed to cure them or they went to Muslim clerics when there was no hope of getting effective treatment from hospitals. There are many examples to substantiate the fact that many people

¹⁵ In colonial Zanzibar, the British government categorized the people under three ethnic groups: 'Africans', 'Indian' and 'Arabs'. Sometimes the word 'Asians' was used to mean people from India. There were also Indian Christians from Goa, near Bombay port and Zoroastrian Parsees from Bombay that were referred as 'Goanese' and 'Parsees' respectively. The 'Comorians' from Comoro Island were also categorized separately. There were people from Madagascar and Seychelles who were grouped independently. The terms 'Africans,' 'Indian' and 'Arabs' were fluid in colonial Zanzibar due to intermarriage.

¹⁶ Tapio Nisula, *Everyday Spirits and Medical Interventions, Ethnographic and Historical Notes on Therapeutic Conventions in Zanzibar Town* (Saarijarvi: Transactions of the Finnish Anthropological Society, NRO, XLIII, 1999), p.

¹⁷ Nisula, *Everyday Spirits and Medical Interventions*, pp. 283, 286 and 287.

in Africa did and do combine biomedicine and indigenous or local medicine. John Janzen observed of Zaireans that:

The people of Zaire recognize the advantages of Western medicine and seek its drugs, surgery, and hospital care, but contrary to what might have been expected, native doctors, prophets, and traditional consultations among kinsmen do not disappear with the adoption of Western medicine. Rather, a *modus vivendi* has developed in which different forms of therapy play complementary rather than competitive roles in the thoughts and lives of the people.¹⁸

After all, as Megan Vaughan has argued, Western medicine has its own limitations. Before the 1950s, European missionaries and medical doctors in Africa lacked in-depth knowledge of the nature of diseases and constructed the idea of diseases. For example, they mistook the disease of yaws for syphilis.

Throughout the colonial period, Western medicine or biomedicine, which involved medical knowledge through scientific experiments, competed with indigenous medical treatment in Zanzibar. For almost sixty years, colonial administrators and medical doctors emphasised the use of biomedicine and tried to displace the use of indigenous medicines. The urban population however, continued to seek advice from local healers. They consulted therapeutic experts who could identify a troublesome spirit or they bought local medicines. For Muslims in urban Zanzibar and throughout Unguja and Pemba islands, Islamic healing methods were and still are popular. Visiting the tomb of a local *Sharif* (the descendants of the Prophet), fasting or reading the Quran were and are part of the healing methods. So while people adopted Western medicines during the colonial period, they also used African, Hindu and Islamic medicines.

Julie Parle has written of similar conditions which surrounded the history of mental health in Natal and Zululand (South Africa) between 1868 and 1918. Parle demonstrates that:

¹⁸ John Janzen, *The Quest for Therapy in Lower Zaire* (Berkeley, Los Angeles, London: University of California Press, 1978), p. 3.

Throughout the time period I cover (and beyond), whites continued to administer proprietary medicines or to attend services promising to bring about a cure through faith healing. Africans consulted therapeutic experts who could diagnose mental ailments by identifying a troublesome spirit, but they also approached asylum authorities to take deeply their disturbed family members off their hands. Indians eschewed Western medicine at times, but also embraced elements of both indigenous African and Western healing therapies.¹⁹

In Zanzibar Town, the responses of urban people to biomedicine, which was introduced from the late-1880s, varied throughout the colonial period to include rejection, adaptation and assimilation. The reaction of townspeople was neither uniform nor consistent. Many cases show that at times they were dissatisfied with colonial health measures, while on other occasions they were willing to try them and even asked the medical authorities to provide facilities. Adoption of Western medicine was generally slow, but gradually urban Zanzibaris accepted, in conjunction with their local medicine, some Western medical practices. One example is X-rays which were available from the early twentieth century in hospitals.

From the early-1910s, as Chapter Six demonstrates, Muslim *Wakf* (endowment) funds were used in the construction of hospitals. The school medical clinic was also built in 1913 with the use of these funds. In 1923, the *Wakf* Commission donated money for the construction of Mwembeladu Maternity Home. The endowment of properties for the benefit of large numbers of Muslims was not a new concept. Since the early nineteenth century, Swahili, Oman Arab and Indian merchants endowed their properties for the use of their slaves, clients and other poor relatives. By the late nineteenth century, many wealthy Indian elites, who were advisors of Omani Sultans, started to donate money for the construction of hospitals and dispensaries. Endowment and charity works among Indians was common in India and in Zanzibar. Other Indian merchants constructed hospitals and other social facilities for the use of their community members. From the early twentieth century, there were dispensaries for Ismailis/Khojas, Bohoras/Bhoras, Ithnasheris (Indian Muslim sects in the Shiite cluster) and Hindus in Zanzibar Town. Numerous charity houses, 'Daram Salah', and *caravanserai* were constructed for the benefit of poor, sick and Indians travellers who

¹⁹ Julie Parle, *States of Mind, Searching for Mental Health in Natal and Zululand, 1868-1918* (Scottville: University of KwaZulu-Natal Press, 2007), p. 7.

came annually during monsoon period. Abdul Sheriff explains that from 1830s, Swahili, Indian and Arab merchants and landowners started to construct mosques for the benefits of various Muslim groups and sects. They endowed houses, *godowns* (warehouses) and plantations for the upkeep of these mosques.²⁰ Laura Fair observes that since the 1830s, Said Sultan (r.1832-1856) endowed land in Ng'ambo for the use of his manumitted slaves. Wealthy Oman Arabs also endowed land for the occupancy of their slaves and clients.²¹

From the early-1930s, Arab and Indian elites trained their children in India and Egypt in medical fields. Young female and male Zanzibari were trained to become doctors. What is striking is how these male Muslim Omani Arabs were willing to train their daughters. Egypt became a model of female education in Zanzibar. Since the 1830s, Young Egyptian women were introduced to Western medicine. According to Kuhnke La Verne, initially, women health officers came from lower and slave background families. But by the 1850s, elites allowed their children to receive medical training.²² During the twentieth century, Egyptian royal princesses as well as Muslim, Christian and Jewish female educated elites were active in the anti-malaria campaigns following the epidemics of 1942-44. The Red Crescent women's group distributed blankets and clothes to malaria stricken people. The American Red Cross also donated blankets and quinine. Since the early twentieth century, the Benevolent Society, another women's organization, raised funds and managed their dispensaries.²³

Indian and Omani Arabs elites in Zanzibar joined in Town Planning, Municipal, Health and Sanitary Boards after the inauguration of the Legislative Council in 1927. Africans' participation in the Council only started in 1945. These elites were influential in the extension of biomedicine in Zanzibar. They identified the main issues that affected the

²⁰ Abdul Sheriff, 'Mosques, Merchants and Landowners in Zanzibar, in Abdul Sheriff (ed.), *The History & Conservation of Zanzibar Stone Town* (London: James Currey, 1995).

²¹ Laura Fair, *Pastimes and Politics: Culture, Community, and Identity in Post- Abolition Urban Zanzibar, 1890–1945* (Oxford: James Currey, 2001), pp. 118-9.

²² Kuhnke La Verne, *Lives at Risk: Public Health in 19th Century Egypt* (Berkeley: University of California Press, 1990), especially Chapter Seven: 'Women Health Officers', pp. 121-133.

²³ Gallagher, *Egypt's Other Wars*, pp. 44-47 and 53.

health of the people. Tayabali Karimjee, one of the most prominent Bohora Indian merchants and an active member of these boards, funded the extension of the Government Hospital in Zanzibar. In India, since the late nineteenth century, Hindu and Muslim elites had been appointed in municipal councils. According to Mark Harrison, this led to increased expenditure on municipal sanitation, including the provision of piped clean water, sewerage, drainage, vaccination, maintenance of hospitals, market regulations, slaughterhouses and burial grounds.²⁴

From 1939, in Zanzibar Town, Indian and Arab elites, and after the Second World War, community leaders and political parties, founded newspapers which became a catalyst for explaining issues pertaining to sanitation, and the shortage of staff and inadequate facilities in hospitals. Newspapers appealed to people to accept vaccinations and other health programmes. During malaria epidemics in Egypt in the 1940s, elite-owned newspapers pointed to the shortcomings of public health facilities. There was criticism too of the Second World War which led to the disastrous malaria epidemics.²⁵

The responses to biomedicine introduced during colonial period in Africa and Asia have attracted the attention of a large number of medical historians. The role of intermediaries and cultural brokers in the expansion of medical services in colonial Africa and India has recently received attention from several scholars of medical history. David Arnold, for instance, shows that the hegemonic influences of Western ideas of medicine were more effectively mediated through indigenous agents and middlemen including local Indian doctors and nurses. Arnold argues that Indians “were often better able than Europeans to persuade Indians that their medicine was effective and safe, they spoke the language and knew intimately the culture and customs they were up against”.²⁶

²⁴ Mark Harrison, *Public Health in British India: Anglo-Indian Preventive Medicine, 1859-1914* (Cambridge: Cambridge University Press, 1994), pp. 71 and 274.

²⁵ Gallagher, *Egypt's Other Wars*, especially Chapter Four and Five.

²⁶ David Arnold, ‘Public Health and Public Power: Medicine and Hegemony in Colonial India’, in Dagmar Engels and Shula Marks (eds.), *Contesting Colonial Hegemony, State and Society in Africa and India* (German Historical Institute and the British Academic Press: London, 1994), pp. 131-151, p. 148.

According to Megan Vaughan, the popular acceptance of Western medicine in colonial Malawi was mostly due to missionaries who provided training for African medical assistants, midwives and nurses, and more marginally, to the colonial state. These African assistants brought medicine to the people.²⁷ Maryinez Lyons observes that African nurses and doctors accepted Western medicine and in turn transmitted this acceptance to the rest of the community. She draws attention to the way that European medical doctors trained African healers and sons of chiefs who then communicated these medical practices to the people.²⁸ Zanzibar was in a different colonial situation, with personnel initially drawn from India, as Sub-Assistant Surgeons and dispensers and training of Zanzibari dispensers or sanitary officers was in the hands of the administration.

Women to women networks also helped in the popularization of medical services in colonial urban Zanzibar. After the abolition of slavery in 1896, beginning in the early twentieth century, urban women in Ng'ambo, mainly former slaves and newcomers to urban Zanzibar, formed leisure groups. The work of Laura Fair spells out how contacts between neighbours in religious and wedding celebrations crafted social communities.²⁹ After the Second World War, middle class women who were living in Stone Town established several women's associations which dealt with the welfare of women and children. The Ladies Club was founded in 1948 by Arab, Indian and few Comorian women who were living in Stone Town. The Club was under the patronage of Sayyida Nunuu, the second wife of Khalifa Haroub (r.1911-1960), and wives of British residents. As in other colonies in Africa, middle class women facilitated the expansion of Western medicine. They organized welfare programmes for mothers and children. Studies of women and welfare activities in colonial Africa and

²⁷ Megan Vaughan, "Health and Hegemony": Representations of Disease and the Creation of the Colonial Subject in Nyasaland', in Dagmar Engels and Shula Marks (eds.), *Contesting Colonial Hegemony, State and Society in Africa and India* (German Historical Institute and the British Academic Press: London, 1994), pp. 173-201, p. 191.

²⁸ Maryinez Lyons, 'The Power to Heal: African Medical Auxiliaries in Colonial Belgium Congo and Uganda, in Dagmar Engels and Shula Marks (eds.), *Contesting Colonial Hegemony, State and Society in Africa and India* (German Historical Institute and the British Academic Press: London, 1994), pp. 202-223. See pp. 203 and 217.

²⁹ Laura Fair, *Pastimes and Politics: Culture, Community, and Identity in Post- Abolition Urban Zanzibar, 1890-1945* (Oxford: James Currey, 2001), pp. 22, 99-100.

India illustrate the vital role played by the wives of European officers and middle class women in shaping women's attitudes to adopt Western medicine and practices.³⁰

Western medicine became more popular in Zanzibar when local Zanzibari Arab, Indian and Africa doctors, nurses and midwives joined the services. They interpreted, analysed, facilitated and became mediators between the Zanzibari and European nurses, doctors, midwives and health officers. John Iliffe's excellent history of East African medical doctors during the colonial period shows that from the late nineteenth century, Africans were incorporated in missionary medical services. From the early twentieth century, they were recruited in government services. The enrolment of medical personnel at Makekere Medical College started in the late-1920s.³¹

From the early twentieth century, when government education was established, disparities between the former slaves and local population started to wane. The former slaves increasingly gained economic mobility as they joined government and missionary schools and were recruited as medical and health officers in public health. Mainlanders and mission educated males became dispensers who were popular in the town but neglected in rural areas. Before 1945, nursing aids were obtained from mission girls and boys. From 1945, female educated Arabs and Africans joined nursing services.

Theoretical Framework

This study draws on diverse approaches to colonial labour history in Zanzibar, political economy theories of disease and health in Africa, Foucauldian analytical theories concerning colonial medicine in Africa, and the writings of scholars like Catherine Burns and Julie Parle on the importance of colonial medical services in the life of indigenous communities in Africa. Most of the works on colonial labour history in Zanzibar show that after the

³⁰ Ann Davin, 'Imperialism and Motherhood', in Frederick Cooper and Ann Laura Stoler (eds.) *Tensions of Empire Colonial Cultures in a Bourgeois World* (Berkeley, Los Angeles and London: University of California Press, 1997), pp. 106-107.

³¹ John Iliffe, *East African Doctors: A History of the Modern Profession* (Cambridge: Cambridge University Press, 1998).

abolition of the slave trade in 1873 and slavery itself in 1897, labour shortage in Zanzibar became a serious problem. The Zanzibar economy changed from dependence on slavery before 1897 to that of a colonial economy dependent on free labour after 1897. Labourers were needed to work in commercial sectors in the Town. Casual labourers and dock workers were needed to pack and transport goods to and from the docks. Labourers were also needed to pick cloves which were the mainstay of economy. The provision of health facilities was important to ensure the survival of the commercial sector.

Scholars in the field of economic history have discussed in detail the labour problem after 1897. George Hadjivayanis and E. Ferguson's article 'The Development of a Colonial Working Class', in *Zanzibar under Colonial Rule*, in tracing the history of the working classes starting from 1897, illustrate how the dock and casual labourer in the Zanzibar port became important for the economy during the transformation period from slavery to a capitalist economy.³² Jacques Depelchin in his chapter in the same work, 'The Transition from Slavery, 1873-1914', observes that after 1897 many former slaves produced food, mainly for their own consumption on their small plots. Others moved to the urban areas where they were employed in several businesses. Clove plantations were deserted. Also, in another chapter, 'The Formation of a Colonial Economy, 1915-1945', E. Ferguson shows that the colonial state in Zanzibar introduced the 'Native Labour Control Decree' and the 'Regulation of Adult Male Persons Decree of 1910', which legalized compulsory labour. Indeed, 'The Masters and Servants Decree of 1925' specified labour offences and punishments for those who deserted their jobs.³³ Although the government's intention was to extend health care services to ensure labour stability by the end of colonial period, most working class people were affected by diseases associated with poverty. Malnutrition became significant among them.

³² George Hadjivayanis and E. Ferguson, 'The Development of a Colonial Working Class', in Abdul Sheriff and E. D. Ferguson (eds.), *Zanzibar under Colonial Rule*, pp. 188-219.

³³ E. Ferguson, 'The Formation of Colonial Economy, 1915-1945', in Abdul Sheriff and E. Ferguson (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991), p. 40.

Political economic studies on health in colonial Africa explore the political economy of health within the context of expanding capitalist relations of production in Africa. There are many proponents of this theory. Ann Beck and Meredith Turshen are among them.³⁴ They highlight the complex ways in which changing patterns of sickness and health are linked to the emergence of specific sets of political and economic interests operating at the local, national and international level. Turshen further shows that diseases emerged from local conditions such as poverty, migrant labour, malnutrition and oppression associated with the capitalist system. Diseases were determined by conditions prevailing in society. Steven Feierman and John Janzen have explained the impact of European colonialism on the health of the colonized. They show how diseases, colonial legislation, urban planning and industrialization affected the health of Africans.³⁵

The writing on medicine and colonialism in Africa has a stream asserting that biomedicine was a tool of imperialism which imposed itself on the colonized. High imperialism and medical scientific confidence did indeed coincide. By the late nineteenth century, the ideas of public health commonest in Europe were being imported into the colonies. Laws and decrees on public health were sanctioned. Medical specialists and doctors from Europe influenced medical expansion in Africa. The creation of the London and Liverpool Schools of Tropical Medicine in 1899 formalized a specialism in British colonies in Africa. As John Farley has demonstrated, these Schools were established during the period of colonial expansion to provide instruction on tropical medicine for colonial medical officers³⁶ who were sent to the colonies. Zanzibar was among them.

The concept of medicine as a 'tool of empire' was first discussed by Daniel Headrick's famous study *Tools of Empire, Technology and European Imperialism in the Nineteenth Century* which argued that medicine, like steamships, was crucial during imperial expansion. The use of

³⁴ See Meredith Turshen, *The Political Ecology of Disease in Tanzania* (New Brunswick: Rutgers University Press, 1984); Ann Beck, 'Medicine and Society in Tanganyika, 1890-1930: A Historical Inquiry', *Transactions of the American Philosophical Society*, 67, 3 (1977), pp. 1-59.

³⁵ Steven Feierman and John Janzen (eds.), *The Social Basis of Health and Healing in Africa*, 'Preface', pp. xvii- xviii.

³⁶ John Farley, *Bilbarzja, A History of Imperial Tropical Medicine* (Cambridge: Cambridge University Press, 1991), p. 21.

quinine prophylaxis led to an increase in the number of European explorers in Africa after the mid-nineteenth century. He further argues that “scientific cinchona production was an imperial technology par excellence. Without it European colonialism would have been almost impossible in Africa and much costlier elsewhere in the tropics”.³⁷ Roy MacLeod has shown that Western medicine and public health services helped Europeans conquer and occupy Africa. “European medicine, and its handmaiden, public health, served as ‘tools of Empire’, of both symbolic and practical consequences, and as images representative of European commitments, variously to conquer occupy or settle... medicine served as an instrument of empire, as well as an imperializing cultural force in itself”.³⁸ William Bynum observes that “If medicine could tame the diseases that were rampant in the tropics, it had undoubted political force as a tool of empire”.³⁹ On the other hand, Megan Vaughan criticizes a Foucauldian claim that Western medicine was merely representative of the European will to rule in Africa. She argues that “only in the later colonial period, and in their liberal, welfarist functions, did they create the systems of surveillance and control common to Europe”.⁴⁰

This thesis will show that although the colonial government in Zanzibar introduced medical services to make labourers available, and that medicine became ‘a tool of empire’ in the sense that it became effective in controlling diseases in Zanzibar, people’s acceptance of Western medicine was largely channelled through or shaped by several kinds of cultural brokers and popularizers, such as ‘community leaders’, local nurses, doctors, orderlies, dispensers and even political leaders. Surveillance was not constant, even in later decades.

³⁷ Daniel Headrick, *The Tools of Empire, Technology and European Imperialism in the Nineteenth Century* (Oxford, New York: Oxford University Press, 1981), p. 72.

³⁸ Roy Macleod, ‘Preface’, in Roy Macleod and Milton Lewis (eds.), *Disease, Medicine and Empire: Perspectives on Western Medicine and the Experience of European Expansion* (London: Routledge, 1988), p. x.

³⁹ William Bynum, *Science and the Practice of Medicine in the Nineteenth Century* (New York: Cambridge University Press, 1994), p. 148.

⁴⁰ Vaughan, *Curing their Ills*, p. 10.

Medicine has been viewed as an instrument of 'social control' in the colonies, since it provided a means of 'knowing' the indigenous population, and at times provided a rationale for social segregation. Public health measures have been viewed as powerful tools for the domination of indigenous people, since they can provide justification for detention and isolation. David Arnold has argued that:

Over the long period of British rule in India, the accumulation of medical knowledge about the body contributed to the political evolution and ideological articulation of the colonial system. Thus medicine cannot be regarded as merely a matter of scientific interest. It cannot meaningfully be abstracted from the broader character of the colonial order.⁴¹

In other circumstances, Western medicine has been used to impose social order. Lynette Jackson, for instance, shows how lunatic asylums in Southern Rhodesia confined those whom the government defined as mentally ill in order to maintain social order, disrupted as a consequence of industrialization.⁴² In colonial Zanzibar, Western medicine was rarely used to isolate people, other than migrants from India, Oman and other Arab States, who might be detained at the Quarantine Stations and at the Infectious Disease Hospital. There was no larger attempt made by the British to isolate sufferers from disease in the town. Moreover, very few of the mentally ill were confined in the Asylum and at the Mental Hospital. Thus, while the literature on southern Africa may help to enlarge the frame of reference concerning custodial institutions or planned segregation, they mainly sharpen the sense of the particularities of the Zanzibar case where urban segregation was never feasible.

Recent ideas about the positive reception of colonial medicine by the indigenous community contained in Catherine Burns' PhD dissertation titled: 'Reproductive Labours: The Politics of Women's Health in South Africa from 1900 to 1960' are suggestive. Burns has shown that Western medicine was important to the life of Africans in South Africa in that it helped to reduce infant and maternal mortality, improved child rearing practices and generally

⁴¹ Arnold, *Colonizing the Body*, p. 8.

⁴² Lynette Jackson, *Surfacing Up, Psychiatry and Social Order in Colonial Zimbabwe, 1908-1968* (Ithaca and London: Cornell University Press, 2005).

improved the health of the labouring class.⁴³ It may also be useful to extend to Zanzibar the findings of Julie Parle in *States of Mind: Searching for Mental Health in Natal and Zululand, 1868-1918*, where she argues that the mental health services in Natal and Zululand should not merely be seen as alien institutions and that sending Indian or African mental patients to the Mental Hospital became one of the therapeutic options.⁴⁴ In urban Zanzibar, Islamic, African and Ayurvedic medicines were used in combination with Western medicine. Wealthy men of the Muslim Shiite sects (Ismaili/Khoja, Bohora/Bhora and Ithnasheri) vigorously supported hospitals, presumably not to the exclusion of Muslim or customary therapies in their communities.

Sources and Structure

A variety sources were examined within and outside Zanzibar, including manuscripts (the original text of an author's handwritten work), journals, log books, administrative files, patient files and books. Primary data was collected at the Zanzibar National Archives (ZNA), where the colonial administrative files, colonial government reports, letters, correspondences, newspapers, Blue Books and other written reports between 1870 and 1963 are preserved. The Zanzibar National Archives houses files used by the Medical and the Health Departments from 1900 to 1963. These departments functioned as separate departments until 1961, during the 'Self Government' period⁴⁵ when the Ministry for Health and Housing was introduced. The Medical Department was involved in managing all government hospitals: the General Hospitals, the Infectious Diseases Hospitals, the Maternity and the Mental Hospitals. The Health Department was involved in public health matters in the town, like the collection of rubbish and establishment of dumping places and public latrines, until 1962 when some of these responsibilities were handed over to the

⁴³ Catherine Burns, 'Reproductive Labors: The Politics of Women's Health in South Africa from 1900 to 1960' (Unpublished PhD dissertation, Northwestern University, 1995).

⁴⁴ Julie Parle, *States of Mind, Searching for Mental Health in Natal and Zululand, 1868-1918* (Scottville: University of KwaZulu-Natal Press, 2007).

⁴⁵ Between 1961 and December 1963 the British government introduced 'Self Government', by which there were elections, and Zanzibaris were elected to occupy the various ministries.

Municipal Council. The Health Department in cooperation with the Department of Education was involved in the dissemination of the public health knowledge through lectures in schools and mobile cinemas in urban and rural areas. Pamphlets and other related materials concerning diseases and health matters were distributed.

Other medical and health information during the colonial period in Zanzibar is located in the Provincial Administrative files and in the Zanzibar Town Municipal Council files. There are reports on anti-malaria programmes which started in 1957, funded by the World Health Organization (WHO). These reports are accompanied by statistical data. Most of this data is comprehensive and accurate because it goes together with the population census of Zanzibar carried out in 1910, 1921, 1924, 1931, 1948 and 1958. There are personal files concerning medical staffs during the colonial period, which are important sources of information on personnel employed in the medical and health services.

The information from these colonial administrative files generally concerns the activities of British medical officers. The reports sometimes portray their frustrations as the funds provided to sponsor medical services were inadequate, and sometimes colonies were required to sponsor the services through local funds. The administrative reports occasionally include officers' expressions of dissatisfaction with the government's decisions on the provision of medical services. Colonial medical officers differed in their attitudes, and many felt sympathetic towards their patients.

Also, the Legislative Council, which was formed in 1927 and composed of colonial officers, and Zanzibari Indians and Arabs, allowed the latter two groups to relay queries and requests from their communities concerning health to the colonial administration. In 1946, Sheikh Ameir Tajo was appointed to the Legislative Council to represent the Shirazi Association (representing the community of indigenous African people in Zanzibar). As the only African Zanzibari in the council, he stimulated other Africans to air their views. The Zanzibar National Archives has a collection of photographs which give information on medical projects in Zanzibar. Government and private newspapers which were owned by the Indian, Arab and African Associations are also in the archives and are important. They show the

reactions of the people to medical and public health projects. The drawback, inevitably, is that these newspapers mostly represent the views of literate and often well-known people.

One of the key primary sources cited is a book called *Cholera Epidemics in East Africa*, which was published in 1876 by James Christie, who arrived in Zanzibar in 1865 as the physician of Bishop Tozer. In 1870, he became the personal physician of Sultan Barghash. Christie explains when and by what means cholera reached Zanzibar. He focuses attention on social behaviour like eating and on social contact and the handling of water in all of the town's communities in the 1870s. This book is one of the major contemporary works which illustrates demographic details invaluable to the history of diseases, medicine and public health facilities in Zanzibar Town in the mid-nineteenth century and is therefore crucial to my studies. A number of other published accounts from the time provide evidence of Western observation of the town. Among the few with Zanzibari authorship is by Emily Ruete, *Memoirs of an Arabian Princess of Zanzibar*.⁴⁶

I also have had the opportunity to visit other archives and libraries, most notably in Britain and South Africa. This includes the Rhodes Library, Oxford, and the Selly Oak Library at the University of Birmingham. Much of the information on missionary medicine in Zanzibar, which is part of Chapter Two of this thesis, was collected at these two libraries. Other primary and secondary material was collected at the School of Oriental and African Studies (SOAS), University College London (UCL) and at the School of Social History of Medicine (SSHM) of the University of London and at the Ernest H. Malherbe Library, Howard College Campus, University of KwaZulu-Natal. Data on the establishment of the Quarantine Station in Zanzibar was almost absent from the Zanzibar National Archives, but was available at the Public Record Office, Kew, England. Most of the data concerning the French and German hospitals and dispensaries are held in collections outside Zanzibar, and this study has therefore relied on secondary material when discussing them. The Zanzibar

⁴⁶ Emily Ruete, *Memoirs of An Arabian Princess from Zanzibar* (Princeton: Markus Wiener Publisher, 1996), Originally published: *Memoirs of an Arabian Princess* (New York: D. Appleton, 1888). Emily Ruete (1844-1924), formerly Salme Said Sultan was born in Zanzibar. She was eloped with Heinrich Ruete, a German trader in 1866.

Archives hold the records of the German Consulate, which were treated as captured enemy documents during the First World War. With the collaboration of a scholar who knows German, I hope in the future to discover what these records may have to say about the 1880s and 1890s with special reference to medical services.

Oral data gathered from people born around the end of the 1930s and later, is useful as official reports tend to over-generalize information concerning the people and the areas. Oral information is vital concerning the incidence or experience of epidemics and various healing options. Oral information was useful since there is little written information on Zanzibari nurses, doctors and midwives. Interviews were conducted with fifty former patients and retired doctors, nurses, orderlies and other staff who worked in these medical institutions. I contacted retired medical doctors who pointed to me other resourceful persons. Many retired nurses, doctors and midwives who were outside Zanzibar and mostly immigrated to the Emirates and Europe after the 1964 Zanzibar Revolution were rarely contacted. Muslim healers, herb sellers, political leaders and activists were also interviewed. Most of the information from oral interviews, however, does not focus further than fifty to sixty years back. Interviewees are understandably biased in terms of the politics of the time. The interview questions are attached as an appendix. The arrangements of the chapters are as follows:

Chapter One deals with the history of diseases in urban Zanzibar in the 1860s and 1870s. It explains how the health of the population in Zanzibar Town was affected due to the growth of the capitalist economy. Movements of people from various regions in Africa and Asia led to the importation of new pathogens into Zanzibar Town which led to severe epidemics of cholera, smallpox and dengue fever. Diseases such as malaria and elephantiasis which were endemic to Zanzibar proliferated, as many people lived in cramped quarters, with inadequate sanitation in the town. Clearing of the bush which surrounded the town for building purposes, the opening of clove plantations and from the 1870s the extension of infrastructure led to the disturbance of anopheles and *Culex* mosquitoes which carried malaria and elephantiasis viruses.

Chapter Two turns to the arrival of Western medicine and the attempts to extend the services to the urban population. The role of British physicians and surgeons in extending Western medicine is examined, as are the initiatives of Zanzibari Indian capitalists and medical doctors in the establishment of medical facilities. The chapter investigates the efforts made by missionaries in extending the services. French Catholics introduced medical services for French naval officers, missionaries and emancipated African slaves from 1860. In 1875, the Universities' Mission for Central Africa (UMCA), the British Protestant missionaries, introduced medical services to a growing number of liberated slaves who were living in the mission station. From 1880, the French and British missionaries approached the urban population for conversion. In order to attract proselytization, medical services were extended to cover Muslim and Hindu urban women. I have emphasized that medical missionaries, physicians and surgeons, like the surgeons and physicians of the colonial service, established the foundation of medical services during colonial period from 1890.

Chapter Three deals with the early public health campaigns. It looks at the history of anti-plague and smallpox campaigns and the early works of the Anti-malaria brigade in Zanzibar Town from 1890-1914. To a large extent these measures evoked great fear in the population. Violent resistance, desertion of their homes and flight from the isolation hospitals were common during this period. The establishment of the Quarantine Station and the Infectious Diseases Hospital in 1899 led to the compulsory isolation of people who arrived in Zanzibar and who were suspected of carrying diseases. Despite such health and control measures, bubonic plague arrived in Zanzibar Town in 1905. More control measures were instituted to control the epidemics. The colonial government in Zanzibar had also focused on the control of smallpox when the epidemics erupted in Zanzibar Town in 1898 and claimed thousand of souls. The epidemics arrived with traders, artisans and other low-income Indians who arrived in Zanzibar during monsoon period. Europeans feared labour shortage.

Chapter Four looks at the opening and development between 1890 and 1930 of three medical institutions in Zanzibar Town: the Government Hospital, the Leprosarium and the Mental Asylum, and the reaction of the locals to these facilities. The provision of medical services by the colonial state in Zanzibar started in 1896. The military hospital which was

funded by Sewa Haji, a Bohora wealthy merchant was established at the Barrack area. From the early-1900s, the medical institutions started to be recognized by some people in the town, mainly government staff, prisoners and school children. Very few mentally ill people were either sent by their families or the police to the asylums. Until the 1920s, local soldiers, prisoners, school children, lunatics and lepers were using the services.

In Chapter Five, I shall seek to explain the malaria control programmes in urban Zanzibar. This chapter discusses various measures introduced by the colonial administrators to prevent malaria. The distribution of quinine, the reclamation of creeks and the canalization of swamps were among the earliest control measures. Urban planning systems and health education campaigns were simultaneously instituted in order to control malaria in Zanzibar. From 1945, DDT was used world-wide in killing adult mosquitoes. From 1957, WHO and UNICEF assisted many countries to eliminate malaria. Zanzibar was one among the few countries in Africa that received assistances from WHO and UNICEF. The reaction of the people varied between acceptance, rejection and ambivalence towards these public health measures. But by the end of colonial period, urban people largely recognised that these anti-malaria measures helped to reduce mortality.

The last substantive chapter, Chapter Six, examines the significant development in medical services between 1930 and 1963. Community leaders, members of the Legislative Council, influential members of local communities and local newspapers spearheaded the changes. Moreover, from 1930, more local personnel were employed in medical field. Other townspeople were attracted into the services. The contributions of political leaders in Zanzibar, and from socialist and Communist countries such as Russia, Cuba, China, East Germany, Czechoslovakia, Rumania and Poland helped in the extension of medical facilities in Zanzibar during and after the 1964 Zanzibar Revolution.

A new phase in the history of medicine and health in Zanzibar and East Africa and the world more generally started after the independence and the Revolution in Zanzibar when the Government Hospitals were staffed with doctors from socialist and communist countries and Zanzibari doctors and nurses trained in these countries. Socialist medical

practices remained biomedical and were consciously and proudly scientific. Rural health services in Zanzibar were extended in this period in collaboration and through the assistances from Socialist and Communist countries.

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CHAPTER ONE: A HISTORY OF DISEASE IN URBAN ZANZIBAR, c. 1860s – c. 1870s

The Entrepôt

Zanzibar and the other East African coastal communities played a part in the Indian Ocean trade from at least the beginning of the Christian era. *The Periplus of the Erythrean Sea* written in c. 100 AD described the trade activities which operated between the East African Coast and Asia. These trade activities grew in the eighth century with the emergence of Islamic states in Arabia. The well known Arab explorer Al- Masudi visited East Africa in 916 AD and recorded some of his impressions. He noted that ivory went from East Africa to Oman and from there to China and India. In return the coastal communities imported manufactured goods such as pottery, beads, Chinese porcelain and cloth.¹ By the twelfth century AD, Zanzibar Town was occupied by a fishing community on the Shangani peninsula. The townspeople were involved in maritime trade with Asia. Beside trade activities and the social life of coastal communities, the writings of the Arab and Muslim geographers are silent on the question of diseases and epidemics that affected the coastal population. There is however, the possibility that these early trade contacts and interactions prompted diseases. The Black Death which ravaged Europe and some parts of Asia between 1347 and 1350 AD may have reached as far as the East African Coast. Kilwa is among the coastal cities that declined during the Black Death period.

The work of Justus Strandes in the early-1960s on the history of the Portuguese in East Africa was very comprehensive in terms of the social, political and economic history of the East African population, though it did not mention anything about the diseases that afflicted the population. It is not clear whether the interaction between the coastal communities and the Portuguese had any social effects as far as diseases and epidemics are concerned. The Portuguese reached the East African coast in 1498 on their way to India. When they ruled the East African coast during the sixteenth and seventeenth centuries, Zanzibar Town was a settlement of local Shirazi rulers. The Portuguese established their settlement in the town

¹ Kevin Shillington, *History of Africa* (London & Basingstoke: Macmillan, 1995), pp.122 and 124.

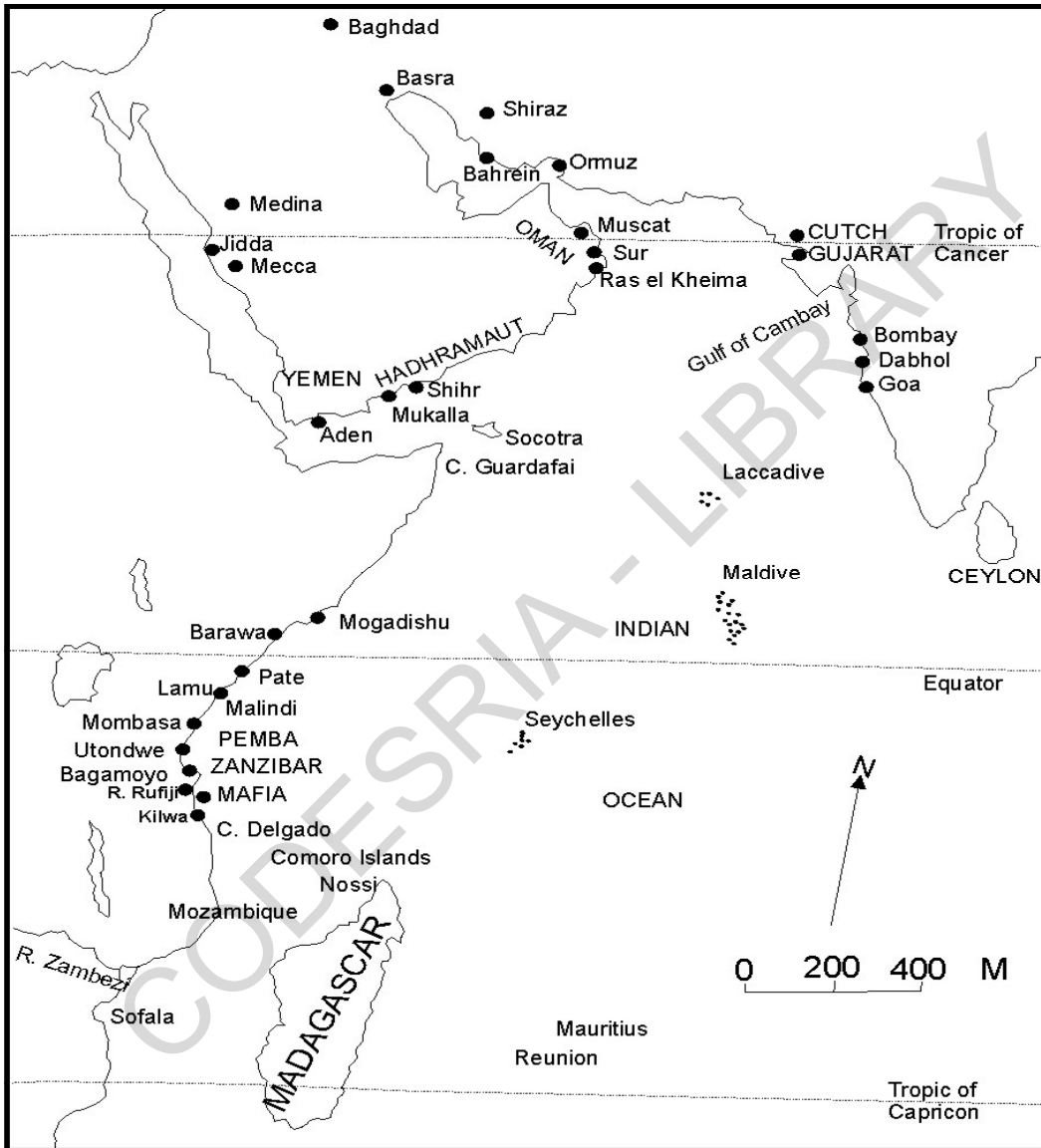
from the mid sixteenth century. They built a chapel and a sugar factory. In the late-1700s, the Portuguese were removed from the East African coast by the Coastal Swahili people with the assistance of Omanis.

The Omani Arabs became a new local power after the defeat of the Portuguese. Under the leadership of the Yarubi dynasty, they controlled all communities along the East African coast. John Gray reports that a large number of the Omani Arabs migrated to Zanzibar and settled in the town after the expulsion of the Portuguese. They demolished the Portuguese chapel and merchant houses and constructed 'a ridiculous little fort' to defend against any threat. By the mid- eighteenth century, Hassan bin Abdullah, the son of the local ruler, Queen Fatima Yussuf, who was faithful to the Portuguese, cleared the bushes that covered Zanzibar Town and founded modern Zanzibar Town.² By this time, the town accommodated local fisherman, the Mafazi Arab, who were the long-established Arabs from Kilwa, the Shirazi ruling class and Omani Arabs. The town expanded as more people settled in it. Little is known as far as the disease history of the town is concerned, though some reference to the history of diseases in the town began to appear in the writings of European travellers and traders from the early nineteenth century.

Zanzibar Town was involved in intensive trading activities from the late eighteenth century when the Omani Arab merchants began to engage in slave trading activities in response to the demand for slaves to work in the Red Sea and the Persian Gulf areas. As the French slave trade declined in the early nineteenth century and was abolished by the British in 1822 under the Moresby Treaty, Zanzibar Town became an entrepôt at the hinge of trade linking Africa, the Indian Ocean, and Europe. Map 1.1 illustrates the western Indian Ocean trading towns. Most of them had trade connections with Zanzibar.

² John Gray, *History of Zanzibar from Middle Ages* (Oxford: Oxford University Press, 1962), pp. 86-7; John Gray, 'The Hadimu and Tumbatu of Zanzibar', *Tanzania Notes and Records*, 81 & 82 (1977) pp. 138-9.

Map 1.1: Western Indian Ocean



Source: John Gray, *History of Zanzibar from the Middle Ages to 1856* (1962), p. v.

Ivory was another important item of trade in Zanzibar. The demand for ivory from the early nineteenth century led to an increase in the town's population. The trade was initially under the control of Omani Arabs, who were supplanted by Indian merchants who began to settling in Zanzibar Town from the early nineteenth century. Ivory was obtained in the southern part of Tanzania and northern Mozambique. Swahili, Arab and Indian traders sent caravans to hunt ivory, which found its way to India, Europe and America for the production of luxury items.

The demand for cloves in Europe and the Americas also influenced trade activities and the importation of slaves to Zanzibar. Clove plantations were established in Zanzibar by Omani Arab traders from the early nineteenth century. Most slaves came from the southern hinterland, the central part of Tanganyika and eastern Zaire. The expansion of commercial activities in Zanzibar Town resulted in the wider use of slave labour and some slaves were retained in the town to work at the Custom House. They cleaned gum copal, orchilla weed and scrubbed ivory. They also prepared copra and dried cloves and became porters, hauling cargoes in and outside the merchant vessels. A small number were used as domestic workers in European, Arab and Indian houses, or were employed in Swahili and Comorian houses. Others were employed in the construction of stone houses. James Christie, a British surgeon who lived in Zanzibar Town during the mid-1860s and 1870s enumerated the number of slaves in the town as 1,000 who mainly worked in American, European, Arabs and Indian households. Another 10,000 to 15,000 worked in the port and business houses.³ Slave labour formed the backbone of commercial activities in Zanzibar Town in the nineteenth century.

American and European traders and commercial agents opened business ventures in Zanzibar Town from the 1830s. They exported ivory, gum copal and cloves and imported textile materials from their own countries. They were obliged to sign the 'Commerce and Amity' treaties with Said Sultan which was a way to control their trade activities. From 1838, consular offices were opened by the United States, France, Britain and Germany who supported their commercial interests with military power in order to ensure that the

³ James Christie, 'Slavery in Zanzibar as it is', *The East African Slave Trade*, in H. Fraser, B. Tozer, and James Christie (London: Harrison, 1871), pp. 37-41.

Sultanate did not impede Western commercial interests. By 1860, Western medicine was introduced in urban Zanzibar by Consulate physicians.

“Stinky Town”

“Stinkibar” in the title of this thesis, ‘From Stinkibar to Zanzibar’ originates from the famous words of Scottish medical doctor and missionary David Livingstone (1813–1873), penned during his visit to Zanzibar in 1866. Livingstone stayed for a few days at Gulioni near the Creek, in Zanzibar Town, coming from his expedition in Central Africa. He described the town as dirty and unhealthy.

The stench from a mile and a half to two miles of sea-beach, which is a general depository of the filth of the town, is quite horrible. At night it is so gross or crass that one might cut out a slice and manure a garden with it, it might be called Stinkibar rather than Zanzibar.⁴

European colonial expansion around the world increased in the late eighteenth century. Europeans demanded raw materials such as cotton and cocoa in America, Asia and Africa. From the early-1800s, European imperial expansion in Africa involved the penetration and exploration of the continent by explorers who investigated its environment and resources. Europeans engaged in studying particular places, experiencing climates, and the local population and the prevalence of diseases among them, as well as the modes of treatment. They also investigated the religion and customs of the people, and their economic and commercial activities. From the late-1700s European medical men in Africa drew upon the information generated in European encounters with diseases in India and elsewhere to guide them in their attempts to relate ill health to physical environment. The information which was provided by these travellers and geographers was crucial for the exploitation of Africa’s natural resources by imperialist powers.

⁴ David Livingstone, *The Last Journal of David Livingstone in Central Africa from 1865 to His Death*, H. Waller (ed.) (London: Murray, vol. 1, 1874), pp. 6-7.

The main task of this chapter is to examine the history of disease in urban Zanzibar in the period between 1860 and 1870. Information on disease in Zanzibar was important for the survival and prosperity of European traders and later the formal colonization of Zanzibar in 1890. Environmental theories that had been dominant among Europeans since the eighteenth century influenced their understanding of diseases in nineteenth century urban Zanzibar. Dorothy Porter, a historian of public health in nineteenth and twentieth century Europe shows that in the seventeenth century, Thomas Sydenham, a British environmentalist, revived the atmospheric theory, which was first proposed in ancient times. It was believed that “the ultimate agents of disease were the poisonous effluvia thrown up at various times from movements of the bowels of the earth”.⁵ By the nineteenth century, Europeans who came to Zanzibar expressed their concern about the health situation and referred to Zanzibar Town as the dirtiest town in East Africa.

The idea that the environment of Zanzibar was hazardous to Europeans' health was not a new one. From the late eighteenth century, Europeans linked the environment in the West Indies, India and South East Asia with diseases such as 'fever' and plague, and it was certainly the case that many of the Europeans who came to Zanzibar encountered unfamiliar diseases to which they had little or no resistance. In the nineteenth century, the idea persisted in many colonies in Asia, Africa and America. The environmental theory or the 'miasmatic theory' of disease held that diseases such as 'fever' were caused by a *miasma*, a noxious form of 'bad air'. Michael Worboys argues that:

The term 'miasmatic' is one of the most ambiguous terms in the history of nineteenth-century medicine...Rather than being refuted or overturned by the adoption of 'true' germ theories of diseases, the meanings of miasmas were refined until they were subsumed within a spectrum of contagious and infectious diseases.⁶

⁵ Dorothy Porter, *Health Civilization and the State, A History of Public Health from Ancient to Modern Times* (London and New York: Routledge, 1999), p. 82.

⁶ Michael Worboys, *Spreading Germs, Disease Theories and Medical Practice in Britain, 1865-1900* (Cambridge: Cambridge University Press, 2000), p. 38.

The work of Louis Pasteur (1822-1895), a French chemist and microbiologist was a breakthrough in the history of biomedicine in the world. His experiments in the 1860s supported the development of germ theory of disease or the pathogenic theory of medicine, which proposes that microorganisms are the cause of many diseases. According to Michael Worboys, “from the 1860s the term ‘contagious’ was increasingly applied to ‘catching’ airborne diseases, transmitted directly at very close quarters (e.g. smallpox), as well as those transmitted by inoculation (e. g. syphilis) or touch (e. g. scabies)”.⁷ In this chapter I shall argue that information on the climate, topography and diseases were important for the colonization of Zanzibar during the late nineteenth century.

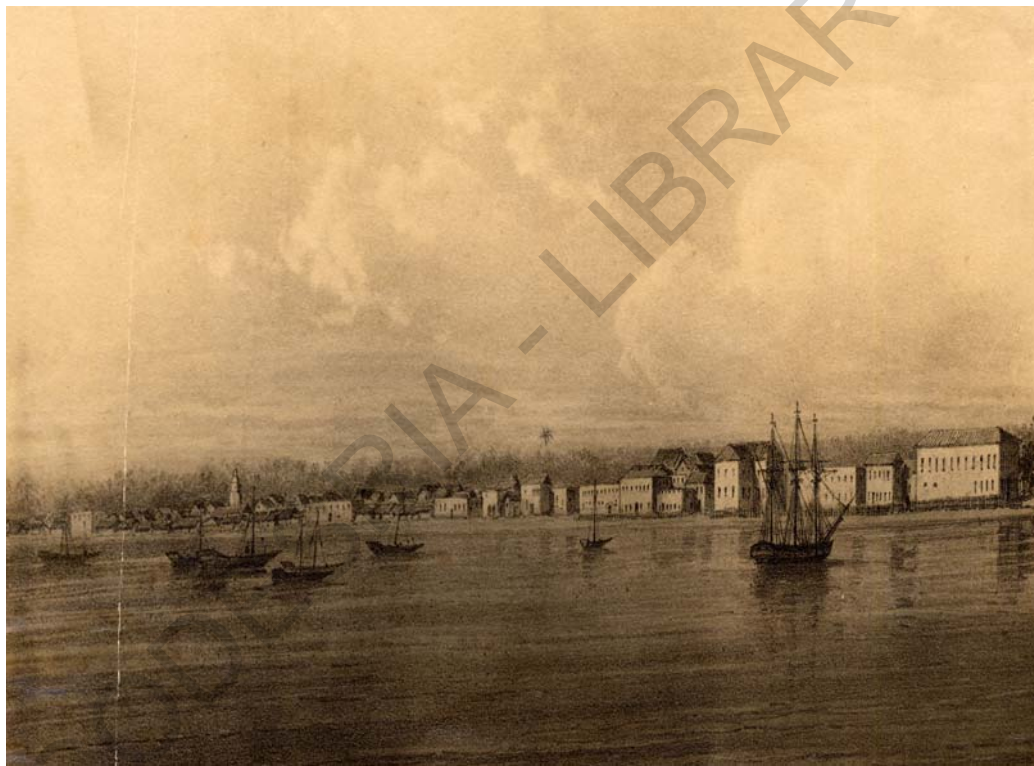
From the early-1800s, some European and American travellers and geographers visited Zanzibar in order to collect information on the economy and culture of its people. Information on the slave trade in East Africa in general and in Zanzibar in particular became important for British slavery abolitionist campaigns. Captain Thomas Smee and Lieutenant Hardy of the Bombay Marine of the East India Company’s navy made a voyage on the East African coast in the early-1800s, visiting Zanzibar in 1811.⁸ Later in the same year, they published a book titled, *Voyage to the Eastern Shores of Africa*. Smee reported about the climate, culture and commercial activities in Zanzibar, noting that the town was dirty. He found bodies of dead slaves lying on the beach, which made the atmosphere of the town insalubrious due to the strong stench of rotting flesh. Smee reported that garbage was scattered all over the town, which increased the possibilities of spreading many diseases, such as ‘fever’ and diarrhoea. Captain Smee states that “the stench in and about the town is intolerable, and co-operating with the noxious effluvia which arises from the putrid vegetable matter during the rainy season, tends to produce fevers and fluxes are, from the above causes, very prevalent, but which, by proper regulations, might be easily obviated”.⁹

⁷ Worboys, *Spreading Germs*, p. 38.

⁸ The East India Company was granted a British Royal Charter in 1600, with the intention of obtaining trade privileges in India. The Company gradually transformed from a commercial trading venture to one that virtually ruled India and other Asian colonies. In 1858, the British Crown assumed direct rule in India following the events of the Indian Mutiny of 1857. See David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth Century in India* (California: California University Press, 1993) and Mark Harrison, *Public Health in British India: Anglo- Indian Preventive Medicine, 1859- 1914* (Cambridge: Cambridge University Press, 1994).

Smee, like the other European and American visitors who followed, was anxious about the surroundings. His main concern was the effect of ‘miasma’ on health. The ‘miasmatic’ theory of disease, which holds that disease was caused by gases given off by putrefying, decomposing organic matter, rotting flesh and vegetables, upset Captain Smee.¹⁰ Bodies of dead slaves in the town who were no longer considered valuable economically by their masters were left unburied. The dirty surrounding caused fear among Europeans.

Photo 1.1: View of Zanzibar Town, 1846



Source: ZNA AV 23/26, Zanzibar during 1846: Captain Guillan’s picture.¹¹

⁹ Thomas Smee, ‘Observations during a Voyage of Research on the East Coast of Africa, from Cape Guardafui to the Island of Zanzibar, in the Honourable Company’s Cruiser *Ternate*, Captain T. Smee and Lieutenant Hardy’, *Voyage to the Eastern Shores of Africa* (London, 1811) in James Christie, *Cholera Epidemics in East Africa* (London: Macmillan, 1876), p. 281.

¹⁰ Roy Porter, *The Greatest Benefit to Mankind, A Medical History of Humanity* (New York: W. W. Norton & Co., Inc., 1998), p. 411.

¹¹ M. Guillan was a French naval officer and a geographer. In 1846, he toured Zanzibar. In 1857, he published a book titled: *Documents sur l’histoire, la géographie et la commerce de l’Afrique Orientale* which relates accounts on his travel to Africa.

In 1826, American merchants from Salem and Boston reached Zanzibar. Afterward, the number of American vessels increased annually. R. W. Beachey explains that by the mid-1830s, some thirty-three American vessels were visiting Zanzibar annually, bringing with them American cotton textiles. They purchased gum copal and cloves from Zanzibar. Later, they opened their consulate in 1837.¹² American surgeons were also attracted to visit Zanzibar. Dr. W. S. Ruschenberger, a Dutch-American surgeon in the U. S. Navy arrived in the town in 1835. By that time, Zanzibar was under an Omani Governor who represented the Al-Busaid or Busaidi (a dynasty which started to rule Oman from 1774) rulers in East Africa. Photo 1.1 above illustrates the view of Zanzibar Town in 1846. Ruschenberger also commented on the health situation in the town. The climate was considered unhealthy. He reports that “the climate is warm and very insalubrious for Europeans, Americans, and even unacclimated Arabians”.¹³ He also associated the refuse which was scattered in the town with diseases such as dysentery, diarrhoea and ‘fever’. Ruschenberger reports that:

In the neighborhood of these low damp grounds, dysenteries [sic], diarrhea, intermittent and fevers of a malignant character, prevail, particularly at the change of the monsoons; that is from March till May, and from October till December. Those periods are also the rainy seasons.¹⁴

By the mid-1800s, the British Royal Geographical Society, which was founded in 1830 for the advancement of geographical science, was interested in geographical information concerning Africa. It had supported many famous explorers, such as David Livingstone, as well as expeditions in Africa and Asia. Richard Burton of the Bombay Army was employed by the British Royal Geographical Society to collect geographical information on Eastern Africa in the late-1850s.¹⁵ Burton was employed by the same Society to study the

¹² R. Beachey, *A History of East Africa, 1592- 1902* (London and New York: I. B. Tauri & Company, 1996), p. 47; See also John Gray, ‘Early Connections between the United States and East Africa’, *Tanganyika Notes and Records*, 22 (1946), pp. 55-86; Norman Bennett, ‘Americans in Zanzibar: 1825-1845’, *Tanganyika Notes and Records*, 56 (1961), pp. 93-108.

¹³ W. Ruschenberger, *Narrative of A Voyage Round the World, During the Years 1835, 1836, and 1837; including A Narrative of an Embassy to the Sultan of Muscat and the King of Siam* (London: Bentley, 1838, vol. I), p. 63.

¹⁴ Ruschenberger, *Narrative of A Voyage Round the World*, vol. 1, p. 63.

¹⁵ Zanzibar National Archives (ZNA), AA 1/6, ‘Letters from Foreign Office (FO) to Hamerton’, Foreign Office Correspondence, 1852 June – 1860 October.

topography of India before coming to Zanzibar. According to Arnold, Burton reports “of his welcome escape from pestiferous Scinde and pestilential Gujarat”.¹⁶ He arrived in Zanzibar in 1856. Like his predecessors, Burton passed the same verdict on the dire state of hygiene in Zanzibar Town. Burton visited the town environs where local people were living and he noted that:

As we go eastward [where the “natives” are living] all such signs of civilization vanish; the sun and wind are the only engineers ... Here, as on the odious sands, the festering impurities render strolling a task that requires some resolution, and the streets are unfit for a decent (white) woman to walk through. I may say the same of almost every city where the Negro element abounds.¹⁷

Some of the long-term European residents in Zanzibar, however, had different opinions about the hygiene of the town. They noted that the climate was not bad throughout the whole year. The opinions of British diplomats also supported the idea that the climate itself of Zanzibar was not necessarily harmful. By the late-1830s, a British Consulate was opened in Zanzibar. Captain Atkins Hamerton, the first British Consul arrived in 1841.¹⁸ In 1844, Sir George Arthur, the Governor of Bombay, asked Hamerton about the health situation on the island of Zanzibar. Hamerton reported that “the climate of [insular] coast is not unhealthy for Europeans, but it is impossible for white men to live in the interior of the island, the vegetation being rank and appearing always to be going on; and generally fever contracted in the interior is fatal to Europeans”.¹⁹

¹⁶ Arnold, *Colonizing the Body*, p. 33.

¹⁷ Richard Burton, *Zanzibar; City, Island, and Coast* (London: Tinsley Brothers, 18, Catherine St., Strand, vol., I, 1872), p. 83.

¹⁸ Captain Atkins Hamerton, a former agent of the East Indian Company at Muscat, Oman came to Zanzibar following the transfer of the Omani Sultanate to Zanzibar in 1840. From the mid-1800s Zanzibar and the other coastal towns in East Africa came under the rulership of the Omani Sultanate. Hamerton was assigned the task of furnishing the Foreign Office, London and the British Indian Government in Bombay with political, social and economic information concerning Zanzibar. See ZNA AA 12/29, ‘Atkins Hamerton’, Correspondence of Atkins Hamerton, British Consul at Zanzibar 1841- 1857’, p. 1; ZNA ARC 1, ‘Letters from Foreign Office, London to Captain Hamerton, 14 December, 1841’.

¹⁹ ZNA AA 12/29, ‘Atkins Hamerton’, Correspondence of Atkins Hamerton, British Consul at Zanzibar 1841-1857’, p. 10.

Colonel Playfair, a former officer of the Indian army and a British Consul and Political Agent in Zanzibar between 1862 and 1865, observed that the health situation sometimes changed from better to worse.²⁰ He made the statement that:

I had heard the most discouraging account of the climate of Zanzibar. I was told that at certain seasons the heat was oppressive, and that it was death for Europeans to sleep even a single night in the country ... after a year of experience no doubt remain in my mind that, with ordinary precautions, the climate of Zanzibar is as healthy as that of other tropical climates; it is never cold and never unpleasantly hot.²¹

As a part of imperial expansion, missionaries of several groups arrived in Zanzibar Town from the late-1830s. Jean and John Comaroff argue that the missionaries “were also the most active cultural agents of empire, being driven by the explicit aim of reconstructing the ‘native’ world in the name of God and European civilization”.²² This theme will be developed further in Chapter Two, which deals with missionary medical works in Zanzibar Town. One of the earliest British Protestant missionaries to reach Central and East Africa was David Livingstone, who insisted that Africa was ‘sick’ and suffering from the evils of the slave trade, from paganism and the ‘creeping forces of Islam’.²³ As I have pointed out before in this chapter Livingstone’s views on the town’s sanitation confirmed those of other European and American visitors.

The records of British medical doctors and surgeons who were for the most part attached to the Consulate are still better sources of information on disease, medicine and health in urban Zanzibar during the nineteenth century. The most famous are John Kirk and James Christie.

²⁰ The British Consul to Zanzibar was appointed and paid by the Bombay government and he had the dual capacities of British Consul and Political Agent of the East Indian Company. In nineteenth century, the relationship between Zanzibar and Bombay grew. The British encouraged the revival of Indian commercial enterprise in Indian Ocean. Indian merchant vessels to East Africa carried the British flag. See Naseem Waheed, *Nature and Extent of the Indian Enterprise along the East African Coast and Subsequent Role in the Development of Kenya, 1840-1905* (Unpublished PhD dissertation, St. John’s University, New York, 1975); J. Mangat, *A History of the Asians in East Africa, c. 1886 to 1945* (Oxford: Clarendon Press, 1969).

²¹ ZNA CA 4/1/6, ‘Administration Report of Zanzibar for the year ending 31st May 1864’, Correspondence of Lt. Colonel R. L. Playfair, Consul at Zanzibar, 1863- 1865, p. 7.

²² John Comaroff and Jean Comaroff, *Of Revelation and Revolution, The Dialectics of Modernity on a South African Frontier* (Chicago and London: The University of Chicago Press, vol. I, 1991), p. 6.

²³ Livingstone, *The Last Journal of David Livingstone in Central Africa from 1865 to His Death*, pp. 6-7.

Kirk (1832-1922) was a Scottish physician who graduated in 1854 from the University of Edinburgh. He came to Zanzibar in 1858 and joined Livingstone in the second Zambezi Expedition, 1858-1863. He became the Barghash's physician and later a British Consul in Zanzibar from the early-1870s. His role will be further considered in Chapter Two.

Christie had graduated in medicine at Glasgow University in 1863. He came to Zanzibar in 1865 and worked as a honorary physician to Bishop Tozer of the Universities' Mission to Central Africa (UMCA). Later in 1870, he became a personal physician of Barghash Said. He was commissioned by the British Epidemiological Society to report on epidemics of cholera in East Africa. His article on cholera in Zanzibar was first published in 1870 in *The Lancet*, the British medical journal founded in Britain in 1823.²⁴

Christie supplied detailed information on the history of cholera epidemics in his book entitled *Cholera Epidemics in East Africa* (1876). He was influenced by John Snow (1813-1858), a London physician and a self-trained scientist who claimed in 1854 that there was a link between cholera and contaminated drinking water. Discussion on cholera in Zanzibar will be supplied later in this chapter. Christie explains about the health situation in urban Zanzibar that:

There are large numbers of cattle, and beasts of burden, horses, donkeys and camels. The cows are driven out to their pasturage in the morning; and, in the evening, they are penned in the court-yards of the houses, or in neighbouring enclosures. In a very few cases the cattle-pens are kept tolerably clean, but in general the droppings are allowed to accumulate till the cattle are standing knee-deep, or until the nuisance becomes so intolerable as to render a clearing out a matter of necessity.²⁵

From the early-1800s, Zanzibar Town became a centre of European commercial expansion, and studies of its topography became important for the benefit of the Europeans who settled in Zanzibar. As early as 1864, Constantin-Abel Semanne, a French naval surgeon in Zanzibar who was the employee of the French Hospital wrote about the topography of

²⁴ Christie, *Cholera Epidemics in East Africa*, pp. vi and vii.

²⁵ Christie, *Cholera Epidemics in East Africa*, pp. 272 - 273.

Zanzibar.²⁶ Such information was also vital as it provided motivation for the introduction of Western medical and public health facilities by the colonial government from the late-1890s. Public health facilities such as the Quarantine Station, the Infectious Diseases Hospitals and the Government General Hospitals were located in the more salubrious locations, in the high altitude areas and around the beaches in order to catch the sea breezes.

Endemic Diseases in Urban Zanzibar: Fever, Yaws and Elephantiasis

European geographers, medical doctors, missionaries and other town residents witnessed that diseases such as fever, yaws, elephantiasis, bowel complaints, dysentery, asthma, diarrhoea, boils, ulcers and pulmonary infections were common in nineteenth century urban Zanzibar. We do not have much information on these diseases as they appeared in rural Unguja or Pemba. It is not clear how far the urban people were affected by diseases coming from rural areas. In this section, I shall concentrate on three diseases which are fever, yaws and elephantiasis. These were the diseases which are most frequently mentioned in the records.

In urban Zanzibar in the mid-1800s, Europeans gave a number of explanations for the presence of 'fever'. For instance, information about 'fever' came from Captain Hamerton, who in 1855 wrote to H. L. Anderson, Chief Secretary of the Indian Government in Bombay, informing him that 'fever' was one among the most terrible diseases that affected many people. Hamerton himself was attacked by 'fever' (whatever he meant by the term) several times.²⁷

Yellow fever was scarcely mentioned, for good reason. Early twentieth century medical records make clear that Zanzibar was a yellow fever-free area. It was imported with the arrival of European and American sailors. When Captain Hamerton reported in 1856, "the

²⁶ Constantin-Abel Semanne, 'Essai d'une Topographie Médicale sur l'Ile de Zanzibar (M. D. thesis, University of Paris, 1864).

²⁷ ZNA AA 12/29, 'Atkins Hamerton', Correspondence of Atkins Hamerton, British Consul at Zanzibar 1841-1857', pp. 134 and 170.

yellow fever has been here. I have seen three Europeans die here of it and Her Majesty's ships on the coast for the suppression of the slave trade have lost numbers of men from it", the disease had not been contracted locally.²⁸

Burton shows that the urban population was more affected with 'fever', than any other diseases such as bowel-complaints, and pulmonary infections. He was the first European to describe the presence of malaria, noting that there were two types of 'fever': intermittent and bilious remittent. The bilious remittent type "is preceded by general languor and listlessness, with lassitude of limbs and heaviness of head, with chills and dull pains in the body and extremities, and with a frigid sensation creeping up the spine".²⁹ From these symptoms, it seems likely that Burton was speaking of malaria.

Burton shows however that malaria in urban Zanzibar was not severe compared to the other East African coastal towns, such as Mombasa and the interior part of East Africa. He states that:

[t]he climate of Zanzibar Island is better than that of the adjacent continent. Here many white residents have escaped severe attacks; but upon the coast the disastrous fate of Captain Owen's surveyors, the losses on board our cruisers, and the many deaths of the 'Mombas Mission', even though, finding the sea-board dangerous, they built houses on the hills which lead to the mountain region of Usumbara, proves that malaria is as active in eastern as in western Africa.³⁰

Charles News, a Methodist missionary, who served both the London Missionary Society (LMS) and the Church Missionary Society (CMS), the two British Protestant missionary societies in Mombasa, and who was in coastal Kenya between 1863 and 1872 gives evidence of the kind of diseases that afflicted the urban population in Zanzibar in the mid-1800s. News was a frequent visitor to Zanzibar Town and noted that fever was the most common disease. He showed that local people had some measure of immunity but "European

²⁸ ZNA AA 12/29, 'Atkins Hamerton', Correspondence of Atkins Hamerton, British Consul at Zanzibar 1841-1857, p. 134.

²⁹ Burton, *Zanzibar; City, Island, and Coast*, vol., I, pp. 186 -187 and 190-191.

³⁰ Burton, *Zanzibar: City, Island and Coast*, vol., I, p. 176.

residents in Zanzibar all suffer more or less from fever, and in many cases the malady proves fatal. Death may be traceable sometimes to want of care; yet, making allowances of this kind, our impression is that the percentage of deaths in Zanzibar among Europeans has been rather high".³¹ The case of immunity was constructed to depict the inferiority of the local people. By the late nineteenth and early twentieth century, the ideas about whiteness and civilization and vulnerability to disease were linked also to madness. Jewish, Irish, Indians and Africans were considered inferior races, whose apparent cultural inferiority was linked to their physical and mental inheritance.

Christie also indicates that malaria fever in Zanzibar was not so dreadful compared with the mainland part of East Africa. He illustrates that:

In the mainland opposite Zanzibar ... The superfluous water of the latter (*rainfall*), when unable to pass to the sea, forms extensive swamps, which never thoroughly dry up, even under the scorching summer sun. These are the main-land hotbeds of malarious diseases, much more dangerous even than the mangrove swamps which are within tidal influence.³²

Studies of pre-colonial Tanganyika also show the existence of malaria along the coast and inland districts of Tanganyika. Steven Feierman notes that for along time the people of Usambara highland in the northern Tanganyika linked malaria with mosquitoes as the word for the disease, *mbu*, was the same as their word for mosquitoes.³³

During the mid-1800s, the climate of Zanzibar was blamed for causing many diseases, again mostly associated with fever. Burton observes that *Kipupwe*, the first winter or cold season of July and early August, was perceived by many people to be universally unhealthy. According to Burton "the charms of the season induce Europeans to despise the insidious attacks of

³¹ Charles News, *Life Wanderings and Labours in Eastern Africa, with an Account of the First Successful Ascent of the Equatorial Snow Mountain Kilimanjaro; and Remarks upon East African Slavery* (London: Hodder and Stoughton, Second Edition, 1874), p. 42.

³² Christie, *Cholera Epidemics in East Africa*, p. 16.

³³ Steven Feierman, *The Shambaa Kingdom, A History* (Madison: University of Wisconsin Press, 1962), pp. 19-20.

malaria: they commit imprudences and pay for them in severe fevers”.³⁴ Burton also claims that the natural surroundings were not good for the health of the people. He shows that:

At the mouth of the lagoon, which at high tides almost encircle the city the natives have built all round this backwater. In 1857 the Eastern or landward side was bush and plantation. As the waters retired they left behind them a rich legacy of fevers and terrible diseases; especially in the inner town, a dead flat, excluded from the sea breeze, and exposed to the pestiferous breath of the maremma.³⁵

News describes that by the 1860s “the city, too, is almost completely surrounded by a broad shallow lagoon, over which the water flows and returns with every tide, leaving a fetid plain, reeking with the most pestiferous vapours. Something needs to be done to remedy this evil”. He proposed the introduction of Sanitary Regulations in Zanzibar.³⁶ The historian Philip Curtin demonstrates that by 1860, Europeans were still attributing tropical fevers to miasma arising from the soil, especially in the marshes. The French in Algeria launched a major drainage programme, an empirical form of mosquito control that also saved lives.³⁷

Malaria in nineteenth century Zanzibar spread for the following reasons: Firstly, the town’s physical structure attracted mosquito breeding since the marshes and Creek which surrounded the town harboured mosquitoes. Until 1846 as Map 1.2 shows, large parts of the Zanzibar Town areas were still covered by bush, but this was later cleared to allow the construction of more houses. These mosquitoes were disturbed as the people cleared the bushes and built on this cleared land. By the 1850s, a lot of people had already crossed the creek to Ng’ambo, which approached the mosquito breeding sites. Map 1.3 illustrates further extension of the town. In 1895, Ng’ambo was already a populated town.

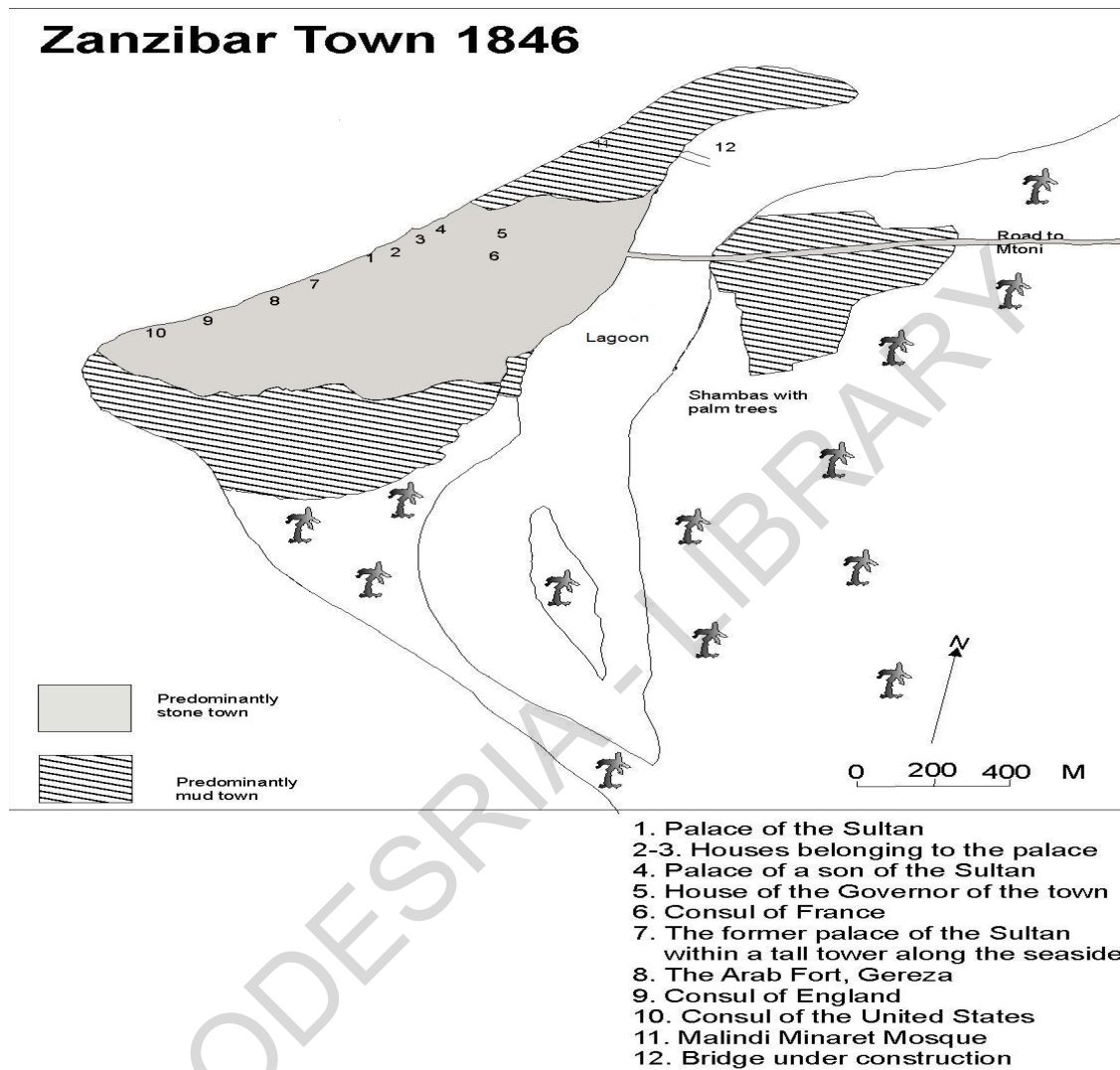
³⁴ Burton, *Zanzibar; City, Island, and Coast*, vol. I, pp. 168-169.

³⁵ Burton, *Zanzibar; City, Island, and Coast*, vol. I, p. 97.

³⁶ News, *Life Wanderings and Labours in Eastern Africa*, p. 42.

³⁷ Philip Curtin, *Death by Migration, Europe’s Encounter with the Tropical World in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995), p. 65.

Map 1.2: Zanzibar Town, 1846

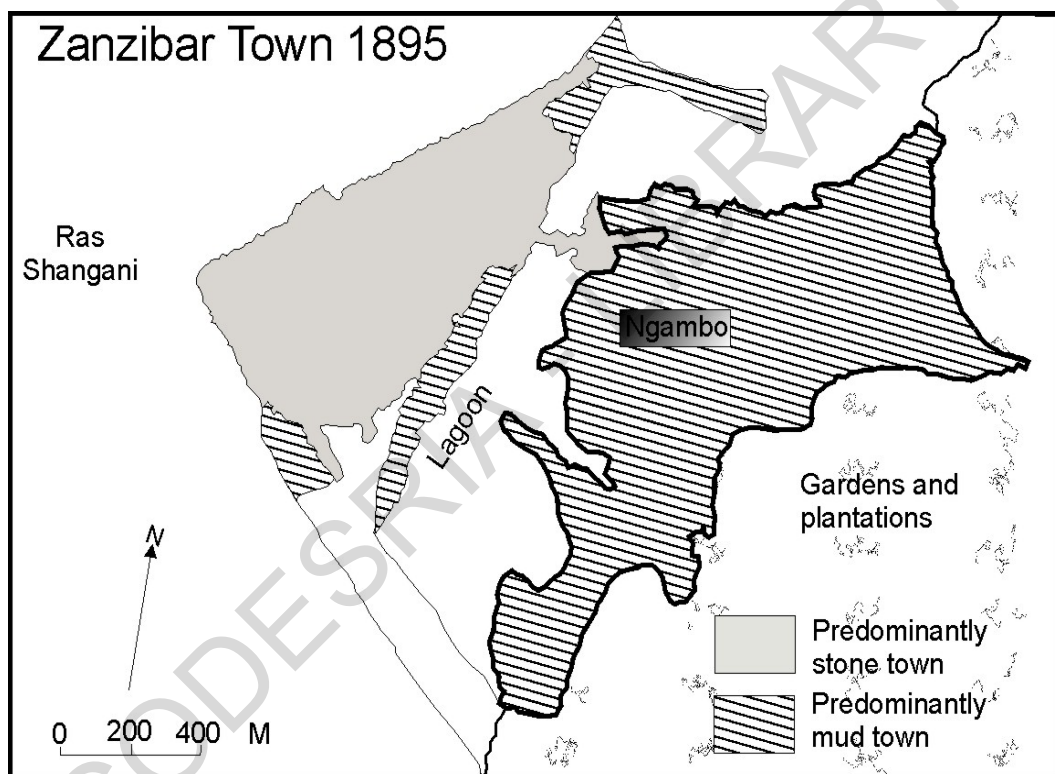


Source: ZNA AV 51/2: Zanzibar Town, 1846, from Guilan's Album.

Secondly, the expansion of urban areas and the improvement of communications such as the introduction of a railway and roads led to the increase and spread of malaria. In 1875, Barghash Said built Chukwani Palace, six miles from the town, to catch more breezes. Roads were constructed in 1876, in order to allow tramcars which carried the Royal family members to this outlying palace. Later, in 1881 a steam locomotive known as 'Sultane' was

introduced to replace the old tramcars.³⁸ The railway line passed near the Ziwani swampy area, which was the greatest mosquito breeding site. Generally, the building of the Palace and the tilling of the land for the construction of the railway line caused malaria mosquitoes to move more freely.

Map 1.3: Zanzibar Town, 1895



Source: Oscar Baumann adapted from R. Harkema (1967), p. 51.

Thirdly, the presence of malaria in Zanzibar Town was possibly affected by the movement of people from the various parts of the islands. The establishment of clove plantations and the attendant movement of labourers enabled anopheles mosquitoes to move freely in the islands. There was also a movement of people from malarial zones of India to Zanzibar.

³⁸ Kevin Patience, *Zanzibar, The Babubu Railway* (Bahrain: Dar Akbar Al Khaleej Press, 2002), pp. 6 -7.

From the early nineteenth century, malaria had become widespread in India due to British expansion. Infrastructures, such as roads and railway lines and plantations were introduced, which allowed for the spread of malarial mosquitoes. The ‘Burdwan fever’ of the 1850s became notorious and killed many Indians.³⁹ The arrival of newly Indian indentured labourers at Mauritius in 1866 brought malaria parasites to Mauritius.⁴⁰ Indians who migrated to Zanzibar increased the prevalence of the disease. Malaria mosquitoes may have travelled in Indian vessels, hidden in their cargo holds.

Fourthly, slave importation in Zanzibar might have increased the chance of malarial mosquitoes being imported into Zanzibar. Slaves were brought from the interior of East Africa, which according to Burton was an area which was more susceptible to malaria than the coastal areas.⁴¹ Many slaves who entered Zanzibar came via Kilwa, which was a mangrove transportation area. These mangrove areas were also the abode of mosquitoes. Anopheles mosquitoes fed on the blood of infected people and then communicated malaria to those previously unaffected or only exposed to low levels of infection.

Another disease most prevalent in Zanzibar was elephantiasis. There was much confusion between elephantiasis, yaws, leprosy and syphilis among nineteenth century European geographers, visitors and residents. Joseph Osgood, a Salem (Massachusetts) trader, who visited Zanzibar in the early-1850s, maintained that “elephantiasis and leprosy proper are prevalent ... to great extent”.⁴² Salme Said Sultan, a princess of Zanzibar and Oman was not sure whether leprosy was prominent though Osgood and Burton had identified it. She was born and bred in Zanzibar Town before moving to Germany and had been an eye-witness to several epidemics, including smallpox and cholera, which occurred in the mid-1800s. Her

³⁹ David Arnold, ‘An Ancient Race Outworn’, *Malaria and Race in Colonial India, 1860-1930*, in Waltraud Ernst and Bernard Harris (eds.), *Race, Science and Medicine, 1700-1960* (London and New York: Routledge, 1999), p. 140.

⁴⁰ Gordon Harrison, *Mosquitoes, Malaria and Man: A History of Hostilities since 1880* (London: John Murray, 1978), p. 200.

⁴¹ Burton, *Zanzibar: City, Island and Coast*, vol., I, p. 179.

⁴² Joseph Osgood, *Notes of Travel or Recollections of Majunga, Zanzibar, Muscat, Aden, Mocha, and other Eastern Ports* (Salem: George Creamer, 1854), p. 22.

valuable information is available in her famous book, *Memoirs Einer Arabischen Prinzessin*, (*Memoirs of an Arabian Princess*), (1888). She explains that:

Hundreds of such poor used to assemble for their share of the alms we distributed in fulfillment of certain vows we made during the year ... Many of these beggars are covered with wounds and sores – some go about minus some feature, and otherwise horribly maimed and disfigured. They are the victims of a very bad disease called *Belas*, which attacks hands and feet first, and leaves these snow-white ever after. Everybody flies from them, as the taint is thought to be contagious. I cannot say whether this is leprosy or not, but these unfortunates always receive rich alms.⁴³

Uncertainty about the distinctive origins and nature of different diseases was due to the fact that discoveries of the bacilli which caused these diseases were made only in the late-1800s. For instance, in 1873, H. Armauer Hansen (1841-1912), a Norwegian physician, identified *Mycobacterium leprae*, as the causative agent of leprosy, although this was not immediately accepted. The etiology of elephantiasis came to be known only in the later period of the nineteenth century, when it was realized that the embryo of *Wuchereri bancrofti* were transmitted by mosquitoes, *Culex fatigans*.⁴⁴ In 1927, a survey by Dr. Mansfield-Aders reported that *Culex fatigans* mosquitoes were commonest in Zanzibar. Mansfield-Aders explains that “in all villages examined *Culex fatigans* was found, in some places this common mosquito was scarce. In towns where drains and cesspits are in vogue it is always the dominant species. It is the commonest domestic mosquito in Zanzibar Town”.⁴⁵

⁴³ Ruete, *Memoirs of An Arabian Princess from Zanzibar*, p. 198.

⁴⁴ The elephantiasis parasite was named after Otto Wucherer (1820-1874), a Portuguese-Germany physician who discovered filaria larvae in urine of a patient in Brazil in 1868. But he showed that the mechanism of transmission was unknown. And Joseph Bancroft (1836-1894), a British surgeon and parasitology who while in Brisbane, Australia discovered filariasis and it was named *Filaria bancrofti* in his honour in 1877. Bancroft was one of the first to suggest that mosquitoes transmitted the disease. This idea was confirmed by Patrick Manson (1844 -1922), a British physician while doing medical research in Hong Kong and in Amoy on the Chinese coast in 1879. See: Julyan Peard, *Race, Place and Medicine, The Idea of the Tropics in Nineteenth-Century Brazilian Medicine* (Durham: Duke University Press, 2000), p. 193; G. Davey, F. Tekola and M. Newport, ‘Podoconiosis’, *Transaction of Royal Society for Tropical Medicine and Hygiene*, 101 (2007), pp. 1175–80 and Philip Curtin, *Death by Migration, Europe's Encounter with the Tropical World in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995), p. 136.

⁴⁵ W. Mansfield-Aders, ‘Notes on Malaria and Filariasis in the Zanzibar Protectorate’, *Transactions of the Royal Society of Tropical Medicine and Hygiene*, XXI, 3 (November, 1927), pp. 207-214. The quotation appears on p. 208.

Christopher Palmer Rigby (1858-60), the second British Political Agent and Consul, who came to Zanzibar after the death of Hamerton in 1857, reported that elephantiasis was common amongst Africans and Arabs, and appeared to become hereditary. Two Europeans were also infected by the disease during his time.⁴⁶ Burton illustrates that elephantiasis of the legs and arms and especially of the scrotum afflicted many poor people including Indians, Arabs and Africans.⁴⁷ Burton claims that:

The scrotum will often reach the knees. I heard of one case measuring in circumferences 41 inches, more than the patient's body, whilst its length (33 inches) touched the ground. There is no cure, and the cause is unknown. The people attribute it to water, and possibly it may spring from the same source which produces goiter and bronchocele.⁴⁸

Rigby points out that elephantiasis of the scrotum attacked old and worn-out people or those who led a very sedentary life. He shows that “cutaneous [yaws and elephantiasis] diseases are very common, doubtless owing to the filthy habits of the people, and from salted and half-putrid fish – a portion of daily food”.⁴⁹ Most of these Europeans were moralistic. They did not relate poverty with diseases that affected poor people. This attitude was also shown towards the British working classes at this time. Dorothy Porter explains that during the 1831 cholera epidemics in Britain, “the middle classes [had] singled out a special group of the poor as eminently blameworthy for the spread of cholera. This was the itinerant worker and the wandering vagabond”.⁵⁰ Elephantiasis however also affected Europeans who lived in Zanzibar Town, and had affected the first French Consul, M. F. P. Broquant, who arrived in 1844. He suffered elephantiasis of the legs. It is not clearly

⁴⁶ ZNA AA 3/18, ‘Rigby’s Report on the Zanzibar Dominions, 1860’, 1859 July – 1861, August, Outward Letters from Zanzibar to the Foreign Office, London; ZNA AA 3/19, Outward Letter Book Commencing July 15 1859.

⁴⁷ Burton, *Zanzibar; City, Island, and Coast*, vol. I, p. 185.

⁴⁸ Burton, *Zanzibar; City, Island, and Coast*, vol. I, p. 185.

⁴⁹ ZNA AA 3/18, ‘Rigby’s Report on the Zanzibar Dominions, 1860’, 1859 July – 1861, August, Outward Letters from Zanzibar to the Foreign Office, London.

⁵⁰ Porter, *Health Civilization and the State*, p. 92.

established where and how he contracted the disease. Eventually, he died in Zanzibar in 1847 from the effects of dysentery.⁵¹

From the mid-1800s, many Europeans in Zanzibar had also noted the presence of yaws. For example, in 1856, Burton reported that yaws, urinary and genital diseases were endemic and syphilis was a widespread disease in the urban Zanzibar in the mid-1800s. It seems likely that Burton confused syphilis with yaws, as the two are related diseases spread by the same spirochaete. He recorded that the 'black lion' (in Arabic *el- Taysr* or *el- Faranj*, and *bubeh*, *Kismendi* or *T'hego*, which are the Swahili words to connote yaws and syphilis) destroyed the body part affected in three weeks. It led to the disappearance of noses; the hair fell off, rheumatism and spreading ulcers occurred. He also writes that when "syphilis attacked the legs and feet, it led to severe damage. Toes might fall off and limbs [sic] distorted".⁵²

Studies in pre-colonial and colonial medicine illustrate the existence of yaws and endemic syphilis in many parts of Africa commonly in rural areas. Yaws is due to bacillus called *Treponema pertenue*. It is acquired by contact with the primary sore on another sufferer. Endemic syphilis is caused by the same spirochetes as caused yaws and venereal syphilis. In pre-colonial Africa, yaws and endemic syphilis were related to poverty, uncleanliness, overcrowding, shared clothing and abrasions of the skin.⁵³ Marc Dawson in his studies of yaws in Kenya observes that it antedated the colonial presence. It was commonest around the coastal areas, Tana River Valley and Central Kavirondo districts, the Kikuyu highlands and the Mount Kenya area.⁵⁴

European visitors and residents were of the opinion that unhealthy diet, personal uncleanliness and sexual behaviour were the sources of diseases in urban Zanzibar in the mid-1800s and linked these with yaws. European and American visitors, diplomats and

⁵¹ Norman Bennett, 'France in Zanzibar, 1844-1860', *Journal of African History*, 5 (1967), p.12.

⁵² Burton, *Zanzibar; City, Island, and Coast*, vol., I, pp. 183-4 and 186.

⁵³ Michael Gelfand, *The Sick African, A Clinical Study* (Cape Town: The Stewart Printing Company, 1944), p. 89.

⁵⁴ Marc Dawson, 'The 1920s Anti-Yaws Campaigns and Colonial Medical Policy in Kenya', *International Journal of African Historical Studies*, 20, 3 (1987), p. 421.

residents noticed that the Arab, Muslim Indian and African populations were affected by many diseases as their diet was poor. Hindus, especially the richest, were however praised for their healthy diet. By the 1850s, Burton was associating yaws with “personal uncleanness, unwholesome food, and insufficient shelter and clothing”.⁵⁵ According to Osgood “much of the sickness and infirmities which generally distress the natives are engendered by a too free use of shark meat and jack-fruit, which form, with cassava, the chief food of the lower classes”.⁵⁶ Yaws and endemic syphilis were transmitted through non-sexual contact. Megan Vaughan argues that what was observed in many parts of Central and East Africa at the beginning of the nineteenth century was yaws, endemic syphilis and more recently introduced sexually transmitted diseases.⁵⁷

“Promiscuous ‘intercourse’ and ‘unrestrained sexual indulgence’” among the African slave population in Zanzibar, in the late-1850s was reported by Burton to transmit syphilis.⁵⁸ Although Burton claims that gonorrhoea was common in Zanzibar Town in the mid-nineteenth century that it was “hardly considered a disease”.⁵⁹ Burton may have been speaking of other skin diseases such as yaws and endemic syphilis which have similar characteristics to those of gonorrhoea.

Generally, the European and American diplomats, traders, and geographers had associated these endemic diseases with the environment, polluted water, unclean habits, poor diet, sexual behaviour, and insufficient shelter and clothing among the urban population. Nevertheless, the eruption of these diseases was historically connected with trade activities. From the early nineteenth century, many diseases increased in incidences in Zanzibar due to the presence of the visiting ships and dhows and the settlement of traders and other people from East African coast and interior. The history of diseases in urban Zanzibar in the mid-

⁵⁵ Burton, *Zanzibar; City, Island, and Coast*, vol., I, p. 186.

⁵⁶ Osgood, *Notes of Travel or Recollections of Majunga, Zanzibar, Muscat, Aden, Mocha, and other Eastern Ports*, p. 22.

⁵⁷ Megan Vaughan, *Curing their Ills: Colonial Power and African Illness* (London: Polity Press, 1991), p. 138.

⁵⁸ Burton, *Zanzibar; City, Island, and Coast*, vol., I, pp. 183 and 184.

⁵⁹ Burton, *Zanzibar; City, Island, and Coast*, vol. I, p. 185.

1800s was therefore strongly influenced by the development of the international capitalist economy.

Epidemic Diseases: Smallpox, Cholera and Dengue Fever

Sheldon Watts has observed that modern imperial expansion extended disease networks from the time when the Portuguese spanned the world during the fourteenth century. I too will show that the expansion of commercial activities between East Africa and India, Arabia and Europe, the importation of slaves from the interior of Central and East Africa and migration of people to urban Zanzibar from the early-1800s led to disease complexity. The expansion of settlements in urban areas created major problems as far the health of the people was concerned. The interaction of people and pathogens could be seen in terms of epidemics that occurred in Zanzibar Town between the 1860s and 1870s.

Migration into and concentration of many people in urban Zanzibar led to the outbreak of epidemics such as smallpox, cholera and dengue fever. Smallpox was an endemic disease in many pre-colonial African societies. "Tribal" wars and famine, as Juhani Koponen shows for the southern part of Tanganyika, induced scattering and regroupment. Smallpox was an old disease, but the caravan trade in the late pre-colonial period caused a more violent cycle in its transmission from the coast to the interior.⁶⁰

In nineteenth century urban Zanzibar, smallpox epidemics occurred through contacts between the urban population and migrants from Asia and possibly from Europe. Scholars of disease history in Africa have identified three forms of smallpox, which are *variola major*, true virulent smallpox; *variola intermedius*, which is an intermediate type and *variola minor* or alastrim, which is a milder form. The *variola intermedius* had a mortality rate of 2.8 to 10.9 percent compared to *variola major*'s 20-40 percent and *variola minor*'s less than 1 percent.⁶¹

⁶⁰ Juhani Koponen, *People and Production in Late Pre-colonial Tanzania, History and Structure* (Gummerus: Kirjapaino Oy Jyvaskyla, 1988), p. 165; See also John Iliffe, *East African Doctors A History of the Modern Profession* (Cambridge: Cambridge University Press, 1998), p. 9.

Smallpox infections became epidemic in Zanzibar when the people encountered *variola major* which was more prevalent in Europe and Asia.⁶² Generally, the smallpox infection rate increased from the early nineteenth century when the town accommodated many traders and other migrants from Europe and Asia.

It seems certain that the migration and concentration of many people in Zanzibar Town from the early nineteenth century led to the increasing outbreaks of smallpox. Early accounts of the history of smallpox in Zanzibar came from Morice, the French slave trader. He noted that in 1775 and 1776, smallpox broke out on a ship carrying a cargo of slaves from Zanzibar to Ile de France in the Indian Ocean and many slaves died.⁶³ These slaves may have been infected with new smallpox viruses when they encountered Arab and French traders. In the early nineteenth century, Captain Smee reported that smallpox became widespread in Zanzibar Town. He shows that it broke out in 1809 and killed about 5,000-15,000 people. It broke out again at intervals of ten to twenty years.⁶⁴

Furthermore, upon arrival in the town in the late-1850s, Burton was not received by Majid Said (r.1856-1870), the second Omani Sultan in Zanzibar who, “having lately recovered from confluent smallpox, an African endemic which had during the last few years decimated the islanders, was ashamed to display a pock-marked face to the ‘public’, ourselves included”.⁶⁵ Moreover, Burton notes that in 1857, smallpox had ravaged the town’s population. He further explains that the virulent type was imported from Muscat, Oman, at the end of 1857 and it raged for the whole of 1858. As a result, half of the population of African origin of the

⁶¹ Sheldon Watts, *Epidemics and History: Disease, Power and Imperialism* (New Haven: Yale University Press, 1997), p. 111.

⁶² For a history of smallpox in East Africa, see Marc Dawson, ‘Socio-economic Change and Disease: Smallpox in Colonial Kenya, 1880-1920’, in Steven Feierman and John Janzen (eds.), *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992), pp. 90-91; Koponen, *People and Production in Late Pre-colonial Tanzania*, p. 165.

⁶³ G. S. P. Freeman-Grenville, *The French at Kilwa Island* (Oxford: Clarendon Press, 1965), p. 64.

⁶⁴ T. Smee in Richard Burton, *Zanzibar: City, Island and Coast*, vol. II, pp. 502 and 519; Mrs. Charles E. B. Russell, (ed.) General Rigby, *Zanzibar and the Slave Trade with Journals, Dispatches, etc* (London: George Allen and Unwin Ltd, 1935), p. 76.

⁶⁵ Burton, *Zanzibar: City, Island and Coast*, vol., I, p. 37.

town was afflicted by the disease. Burton shows that this virulent Muscat type was more dangerous to Africans living in the town,⁶⁶ though he did not give reasons. Captain Rigby, a British Consul, who was in Zanzibar Town in 1858, noted that smallpox hit the town and was fatal for many Africans.⁶⁷

Smallpox was very likely introduced to Zanzibar from India as well as from Muscat, through trade contacts and migration, although sources are not explicit on this matter. David Arnold demonstrates that in the nineteenth century, smallpox erupted in many parts of India at intervals of five to seven years. It occurred in Sind, Gujarat, Bombay and Cutch among other towns in India.⁶⁸ These towns had had historical connections with Zanzibar for a long time. Agehananda Bharati shows that from the late eighteenth century Indian traders, particularly Gujarati and Cutchi-speaking Muslims and trade-oriented Bhatia from Bombay and Cutch along the west coast of the subcontinent settled in Zanzibar.⁶⁹ Bombay, a busy trading port in India, in particular became a centre of the dissemination of smallpox from other parts of India, Arabia, Persia and Africa during the nineteenth century. Christie quoted Mr. Hewlett, the Medical Officer of Health for the City of Bombay in the late-1860s as saying that smallpox was imported into Bombay through people arriving in 'native' craft from sea port towns of Arabia, Persia and Africa.⁷⁰ This shows that the disease exchange was very extensive between India, Arabia and Zanzibar. The mid-nineteenth century trade reports in Zanzibar show that between August 1863 and May 1867, three hundred and fifty dhows from India and Muscat visited Zanzibar.⁷¹

⁶⁶ Burton, *Zanzibar: City, Island and Coast*, vol., I, p. 195.

⁶⁷ Russell (ed.), General Rigby, *Zanzibar and the Slave Trade*, p. 115.

⁶⁸ Arnold, *Colonizing the Body*, pp. 117 and 121.

⁶⁹ Agehananda Bharati, *The Asians in East Africa* (Chicago: Nelson- Hall Coy. Publisher, 1972), p. 10; See also Gorge Delf, *Asians in East Africa* (Oxford: Oxford University Press, 1963), pp, 6 and 7; Dana April Seidenberg, *Mercantile Adventurers: The World of East African Asians 1750-1985* (New Delhi: New Age International (P) Limited, Publishers, 1996), p. 24; Robert Gregory, *India and East Africa A History of Race Relations within the British Empire 1890- 1939* (Oxford: Clarendon Press, 1971), p. 33.

⁷⁰ Christie, *Cholera Epidemics in East Africa*, p. 122.

⁷¹ ZNA AA 2/4, 'Returns of British Shipping at Port of Zanzibar', Correspondence between the British officers in Zanzibar and the Foreign Office, 1860s-1870s.

Cholera was another disease which caused the deaths of many people in the world during nineteenth century, including Zanzibar Island. The island itself then became an important point of cholera dissemination to the African interior and ports on the East African coast such as Kilwa and Lourenço Marques due to its important role in trade activities and its commercial connection with Arabia and India. Cholera mostly entered the interior of East Africa from the coast and was carried by slave traders and along the caravan routes. During the 1869-70 cholera epidemics, the disease spread to Zanzibar through inland routes from Ethiopia to Uganda and to the Tanganyikan coast. Christie was in the town during the 1869-70 cholera epidemic. He has left us a clear picture of how the disease was contracted by the town population and how it spread in the urban and rural Zanzibar and in East Africa in general.

Cholera in epidemic form began in Bengal in seventeenth century and later spread to other areas of the world from the beginning of the eighteenth century. It broke out again all over the world from the early nineteenth century. Frederick Cartwright shows that cholera was exported from India eastward to China and the Philippines, south to Mauritius and Reunion, north-west to Persia and Turkey, in 1817-18. By 1826, it had spread to other areas such as Japan and Asiatic Russia. Poland, German, Austria and Sweden were infected in 1829. It reached England and the rest of Europe in 1832-3. In America it arrived by ship in 1832.⁷²

Christie explains that four cholera epidemics hit Zanzibar before 1870. The first epidemic occurred in 1821, at the same time as it raged along the eastern coast of Arabia and the Persian Gulf. Other cholera epidemics in Zanzibar occurred in 1836-37, 1858-9, and 1869-70; the infection came also from Mecca.⁷³ The epidemics in Zanzibar were associated with Indian cholera epidemics. Mecca became a centre of infection because of returning pilgrims. David Arnold shows that the first nineteenth century cholera epidemics in India occurred in Bengal in 1817 to 1821, starting in August 1817, and it was “probably the most terrible of all

⁷² Frederick Cartwright, *A Social History of Medicine* (London: Longman Group Limited, 1983), p. 98; John Hays, *The Burdens of Disease, Epidemics and Human Response in Western History* (New Brunswick, New Jersey and London: Rutgers University Press, 1998), p. 136.

⁷³ Christie, *Cholera Epidemics in East Africa*, pp. 24 and 98.

Indian cholera epidemics”. In western India, especially at Bombay, the epidemic was mild in 1818.⁷⁴

The Indian Ocean commercial contacts, which connected East African coastal towns with Arabia, India and the Persian Gulf, had existed for centuries, and depended on the monsoon winds. The north-east monsoon usually starts in November and permitted the departure of dhows from Arabian coast to East Africa. Dhows from India normally departed to the East African coast in December. By March the north-east monsoon reverses to become the south-west monsoon, which allowed dhows to depart from the East African coast for India and Arabia.⁷⁵ Christie observes that cholera in epidemic forms in Zanzibar followed the monsoon wind patterns. They “appeared and spread during the months of the north-east monsoon – and the months of November, December, January, February and March, are the cholera months of Zanzibar”.⁷⁶ This suggests that cholera may have been imported to Zanzibar by two routes and that both India and Arabia were sources of cholera. Generally, cholera touched the northern ports of Somalia, Lamu and Mombasa first, before reaching Zanzibar. From Zanzibar the epidemic reached the southern Kilwa and Mozambican ports. It followed the Indian Ocean trading networks. Dhows became important vehicles for cholera dissemination. Cholera was taken aboard in water jars and other utensils.⁷⁷

Christie identifies two factors that caused the diffusion of cholera in Zanzibar Town. He mentions poor sanitation and contaminated water as important vehicles for cholera dissemination. By 1870, when he wrote about cholera epidemics in East Africa, water had not yet been proved to be an important vehicle for cholera transmission, although the idea had been proposed by John Snow, as early as in 1849. Snow had suggested that cholera was a contagious disease passed from the excreta of cholera patients through the contaminated

⁷⁴ Arnold, *Colonizing the Body*, pp. 161-163.

⁷⁵ Abdul Sheriff, *Slaves, Spices and Ivory in Zanzibar* (London: James Currey, 1987), p. 10.

⁷⁶ Christie, *Cholera Epidemics in East Africa*, p. 24.

⁷⁷ Amina Issa, ‘Dhows and Epidemics in the Indian Ocean Ports’, Proceedings of the Seminar, “Sails of History”, Zanzibar International Film Festival (ZIFF), July, 2007.

water supply.⁷⁸ Robert Koch, a German scientist and bacteriologist, did his first research on cholera in 1883 in Egypt and later in India in the same year. He found that the disease was caused by '*vibrio cholerae*' and that the disease was connected with drinking water.⁷⁹

Cholera raged in urban Zanzibar because most of the water sources were contaminated by polluted waters from the town's latrines and sewers. Also, the urban population and their animals, mostly donkeys and cows, defecated in the water sources. Christie had observed that urban inhabitants used water from Bububu and Mtoni streams, which were polluted with human and animal excrement. He states that "the potable water of Zanzibar may be said, without any exaggeration, to consist of the diluted drainage of dunghills and the graveyard, a saturated solution of every conceivable abomination".⁸⁰ He further explains that in 1872, Mr. John Webb, an American Consul in Zanzibar, had forwarded water samples to America for analysis. The result showed the presence of fumes of sulphuretted hydrogen,⁸¹ which was harmful to human beings. Hydrogen sulphate often results from the bacterial breakdown of organic matter in the absence of oxygen, such as occurs in swamps and sewers. Christie also shows that cholera spread in the town because there was no sewerage system to collect dirty water. Contaminated water polluted the town wells, which were in use since there was no piped water.⁸²

The water pollution in Zanzibar had been noticed earlier before by Ruschenberger who visited the town in the late-1830s. He noted that:

Wells are numerous throughout the town, they are all square, and few of them are more than fifteen feet deep. They have no barrier around them, and their walls are not carried above the surface of the ground; their vicinity is

⁷⁸ Charles Rosenberg, *Explaining Epidemics and Other Studies in the History of Medicine* (Cambridge: Cambridge University Press, 1992), p. 117.

⁷⁹ Thomas Brock, *Robert Koch A Life in Medicine and Bacteriology* (Madison: Science Tech Publishers, 1988), p. 162; Watts, *Epidemics and History*, p. 169.

⁸⁰ Christie, *Cholera Epidemics in East Africa*, p. 289.

⁸¹ Christie, *Cholera Epidemics in East Africa*, pp. 289, 290 and 296.

⁸² Christie, *Cholera Epidemics in East Africa*, pp. 358 and 359.

disgustingly filthy, and the water itself is as thick as that in a puddle, which may be attributed to the want of rain for the past seven months.⁸³

This could be not denied as far as cholera dissemination in the town was concerned. The town's water had become increasingly polluted with the increasing pressure of people who migrated to the town during the nineteenth century. From 1840, Zanzibar Town accommodated many slaves who were employed in domestic and commercial areas. In 1851, the annual rate of importation of slaves into Zanzibar, mostly from Kilwa, amounted to between 8,000 and 10,000 persons.⁸⁴ Captain Hamerton informed Richard Burton that in 1856 the average annual importation of slaves into Zanzibar was 14,000, but that the extremes varied from 9,000 to 20,000.⁸⁵ Half the number of slaves remained in the town itself and others were sent in the rural areas of Unguja Island. Other as I shall mention later in this chapter were sent in other coastal towns of Mombasa, Malindi, Lamu and in other towns in the south of Somalia. Furthermore, traders from the Gulf, India and southern ports of Madagascar visited Zanzibar annually. The population explosion created health problems in a small town like Zanzibar Town.

Once more, we can point to reports from Dutch, French and British sailors who travelled along the East African coast between the sixteenth and eighteenth centuries which showed that Zanzibar's water was then sweet and clean that thus it was the overcrowded conditions in the town since the early nineteenth century was what led to water contamination. Generally, as Philip Curtin has argued colonial economic policies were major factors that contributed directly to the spread of epidemic diseases in the tropical Africa.⁸⁶

The most important centre of the epidemic was in the houses of Hadhrami Arabs, who were the most extensive slave holders in the town. They settled at Malindi in the eastern corner of the Stone Town, near the port. They owned slaves whom they sent to work in the port on a contract basis. Most of the Arabs, Muslim Indians, poor Hindus and Africans were

⁸³ Ruschenberger, *Narrative of A Voyage Round the World*, vol. 1, p. 49

⁸⁴ Edward Alpers, *Ivory and Slaves in East and Central Africa* (London: Heinemann, 1975), p. 237.

⁸⁵ Richard Burton, *The Lake Region* (London: Sidgwick & Jackson, vol. II, 1961), p. 377.

⁸⁶ Philip Curtin, 'The White Man's Grave: Image and Reality,' *Journal of the British Studies*, 1 (1961), pp. 94-110.

vulnerable to cholera.⁸⁷ Christie wrote that houses used by Africans, mostly slaves, “soak all fluid impurities; myriads of ants and cockroaches remove the more solid ingredients, and countless rats are ready for anything of greater bulk than the insect can remove”.⁸⁸ Christie further shows that African slaves bought second-hand clothes which might be contaminated with cholera dejecta.⁸⁹

Christie points out that rich Muslim Indians were affected by cholera because of their exploitation of slave labour. Christie complains ‘disgusting’ female African slaves served as cooks and continued:

Among the Khojas (Ismailis), *Marashi*, a female slave was left with the kitchens while Khoja women were involved in business and their husbands in outdoors business. As a result, the Khojas certainly suffer more than any other section of the population from fever, dysentery, hypertrophy of the liver, and more especially of the spleen, hydrocele, and various skin diseases.⁹⁰

The least affected populations in the town, according to Christie, were the European residents and rich Hindus (Banyans). There were several factors which contributed to this situation. First, normally, Hindus cooked for themselves. They never allowed African slaves in their houses. Second, they usually drew water from their own wells.⁹¹

During the nineteenth century, water was brought to the town by a bullock cart from the outskirts at the back of Punjebhai Club, near Saateni, for the use of wealthy Hindus. This was before the introduction of tap water. Jairam Sivji, a well known Indian merchant, had a well there and the pure water was brought in two big metal pots. The water was then distributed among the rich Banyans daily.⁹² Poor Hindus had to use the brackish water of

⁸⁷ Christie, *Cholera Epidemics in East Africa*, pp. 364 and 365.

⁸⁸ Christie, *Cholera Epidemics in East Africa*, p. 307.

⁸⁹ Christie, *Cholera Epidemics in East Africa*, p. 319.

⁹⁰ Christie, *Cholera Epidemics in East Africa*, pp. 339 and 340.

⁹¹ Christie, *Cholera Epidemics in East Africa*, p. 348.

the town and many of them, like the African population, died of cholera. In Zanzibar, as in India, the elite were also partly protected against cholera by their awareness of sanitation and the need for clean drinking water in the 1850s.⁹³ Cholera remained as a disease of the poor in India and in Zanzibar.

Thus, an analysis of cholera epidemics in nineteenth century Zanzibar Town needs to follow not only the lines of health conditions and poor sanitation in the town, but one must also look at economic relations. As we have seen, the increased use of slaves in Zanzibar started in the early nineteenth century when Zanzibar was firmly incorporated into the world capitalist system. Many slaves died in the town due to poor conditions. They were often forced to live in overcrowded quarters by their masters. They were also poorly fed by their masters and may have suffered from venereal diseases. They became weak, anaemic and at greater risk of malaria and other virulent and infectious diseases. Cholera erupted first in their quarters, which were near to the port. Slaves usually mixed easily with the traders from Arabia and India whose vessels brought the diseases to the town.

Additionally, dengue fever was one of the diseases that erupted in epidemic form in urban Zanzibar in the mid-1800s. The first epidemics occurred almost simultaneously in Asia, Africa, and North America in the 1780s. Later, dengue fever, which became more widespread in tropical regions, was reported to have erupted in the East and West Indies and South America in the 1820s and 1850s. Information reported in the *Zanzibar Gazette* of 1893 also suggests that dengue fever was transmitted from Zanzibar to the mainland of East Africa, India, and Arabia from the mid-1800s. Movements of people through trade and imperial expansion from the late eighteenth century led to the widespread acceleration of this disease. The history of dengue fever in Zanzibar is unknown but the disease may have erupted in epidemic form from the early-1850s, possibly due to the migration of people

⁹² ZNA NW 14/1, 'The Hindu in Zanzibar: Old Zanzibar Conditions', *Samachar*, 1929, p. 27; Abdul Sheriff describes Jairam Sivji as a merchant financier and a farmer of the custom duties, who owned four hundred slaves before 1860. In the 1860s and 1870s, American, French and British firms in Zanzibar borrowed money from Jairam in order to expand their businesses. See, Sheriff, *Slaves, Spices and Ivory in Zanzibar* pp. 65 and 107.

⁹³ Arnold, *Colonizing the Body*, p. 166.

from India. The disease killed a lot of children.⁹⁴ Christie notes that an epidemic of dengue had occurred in Zanzibar Town after the 1869-70 cholera epidemic.⁹⁵ However, he did not report anything about the cause of the disease.

In the twentieth century, it became known that dengue viruses are transmitted from human to human primarily by *Aedes aegypti* mosquitoes, which also transmit yellow fever. Medical researches in the early colonial Zanzibar looked for anopheles, not *Culex* mosquitoes and only reported them after the First World War when the yellow fever scare alerted international health campaigners to *Aedes aegypti*, so the prevalence of this vector in the nineteenth century is entirely speculative. The illness is characterized by sudden onset of fever, headache, aching back and limbs and rashes on the body. The information in the *Zanzibar Gazette* in 1893 showed that in urban Zanzibar, the African population named dengue fever as 'ganzi,' cramp, 'jingopopo' and 'kidingapepo,' which means cramp produced by an evil spirit. Indians in Zanzibar called it 'homa magnu' or leg fever because of severe pains in the lower extremities. Arabs from Oman confused it with 'bardiabis' or rheumatism and admitted that most of the symptoms were new to them. The African population from the mainland, who resided in the town, was entirely unacquainted with it.⁹⁶ It is informed that in all these cases Europeans suffered more than any other communities in Zanzibar Town. Remedies in the late nineteenth century were quinine and iodide of potassium, used as a purgative.

⁹⁴ ZNA BA 104/2, 'Dengue Fever', *Zanzibar Gazette*, 16 August 1893, p. 2. *Zanzibar Gazette* was first established in 1892 by Messrs. Forwood Bros. & Co. It was called 'The Gazette for Zanzibar and East Africa' intended to give commercial report. The first issue was on 1 February, 1892. On 17 October, 1894 it was sold and managed by the Zanzibar Government and it changed its name to 'Zanzibar Gazette'. Dr. Sullivan Beard the then British Vice Consul became the first editor.

⁹⁵ Christie, *Cholera Epidemics in East Africa*, p. viii.

⁹⁶ ZNA BA 104/2, 'Dengue Fever', *Zanzibar Gazette*, 16 August 1893, p. 2.

Disease, Death and Demography

Historians of population patterns in Africa demonstrate that epidemics contributed to mortality as well as to morbidity. John Iliffe explains that there was a demographic stagnation or decline in North Africa between 1750s and 1830s, mainly due to outbreaks of plague, which had remained endemic in North Africa since the Black Death of 1348. Algeria had five plague epidemics in eighteenth century and Tunisia had three plagues. In 1784-5, plagues killed between one and three of every six people. Smallpox also killed thousands of children in the region.⁹⁷ A cholera epidemic that occurred in Egypt in 1831 killed 150,000 Egyptians. According to Kuhnke La Verne:

The first visitation of cholera in 1831 was one of the most murderous epidemics in Egypt's history. Within two months, the disease killed about 150,000 of the estimated population of three and a half million; some 36,000 of Cairo's quarter million inhabitants are believed to have perished in only twenty-eight days.⁹⁸

In 1848 as a result of a cholera epidemic in Egypt, the total numbers of deaths were 30,000.⁹⁹

There was also a considerable decline of population in urban Zanzibar due to disease from 1800 until the late-1880s. Mortality due to diseases is noted in the written correspondence of many Europeans and Americans. However, this information about mortality focused only on infectious diseases such as cholera, smallpox and dengue fever. We do not know how far malnutrition increased mortality among the slave population in the town. There is also no data concerning mortality from long-existing local diseases such as fever (primarily malaria as discussed above), elephantiasis, yaws, dysentery and pulmonary infections, until 1907 when a British bacteriologist was employed in the Department of Health in Zanzibar.

⁹⁷ John Iliffe, *Africans: The History of a Continent* (Cambridge: Cambridge University Press, 1995), pp. 161 and 162.

⁹⁸ Kuhnke La Verne, *Lives at Risk: Public Health in 19th Century Egypt* (Berkeley, Los Angeles and Oxford: University of California Press, 1990), p. 51

⁹⁹ La Verne, *Lives at Risk*, p. 59.

The available sources suggest that up to the late-1880s, the town's population was unstable and fluctuated widely.¹⁰⁰ Several factors contributed to this instability. Most notably, the population of the town increased during the monsoon seasons. Traders from India, the Gulf region, East African coastal towns and the southern ports of Madagascar visited the town annually. The annual number of visitors from these areas, according to Burton and Rigby, varied between 20,000 and 30,000. Some of these seasonal visitors remained in Zanzibar permanently and some went home in the next season. Also, the population of urban Zanzibar was increased by the importation of slaves. Abdul Sheriff suggests that about 14,000 and 15,000 slaves were imported in Zanzibar in the 1850s and about 20,000 in the 1860s, of which 5,000 were re-exported to the coastal towns of Mombasa, Malindi, Lamu and in southern Somalia.¹⁰¹ Furthermore according to Sheriff, the Custom House figures for the 1860s illustrate that 10,000 slaves were retained in Zanzibar and Pemba annually.¹⁰²

Although it is very likely that epidemics caused a decrease in population in nineteenth century Zanzibar Town, we do not have statistics of birth and survival rates. Usually, high population density, as E. A. Wrigley explains, leads to increased exposure to disease carriers, while low density usually leads to a relative freedom from infection.¹⁰³ Between the 1850s and 1870s, thousands of people died in urban Zanzibar because of epidemics of dengue fever, smallpox and cholera. Dengue fever which occurred in 1850 was reported to have killed hundreds of children. We do not have an exact figure on the number of deaths, but the *Zanzibar Gazette* reports that the disease led to high mortality. According to Burton the

¹⁰⁰ In 1857, Richard Burton estimated the people in Zanzibar Town to be between 25,000 and 45,000. See Richard Burton, *Zanzibar; City, Island, and Coast* (London: Tinsley Brothers, 18, Catherine St., Strand, Vol. 1, 1872), pp. 82-3, 103; Christopher Rigby estimated the population in 1860 as 60,000 people. See: Mrs. Charles B. Russell, *General Rigby, Zanzibar and the Slave Trade with Journals, Dispatches, etc.*, p. 115; John Kirk in 1869 showed that the urban people were 70,000 and James Christie mentions that the population of Zanzibar Town in 1876 as between 80,000 and 100,000; See: Christie, *Cholera Epidemics in East Africa*, pp. 272-273. More information on the estimated number of the population in urban Zanzibar, See: Roelf Harkema, *The Town of Zanzibar in the later Half of the Nineteenth Century* (PhD dissertation, University of Groningen, 1967), p. 27.

¹⁰¹ Sheriff, *Slaves, Spices and Ivory in Zanzibar*, pp. 60 and 71.

¹⁰² Sheriff, *Slaves, Spices and Ivory in Zanzibar*, pp. 60 and 73.

¹⁰³ E. A. Wrigley, 'No Death Without Birth': The Implications of English Mortality in the Early Modern Period, in Roy Porter and Andrew Wear (eds.) *Problems and Methods in the History of Medicine* (New York: Croom Helm, 1987), p. 139.

number of deaths due to smallpox in 1857 and 1858 was 12,000. He estimates the population of the town in 1857 to be 25,000- 45,000.¹⁰⁴ It is not clear whether Burton's figure was the town's average number of permanent dwellers, to which number we must add the annually imported slaves and seasonal visitors, or not. Again in the 1858-9 cholera epidemic, the disease killed 7,000 people in the city of Zanzibar and its suburbs and another 13,000 in the rural areas.¹⁰⁵ As cholera usually arrived with the people coming from the Persian Gulf areas, this suggests that mortality numbers included the town people and seasonal visitors. Burton also demonstrates that in Kilwa Kivinje in south-east Tanganyika, cholera killed half of the inhabitants.¹⁰⁶

Again, during the 1860s and 1870s, smallpox, cholera and dengue fever epidemics once more led to the deaths of thousands of people in the town. According to Christie, the cholera epidemic of 1869 alone caused the deaths of 12,000-15,000 people in Zanzibar Town and the suburbs. Throughout the island, Christie estimated, the number was probably 25,000 to 30,000.¹⁰⁷ In order to prevent greater mortality, the British forbade the transportation of slaves from the mainland to Zanzibar during the North -East monsoon. They lifted this ban from May 1869, when about 20,000 slaves entered the Zanzibar market. This fuelled the cholera epidemic, which began to bite during that time. Cholera was then prevalent in Kilwa, the main supplier of slaves to Zanzibar.¹⁰⁸ John Kirk mentions that people died in their hundreds when smallpox hit the town in 1868. Also, dengue fever, which followed the cholera epidemic, killed hundreds of people. In general, thousands of people died between 1869 and 1870 due to cholera, smallpox and dengue fever epidemics.

¹⁰⁴ Burton, *Zanzibar: City, Island and Coast*, vol., I, p. 195.

¹⁰⁵ Mrs. Charles E. B. Russell (ed.), General Rigby, *Zanzibar and the Slave Trade*, p. 115.

¹⁰⁶ Burton, *Zanzibar: City, Island and Coast*, vol., II, p. 342.

¹⁰⁷ Christie, *Cholera Epidemics in East Africa*, p. 419.

¹⁰⁸ Christie, *Cholera Epidemics in East Africa*, pp. 397, 414 and 415.

Conclusion: Zanzibar Town in the mid-1800s, A Repository of Disease and Death

The history of disease in nineteenth century urban Zanzibar is influenced by the development of capitalism. The volume of the slave trade expanded when clove plantations were established in Zanzibar. In addition, demand for ivory, cowries, gum copal and orchilla weeds in European and American markets from the early-1800s expanded. Zanzibar Town evolved as an important commercial town. The expansion of the town to accommodate foreign residents led to the introduction of new pathogens. Cholera and smallpox epidemics erupted several times. Trade, migration and urbanization had fuelled these epidemics. Zanzibar Town, a major entrepôt, became a centre for the dissemination of diseases. Smallpox, which was indigenous to East Africa, erupted repeatedly in epidemic forms in Zanzibar throughout the nineteenth century.

Endemic diseases such as yaws, elephantiasis and malaria increasingly became a problem in nineteenth century urban Zanzibar due to the urbanization process. The extension of the town led to ecological changes: malaria- and elephantiasis-carrying mosquitoes were disturbed by the expansion of the town, and the large number of slaves, wretchedly housed in the town, had led to a serious expansion of diseases. Malnutrition and malaria among the slave population led to anaemia. This was also the period when diseases such as yaws and elephantiasis were noticed by foreigners who visited the town. Another disease that erupted in large scale at that time was dysentery, which was linked with water pollution in urban Zanzibar.

CHAPTER TWO: THE ARRIVAL AND CONSOLIDATION OF WESTERN MEDICINE IN URBAN ZANZIBAR, 1830-1889

The Arrival of Western Medicine in Urban Zanzibar

From the early decades of the nineteenth century, Indian and European apothecaries came to Zanzibar and introduced medical practices. From the 1860s, European missionaries established dispensaries and hospitals. Cartwright explains that at the beginning of the nineteenth century in Europe, though medical men had a detailed knowledge of anatomy, the doctor's main function was the alleviation of symptoms. They cured constipation, relieved pain and steadied the pulse. The pharmacopoeia used was a mixture of ancient and modern medicines such as castor oil and opium.¹

By the late-1880s, biomedicine or scientific, allopathic, orthodox or 'western medicine' meant the application of the principles of the natural sciences, especially biology and physiology, to clinical medicine developed in Western Europe with the discovery of the bacteria which caused diseases. Initially, the progress was slow. Medical institutions and individual practitioners were occasionally reluctant to embrace new ideas but at other times, they grasped quickly at the new treatments. Zanzibar Town was anyway a site of competing medical traditions. European, Galenic-Islamic, Hindu and African medicines were employed to treat a range of diseases. This chapter looks at the arrival, introduction and consolidation of Western medicine in urban Zanzibar from the early-1830s up to the late-1880s and examines the agents who brought this medicine. More importantly, it considers the responses of the urban population.

I shall argue that some aspects of medical practices such as diagnosis procedures were accepted by a handful of citizens, who included the Omani Arab and Indian merchant classes and the former African slaves who were brought to the mission stations after emancipation and had no option other than accepting the treatment available. The majority

¹ Frederick Cartwright, *A Social History of Medicine* (London and New York: Longman, 1977), pp. 134-135.

of Muslims and Hindus who were living in the town avoided the medical enterprises launched by Europeans.

Captain Thomas Smee of the East India Company visited Zanzibar in 1811 and noted that smallpox was widespread in the town. He offered vaccination but the town people resisted it.² Rather, in urban Zanzibar, the people used variolation and the application of turmeric mixture or curcuma, locally known as *djiso*, which was applied in the body to cure smallpox. Also, smallpox victims were smeared with coconut milk. Salme reports that in the Royal harem, “the body of the sick person is coated entirely with an ointment of *djiso*, (curcuma) and thus [the patient] is placed in the sun. Or the pocks are smeared with coconut milk, which in any case is preferable to *djiso*...These are the only reliefs which fall to the sick person’s lot; internal remedies are not used”.³

Vaccination against smallpox was an important stage in the development of Western medicine and in the world history. It started in the late eighteenth century in which Edward Jenner; a British surgeon (1749-1832) developed the smallpox vaccine from cowpox.⁴ The innovation made by Jenner marked the beginning of scientific medicine in treating smallpox. The vaccine lymph was distributed in many British colonies through the East India Company naval officers. Frederick Cartwright explains that the lymph reached Persian Gulf and India in 1802.⁵ In Egypt, according to Kuhnke La Verne, Muhammad Ali (1805-1848), the ruler, organized the vaccination of Egyptian children as early as 1819. He “ordered his deputy to introduce vaccination among children in different sectors of society, to set an example for people who were rejecting vaccination of their children as “contrary to their customs”.⁶

² Thomas Smee in Richard Burton, *Zanzibar: City, Island and Coast* (London: Tinsley, Vol. 2, App. III, 1872), pp. 502, 519; Mrs. Charles B. Russell, *General Rigby, Zanzibar and the Slave Trade with Journals, Dispatches, etc* (London: George Allen & Unwin Ltd, 1935), p. 76.

³ Emily Ruete, *Memoirs of An Arabian Princess from Zanzibar* (Princeton: Markus Wiener Publisher, 1996), p. 209.

⁴ John Hays, *The Burdens of Disease, Epidemics and Human Response in Western History* (Rutgers: Rutgers University Press), pp. 125-126.

⁵ Cartwright, *A Social History of Medicine*, p. 88.

From the 1830s, with the arrival of European, American and large numbers of Indian traders in Zanzibar, European and Indian apothecaries took up residence. Since 1800, apothecaries had outnumbered other kinds of medical practitioners in European cities. ‘Apothecary’ is the name for a medical practitioner who formulates and dispenses *materia medica* to physicians, surgeons and patients. According to Roy Porter, in Britain, an Apothecaries Act was firstly introduced in 1815. The Act specified that “in future, the normal qualification for practice as an apothecary should be possession of a licence issued by the Society of Apothecaries (the LSA), which involved an apprenticeship, taking stipulated courses, some hospital experience, and passing examinations”.⁷

These licensed apothecaries tried their luck by selling their medicines to European, Indian and Arab merchants. According to Richard Burton, in the late-1830s, Khalid Said, (d.1854), the Omani prince, became a regular customer of a European apothecary who operated in the town. Burton also recorded the presence of a Eurasian apothecary in 1847. In 1850, apothecary Lewis George became a medical practitioner employed in the British Consulate. Lewis was succeeded by a ‘Mr. Frost’ in 1852.⁸ The European apothecaries introduced smallpox vaccination to the urban people. Nevertheless, with the exception of the Arab and Indian elites who were familiar with Europeans through their commercial activities, many people avoided the vaccination. In 1854, Captain Hamerton reported to the Indian Government that many local people in urban area rejected the vaccination “except a few people who came about Europeans at Zanzibar and Muscat. ‘Mr. Frost’, the medical officer of the Consulate Agency, finds these people rather averse to it”.⁹

Burton shows that smallpox vaccination was again attempted in Zanzibar Town by the British-Indian government officials during the 1858 smallpox epidemic but it was again

⁶ Kuhnke La Verne, *Lives at Risk: Public Health in 19th Century Egypt* (Berkeley, Los Angeles and Oxford: University of California Press, 1990), p. 113.

⁷ Roy Porter, *Disease, Medicine and Society in England 1550- 1860 Studies in Economic and Social History* (Macmillan Education, London, 1987), p. 49.

⁸ Richard Burton, *Zanzibar: City, Island and Coast* (London: Tinsley Brothers, 18, Catherine St., Strand, vol., I, 1872), p. 152; R. H. Crofton, *The Old Consulate at Zanzibar* (London: Oxford University Press, 1935), p. 47.

⁹ Zanzibar National Archives (ZNA) AA 12/29, ‘Atkins Hamerton’, Correspondence of Atkins Hamerton, British Consul at Zanzibar 1841- 1857’, p. 134.

avoided by many people. Ignorance, as it was termed by the British authorities, was not the only problem encountered in treating the disease. Technical difficulties were also noted by Burton, who was in the town at that time. He explains that “the lymph sent from Aden and the Mauritius was so deteriorated by the journey that it probably never produced a single vesicle”.¹⁰ Smallpox vaccination in Zanzibar only became successful in the sense of accepted as normal in the mid-twentieth century.

Additionally, there was a Parsee apothecary from Bombay who operated a medical service in Zanzibar Town in 1855. Interestingly, he combined homeopathy and tin smithery work. There is not much information about the medical activities of apothecaries in general unfortunately, but it seems that they mainly treated the handful of Europeans. Other than Europeans, few wealthy Arabs and Indians used the services provided by these apothecaries. This may be because their treatments were in fact not very different from other medical techniques that were available in urban Zanzibar at that time. The apothecaries provided medicines such as opium and castor oil, which were also familiar to the people in Zanzibar. Burton noted the use of castor oil. He shows that “seeds of *Mbono* [castor] or *Palma Christi* spring up spontaneously in Zanzibar as in most tropical regions ... The seed is toasted in iron pots, pounded, and boiled to float the oil, its aloes is the popular cathartic, and it was used to rub upon the skin to soften the muscles”.¹¹

By the mid-1800s quinine was used for treating malaria but not on a large scale. Burton recorded that “Quinine was administered, but often in quantities not sufficient to induce the necessary chinchonization, and the inexperienced awaited too long [for] the period of remission, administering the drug only during the interval”.¹² Generally, between 1820 and 1850, the method of preparation known and the supplies of quinine were still restricted to a minority, who had enough money to buy the product. The price of this bark was still very high.¹³ As Philip Curtin observes, European soldiers started to use quinine as a prophylactic

¹⁰ Burton, *Zanzibar: City, Island and Coast*, vol., I, p. 195.

¹¹ Burton, *Zanzibar: City, Island and Coast*, vol., I, pp. 225 and 226.

¹² Burton, *Zanzibar: City, Island and Coast*, vol., I, p. 189.

against malaria in 1847. By that time, Alexander Bryson, the Chief Medical Officer of the British Navy in West African waters, ordered a shift from wine and cinchona bark to wine and quinine as a prophylactic against malaria.¹⁴ If, as is the case, up to 1890 when Zanzibar became a British Protectorate, there were few local people taking advantage of Western medical practices and medicines very few British officials in place, quinine hardly counts as a “tool of empire” up to that point.

Other medicines used in Zanzibar in the treatment of malaria and other fevers included “diaphoretics of nitrate of potash, camphor mixture, and the liquor acetic ammonia, which were used to reduce the temperature of the skin”,¹⁵ to relieve fever. Moreover, “the most distressing symptoms, of ejection of bile, were opposed by saline drinks, diluted prussic acid and mustard became the best remedies for treating fever”.¹⁶ Sometimes ammonia and wine and camphor and quinine were also used. Against diarrhoea or cholera, pills of opium, chalk and catechu were also frequently used. A compound of aloes, quinine and opium was considered to be the best antidote for malaria.¹⁷

In Europe as well as in Zanzibar, science had hardly eclipsed local therapies. According to Norman Howard-Jones, “at the time cholera reached Europe in 1830, medical treatment, with the exception of surgery, was limited to prescribing a mixture of pills, purging, administering emetics, and bleeding”. He further shows that “in Europe in 1831 bleeding was proposed by the Board of Health in London while reviewing medical treatment used in India”.¹⁸ In India, for centuries, camphor was used to treat a range of diseases. Also catechu was a medicine for the gums and mouth.¹⁹ David Arnold shows that until at least the 1850s,

¹³ Henry Hobhouse, *Seeds of Change: Six Plants that Transformed the World* (London: Pan, 2002), p. 18.

¹⁴ Philip Curtin, *Death by Migration, Europe's Encounter with the Tropical World in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995), p. 64.

¹⁵ Burton, *Zanzibar: City, Island and Coast*, Vol. I, p. 189.

¹⁶ Burton, *Zanzibar: City, Island and Coast*, Vol. I, p. 189.

¹⁷ Burton, *Zanzibar: City, Island and Coast*, Vol. I, p. 189.

¹⁸ Norman Howard-Jones, ‘Cholera Therapy in the Nineteenth Century’, *Journal of the History of Medicine and Allied Sciences*, XXVII, 4 (October 1972), pp. 373-395. The quotation is on p. 376.

Western doctors in India were influenced by Ayurvedic and Muslim medicines. They borrowed medicines from *Vaidyas* (Hindu practitioners) and *Hakims* (Muslim practitioners).²⁰

Consulate Physicians and Peoples' Illnesses

By the early-1860s, qualified British medical doctors were posted in Zanzibar. From this period in urban Zanzibar, the British, French and German Consulate doctors provided medicines to alleviate diseases and promote health, mainly to Arab and Hindu elites and continued to draw patients from the European consular corps, traders, sailors and naval officers. Physicians supplied medicines to those who expressed interest among the Africans, Arabs and Indians.

British physicians were sometimes required to act as a political agent. In the British dominions of Constantinople and Tehran, the Embassy physician was a diplomatic officer, paid out of the diplomatic vote. The circumstances in Zanzibar were similar to those of Tokyo, where the medical officer took precedence after the Vice Consul and was paid out of the Consular vote.²¹ In nineteenth century Zanzibar, European doctors sometimes attained political posts. It is not clear whether the lack of funds for colonial administration moved imperial authorities in India and London to allow medical doctors to hold political positions. That they at times did wield such power is seen in Zanzibar, where a Dr. A.C. Seward became the Agency Surgeon when, from 1862, Robert Lambert Playfair was the Political Agent and Consul. When Playfair's health broke down in 1865 and he left Zanzibar, Dr. Seward became an Acting Consul.²² The Consulate physicians in Zanzibar were housed in

¹⁹ K. Nadkari (ed.), *Indian Plants and Drugs with their Medical Properties and Uses* (Delhi: Asiatic Publishing House, 1998), pp. 6 and 74.

²⁰ David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth Century in India* (California: California University Press, 1993), pp. 180-181.

²¹ ZNA AC 1/22, 'Letter from Foreign Office, London to Arthur Hardinge, British Consul, Zanzibar, 1895', Inward Letters from Foreign Office to Zanzibar 1895 April – December.

²² ZNA CA 4/1/6, Correspondence of Lt. Colonel R. L. Playfair, Consul at Zanzibar, 1863- 1865.

the building near the British Consulate and the building was popularly known as the “Surgeon’s House”.²³

Of the new, better qualified British medical doctor-diplomats stationed in Zanzibar, the most important was John Kirk, who arrived in 1866 and became a Consulate physician and later, in 1870, a Consul.²⁴ The other prominent medical person in the history of the nineteenth century British medical doctors in Zanzibar Town was Dr. James Christie, who came in the mid-1860s and whose invaluable record of medical activities has already been referred to.²⁵

The British in Zanzibar had reminded his superiors in Bombay that “the assistant surgeon to Zanzibar was appointed to aid scientific research in East Africa and solicits permission to draw from the Medical Stores certain instruments and supplies of alcohol and drugs, which can not be procured in Zanzibar”.²⁶ The Consulate Surgeons were also tasked with containing epidemics which occurred in the town. During the 1868-1869 cholera epidemic, it will be recalled, the British restricted the transportation of slaves from the mainland to Zanzibar, partly to prevent more infections.²⁷ Generally, however, the Agency Surgeon was in charge of the health of British officers²⁸ for as Michael Worboys has argued, “medicine until the end of nineteenth century concentrated upon protecting and maintaining of health of Europeans”.²⁹

²³ ZNA AA 1/48, ‘Surgeon Quarters’, Outward Letters, Foreign Office 1883 January – October; ZNA AA 1/52, ‘Letters from British Consulate Zanzibar’, 31 July 1887, Outward Letters to Foreign Office, 1887; R. Crofton, *The Old Consulate at Zanzibar* (London: Oxford University Press, 1935), p. 47.

²⁴ Formerly, Kirk had worked at the Royal Infirmary in London before joining the British Army in Crimean War in 1855. See: R. Crofton, *Zanzibar Affairs 1914- 1933* (London: Francis Edwards Ltd., 1953), p. 129; Reginald Coupland, *The Exploitation of East Africa 1856-1890* (London: Faber & Faber Ltd., 1939), p. 38.

²⁵ ZNA CA 4/1/4, ‘The arrival of Dr. James Christie, 27 November 1865’, UMCA Diary.

²⁶ ZNA CA 4/1/6, Correspondence of Lt. Colonel R. L. Playfair, Consul at Zanzibar, 1863- 1865.

²⁷ James Christie, *Cholera Epidemics in East Africa* (London: Macmillan, 1876), pp. 414-415.

²⁸ ZNA AA 1/61, ‘Health of the British officers in Zanzibar’, ‘Outward Letters from Zanzibar to London, 1888 June- September’.

The available records show that British medical services were also utilized by the Oman Royal elite, as well as by Europeans. In 1866, Kirk was requested to attend Khole, Sultan Barghash's sister, in the countryside. Khole had apparently tried 'native' doctors already. Kirk told the Royal family members that:

(t)o try native doctor and then to expect me to take on the case afterwards was absurd, but native prejudices among the women are very strong and so, after suffering at the hands [of local doctors] the application of a hot iron [hot iron rods were common in Arabia to rid patients of common cold] very freely, they wished me to see her.³⁰

What had persuaded Barghash to take an interest in consulting Western doctors, according to Kirk, was that "his residence in Bombay made him [to] appreciate European manners and customs".³¹ On the other hand, we know that Majid, another Royal family member and a Sultan (r.1856-1870) suffered chronic haemorrhage and epilepsy during Kirk's time, but never consulted Western doctors. His illness was kept secret since his death would have immediately revived old political tensions in Zanzibar.³²

During Kirk's time, among the interested groups who adopted aspects of Western medical practices in urban Zanzibar were some of the Hindu merchants. They used the medicine alongside purification rituals and prayers. Kirk wrote to his fiancée, Miss Cook, in London in 1866, that Hindus were his "charming patients". It seems that Muslims did not come to the Consulate for treatment,³³ whereas these Hindu merchants became daily visitors at the Christie dispensary. There is not much information about this dispensary, other than that

²⁹ Michael Worboys, 'The Spread of Western Medicine', in Irvine Loudon (ed.) *Western Medicine Illustrated History* (Oxford, New York: Oxford University Press, 1997), pp. 249-63. The phrase appears on p. 253.

³⁰ As quoted by Reginald Coupland, *The Exploitation of East Africa, 1856-1890: The Slave Trade and the Scramble*, (Evanston, Illinois: Northwestern University Press, 1967), p. 50.

³¹ Coupland, *The Exploitation of East Africa, 1856-1890*, p. 52. In 1859 a dispute broke out between the brothers Majid, the first Sultan of Zanzibar, and Barghash. However, with the help of an English gunboat the insurrection of Barghash was soon brought to an end, and Barghash was sent into exile in Bombay for two years.

³² Coupland, *The Exploitation of East Africa, 1856-1890*, pp. 52-53.

³³ Coupland, *The Exploitation of East Africa, 1856*, p. 50; Kirk's information was obtained by Coupland from the documents that were under the possession of the Kirk[s] family in Britain.

Christie tolerated Hindus who brought their bottles of water to the dispensary for mixing medicines. Christie comments that “when it became necessary to administer medicine in solution, the Banyans invariably brought water in a clear, glass bottle”.³⁴ Indeed tolerance was a necessary part of the British medical officers’ techniques in Zanzibar as it had been in India, in order to reduce opposition to Western practice.³⁵

By the late-1860s, Arab masters were sending their slaves to Kirk and Christie, especially for surgical cases. Many slaves suffered from what were described as chronic ulcers due to hardships of their travel from interior to the coast. Increasingly, and especially during the 1869-70 cholera epidemic, Arab slave-masters were requested by European physicians to send their African slaves for routine medical check-ups. In 1870, Christie reports that “as I was not usually asked to attend ‘Negroes’ during illness, exception surgical cases, I made efforts to see cases of the disease by arranging with the Arabs to send for me when any of their slaves were taken ill”.³⁶ This implies that by the late-1860s, Western medical practices were beginning to be made available to the urban slave population.

Also, British physicians treated ex-slaves who were under the care of the Universities’ Mission to Central Africa (UMCA), a British missionary community in the town. According to Norman Bennett, in the 1860s, John Robb formerly of the Indian Army Medical Services, a physician of the British Consulate in Zanzibar had a good reputation because of his free treatment of the patients with attachments to the UMCA mission station.³⁷

In addition, during the 1869-70 cholera epidemic in Zanzibar, local Africans who were living in the town were employed by the British Consulate to attend the victims of the epidemic. The British officials in Zanzibar designated a small hospital on the shore for treating European and American sailors. Christie points out that “a building, the property of the Indian Government, [in Zanzibar] which was originally designed for a prison and hospital,

³⁴ Christie, *Cholera Epidemics in East Africa*, p. 349.

³⁵ Arnold, *Colonizing the Body*, p 185.

³⁶ Christie, *Cholera Epidemics in East Africa*, p. 350.

³⁷ Norman Bennett (ed.), ‘From Zanzibar to Ujiji, the Journal of Arthur Dodgshun, 1877-1879’ (African Studies Center, Boston University, 1969), p. 46.

was set apart (on shore) for the use of the shipping, as a hospital. Natives were used to attend the patients”.³⁸ There is no further extant information about this hospital. It is likely that it was closed after the epidemic.

Europeans encouraged hygienic behaviour among their Comorian, Goan and African servants by giving them carbolic soap to wash their bodies, hands and clothes.³⁹ Carbolic soap was also used in Britain in the 1860s following the discovery of Joseph Lister who, in 1867, suggested the use of carbolic acid dressings for the treatment of compound fractures. Also carbolic acid was used to sterilize surgical instruments. Many British surgeons found it difficult to apply the anti-sepsis techniques proposed by Lister except for surgeons who studied under him at Glasgow University. In 1867, Lister published an article in *The Lancet*: ‘Antiseptic Principle of the Practice of Surgery’.⁴⁰ James Christie, who was a Glasgow graduate, may have influenced the early use of carbolic soap in Zanzibar.

There is evidence that some of the public health facilities were initiated by the Omani rulers themselves. In 1856, Said Sultan built a stone tank at *Baytil-Sabil* (“Palace near the Seashore”), one of his town palaces, for water to be used by the sailors coming to the town. The tank, however, was soon out of repair and it fell into disuse. He also built a system of gutters in Shangani area to clear rain water from the unpaved streets. Again, the gutter system quickly fell into disrepair.⁴¹ It is not clear why the Sultan did not maintain the water tank and gutters.

In Muslim countries, the introduction and application of Islamic hygienic rules were normally the responsibility of the rulers. This obligation calls for further comparative study, but the literature suggests that in many Muslim societies, rulers were obliged to supply water for the use of the public. For many centuries, Muslim rulers in Tunisia were responsible to

³⁸ Christie, *Cholera Epidemics in East Africa*, p. 408.

³⁹ Christie, *Cholera Epidemics in East Africa*, p. 355.

⁴⁰ Michael Worboys, *Spreading Germs, Diseases Theories and Medical Practice in Britain, 1865-1900* (Cambridge: Cambridge University Press, 2000), p. 83.

⁴¹ Burton, *Zanzibar: City, Island and Coast*, vol., I, p. 98.

build aqueducts for supplying water in the towns. For instance, according to Nancy Gallagher in 1770, Ali Bey (1759-1882) renovated a *Wakf* or *Waqf* (meaning, created as a legacy from a deceased person) water system that had fallen into disrepair. But since the pipelines were not regularly maintained, contamination of water system was inevitable. The population in towns therefore depended on well water.⁴² By 1856, Majid, though he did not subscribe to Western medical practices, appeared to have been convinced, whether as an extension of Islamic precepts or simply to buttress his legitimacy in the face of public ill-health, to embark on broader public health measures. On the advice of Captain Rigby, he had the streets of Zanzibar Town paved with coral and *chunam*, a combination of small stone and lime, in order to clear rain water. Burton, who was in the town, praised the work, maintaining that in Africa, the *chunam* work was particular to Zanzibar Town in that period.⁴³

In 1860, Majid imposed a tax to be imposed on the coconut and clove trade to fund the construction of a bridge which connected Stone Town and Ng'ambo. The bridge became essential for the health of the people as the Creek, which they were otherwise obliged to wade across, was reported to be a source of dysentery and malaria. From this tax Majid bought three iron bridges from England.⁴⁴ His edict ruled that "all cloves that may be grown in Zanzibar shall pay a [lase] of 5 cent *ad valorem* to be paid by the owner of the cloves to the Director of the Custom House...We have also ordained that each productive coconut tree shall be liable to a tax of 2 *pice* per annum".⁴⁵

In 1863, Playfair required Indian traders (who owned nine-tenths of the town's shops) to clean the streets in front of their shops.⁴⁶ A gang of slaves was employed by the British authority to sweep the streets from the early-1860s. The streets, however, became dirty again

⁴² Nancy Elizabeth Gallagher, *Medicine and Power in Tunisia, 1780- 1900* (Cambridge: Cambridge University Press, 1983), p. 16.

⁴³ Burton, *Zanzibar: City, Island and Coast*, vol., I, p. 82.

⁴⁴ ZNA AA 3/18, Letters of R. Playfair, Acting Political Agent, Zanzibar to Hon. H. L. Anderson, Chief Secretary to Government, Bombay, 11 August, 1863, p. 171.

⁴⁵ ZNA AA 3/18, Letters of R. Playfair to Anderson, 11 August, 1863, p. 178.

⁴⁶ ZNA AA 3/18, Letters of R. Playfair to Anderson, 11 August, 1863, p. 170.

after a short period since there was no regular supervision of street-cleaning or collection of garbage of the town. According to Christie, normally “the streets undergo a superficial sweeping”.⁴⁷ In general, however, efforts were made mainly to ensure that Zanzibar Town was safe for the European administrators, traders and local people to live in.

By the 1870s, the African local community in urban Zanzibar had their own preventive measures. A town cleansing ritual was done annually, part of an older tradition to prevent the town against calamities such as droughts and plagues. Preventative medicine was organized by the town elders’ committee, *wazee wa mji*, which was made up of the Swahili-Bantu fisherman folk. Cattle were taken in a procession around the town and finally slaughtered for sacrifice so as to defend the town against evil spirits and misfortune. During Omani Arab rule, the Sultan’s palace became the destination where the ritual was concluded.⁴⁸

Popular cleansing rituals of unknown antiquity, but very possibly dating from the nineteenth century were described by Sir John Gray, a British officer who had an opportunity of learning what happened on these occasions in Zanzibar. In 1955, Gray wrote an article, ‘*Nairuzi or Siku ya Mwaka*’. Gray reports that in Zanzibar Town urban Muslims participated in several activities on that day. The most important event was bathing in the sea. Women and children proceeded to the beach and then washed their bodies to symbolize good health.⁴⁹ Similar preventive measures were and still are common in towns such as Tumbatu, Makunduchi, Tumbe and Kojani in Unguja and Pemba islands.

By 1885, although sanitation in the town had slightly improved, many streets were still dirty. Salme, who had visited Zanzibar in 1885 after nine years of living in Germany, was frustrated by the sanitary conditions. She found that the streets accumulated heaps of

⁴⁷ Christie, *Cholera Epidemics in East Africa*, p. 272.

⁴⁸ Abdurhaman Juma, ‘The Early History of Zanzibar Town’, Paper Presented at the Stone Town Conference 17- 19 July (1990), p. 2.

⁴⁹ John Gray, ‘Nairuzi or New Year Celebration’, *Tanganyika Notes and Record*, 41(1955), pp. 1-22, p. 16.

rubbish. She thought that it would be a good idea was for the Sultan's government, in collaboration with the British authorities, to introduce a Sanitary Board, which would be responsible for sanitation works.⁵⁰ The Sanitary Board, under two British Naval medical officers and the Agency Surgeon was established in 1889⁵¹ but did not last long as there were few British officers in Zanzibar.

Until the late-1880s, it was only the Omani elite, Hindu merchants and a few former slaves who availed themselves of Western medicine, provided by the Consulate physicians. In 1896, after the establishment of the first Government Hospital, further attempts were made by the British in Zanzibar to extend the facilities. Pending that moment, efforts to reach the urban population were led by missionaries from the early-1880s.

Cure and Christianity: The French Catholics at Ng'ambo

Scholars of medical history in colonial Africa demonstrate that there was a link between the arrival of missionaries in Africa and the extension of Western medical facilities. Megan Vaughan demonstrates that missionaries introduced Christian healing for curing 'souls' and diseases prevalent in Africa and that African patients became potential for conversion.⁵² Jean and John Comaroff, in their study of religion in the making of modern South Africa, express the idea that, "healing remained, in large measures, a tactile process, one in which the physical separations of the civilizing mission were most often ruptured – and where feelings of recognition, even compassion, flowed across the cleavages of a racially divided society".⁵³

⁵⁰ Ruete, *Memoirs of An Arabian Princess from Zanzibar*, p. 287.

⁵¹ ZNA AA 1/65, 'From Foreign Office to Sir Euan Smith, British Consul Zanzibar, 14 March 1889', Inward Letters from Foreign Office to Zanzibar, 1889 January- April.

⁵² Megan Vaughan, *Curing their Ills: Colonial Power and African Illness* (London: Polity Press, 1991). See especially: Chapter Three, 'The Great Dispensary in the Sky', pp. 55-76 and Chapter Four, 'Without the Camp: Institutions and Identities in the Colonial History of Leprosy', pp. 77-99.

⁵³ Jean Comaroff and John Comaroff, *Of Revelation and Revolution: The Dialectics of Modernity on a South African Frontier* (Chicago: Chicago University Press, vol. II, 1997), pp. 323-324.

As this thesis shows, there is a lot of primary data which could be used to write a missionary medical history in nineteenth century Zanzibar. Rhodes House Library at Oxford, for instance, holds manuscripts, letters and reports written by Bishops Tozer and Steere, the first two Anglican bishops who run the Universities' Mission to Central Africa (UMCA), during mid-nineteenth century. There are also records of bishops Smythies, Richardson and Hine who followed Tozer and Steere. Besides, the UMCA launched two journals: *Central Africa* and *The Children's Tidings*, later *African Tidings*, which were founded in 1883 and 1885 respectively. *Central Africa* highlights issues such as the missionary perception of the African culture and the running of the hospitals. French missionaries established three hospitals in Zanzibar during the nineteenth century and I have gained information on one of these hospitals through *Notre-Dame des Anges où Un Hôpital à Zanzibar* (Our Ladies of Angels, or a Hospital in Zanzibar), a book written in 1884 by Bishop Raoul de Courmont of the Zanzibar Diocese. I had no chance however of getting information from French journals of the time and other related German sources. I have to rely mostly on the information from other secondary sources.

From 1860, the French Catholic, British Protestant and German Lutheran churches established medical institutions in Zanzibar Town. From 1881, apart from the African converts and the Europeans who engaged in commercial activities in the town, the missionary medical services were directed at the Muslim and Hindu population. Each missionary society employed a different strategy to reach the urban people. The French targeted male and female Muslims at Ng'ambo. These were manumitted slaves, formerly owned by Arabs. Others were free-born Muslims of the islands and immigrants from India, Oman, Yemen, Comoro and Madagascar. The British focused their attentions on the Muslim and Hindu women who resided in the Stone Town. The Germans were mostly preached to their emancipated African slaves. They extended their medical services to anyone who needed them but focused on treating local and German soldiers during the conquest of Tanganyika.

The main reasons for the missionaries' decisions to approach urban Muslims and Hindus were the abolition of the Slave Trade which occurred in 1873. Since the inception of

missionary activities in Zanzibar in the 1860s, French and British missionaries had concerned themselves with Africans, who were emancipated by British squadrons. Other slaves were ransomed by the missionaries from the Slave Market which was located at Mkunazini in Stone Town. Numerous numbers of slaves went to live in the mission stations since they had no one to take care after them. They were the abandoned slaves who were ill and were incapable to do any work. In 1873 the Mkunazini Slave Market was finally closed.

After 1873, though the trade continued to operate illegally few slaves were sent to the mission stations. For example, between 1873 and 1877, 474 emancipated slaves who were liberated by the British squadrons were distributed in the mission centres. 111 were sent to the French Mission at Bagamoyo, 333 to the Church Missionary Society (CMS) at Mombasa and 30 to the UMCA center. Between December 1877 and March 1885, 86 liberated slaves were sent to the French Mission, and 433 to the UMCA station in Zanzibar Town. The British Anti-slavery Commission in Zanzibar sent another 190 former slaves to the CMS in Mombasa; 514 were left in Zanzibar Town, and were provided with subsistence by the Anti-slavery Commission. In 1888, 104 emancipated slaves were left in the town. UMCA received two former slaves, 43 were deposited at the CMS mission station and ten were sent to the French Mission Centre.⁵⁴

Missionary medical services in urban Zanzibar started in 1860. In December 1860, the French Catholics under Father Armand Fava, Vicar-General of Réunion (1826-1899), founded the Catholic mission station at Zanzibar Town.⁵⁵ Immediately after arriving in

⁵⁴ ZNA AA 1/20, 'Slave Trade in East Africa', Letters to Foreign Office 19 September, 1877, Outward Letters from Zanzibar to London, 1877; ZNA AA 1/24, 'Slave Trade in East Africa', Outward Letters, 1878; ZNA AA 1/34, 'Slave Trade in East Africa', 1885 Outward Letters; ZNA AA 1/63, 'Slave Trade in East Africa', Outward Letters 1888 December – February 1889; ZNA AA 1/64, 'Slave Trade in East Africa', Outward Letters, 1889 April- August 1889.

⁵⁵ In 1862, on the departure of Fava, the Mission was confided to the care of the Congregation of the Holy Ghost or the Spiritans from Reunion. The mission was belonging to the Society 'Da St. Esprit et da St. Coeur de Marie' of Paris. See: ZNA BA 104/7, 'The French Missionaries in Zanzibar', *Zanzibar Gazette*, 6 January 1897, p. 5; ZNA AA 1/11, 1872 December – 1873 Inward letters from Foreign Office, London to Zanzibar. In this file there are letters which have information on the establishment of the 'French mission' station in Zanzibar Town; See also: John Kieran, 'The Holy Ghost Fathers in East Africa, 1863 to 1914' (PhD dissertation, University of London, 1966).

Zanzibar, the French missionaries decided to establish medical facilities for Catholic converts and for those who were in need. They wanted to fulfill the promise that they had made to Majid Said. Majid, while allowing the establishment of the French mission, had requested the introduction of schools and also the opening of a hospital for the people of Zanzibar. This shows that the introduction of Western medical facilities was sometimes a result of the request of local rulers themselves. Majid instructed the Catholics not to preach openly in the town.⁵⁶ The French accepted this and restricted the teaching of Christianity to their African converts. During the nineteenth century, in some areas in colonial Africa, local rulers became popularizers, furthering the use of Western medical practices for their people. There is a precedent in Egypt: in 1825, Mehmet Ali Pasha, the ruler of Egypt, requested a French doctor, Dr. Antoine-Barthélemy Clot, to organize the country's medical system. According to Khalid Fahmy, Dr. Clot founded a medical school in 1827, attached to a hospital in Abu Za'abal on the northern outskirts of Cairo. The hospital was named Qasr al-'Aini and aimed at treating Egyptian soldiers⁵⁷ who were important for the consolidation of Egyptian rulership and the defence against European invasion.

Following familiar patterns, French medical facilities in Zanzibar were used mainly by European officials, traders, sailors and African former slaves. Europeans "express[ed] thanks to the French Mission, for the care they received from the Sisters in the hospital".⁵⁸ The hospital for Africans was "soon the busiest part of the mission, receiving between forty and fifty patients per day".⁵⁹ In the 1860s, the majority of these patients in the French Hospitals were ex-slaves under the care of the Mission. According to Paul Kollman, the Mission created a colony of its own, hiding the mission children away from Muslims, who, they feared, might proselytize or enslave the children.⁶⁰

⁵⁶ Kieran, 'The Holy Ghost Fathers in East Africa, 1863 to 1914', p. 26ff.

⁵⁷ Khalid Fahmy, 'Women, Medicine, and Power in Nineteenth-Century Egypt', in Lila Abu-Lughod (ed.) *Remaking Women Feminism and Modernity in the Middle East* (Princeton, New Jersey: Princeton University Press, 1998), p. 35.

⁵⁸ Paul Kollman, *The Evangelization of Slaves and Catholic Origins in Eastern Africa* (New York: Orbis Books, Maryknoll, 2005), p. 88.

⁵⁹ Kollman, *The Evangelization of Slaves*, p. 88.

In 1868 most of the Mission activities were transferred to Bagamoyo, on the Tanganyika coast. Thereafter, Bagamoyo became the priority as the mission intended to expand inland in Tanganyika.⁶¹ Epidemic diseases in urban Zanzibar had led to the deterioration of health and morale among these missionaries, many of whom had died of malaria. The smallpox and cholera epidemics that occurred in the town in the 1860s also killed many children in the mission.⁶² Many of the African converts were sent to the mainland station, only a few remaining in Zanzibar.

From the 1880s, the Holy Ghost or the Spiritans decided to target male and female Africans, Arabs and Indians, Comorians and Madagascans who were living in Ng'ambo. In 1884, the French established a new hospital at Gulioni, Ng'ambo in the centre of the African quarters. It was named *Notre Dame des Anges*, (Our Lady of Angels). Behind this decision lay the following consideration: in 1884, the Apostolic Prefecture of Zanzibar was raised into an Apostolic Vicariate and Zanzibar became the equivalent of a diocese. Raoul de Courmont (1841-1925) became Bishop of Zanzibar. During the expansion period, it was felt that many new converts were needed.

By 1884, Bishop Courmont had brought with him from France a laywoman, Madame Chevalier, to run the hospital at Gulioni. She was assisted by Mademoiselle Duclos who was also a Frenchwoman. Bishop Courmont emphasised the importance of charitable works by explaining that “in a Muslim town, especially in the early stages of Evangelism and for works of religious propagation, a lady of charity is more appropriate than a member of a religious order, a teacher or a hospital worker”.⁶³ Charitable works were important to draw more new converts without posing an overt religious threat. Madame Chevalier had worked in many charitable centres in France before coming to Zanzibar. Courmont describes her thus:

⁶⁰ Kollman, *The Evangelization of Slaves*, p. 53.

⁶¹ Kollman, *The Evangelization of Slaves*, pp. 143-144.

⁶² Kollman, *The Evangelization of Slaves*, p. 100.

⁶³ Mgr R. de Courmont, *Notre-Dame des Anges our Un Hôpital a Zanzibar* (Lyon: Imprimerie E. Paris, 1886), p. 29. I would like to thank Ninon Larché for translating this book: *Notre-Dame des Anges où Un Hôpital a Zanzibar*. The quotation is: “Voilà pourquoi il me semble que dans une ville musulmane, surtout au début d’une évangélisation et pour des œuvres de propagande, une dame de charité est plus à sa place qu’une religieuse enseignante ou hospitalière”.

Her entire life was motivated by an overwhelming need to devote herself, within the shadow of discretion and humility, to charitable works of the most lowly, disregarded and despised kind. Certainly, there was no lack of charitable work to be done in Paris, but most was in the limelight. And moreover, there were many other charity workers. They spoke of Zanzibar, of Gnambo, the Blacks who lived there and died as slaves, without ever being enlightened to the secret of a better world.⁶⁴

The hospital building at Gulioni was acquired by the Spiritans in 1884 on a seven-year lease. The building had been the property of Said Abd el- Houab, the brother of the Sultans Majid and Barghash and a friend of many Europeans in the town. This was where Livingstone had stayed temporarily on his way to Central Africa in 1866. It was then sold to Tharia Topan whose information I will supply later in this Chapter. Topan leased it to the Spiritans.⁶⁵ For a long time, the building “became a place where Europeans would come for a change of air, staying there for a few months. The healthy and relatively cool air, the colourfulness of the countryside which unfolded from one end to the other, seemed to relax them and rejuvenate their strength, which had a tendency to weaken elsewhere”.⁶⁶ The building became suitable for hospital purposes in 1884, as Courmont asserts, since “it offered a unique architecture, with quite spacious outbuildings, which could easily be converted into consulting rooms, a pharmacy, and wards for the sick”.⁶⁷

By the mid-1880s, the diaries and writings of missionaries were full of stories about the darkness of the souls of the Muslims. Medical works became more important in order to advance evangelization since Mission schools had failed to attract Muslim converts. By the

⁶⁴ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, p. 13, the quotation is: “Sa vie tout entière avait été travaillée par un immense besoin de se dévouer, dans l’ombre et l’humilité, aux oeuvres pauvres, petites et méprisées. Certes le champ était vaste à Paris; mais il était en trop grande lumière et d’ailleurs les ouvriers de Dieu n’y manquaient pas. On parla de Zanzibar, de Gnambo, des Noirs qui y vivaient et y mouraient esclaves, sans qu’une parole vînt leur livrer le secret d’un monde meilleur”.

⁶⁵ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, pp. 14-15.

⁶⁶ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, p. 16, “était devenue un lieu de changement d’air pour les Européens, qui y passaient quelques mois. L’air salubre et relativement frais qu’on y respire, la gaieté du paysage qui s’y déroule le long de la côte, reposaient et ranimaient les forces, promptes à se débilitier ailleurs”.

⁶⁷ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, p. 15. “Elle offrait un corps unique de bâtiment, avec des dépendances assez spacieuses, facilement convertissables en sale de consultation, pharmacie, dispensaire et chambres pour les malades”.

mid-1860s, Arab and Indian schools under the Holy Ghost Fathers had been closed due to low attendance. Therefore, the foundation of the *Notre Dames des Anges* Hospital became necessary. Courmont admitted that Islam was still a problem since it was the religion of the majority of urban population. He argues that:

(u)nder the scrutiny of the proponents of Islam, and an Arab authority that guarded the Islamic faith, open conversions of Muslim subjects could alienate those who were on the surface not unsympathetic to Christianity, making them religious adversaries ... it was therefore imperative that one proceeded with caution.⁶⁸

Also, Courmont showed that “it was necessary therefore, to win them over little by little. This proved easy. The first few sick whose wounds we dressed, and whom we treated with the utmost maternal kindness, soon brought along a flood of others”.⁶⁹ The claim that was made by Courmont was not true: the French had managed to convert very few Muslims.

By the late nineteenth century, the French missionaries were increasingly employing health education as a means of gaining access to the people in urban Zanzibar for the purpose of evangelization. Visiting the people and giving them advice on hygiene became important for such purposes. Madame Chevalier visited many people in Ng’ambo and taught them about the hygiene and she encouraged them to come to the Hospital. Courmont argues for the importance of these home visits by showing that:

Visiting the huts, giving medicines, advice on hygiene, while conferring on these poor, selfish and coarse people, the best blessings possible, again under the guise of medicine, and by bringing them into contact with generous, devoted souls, who would inspire confidence, gain their sympathies and affection, earn their respect, so that at the right time, they would be able to exercise a decisive influence over these wretched ill people.⁷⁰

⁶⁸ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, p. 11. “Sous les yeux des sectateurs de l’Islam et d’une autorité gardienne de ces croyances, un prosélytisme à la surface et changer en adversaries religieux,...Il importait donc de procéder avec prudence”.

⁶⁹ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, p. 16, “Il fallut donc les apprivoiser peu à peu. Ce fut aisé. Les premiers maladies, pansés et traités avec la plus maternelle charité, amenèrent bientôt une surabondante clientele”.

In this excerpt we see how Courmont has constructed the Ng'ambo people as unhealthy and diseased. As already noted, the idea that the people in Africa were diseased was common among European missionaries and travellers from the early nineteenth century.

After two and half years of operation, *Notre Dame des Anges* Hospital, was, however, closed. The French Catholics encountered many problems, which led to the closure of their hospital. The process of converting Muslims through medical services had failed, as only a few Muslims had sent their family members to the hospital and this normally occurred during epidemics of dysentery. The number of patients who had attended the hospital after one year of its services was 2,196.⁷¹ They formed about two percent of the Ng'ambo population which was estimated by Courmont at 40,000 people in 1884.⁷²

Persuading the urban Muslim population to convert to Christianity continued to be very difficult. Many of the patients were removed from the hospital by their relatives in their last hours. As Ranger and others have argued, in many pre-colonial African societies, “decisions about the treatment of disease involved collective discussion and determination ... when that individual fell seriously ill, it was his kinsfolk, his *jamaa*, who determined how he should be treated”.⁷³ This is not only the case in pre-colonial Africa: John Janzen points out that in the present day, in many families decisions about choices and courses of therapy in a time of illness are usually made by family or close kin.⁷⁴

⁷⁰ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, p.16. “il importait de faire circuler de case en case, des donneuses de rémedes et de conseils hygiéniques, sauf pour celles-ci à conférer de meilleurs dons encore, dérobés sous l'étiquette d'un médicament; de mettre ce pauvre peuple égoïste et grossier en contact avec des âmes généreuses, dévouées, inspirant confiance, gagnant d'emblée les sympathies, s'emparant de toutes les affections, commandant tous les respects, pour exercer á une heure voulue une influence decisive sur d'infortunés malades”.

⁷¹ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, p. 19.

⁷² Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, p. 10.

⁷³ Terence Ranger, ‘The Ambiguities of Medical Mission in Southeastern Tanzania, 1900-1945’, in Steven Feierman and John Janzen (eds.) *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992), p. 270.

⁷⁴ John Janzen, *The Quest for Therapy in Lower Zaire* (Berkeley: University of California Press, 1978), p. 25.

The French Catholics sometimes succeeded in converting those few who were on their deathbeds and who had no relatives to care after them. Madame Chevalier recounted that:

The first sick person, Abdalla, an Arab from Masdate, [Muscat, Oman] arrived at the hospital on the 16th of August [1885]. He was suffering from dysentery. On one of my rounds to the huts, I recognized him as one of those who had come to the hospital for treatment, while he was still on his feet. I expressed the desire to have him taken to the hospital so that he could receive better treatment ... Discretely and with caution, I made some preliminary overtures. He welcomed my words, and was brought to tears by the care that I administer to him. I spoke to him of *dawa*, that is to say, the *healing* of God, of baptism, which healed the soul, and gave everlasting life, even after death on the 24th of August, at nine o'clock in the evening, seeing that his condition was deteriorating, I baptized him.⁷⁵

As Zanzibar was the centre for many missionaries who arrived in East Africa, the Swahili word *dawa*, derived from the Arabic, and meaning medicine and treatment, was adopted by these missionaries and it became one of their healing terminologies. Later, with the spread of medical missionary work in these regions, the word was extensively used on the mainland of East and Central Africa. This was noted by Megan Vaughan who shows that the word was used in the same sense in the UMCA missionaries' centres in Malawi.⁷⁶

Most Muslims who attended the *Notre Dames des Anges* Hospital did accept the Western medical practices but were not ready for conversion. This frustrated the missionaries, who decided to close the Gulioni French hospital. According to Madame Chevalier:

The devil dealt terrible attacks on these poor people, when he sensed that there was a conversion. Once, sadly, I witnessed one such attack, the results of which were awful. He was a Muslim. I spoke to him, and began to instruct

⁷⁵ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, p. 16. "Le premier malade, Abdalla, Arabe de Masdate, entra à l'hospice le 16 août. Il était atteint de la dysenterie. Dans une de mes tournées dans les cases, je le reconnus pour un de ceux qui venait recevoir les rémedes, alors qu'il était encore sur pied. J'exprimai le désir qu'il fût porté à l'hôpital pou être mieux soigné; et ses parents, lui surtout, y consentirent. Le mal était ancien; le pauvre home épuisé; je n'avais donc aucun espoir de le guérir. Mais je pouvais le sauver. Discrètement, prudemment, je lui fis quelques ouvertures. Il accueillit mes paroles, touché jusqu'aux larmes des soins que je lui prodiguais. Je lui parlai du *dawa*, c'est-à-dire du *remède* du bon Dieu, du baptême, qui guérit l'âme et fait vivre meme après la mort. Tout cela le surprit, l'intéressa. Il consentit à se laisser instruire. Bientôt il fut prêt, et il ne s'agissait plus que de guetter l'instant propice pour le régénérer. Le 24 août, à neuf heures du soir, voyant que sa faiblesse croissait, je lui donnai le baptême."

⁷⁶ Megan Vaughan, *Curing their Ills: Colonial Power and African Illness* (London: Polity Press, 1991).

him with some initial success. He acquiesced to my gentle teachings, and showed himself to be willing. After sometime, I believed that I had won him over. However, I noticed that after having spoken to him and then leaving him alone for some time, he was much less disposed to my teachings when I resumed them again. This man believed that he would recover, and he saw himself back amongst his community, believing in a religion, if he converted, which was loathed by them. His heart was almost won over, but, the human element was stronger. One of the last things he said was a strong “*sitaki*”, which meant, “I don’t want” your religion. He died soon after.⁷⁷

Apart from that, the *Notre Dames des Anges* Hospital was closed due to the lack of funds to operate the services. By that time, the French had opened plantations at Bagamoyo on the mainland in order to feed the Christian community there. In Zanzibar, such opportunity was absent as Barghash Said, after his accession to the power in 1870, was hostile to them. During his reign, Barghash sought to purchase back the Mission properties and refused to allow the French to buy land for constructing a church.⁷⁸ Barghash was unsympathetic to Europeans, including missionaries at that time. Part of his dislike arose from the fact that the abolition of the slave trade, which they advocated, threatened the economy of Zanzibar. Many Omani Arab plantation owners lost faith in Barghash, because he failed effectively to oppose the abolition of slavery.

The Hospital had no qualified doctors, so the medical services became unsatisfactory. Bishop Courmont admits that “Our Lady of Angels was not a real hospital ... once we had a limited number of cases we could treat; the Health officials of Gulioni did not oblige us even to be certified as a hospital service”.⁷⁹ Another French hospital was constructed at Mtakuja

⁷⁷ Courmont, *Notre-Dame des Anges our Un Hopital a Zanzibar*, pp. 21-22. “Le démon livre de rudes assauts á ces pauvres malades, don’t il entrevoit la conversion. Une fois surtout, je pus assister, désolée, á l’une de ces lutes, dont l’issue fut terrible. C’était un musulman. Je lui parlai, commençai á l’instruire avec quelque success. Docile á ma voix, il se montrait assez souple et complaisant. Quelque temps, je crus le gagner. Pourtant, je remarquais qu’après lui avoir parlé, le laissant á lui-même, je le retrouvais moins bien disposé, quand je l’entreprenais de nouveau. Cet homme espérait guérir, et il se revoyait au milieu des siens, professant, s’il se convertissait, une religion qu’ils exérent. Son cœur semblait presequé gagné; mais le respect humain fut le plus fort. Une de ses dernières paroles fut un “sitaki” énergique, qui signifiait: “Je ne veux pas” de ta religion. Il mourut peu après”.

⁷⁸ Kieran, *The Holy Ghost Fathers in East Africa, 1863 to 1914*, p. 260.

in the Stone Town area in 1892. By this time, the Saint Joseph community, the other group of the French Catholics had opened a hospital for the Europeans only. The Sisters of the St. Joseph of Cluny, an order which was established in France in 1807 operated the services.

UMCA Missionaries and Women in Stone Town

Another scheme to reach the Hindus and Muslims through medical services was started by the UMCA missionaries in urban Zanzibar in the early 1880s.⁸⁰ The female UMCA missionaries targeted the Muslim and Hindu women of the Stone Town in order to instruct them on hygiene and hoping to teach them Christianity as well. They founded the 'Women Works' project to convert Muslim women and, overtly, to instruct them in hygienic practices for their families.

In 1860, the Liverpool Missionary Conference was already insisting on the provision of medical care to supplement preaching works,⁸¹ but the decision was only adopted slowly in Zanzibar. As Charles Good shows, by the 1870s many missionaries had started to recruit

⁷⁹ Courmont, *Notre-Dame des Anges: ou Un Hôpital à Zanzibar*, p. 18. [Ils]“n’ont pas droit d’hôpital à Notre- Dame des Anges. Ces éliminations une fois faites, l’office des hospitalières de Gulioni n’exige pas même le brevet d’officier de santé”.

⁸⁰ In 1858, Anglican members of the four Universities: Oxford, Cambridge, Dublin and Durham, formed a committee which came to be named the Universities' Mission to Central Africa, the aim of which was to attempt to stop slavery in Central Africa and to promote Christianity there. In 1861, Bishop Mackenzie, the first Bishop of the mission and a group of volunteers landed at Magomero in the Zambezi area, which became the first UMCA mission station in Africa. In 1863, Bishop William George Tozer, who was consecrated as Bishop of the Mission to Central Africa after the death of Mackenzie, abandoned Magomero, the original site of the Mission and shortly afterwards established a station at Shire in the Zambezi area before coming to Zanzibar in 1864. See Rhodes House Library, (RHL) Oxford, A4 1, 'The Cathedral Church of Christ, Zanzibar'; RHL UMCA Box List A4 (I) Diocese of Zanzibar 1864-1963, 'Memories of the Bishop of Oxford's address at a Conference of Members of Senior Committee of Central African Mission held at Pall Mall, Oxford, Tuesday 9th February, 1864'; RHL UMCA Box List 1865-1883, Bishop Steere (1863-82); A 1 (III) A. E. Steere, L.L.D (Missionary Bishop) *The University Mission to Central Africa, A Speech Delivered at Oxford* (London: Harrison & Sons, 1875); ZNA CB 1/1A, 1863-1865 Bishop Tozer's Journals and Letters, pp. 1 and 4; CB 1/5, 1863-1888, Central African Mission Diary: Includes The Arrival of Bishop Tozer and Bishop Steere in Zanzibar and D. Y Mills, *The Quest of the Mighty, A Short History of the Universities' Mission to Central Africa for Young People* (London: Westminster, 1920).

⁸¹ Rosemary Fitzgerald, "'Clinical Christianity': The Emergence of Medical Work as a Missionary Strategy in Colonial India, 1800-1914", in B. Pati and M. Harrison (eds.) *Health, Medicine and Empire: Perspectives on Colonial India* (Hyderabad: Orient Longman, 2001), pp. 88-136. The phrase is on p. 101.

nurses. By this time tropical diseases and their remedies remained poorly understood.⁸² In 1875, Miss May Allen, the first trained UMCA nurse, arrived in Zanzibar. She was the daughter of the then Archdeacon of Shropshire, England, and had trained as a nurse at King's College Hospital in the mid-1800s. She started medical missionary services at Shangani Mission House, at Stone Town.⁸³ Initially, Miss Allen screened off part of her dining room and stocked it with medicines and appliances that she could "rake together" and started to work as there was no dispensary or building reserved for a hospital.⁸⁴ The foundation of the Medical Missionary Society in London in 1878, which was concerned with the health of missionaries on their stations in Africa and Asia,⁸⁵ spearheaded the introduction of more qualified British doctors and even nurses to Zanzibar. At that time, these medical facilities were mostly used by former African slaves who were living in the UMCA mission station.

A few years later, in the early-1880s, Miss Allen began to visit the homes of Muslim women. She wrote that, the home visits flourished for a few months. Hence, a space was needed in the Church area to accommodate Muslim women who attended the 'health education' gatherings. 'Women and Children health care lessons' were introduced. In 1881, Miss Allen wrote to Arthur Madan, the UMCA secretary in London informing him that she intended to establish "the Ladies Association" for the town Muslim women. She requested £500 to build a Women's centre.⁸⁶ She reported in a letter which was sent to Miss Leslie, Secretary of the Ladies Association in London, that "I feel confident I could induce women to attend on services if only there was a fitting place for them in the church".⁸⁷ The involvement of the

⁸² Charles Good, *The Steamer Parish, The Rise and Fall of Missionary Medicine on an African Frontier* (Chicago and London: The University of Chicago Press, 2004), p. 36.

⁸³ RHL UMCA Box List Bishop Steere (1863-1882), A1 (III) A, *Guardian*, 10 December 1879 article by John Allen of Shrewsbury and RHL Bishop Steere A 1(III) C, Central African Mission, First Quarterly Statement of Bishop Steere to the Central Committee of UMCA (1875).

⁸⁴ *African Tidings*, 'The Quest of the Mighty- The Nurses' Quest', XXVIII, 358 (December 1919), p. 111-112; *African Tidings*, XXX, 373 (August 1921), p.12.

⁸⁵ Good, *The Steamer Parish*, pp. 36 and 41.

⁸⁶ RHL, 'From Miss May Allen to Madan, 20 September 1881', UMCA Box List A1 (XIV), Letter, Miscellaneous, Zanzibar 1901-1910, p. 374.

UMCA female missionaries and nurses in medical services became important due to the inadequate funding and shortage of qualified medical doctors to pioneer the services. At the same time the recruitment of female nurses and health educators were insisted by many missionaries groups.

From the second half of the nineteenth century, European and American missionary groups started to send women to mission centres in Asia and Africa as educators and healers among new converts. The first female doctor was sent to India in 1869 by the Women's Foreign Missionary Society, founded in Boston in the same year.⁸⁸ In India, from the mid-1800s the women's quarters in Hindu and Muslim households had become a focus of critical attention for Western missionaries, who provided Western medical care for women and girls. They introduced a 'Zenana' project whereby they regularly visited secluded upper class women who were confined to the women's quarters of the houses and they taught them Bible stories, prayed, and sang religious songs.⁸⁹ Leslie Flemming further explains that:

These missionaries were imbued with a commitment to women's responsibility for the management of domestic life and reproduction, and they did not hope to see education and physical freedom lead Indian women into role that excluded them from those responsibilities. Even highly educated single women missionaries, whose work helped to provide new options for some Indian women, accepted the domestic role as the primary one for women.⁹⁰

The household was thought to be the "abode of ignorance and superstition, a place of dirt, darkness and disease". David Arnold demonstrates that the work of penetrating these

⁸⁷ RHL, 'From Miss May Allen to Madan, 20 September 1881', UMCA Box List A1 (XIV), Letter, Miscellaneous, Zanzibar 1901-1910, p. 374.

⁸⁸ David Hardiman, 'Introduction', in David Hardiman (ed.), *Healing Bodies, Saving Souls Medical Missions in Asia and Africa* (Amsterdam and New York: Rodopi, 2006), pp. 1-30, The phrase is on pp. 29-30.

⁸⁹ Leslie A. Flemming, 'A New Humanity: American Missionaries' Ideals for Women in North India, 1870-1930', in Nupur Chaudhuri and Margaret Strobel (eds.) *Western Women and Imperialism, Complicity and Resistance* (Bloomington and Indianapolis: Indiana University Press, 1992), pp. 191-206, p. 194. See also: Antoinette Burton, 'The White Woman's Burden: British Feminists and "The Indian Woman", 1865-1915', in Nupur Chaudhuri and Margaret Strobel (eds.) *Western Women and Imperialism, Complicity and Resistance* (Bloomington and Indianapolis: Indiana University Press, 1992), pp. 137-157, p. 137.

⁹⁰ Flemming, 'A New Humanity American Missionaries' Ideals for Women in North India, 1870-1930', p. 195.

households was left to female missionaries who employed education and health as a means of gaining access to the “hearts and minds” of secluded people.⁹¹

We should note that from the late nineteenth century, in East and Central Africa missionaries associated child-birth practices among African women with pollution and dirtiness. Megan Vaughan explains that “Christian missionaries were quick to realize that African midwifery practices and associated ideas about fertility and child-care, were of more than practical significance for their own work”.⁹² African women were associated with venereal disease, which caused abortion and infant mortality. As I have mentioned earlier in Chapter One, in nineteenth century urban Zanzibar, ‘promiscuous intercourse’, and ‘unrestrained sexual indulgence’ among the African slave population, was also thought to cause syphilis.⁹³ Furthermore, from the mid -1800s, European and American women viewed African and Asian women as ‘unfortunate’, and as in need of better health education and medical care. Women missionaries and many middle class British feminists saw what they regarded as an urgent need to help women in Asia and Africa. Antoinette Burton, however, claims that “a sense of national and racial superiority based on Britain’s imperial status was an organizing principle of Victorian culture”.⁹⁴

The medical activities related to women in Zanzibar Town however had to stop temporarily when Miss Allen was shifted to Magila, Tanga, a new UMCA station in the northern-east of Tanganyika in 1883. She was replaced in 1884 by a Miss Shaw, who continued with the ‘home visit’ programmes. Like Miss Allen, Miss Shaw used to go to the houses of the Muslim patients in the town for instruction purposes.⁹⁵ She instructed them about female healthcare and diseases that affect infants, mainly malaria. Miss Shaw recorded that, “We also get outside calls from ... natives, and some forty visits were paid regularly to Indian

⁹¹ Arnold, *Colonizing the Body*, p. 256; Mark Harrison, *Public Health in British India, Anglo- Indian Preventive Medicine, 1859-1914* (Cambridge: Cambridge University Press, 1994), p. 91.

⁹² Vaughan, *Curing their Ills*, p. 66.

⁹³ Burton, *Zanzibar; City, Island, and Coast*, vol. I, pp. 183-184.

⁹⁴ Burton, ‘The White Woman’s Burden British Feminists and “The Indian Woman,” 1865-1915’, p. 137.

⁹⁵ *African Tidings*, ‘The Quest of the Mighty’, p. 112.

cases.⁹⁶ Also, sometimes after the opening of a hospital “there are frequently patients to be seen in their own homes, either Arabs or Hindi women, or some of our own Swahili people, who can’t come out”.⁹⁷ The attendance of Hindu and Muslim women at the UMCA dispensary itself however was very low. It was the wives and children of the Omani Arab elites and European employees who attended the clinics.

Meanwhile, the work of reaching Muslim women was carried on by Miss Phillips, another UMCA nurse. The ‘Ladies’ Mission House’ was opened at Shangani in 1885 under Miss Phillips, “to work amongst the Arab ladies, that is the wives of the aristocracy, the Swahili women, and possibly the Hindis [Muslim Indians]”.⁹⁸ This was the continuation of the previous services, which were started by Miss Allen and Miss Shaw. In many of their visits they talked about Christianity and child care.⁹⁹ For one event, about ninety-seven women were reported to be gathered at the UMCA centre.¹⁰⁰ But both *Central Africa* and *African Tidings* showed that there very little was achieved in terms of conversion.

In 1886, the UMCA built a dispensary at Mkunazini Mission headquarters to serve the large Anglican population. The dispensary was also intended to treat the town Muslim and Hindu population; though very few of them were interested in the facilities. The urban Muslim population had a variety of indigenous medicines, used to treat a range of diseases. Western medical practices were used mostly by the Arab and Indian elites and the African former slaves. Funds for the building of the dispensary were obtained from various sources. Private

⁹⁶ *Central Africa*, ‘Zanzibar Hospital’, XXVI (1906), p. 320.

⁹⁷ *African Tidings*, ‘At the Zanzibar Dispensary’, IX, 132 (October, 1900), p. 110. In 1893, a UMCA Hospital was built at the Mkunazini Mission headquarters. It was temporarily closed during the First World War when the doctors joined the medical services of the British and afterwards reopened. It was closed completely in 1938. The decision to close the Hospital was due to poor attendance. Many people had preferred to go to the Government Hospital. See: ‘the Closing of Mkunazini Hospital’, *Central Africa*, ‘The Closing of Mkunazini Hospital’, LV, 651 (March, 1937), p. 49; The Mission clinic operated until 1967, when all the private welfare services were nationalized. Interview with Bishop John Ramadhan at Mkunazini on 20 July, 2005.

⁹⁸ *African Tidings*, ‘African Characteristics’, VIII, 120 (October, 1899), p. 95.

⁹⁹ *African Tidings*, ‘Visiting in Zanzibar’, X, 130 (October, 1901), p. 53; *African Tidings*, ‘At the Zanzibar Dispensary’, IX, 128 (June, 1900), p. 61.

¹⁰⁰ RHL, ‘From Miss May Allen to Madan, 20 September 1881’, UMCA Box List A1 (XIV), Letter, Miscellaneous, Zanzibar 1901-1910, p. 369.

donors in England contributed a lot of money towards it. In Zanzibar, some of the funds were obtained from the Mission children who knitted socks and mittens and sold them to sailors of the British Navy.¹⁰¹

The UMCA activities in visiting the Muslim population increased after the Lambeth Conference in London in 1888. At this meeting, Bishop Smythies, the third Bishop of Zanzibar, reported the need of the Anglicans to reach the Muslim urban population. Bishop Smythies reported to the Conference that “for sometime past the missionaries had been in the habit of receiving from her Majesty’s Consul at Zanzibar slaves rescued from vessels by the British ships which cruised on that coast”.¹⁰² There was now a need to reach Muslims for proselytization purposes since the slaves were no longer sent to the Mission. The work of conversion however was hardly successful. There were no large attendances of Muslims at the dispensary.

Generally, by the 1880s, missionary medical services in Zanzibar Town were used by British, German and French diplomats, traders and Navy officials. Missionaries from the mainland, both UMCA and CMS, Government officials and their wives, and employees of the Eastern Telegraph Company attended the missionary hospitals.¹⁰³ Some of the Muslim urban elite groups were also regularly using the Western medical services by that time. Other patients who used the missionary medical facilities were the African converts and the abandoned slaves, or those who had no families to take care of them. It is for instance reported in the *Central Africa*, that “the patients in those early days were largely drawn from slaves recently released, and a large proportion of them willingly became Christians, embracing the religion of the friends who saved them from slavery”.¹⁰⁴ Vaughan observes that:

¹⁰¹ *African Tidings*, ‘The Quest of the Mighty- The Nurses’ Quest’, XXVIII, 358 (December 1919), p. 112.

¹⁰² RHL A1 VA, Bishop Smithies (1883-1894), *The Guardian*, ‘Lambeth Conference’, 11 July 1888.

¹⁰³ *Central Africa*, ‘The Closing of Mkunazini Hospital’, LV, 651 (March, 1937), p. 50.

¹⁰⁴ *Central Africa*, ‘the Closing of Mkunazini Hospital’, LV, 651 (March, 1937), p. 49. The article reviews the UMCA medical works since the arrival of the UMCA missionaries in Zanzibar in 1864.

Many of the earliest patients treated in mission hospitals in East and Central Africa were victims of the disruptions of social disorder of the late nineteenth century – they were not only sick but often cut off from their kin ... and many of these earliest patients lingered on in the hospitals long after they had recovered from their illness, becoming converts and, often, the first African medical assistants.¹⁰⁵

The UMCA records are full of these stories about freed slaves, who were kept and treated in the mission. For instance, in 1895, one of the patients in the women's ward at the UMCA Hospital was sent to the hospital after having been neglected by her master. She was found on a mat outside the church and had a terrible ulcer. Also, she was suffering from heart disease and dropsy. The other two patients in the UMCA women's ward were named Panya and Attinaye and had bad ulcers. They were found close to the Mission Hospital. They were deserted as they could not work in their master's houses.¹⁰⁶

We also know of Jamedi and Kibandile who were sent by Lloyd Mathews's servant to the Hospital. Lloyd Mathews served in several posts in Zanzibar before being appointed as a British First Minister there in 1891. Jamedi's mistress abandoned her as she could not work with her hand amputated. There was also a slave woman and her baby who were thrown from a slave dhow near Mbweni beach, two miles from the town, in the course of the illicit slave trade, which was still continuing.¹⁰⁷ Sikujua was an abandoned slave girl, was suffering from bad ulcers, and was sent to the Hospital by an officer of one of the ships who founded her in the town harbour.¹⁰⁸

¹⁰⁵ Vaughan, *Curing their Ills*, p. 61.

¹⁰⁶ *African Tidings*, 'In-patients at the Hospital', III, 72 (October, 1895), pp. 94-95. For the information on the accounts of slave narratives, see Gareth Griffiths, "Trained to Tell the Truth': Missionaries, Converts, and Narration', in Norman Etherington (ed.), *Missions and Empire* (Oxford: Oxford University Press, 2007), pp. 153-172.

¹⁰⁷ *African Tidings*, 'In-patients at the Hospital', pp. 94-95.

¹⁰⁸ *Central Africa*, 'Hospital Sketches', XXVII (1907), p. 151.

One of the reasons for the limited acceptance of Western medicine by the Muslim and Hindu population had to do with indigenous medicine. Most of the missionaries were hostile to indigenous therapeutic methods such as the use of charms. This had led to hostility between the urban Muslim population and missionaries. Charles Good, while explaining the UMCA medical works in Malawi, explains that: “few if any UMCA missionaries viewed African healing as a valid institution, with the possible exception of certain aspects of herbalism believed to be benign or unconnected to the supernatural. Most could not accept the fact missionary medicine had to compete against African ideas and practices”.¹⁰⁹ They also treat local medicine as the “dark side” of African life.¹¹⁰

Apart from that, the open preaching of Christianity against Islam made Muslims to refuse to go to the Mission Hospital. Bishop John Hines, (b.1857), the fourth Bishop of Zanzibar, explained in detail the UMCA policies in the late nineteenth century. Hines reports that:

We carried on these weekly preachings for a year or two, but as it never seemed to lead to anything but ‘wrangling in the market-place’ we gave it up. I saw that to gain a hearing you must know Arabic and the Koran thoroughly, as well as the Mohammedan ‘Traditions’, before you could preach or teach with any efficacy. Canon Dale later on, with full and complete knowledge, worked on different and more promising lines. We must remember that it is this popular criticism of Christianity which our native Christians constantly hear in the town among the people in the midst of whom they live, and though they do not often lapse into Mohammedanism, they find it very hard to hold to their Faith.¹¹¹

Muslim fears of conversion made them unwilling to attend the mission hospitals and dispensaries. On one occasion it was reported in *Central Africa* that, “the missionaries had little alternative, since although the Zanzibar Government allowed open preaching, it

¹⁰⁹ Good, *The Steamer Parish*, p. 10.

¹¹⁰ Good, *The Steamer Parish*, p. 31.

¹¹¹ Bishop Hines was a medical doctor, who had graduated from the University of London in 1874 and worked at the Bedford Infirmary, at the Mildmay Medical Mission in Spitafield and at the Radcliffe Infirmary, Oxford in 1880-82. He was ordained in 1885. J. E Hines, *Days Gone By: Being Some Account of Past Years Chiefly in Central Africa* (London: John Murray, 1924), p. 114; See also: RHL A1 VIII, Letter from Bishop Richards on Zanzibar 7th January, 1897. In this letter, Canon Dale was instructed by Bishop Richards to study Arabic to work among the inhabitants of the City of Zanzibar, p. 306.

nonetheless reacted harshly if individual Muslims demonstrated interest in the Christian message”. One Muslim, Abdullah Mohammed, was “imprisoned by Sultan Barghash after participating in Christian ceremonies, and died while still confined some three and one-half years later”.¹¹² As I have pointed out previously in this chapter, Barghash’s hostility to missionaries was great after 1873. At his death in 1888, the East African coastal area from Warsheikh, Somalia to Kilwa which was under the Sultan’s possession had been divided between the Italian, German and British colonial powers. This occurred after the Berlin Conference and the Anglo-German Treaty or the Delimitation Treaty of 1886.¹¹³

Death and illness among the missionaries was a great obstacle to the expansion of the medical services. Michael Jennings explains that from the first moment of the UMCA’s incursion into the African interior, the greatest challenge it faced was the problem of mortality and morbidity. Between 1860 and 1918, over one-third of the mission staff were lost to death, or invalidated out due to ill-health.¹¹⁴ The lack of funds impeded the extension of medical services too. The next section looks at the medical services of the German Lutheran.

German Lutheran and Medical Services in Zanzibar Town

By the late nineteenth century in urban Zanzibar medical facilities under the Evangelical Mission Society for German East Africa (EMS), a German Lutheran society, were used by the former African slaves who were brought to there by British Naval officers. The Mission Society was founded in 1886 in Berlin as a result of acquisition of land in 1884 in Tanganyika, by Dr. Carl Peter on behalf of the German Colonization Society. Countess Martha Pfeil and Frieda Bülow, a relative and friend respectively of Peters, expressed the

¹¹² *Central Africa*, ‘Zanzibar’, II (1884), p. 39; *Central Africa*, ‘Zanzibar’, IV (1886), p. 59.

¹¹³ Agreement achieved by the exchange of notes between Great Britain and Germany on October 29th and November 11th 1886, regarding the Sultanate of Zanzibar and the delimitation of the British and German spheres of interest in East Africa. A number of scholars have written about the issue. See for instance: Norman Bennett, *A History of the Arab State of Zanzibar* (London: Methuen & Co Ltd, 1978), especially Chapter Four: ‘The Loss of Independence’.

¹¹⁴ Michael Jennings, ‘This Mysterious and Intangible Enemy: Health and Disease amongst the Early UMCA Missionaries, 1860 – 1918’, *Social History of Medicine*, 15, 1 (2002), pp. 65-87.

wish to establish an evangelical church in the new colony.¹¹⁵ Bülow proposed to Peters to establish medical services there. As Lora Wildenthal explains, “in German-speaking lands, nursing became associated with military glory and nationalism during the Napoleonic Wars and the wars of unification in the 1860s”.¹¹⁶

A committee of Germans in Zanzibar Town was formed to spearhead the foundation of an EMS hospital in 1886. G. Michahelles, the German Consul and two other prominent Germans in the town formed the committee. Frieda Bülow and Bertha Wilke arrived in Zanzibar Town in 1887. The German East African Company, (G.E.ACo) supported the hospital with a contribution of DM 3000, per annum.¹¹⁷

The EMS hospital was opened at Mtakuja, not very far from the French Hospital buildings in Zanzibar Town in 1887 as Map 2.1 below shows. This was the period after the partition of Africa in Berlin in 1884 and 1885 and the Anglo-German Treaty or the Delimitation Treaty of 1886.¹¹⁸ By this time, Dr. Hadenfeldt and Deacon Hüge had been seconded to the hospital by the German Government through its Consul in Zanzibar. Nurses who served the hospital came from the Lazarus Deaconess Institution in Berlin. The German Women’s Society for Medical Works in the Colonies assisted the medical works of the Germans in the town.¹¹⁹

¹¹⁵ The EMS was founded at that time. The missionaries began a widespread advertising campaign and soon received support from the highest political, church and social circles. Even Dr. Peter, the colonial pioneer, who had signed the first treaties with the Sultans on the coast and in the inland, belonged to its executive committee. S. von Sicard, *The Lutheran Church on the Coast of Tanzania 1887-1914 with special reference to the Evangelical Lutheran Church in Tanzania, Synod of Uzaramo-Uluguru* (Uppsala: Almqvist & Wiksellsp, 1970), pp. 52-3. I would like to thank Caroline Jeannerate for translating pages 92 and 93 of the book: Hellmut Lehmann, *150 Jahre Berliner Mission* (Erlangen: Verlag derevangelisch-lutherischen Mission, 1974), p. 92. See also: Lora Wildenthal, *German Women for Empire, 1884- 1945* (Durham Duke University Press, 2001), p. 19.

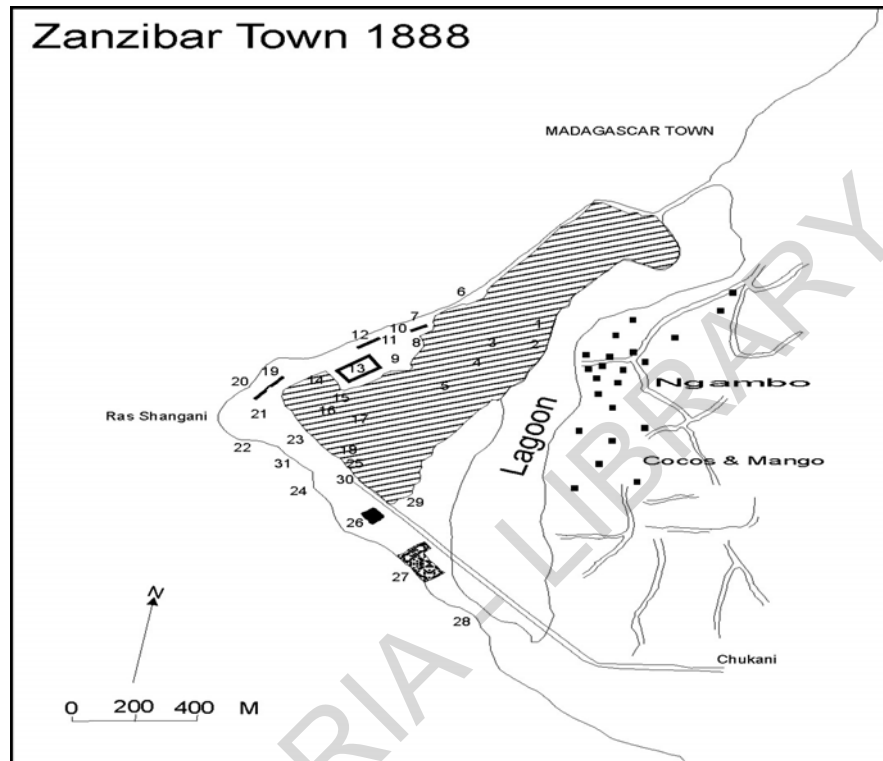
¹¹⁶ Wildenthal, *German Women for Empire*, p. 13.

¹¹⁷ Sicard, *The Lutheran Church on the Coast of Tanzania 1887-1914*, p. 67; Lehmann, *150 Jahre Berliner Mission*, p. 93.

¹¹⁸ The Anglo-German Agreement of 1886 made the Sultan of Zanzibar to possess a 10-mile-wide of East African coastal strip. Britain and Germany divided the hinterland between them. British possessed mainland of Kenya and Uganda. German possessed Tanganyika which became known as German East Africa.

¹¹⁹ Sicard, *The Lutheran Church on the Coast of Tanzania 1887-1914*, pp. 67 and 69.

Map 2.1: Zanzibar Town, 1888



1. UMCA Cathedral 2. UMCA 3. Topan's House 4. Hintzmann's House 5. Usagara House, GEA Co. (II) 6. French Hotel 7. Sultan's Harem 8. Old Palace 9. New Palace 10. Lighthouse 11. Flagmast
12. Customs 13. Fort 14. Usagara House 15. Italian Consulate 16. Roman Catholic Mission 17. Usagara House, GEA Co. (III) 18. Usagara House, GEA Co. (I) 19. W. O'Swald & Co. 20. British Consulate 21. Post Office 22. French Consulate 23. German Consulate 24. Roman Catholic Hospital 25. Meyer's House 26. New Barracks 27. Indian burial ground 28. German burial ground 29. Sultan's Garden 30. EMS Hospital 31. Proposed site for a hospital and a church leased to Germans from Sultan in 1888.

Source: S. von Sicard, *The Lutheran Church on the Coast of Tanzania 1887-1914* (1970), p. 68.

In contrast to the French and the British missionaries, the Lutherans made no attempt to reach the urban population. Apart from the African converts who were mainly the released slaves from the British squadrons, the Lutheran medical services were used by German and other soldiers recruited in Africa who were involved in the conquest of Tanganyika and

stationed in Zanzibar as a result of the outbreak of hostilities between the Germans and local communities in Tanganyika.¹²⁰

Meanwhile, the site for a new missionary hospital at Shangani in Zanzibar Town near the German Consulate area to accommodate a large number of patients was secured by the German officials as Map 2.1 shows. By the end of 1888 about DM 18,000 had been raised from the German government for the building of the new hospital and private companies in Germany offered support for the hospital. The Steel Magnates Company of the Ruhr contributed DM 25,000. This new hospital was intended to be under the joint control of the German colonial authorities in East Africa and the EMS.¹²¹ However, the scheme did not materialize since Zanzibar became a British Protectorate in 1890.

At the same time, the German East Africa Imperial Company (IBEACo.) or *Deutsch Ostafrikanische Gesellschaft*, (DOAG), which was involved in the conquest of Tanganyika, established the first military hospital in Zanzibar Town in 1889. A house was rented, the property of an Arab landlord in between Baghani and Forodhani, to be used as a hospital. The hospital was founded prior to the Anglo-German Treaty of 1890, which settle the colonial dispute between the British and the Germans and gave power to Germany to colonize Tanganyika.¹²²

A few days before the arrival of German forces in the town, the Zanzibar Sultan wrote to Sir Euan Smith, the British Consul in Zanzibar between 1889 and 1891, about the Germans'

¹²⁰ For the history of the German conquest of Tanganyika see Robert Jackson, 'Resistance to the German Invasion of the Tanganyikan Coast, 1888- 1891', in Robert Rotberg and Ali Mazrui (eds.), *Protest and Power in Black Africa* (New York: Oxford University Press, 1970), pp. 37-79 and Juhani Koponen, *Development for Exploitation, German Colonial Policies in Mainland Tanzania, 1884-1914* (Helsinki: Finnish Historical Society, 1994) and Jonathon Glassman, *Feasts and Riot: Revelry, Rebellion, and Popular Consciousness on the Swahili Coast, 1856-1888* (London, Portsmouth, Nairobi and Dar es Salaam: James Currey, Heinemann, E.A.E.P. and Mkuki na Nyota, 1994).

¹²¹ Sicard, *The Lutheran Church on the Coast of Tanzania 1887-1914*, pp. 70-71

¹²² Norman Bennett, *A History of the Arab State of Zanzibar* (London: Methuen & Co Ltd, 1978), pp. 131-132; Lawrence Hollingsworth, *Zanzibar under the Foreign Office 1890-1913* (London: Macmillan & Co. Ltd, 1953), p. 20.

encroachment. Khalifa Said (r.1888-1890), the fourth Omani ruler in Zanzibar informed Smith that:

We have heard that the German Government are bringing soldiers to this part and will land them in Zanzibar. The Germans here are now in search of houses which they want to hire for them ... we fear best [sic] something may happen to them... similar to what is taking place in the coast ... it would be better if they would land their soldiers in some other place than Zanzibar. This we have to inform you of because we are afraid of disturbances.¹²³

Despite the Sultan's efforts to stop the Germans, they landed in the town.

The German Military Hospital in Zanzibar was named the 'Wissmann Hospital' after Hermann von Wissmann, (1835-1905) a German officer who was sent to subdue coastal resistance in Tanganyika. Wissmann had served in the Prussian army during the Franco-Prussian War of 1870-71. He had also participated in the exploration of East and Central Africa in the early 1880s.¹²⁴ Norman Bennett comments that, "Wissmann's appointment signalled the beginning of the end of the German East African Company's role as an instrument of German imperial policy in East Africa".¹²⁵ It was succeeded by the German colonial state. The Wissmann Unit was kept in Zanzibar Town where it had seven naval bases. Bennett explains that Wissmann's forces comprised 850 Sudanese, Zulu and Somalis, and 50 to 80 German Non-Commissioned Officers (NCOs) and officers.¹²⁶ Recruiting local soldiers from East Africa was impeded because of coastal revolts in Tanganyika organized by Swahili and Arab traders who had supporters among the local traders.

¹²³ ZNA AA 1/63, 'Letter from Sultan to Euan Smith, 26 February 1889', Correspondence between Zanzibar and Foreign Office, London, 1888 December- February 1889.

¹²⁴ Ann Beck, 'Medicine and Society in Tanganyika, 1890-1930; A Historical Inquiry', *Transactions of the American Philosophical Society*, 67, 3 (1977), pp. 1-59, p. 8; Erick J. Mann, *Mikono ya Damu: "Hands of Blood", African Mercenaries and the Politics of Conflict in German East Africa, 1888-1904* (Frankfurt: Peter Land, 2002), p. 34.

¹²⁵ Bennett, *A History of the Arab State of Zanzibar*, pp. 151-152 and 154; Helmut Stoecker (ed.) *German Imperialism in Africa* (London: C. Hurst & Co., 1986), p. 29; Beck, 'Medicine and Society in Tanganyika, 1890-1930', p. 8.

¹²⁶ Bennett, *A History of the Arab State of Zanzibar*, 1978, p.158. But Erick Mann disputed the participation of the Zulu in the German army in Zanzibar. Mann observes that Wissmann recruited Shangaan warriors who settled in the highlands near the port town of Inhambane, Mozambique and had no ties with the Zulu at all. Mann, *Mikono ya Damu: "Hands of Blood"*, p. 49.

The German forces launched an attack on the mainland of Tanganyika in 1889. By that time, the hospital was established in Zanzibar, which became a German stronghold before the full occupation of Tanganyika. The German Military Hospital (GMH) played a major role in treating those soldiers who were later sent to the mainland during this expansionist period. By the end of 1889, the GMH had treated more than hundred soldiers.¹²⁷ Zanzibar Town became a centre of German activities through its Consulate in Zanzibar Town.

The relationship between the new Zanzibar Sultan, Ali Said, (r.1890- 1893), the fifth Omani ruler in Zanzibar, and the German authorities in Zanzibar was good. It was reported that, “Major Wissmann had already gained at Zanzibar by the establishment here of his official headquarters ... at the present moment at least 150 Germans (in Town) have a good relationship with the Sultan who enjoys German’s services and resources such as steamers”.¹²⁸ Among the German military doctors who worked at the Wissmann Hospital were Carl Heinrich Schmelskopf and Paul Kohlstock and four medical orderlies, who were German NCOs.¹²⁹ Wilhelm Steuber (1862-1904) was one of the first medical officers to serve with the German forces in East Africa from 1889-1893. Dr. Alexander Becker became a senior staff surgeon of troops in East Africa from 1891-1900. Later, when Tanganyika became a German colony, from 1890 to 1900, he was the Principal Medical Officer (PMO) of Health Services. He was succeeded by Wilhelm Steuber who became Director of Health Services from 1901 to 1903.

In addition, civilian doctors were employed to provide medical services, though the military doctors were more numerous. They represented two-thirds of all doctors in Tanganyika before the outbreak of the First World War.¹³⁰ While discussing the history of German medical services in colonial Tanganyika, Juhani Koponen has commented that “reflecting the

¹²⁷ S. von Sicard, *The Lutheran Church on the Coast of Tanzania 1887-1914 with special reference to the Evangelical Lutheran Church in Tanzania, Synod of Uzaramo-Uluguru* (Uppsala: Almqvist & Wiksellsp, 1970), p. 71.

¹²⁸ ZNA AA 1/73, ‘Germans in Zanzibar’, Outward Letter from Zanzibar to the Foreign Office, 1890 March – May.

¹²⁹ David Clyde, *History of the Medical Services of Tanganyika* (Dar es salaam: Government Press, 1962), p. 3.

¹³⁰ Koponen, *Development for Exploitation*, p. 464.

military origins of the colonial state, the medical infrastructure was, in the common colonial fashion, firmly based on military doctors ('Stabsarzt' (staff surgeon) corresponding to major) and medical NCOs of the colonial forces'.¹³¹ Many of these military doctors had served during the Franco-Prussian War of 1870-1. Beyond this information, the extent of German medical services in Zanzibar Town is unclear. However, we do know that by March 1890, 'The German Military Hospital' or 'Wissmann Hospital' was closed and moved to Bagamoyo, Tanganyika. This was the time when Zanzibar was put under the British colonial rule, though the German East Africa Company, stripped of its political functions, kept its headquarters in Zanzibar until 1905.¹³²

Western Medicine: Initiatives of Local Elites

'Western' knowledge of medicine and practices such as public health was not brought by the British physicians and missionaries alone, but also via other networks. The construction of medical institutions in Zanzibar during the 1880s was carried on by the merchant elites who were closet advisors and friends of the ruling class. Barghash Said, the third Omani ruler in Zanzibar and his friends and financial and commercial advisors used their wealth to consolidate the power and wealth they had lost through the abolition of the slave trade in 1873. After the abolition of the slave trade, Great Britain and other European imperial powers began to exercise political and economic power in Zanzibar.

From the early-1870s, Barghash introduced considerable changes to the physical structure of Zanzibar Town. As I have mentioned in Chapter One, he extended roads and introduced steam railway services. In 1879, he installed telegraphic mail-services between Zanzibar and Aden. Barghash visited London in 1872 at the invitation of Queen Victoria. His visit to London however persuaded him to introduce street lights in the town. In 1875, he visited

¹³¹ Alexander Becker, A New Sultan Succeeds to the Throne in Zanzibar: Our Special Audience with Him, *Tanganyika Notes and Records* 61, 1963 (1911), pp. 147-154, p. 147; Helmut Stoecker (ed.) *German Imperialism in Africa* (London: C. Hurst & Co., 1986), p. 99; Koponen, *Development for Exploitation*, p. 464.

¹³² Koponen, *Development for Exploitation*, p. 187 and 465; Sicard, *The Lutheran Church on the Coast of Tanzania 1887-1914*, p. 71.

Egypt and became a great admirer of the Egyptian ruler, Khedive Ismail, (r.1863-1879). Ismail had been to Europe as a student and travelled frequently between Istanbul and Paris. During his reign, Ismail extended public works in Egypt. By the late 1860s, Egypt had telegraphic lines amounting to 5000 miles. By 1879, the railway mileage had increased from 800 to 11,000 miles.¹³³

Another contribution made by Barghash which was very important to the health of the people was the introduction of tap water in urban area to replace the local wells, though this water system benefited only the Stone Town habitants. He ordered Mohamed Suleiman from Muscat to build sewerage pipes from the *Chemchem* (spring) at Bububu to Saateni. From Saateni the pipe reached Malindi and the Palace complex. From there it passed on to Beit el Ajaib, Sokomuhogo, Vuga and Victoria Garden. According to an anonymous author in *Samachar*, the number of the Indian doctors in the town increased after the introduction of piped water, which was inaugurated by Barghash.¹³⁴ We know for instance of a Dr. Nariman, a Parsee from Bombay, who arrived in the town in 1888. He practised Western medicine privately and was appointed personal physician to Khalifa Said.¹³⁵ Parsees from Bombay were the most numerous Western-educated Indians throughout the nineteenth century. In 1854, Sir Jamshedji Jijibhai, a Parsee magnate, had provided financial assistance for the establishment of Bombay's Grant Medical College, which was the first medical college in India, where Western medicine was taught. David Arnold points out that Parsees formed the largest single group among early entrants to the College. Others were Hindu and Christians.¹³⁶

¹³³ P. Vatikiotis, *The History of Egypt from Muhammad Ali to Mubarak* (London: Butler and Tunner, Third Edition, 1985), pp. 74, 75 and 79.

¹³⁴ ZNA AC 1/5, 'From Sir Euan Smith to FO 10 February, 1892', Dispatches, Foreign Office Correspondence, 1891 December – January 1892; ZNA NW 14/1, 'The Hindu in Zanzibar: Old Zanzibar Conditions', *Samachar* 1929, p. 27. *Samachar* is a newspaper founded in Zanzibar in 1902 by Fazel J. Master, an Ismaili former school teacher. It carried commercial and political information concerning India. See Maryam Hamdan, *Zanzibar Newspapers, 1902 to 1974* (Diploma Thesis, Tanzania School of Journalism, 1981), p. 9.

¹³⁵ ZNA AC 1/91, 'Dr. Nariman- Surgeon, Government Military Hospital', 1907 April- June, Dispatches, Foreign Office Correspondence; ZNA AC 1/147, 'Government Staff, 1911 June- August, Dispatches, Foreign Office Correspondence.

¹³⁶ David Arnold, *Science, Technology and Medicine in Colonial India, The New Cambridge History of India* (Cambridge: Cambridge University Press, 2004), p. 64.

Another private doctor in Zanzibar Town at this time was Dr. Isaac d'Arbella, born in Ukraine in 1852 and graduating from the Imperial Medico-Surgical Academy, St. Petersburg in 1878. He came to Zanzibar in 1885, coming from Egypt where he had worked since 1880.¹³⁷ The arrival of Drs. Nariman and d'Arbella in Zanzibar confirms the earlier point made in this chapter that 'western' knowledge and practices on medicine did not necessarily come directly from the metropole. Another prominent Western doctor was Alexander Becker, born 1857 in Germany, who took over the medical practice abandoned in 1885 by Dr. G. A. Fisher, a German explorer and physician. Becker as I have pointed out earlier in this chapter became a physician at the German Military Hospital in the town from 1889.¹³⁸

The initiatives of local notables in the expansion of Western medicine and the construction of hospitals in Zanzibar started after the failure of urban people to appreciate missionary medical services. Tharia Topan, who pioneered the construction of the first hospital in 1887, though he conceived the idea in 1881, may be the best known.¹³⁹ The fact remains, however, that regrettably little has been written on the contribution made by wealthy Indian merchants in the construction of hospitals and leprosaria in East Africa in general and in Zanzibar in particular.

¹³⁷ ZNA AA 1/39, 'Appointment of Dr. d'Arbella to Sultan's services', 1885 January- May, Outward Letters from Zanzibar to Foreign Office'.

¹³⁸ Clyde, *History of the Medical Services of Tanganyika*, p. 4.

¹³⁹ According to Professor Farouk Topan, a grandson of Tharia Topan, his grandfather had planned to build more hospitals. His death in 1891 prevented him from doing this. Interview with Professor Topan at Shangani on 16 August 2008. Robert Gregory in the *Rise and Fall of Philanthropy in East Africa: The Asian Contribution* (1992) examines the contributions of Asians to economic, political and social life in East Africa during the colonial period. Asians funded the construction of hospitals in Kenya, Uganda, Tanganyika and Zanzibar. There is a need for comprehensive studies on the initiatives of Tharia Topan, Sewa Haji, and the Karimjee Jivanjee family. The work of Steve Battle on the architectural history of 'Jubilee Hospital' in Zanzibar has begun this breakthrough. In 1990, the Aga Khan Cultural Trustee Fund, under the Prince Aga Khan, the Ismaili Spiritual leader, decided to renovate the 'Jubilee Hospital' as the building has historical and architectural potential. Steve Battle, an architect, was employed by the Trustees to supervise the renovation works. Battle looks at the design and materials that were used in the construction of the hospital.

Photo 2.1: Tharia Topan



Sources: ZNA AV 3/33, Tharia Topan.

From the early-1880s, Tharia Topan, a rich Indian Ismaili who was influential in Zanzibar, not the least for being Barghash's advisor (see Photo 2.1), provided funds for the construction of a hospital for the use of urban people in Zanzibar.¹⁴⁰ This can be seen as

¹⁴⁰ Tharia Topan was Barghash's most trusted adviser and official customs master, who streamlined Zanzibar's internal system of marketing cloves, solidifying Zanzibari trading connections within the wider international market system of Europe and America as well as resurrecting old trading connections with India and China. He came to Zanzibar at the age of 12. He was employed by several customs farmers before becoming involved with American traders. For further details on Tharia Topan's history see Naseem Abdul Waheed, Nature and

part of a broader pattern, for by the mid-1800s, Indian wealthy merchants funded biomedical services, first in India and then also in East Africa. In India, charitable works like feeding and giving alms to the poor had been a part of religious duties for many centuries. By the nineteenth century, during British colonial rule medical philanthropy, as David Arnold explains had become “a means of buying influence, prestige, even political recognition, from the colonial regime”.¹⁴¹ For instance, in 1843, Sir Jamshedji Jijibhai, a major beneficiary of Bombay’s China trade and the first Indian to be knighted, donated Rs. 164,000 for building a hospital in Bombay.¹⁴²

In nineteenth century East Africa, Indian merchants had a special position in the economy of the region. By the 1880s, they dominated the commercial life of the area. Tharia Topan was a leading merchant who based his activities in India and in Zanzibar. He was a major financier of trade caravans to the interior of East Africa. By 1874, his business interests ranged from China to London. His involvement in medical philanthropic works in Zanzibar was based on political ambition. From the 1860s, in India, Bombay’s Hindus and Muslims were competing with Parsees in the extension of medical facilities.¹⁴³ Like, Sir Jamshedji Jijibhai, in 1890, Topan was knighted which seemed likely to be a powerful political tool for himself though he died few months afterwards.¹⁴⁴

In 1881, Topan donated 200,000 rupees for a hospital and school for the Indian community in Zanzibar, on condition that the British-Indian Government would subscribe the same amount for hospital purposes.¹⁴⁵ Hatim Amiji explains that Tharia donated the money to

Extent of the Indian Enterprise along the East African Coast and Subsequent Role in the Development of Kenya, 1840-1905 (PhD dissertation, St. John’s University, New York, 1975), pp. 84-93.

¹⁴¹ Arnold, *Colonizing the Body*, p. 270.

¹⁴² Arnold, *Colonizing the Body*, p. 271.

¹⁴³ Arnold, *Colonizing the Body*, p. 272.

¹⁴⁴ Abdul Sheriff, *Slaves, Spices and Ivory in Zanzibar* (London: James Currey, 1987), p. 107; Steve Battle, ‘The Old Dispensary: An Apogee of Zanzibar Architecture’, in Abdul Sheriff (ed.) *The History & Conservation of Zanzibar Stone Town* (London: James Currey, 1995), p. 93.

construct a hospital and school in Zanzibar under pressure from the Aga Khan, an Ismaili spiritual leader, who prevented his followers from attending any English-based school.¹⁴⁶ The Aga Khan may have feared the impact of Western education on the minds of the children but he was ready to accept the launch of medical services. Nevertheless, Topan's proposal did not materialize as the government was not ready to donate funding for such a hospital. Topan renewed his offer again in 1887, but again the British Government refused to contribute to the fund.¹⁴⁷

Finally, Topan decided to shoulder the cost of constructing a hospital himself. The British Government accepted the offer under the condition that:

The institution should be built and kept as under the general control of the British Government ... It would be the duty of the Surgeon to the British Agency to attend at the Hospital three days per a week for consultations ... The Ministrations of Sisters of Charity of all denominations to be permitted subject to the Hospital Regulation visits of the Christian Bishops and Clergy and of the religion leaders of the various denominations, Christian Sects to be permitted whenever desired by the patient, subject to the Hospital Regulations.¹⁴⁸

The inclusion of Christian missionaries in the affairs of the Hospital was a decision made by the British in order to facilitate the acquisition of nurses from missionary hospitals and dispensaries. The British had no sufficient funds to pioneer the services and also lacked trained personnel to administer the hospital.

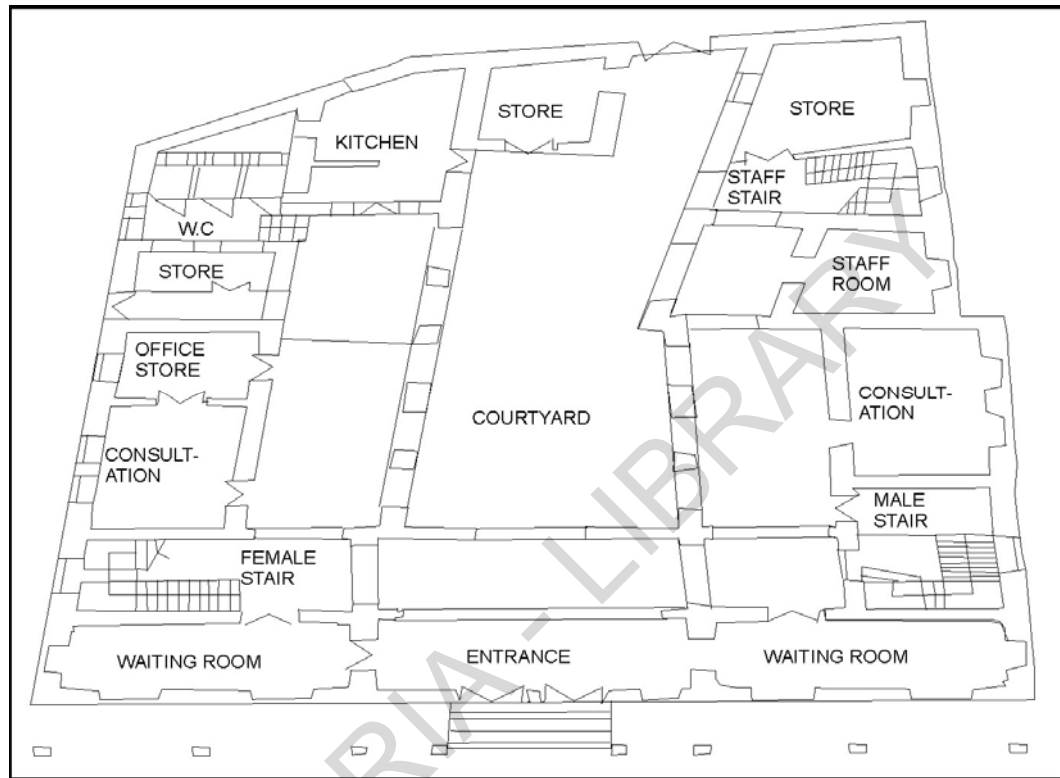
¹⁴⁵ ZNA AA 1/45, 'From Topan to Kirk, 26 March 1886', Inward Letters from Foreign Office to Zanzibar, 1886 January- June; ZNA AA 1/46, 'From Topan to Kirk, 11 August, 1886', Outward Letters from Zanzibar to London, 1886 January- July.

¹⁴⁶ Hatim Amiji, 'Some Notes on Religious Dissent in Nineteenth-Century East Africa', *African Historical Studies*, 3 (1971), pp. 603-616. See p. 613.

¹⁴⁷ ZNA AA 1/45, 'From Topan to Kirk, 26 March 1886', Inward Letters from Foreign Office to Zanzibar, 1886 January- June; ZNA AA 1/46, 'From Topan to Kirk, 11 August, 1886', Outward Letters from Zanzibar to London, 1886 January- July; ZNA AA 1/49, 1886 June – December, A letter of 26 November, 1886 from Foreign Office, London reads as "they [the British-Indian Government] are unable to recommend that it be given any pecuniary assistance from the revenues of India".

¹⁴⁸ ZNA AA 1/57, 'Memo from Holmwood, British Consul in Zanzibar to the Foreign Office, 22 December, 1887' and 'Memo from Treasury Chambers, London to Holmwood, 13 January 1888', Inward Letters from Foreign Office to Zanzibar, 1887 January- 1888 May.

Figure 2.1: Plan of the Jubilee Hospital



Source: Steve Battle, 'The Old Dispensary: An Apogee of Zanzibar Architecture' (1995), p. 97.

Topan purchased a site at Malindi near the harbour for the hospital. The foundation stone for the building of hospital was laid on the occasion of the commemoration of the Silver Jubilee of Queen Victoria in 1887.¹⁴⁹ In order to maintain the 'Jubilee Hospital', Topan had intended "to make over certain landed property in Bombay to the Trustees of the Hospital funds, in order to secure a higher rate of interest for the money to be lodged in the endowment funds". The offer was however not accepted by the British officials in Zanzibar,

¹⁴⁹ ZNA AA 1/57, 'Topan's Hospital', Inward Letters 1887 January – 1888 May.

who were not yet ready to pour money to begin the construction of the hospital.¹⁵⁰ Figure 2.1 shows the plan of the ground floor of the hospital.

Topan therefore decided to use the funds which he held in Zanzibar to construct the hospital, and the work was begun in 1887, without the aid of British funding. Jubilee Hospital was built at the time when the Indian and Omani elites and other influential personnel such as Swahili Zanzibari merchants and Comorians, who by that time had acquired important positions in the Sultanate's offices, were increasingly turning to the use of Western medicine and required the provision of medical facilities.

The work of construction did not proceed smoothly and Topan's Hospital was not completed by the time of his death in 1891. His will was disputed and the money that he had intended for the construction of the hospital was withheld. However, in 1892, Topan's wife and family members arranged to provide money for the construction of the Jubilee Hospital, which was completed in 1894.¹⁵¹ In 1897, however, due to family disputes, the hospital was sold to another Indian who converted the ground floor into a private dispensary.¹⁵²

The architecture of the hospital represented the political situation of the time. It was a hybridization of European, Indian and Zanzibari Muslim architecture. For the whole of the nineteenth century, Zanzibar's economy, culture and politics was influenced by British policies in India and in Britain. Battle, in his chapter, 'The Old Dispensary: An Apogee of Zanzibari Architecture', explains for instance that, the balconies of the hospital are characteristic of houses in India. The building has a central courtyard, which is characteristic of Zanzibari architecture. The plaster mouldings are in a European neo-classic style, while the fretwork and fruit which sprouts from gables are from the East.¹⁵³ Furthermore,

¹⁵⁰ ZNA AA 1/65, 'From Lord Salisbury, London to Euan Smith, 15 February 1889', Inward Letters from London to Zanzibar, 1889 January- April.

¹⁵¹ ZNA BA 104/1, 'Topan Hospital', *Zanzibar Gazette*, 27 January 1892, 11 May 1892, 11 October 1893, and 25 April 1894.

¹⁵² ZNA BA 104/6, 'Hospital', *Zanzibar Gazette*, 1 January 1897; ZNA NW 14/1, 'Muslim Indians in Zanzibar', *Samachar* 1929, p. 60.

according to Battle, the hospital building and rooms resemble ballrooms rather than hospital wards. The chandeliers fitted in the wards were decorative rather than necessary. In general, Topan displayed his immense wealth by building a huge and lavish hospital.

Conclusion: The Grounding of Western Medicine in Urban Zanzibar

Nineteenth century urban Zanzibar was a site where British and Indian secular doctors and the French, British and German missionary doctors and nurses practiced Western medicine. Medicine was not simply 'a tool of empire': few medical personnel were sent by the metropolitan government to Zanzibar during the nineteenth century. British interests in Zanzibar grew from the time when Zanzibar became headquarter of the Omani Sultanate and became more and more embodied in Consular activities from about 1870, but Zanzibar was not given a high priority compared with British colonial possessions such as India. Due to the fact that Zanzibar had a little significance to the British very little was initiated in terms of medical services. This gave chances to local elites to pioneer the services. Until 1890, British possessed no hospital of its own in Zanzibar. The extended medical services were of a less significant. The lack of a large number of British officials impeded British to fund medical services. In comparison, the German officials in Zanzibar opened and financed their military hospital to treat the soldiers who were used in the conquest of Tanganyika.

Between 1860 and 1880, Western medicine, together with other indigenous medical practices such as Muslim and Hindu remedies became an option among the urban Arab and Indian elites. Western medicine was also used by emancipated slaves who were cared for by missionaries. The majority of Hindus and Muslim urban people did not believe that Western medicine could offer superior therapeutics compared with their own healing methods. Up to the late-1880s, Western medicine was not superior to indigenous medicine. The only remedies were quinine, anti-sepsis and surgery.

¹⁵³ Battle, *The Old Dispensary: An Apogee of Zanzibari Architecture*, p. 96.

By the late nineteenth century, the missionary medical services became unpopular with the Muslim urban population as the missionaries expected the Muslims to abandon many of their customary practices. Moreover, the missionary medical services had failed to penetrate most of the Muslim population in urban Zanzibar due to a shortage of nurses, doctors and funds. Nevertheless, certain activities persisted, frequently harmonized with the colonial medical program. From the early-1900s, the UMCA missionaries decided to concentrate on their mainland stations since Zanzibar had failed to provide suitable area for conversion. They did not abandon Zanzibar totally. The UMCA Hospital continued to provide medical services until 1938 when it was closed. The UMCA dispensary provided the services until 1967 when all private medical facilities were nationalized.

As for the French Catholics, from 1862, the Holy Ghost Fathers or the Spiritans took over the services until 1868, when they decided to go to the mainland. From 1884, the medical services were under the new group of Spiritans who arrived from France. Their attempt to convert the urban Muslim population through medical services having failed, they closed the hospital at Ng'ambo in 1887. The St. Joseph Community, another French Catholic group took over the medical works. Sisters of St Joseph of Cluny operated a dispensary for their African converts until 1912. In 1892, they built a new hospital which mainly treated European population in Zanzibar. It was also closed in 1912. The Cluny Sisters took care of lepers at Welezo Government Leprosaria between 1900 and 1923 and thus figure in later chapters.

CHAPTER THREE: EPIDEMICS AND COLONIAL GOVERNMENT INTERVENTION TO 1914

Fighting Infectious and Contagious Diseases

This chapter focuses on the measures introduced by colonial officials to control epidemics in urban Zanzibar and the ways the urban population responded to the colonial government's efforts in the face of epidemics which occurred and persisted in the town between 1897 and 1914. I shall discuss specifically the epidemics of bubonic plague and smallpox, which posed a constant threat to the economic and political viability of early colonial states in Africa. From 1898 to 1914, the colonial government in Zanzibar strongly emphasized the fight against bubonic plague and smallpox which threatened the population and the economy. Campaigns against plague and smallpox were prominent in the early colonial medical campaigns in Africa. Of the other diseases which threatened the colonized people, malaria, yellow fever and cholera, malaria was to figure most largely in Zanzibar, where it was addressed by environmental vector control. The Quarantine Station (QS) and the Infectious Disease Hospital (IDH) were established in Zanzibar in 1899 in order to defend the town and the islands against escalating epidemics which arose mainly from trade with India and the Gulf region and through the migration of people from the inland regions and the coast of East Africa.

The fight against infectious and contagious diseases became a focus of colonial administrators and medical doctors in Zanzibar after 1897. This was mainly in response to the pressure brought by various emerging bodies concerned with international health based in Europe and to the increasing numbers of incoming ships from India and the Gulf area. Since 1852 several conventions had been held by the European powers, with a view to uniform action in keeping out infection from Asia. Before 1897, the conventions had mainly dealt with the spread of cholera. The 1897 International Sanitary Convention (ISC), which was held in Venice, Italy, pressurized countries in Europe and America and colonial governments in Asia and Africa to introduce measures to curb the bubonic plague epidemic

which had started in China in 1894. Zanzibar also introduced an 'Infectious Diseases Regulation' to respond to the objectives of the International Sanitary Conventions. The Venice Convention settled the incubation period for plague, and the period of quarantine to be adopted for administrative purposes. After much discussion ten days was accepted by a large majority. The principle of disease notification was unanimously adopted. Each government had to notify other governments on outbreaks of plague and at the same time state the measures of prevention being carried out to prevent its spread. These Conventions were important in bringing about international cooperation. They reached agreements on prophylactic measures against diseases such as cholera, plague, and yellow fever.

The responses of the local community in Zanzibar Town to many of these public health measures varied. I shall show that there was both acceptance and rejection and often ambivalence towards these public health measures throughout the colonial period. Evidence from records of the British administrators and medical officers, and the missionaries who were stationed in the town, and as well as from the town population itself indicates that hostility towards sanitary regulations and public health measures persisted throughout the colonial period. Some of these health measures were accepted as they helped in curing new diseases which, as in many other parts of Africa, indigenous medicine or preventive measures failed to cure. While it may be valid broadly that during this period, "the great variety of African methods of health management presented an enormous challenge to the imposition of a uniform, biomedical model of health",¹ the slowly accruing colonial situation and penetration of biomedical practices in Zanzibar over the later nineteenth century present a less polarized picture.

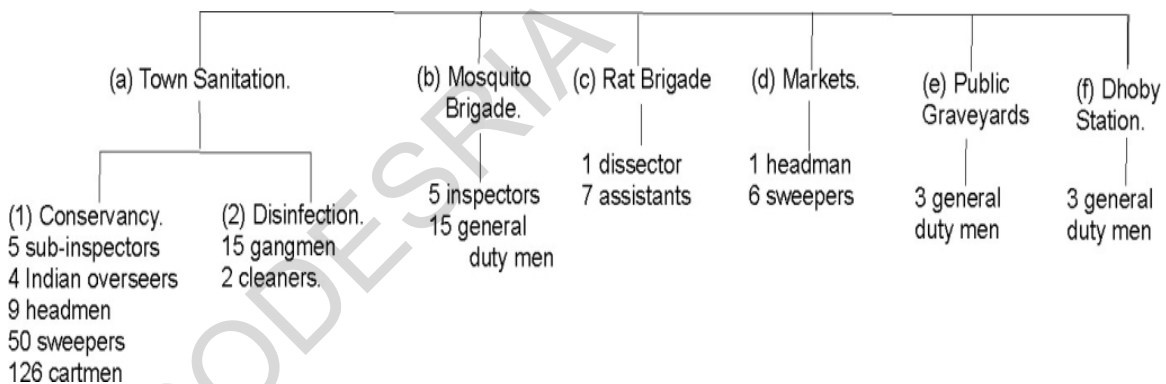
After the formal conquest of Africa, many colonial governments started to promulgate public health regulations in order to contain epidemics. In this, Zanzibar was no exception. The imposition of quarantine rules went back in Europe to the 'Black Death' pandemic of 1347. Quarantine safety measures were applied in the Mediterranean area during the eighteenth and early nineteenth century outbreaks of bubonic plague. Sheldon Watts

¹ Maryinez Lyons, 'Public Health in Colonial Africa: The Belgian Congo', in Dorothy Porter (ed.), *The History of Public Health and the Modern State* (Rodopi: Amsterdam and Atlanta, 1994), p. 385.

observes that by the early 1830s, the first step towards controlling bubonic plague in Egypt was the imposition of quarantine on ships from infected Turkish ports. Despite the quarantine measures, the bubonic plague reached Egypt in 1834, which led to the introduction of more public health measures such as the imprisonment of the victims in pest houses. Also, their belongings were burnt.²

The control of smallpox and bubonic plagues in Zanzibar was undertaken by both the Department of Health and Medicine. Department of Health had a range of activities which focused on the elimination of rats, mosquito control measures, town sanitation, public graveyard and dhobi (laundry station). Figure 3.1 below represents the organization of the Department of Health in the early-1910s.

Figure 3.1: Organization of the Department of Health



Sources: Zanzibar National Archives (ZNA) 7/2: Public Health Report for the Year 1913, p. 21.

² Sheldon Watts, *Epidemics and History: Disease, Power and Imperialism* (New Haven: Yale University Press, 1997), p. 37. See also Kuhnke La Verne, *Lives at Risk: Public Health in 19th Century Egypt* (Berkeley: University of California Press, 1990). La Verne shows that European consuls on their eager to protect their nation's commercial interests formed Quarantine Board in Alexandria, the largest city after Cairo to regulate quarantine.

Photo 3.1: Health Department, 1905



Source: ZNA AV 21/17, Health Department Office, 1905.

In 1897 plague hit Bombay and other localities in India. It was feared that the disease might reach Zanzibar. Also, in 1898, a smallpox epidemic brought by traders from the northern ports of India and the Persian Gulf hit Zanzibar Town.³ While the Department of Health was involved in introducing sanitary measures to control the epidemics, the Medical

³ Robert Nunez Lyne, *Zanzibar in Contemporary Times: A Short History of the Southern East in the Nineteenth Century* (London: Hurst and Blackett Limited, 1905), p. 279.

Department was concerned with vaccination activities. Subsequently, the Department of Health also became involved in the management of the Leprosy Centre and the establishment of an Infectious Diseases Hospital in 1898.⁴ Photo 3.1 above portrays the headquarters of the Department of Health during the early-1900s. Outside is some of the Department's staff.

The Establishment of the Quarantine Station in Urban Zanzibar in 1899

Few studies have been done on the anti-smallpox and plague campaigns in East Africa during colonial rule. Megan Vaughan, while explaining the early colonial public health campaigns, shows that “the early colonial medical departments were taken up with prevention – more particularly with preventing the spread of disease from the African to the European”. She further argues that, “the public health of these territories was addressed piecemeal, through sporadic, militaristic ‘campaigns’ to prevent or treat one epidemic disease or another”.⁵

The Zanzibar Government introduced various preventive measures from the 1890s, although the funding was not enough to support many medical projects. The situation however varied a good deal: from the early colonial period preventive measures, like inoculation against smallpox and plague, and institutions such as the Quarantine Station (QS) and the Infectious Diseases Hospital (IDH) were instituted by the government. Community and Association leaders were anxious to ensure that their community members accepted inoculation. Archival records both in London and in Zanzibar show that precautionary measures were adopted during and after the cholera, plague and smallpox epidemics.

⁴ Lawrence Hollingsworth, *Zanzibar under the Foreign Office 1890-1913* (London: Greenwood Press, 1975), pp. 117 and 191.

⁵ Megan Vaughan, *Curing their Ills: Colonial Power and African Illness* (London: Polity Press, 1991), p. 39.

The Quarantine Station (QS) in Zanzibar was founded in 1899 following the occurrence of bubonic plague in East Africa in 1898. It was suspected that the Indian epidemic originated from either China or the Gulf areas where the remnants of the 'Black Death' pandemic still persisted.⁶ The plague in China, which was the third pandemic in the world (others were the Justinian in 541 A.D. and the Black Death in 1347) started in 1854. Carol Benedict shows that plague epidemics in China "were more likely precipitated by troop movements and refugee migrations during the violent conflict that engulfed Yunnan for the seventeen years from 1856 and 1873, [during] the Muslim Rebellion".⁷ By the spring of 1894 this epidemic had reached the major cities of Hong Kong and Canton and from there began spreading to other cities around the world.⁸

In colonial Zanzibar and East Africa, the association made by the British between the culture of the people and the spread of disease had also influenced the practices of colonial medicine. Osaak Olumwullah, while explaining the occurrence of bubonic plague in western Kenya, claims that "epidemics like plague provided an arena in which the African cultural environment as well as the African body was elevated to a position of both source and vehicle in the transmission and spread of disease".⁹ I will return to this in Chapter Four.

The attitudes of the British and the linkage of local culture with disease continued unchallenged due to lack of medical data. The British East African Protectorate authorities decided to introduce various health control measures and medical institutions which were new to East Africa. But as Marc Dawson explicitly explains, most of the medical and sanitation measures, such as quarantine, were introduced without a correct understanding of the patterns of diseases.¹⁰

⁶ Mark Harrison, *Public Health in British India: Anglo-Indian Preventive Medicine, 1859-1914* (Cambridge: Cambridge University Press, 1994), p. 120.

⁷ Carol Benedict, *Bubonic Plague in Nineteenth-Century China* (Stanford, California: Stanford University Press, 1996), p. 37.

⁸ Benedict, *Bubonic Plague in Nineteenth-Century China*, pp. 1 and 49.

⁹ Osaak A. Olumwullah, *Dis-ease in the Colonial State Medicine, Society, and Social Change among the AbaNyole of Western Kenya* (Westport, Connecticut, London: Greenwood Press, 2002), p. 194.

The East African epidemic had originated in India in 1896. The plague broke out in Bombay in September 1896. It then spread to Pune, Karachi, and Calcutta.¹¹ The Indian bubonic plague spread to Indian Ocean port cities of Mauritius in 1897. In 1898 the plague arrived in Madagascar and Kenya through Indian indentured labourers and the importation of merchandise. By the early twentieth century, bubonic plague had spread to many inland areas of Africa. In 1902, plague cases were reported in Nairobi, Kenya. Also, in Natal, bubonic plague broke out in 1902 through infection from a cargo ship from Argentina.¹² Movements of people and goods from India to Zanzibar led to the outbreak of plague in Zanzibar in 1905.

The British authorities in Kenya, Uganda and Zanzibar decided that a Quarantine Station had to be built on an island close to Zanzibar Town in 1899 in order to control the spread of plague (See Map 3.1 below). These measures were given greater urgency by the incident of the S.S. Bhundara. At the end of 1898, a telegram from the British East African Protectorate in Mombasa, on the Kenyan coast was sent to the Colonial Office in London informing of the presence of plague near Mombasa port. It was reported that the steamer Bhundara from the port of Bombay, with 1,000 Indian indentured labourers, including people suffering from plague on board, had arrived at Mombasa. These Indian labourers were imported into East Africa for the construction of the Mombasa-Kisumu Railway line, which started in 1897 and reached Lake Victoria in 1901. The Bhundara had a cargo of 700 tons of rice to be transported to Zanzibar. Six people had died of plague on board.¹³ This case was reported on 25 of December, 1898. On the following days, the colonial authorities in Mombasa and

¹⁰ Mac Dawson, 'Socioeconomic Change and Disease: Smallpox in Colonial Kenya, 1880-1920', in Steven Feierman and John Janzen (eds.) *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992), p. 99.

¹¹ David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (California: California University Press, 1993), p. 201.

¹² Nafisa Essop Sheik, 'This Most Perilous and Epidemical Disease' Plague Precautions and Public Politics in Natal, 1896-1903' (Unpublished B. A. Honour's Thesis, Department of Historical Studies, University of KwaZulu-Natal, 2004), p. 2.

¹³ Public Record Office (PRO), London, FO 2/433 Africa, 'Telegram from Mombasa to London, 26 December, 1898', Case of the "Bhundara", Claim for Detention of, at Zanzibar and Mombasa- Plague and Quarantine Regulation 1898-1900, p. 22.

Zanzibar ordered the Bhundara to return to India as there were no quarantine facilities in East Africa. The captain of the Bhundara requested from the colonial authorities in East Africa to have one hundred and twenty tons of water necessary for the journey back to India but neither Mombasa nor the Zanzibar authority responded to the request.¹⁴ The British authorities in East Africa thereupon decided to retain the Bhundara in East Africa fearing more deaths would occur if the ship returned to India.

Map 3.1: The Quarantine Station, 1900



Source: Public Record Office, London, FO 2/912 Africa (East) 'Quarantine Station on Prison Island Zanzibar 1894-1904'.

¹⁴ PRO FO 2/433, 'From Marquess of Salisbury to Hardinge, 27 December 1898', Case of the "Bhundara," p. 81.

Further tension evolved over plague matters at Mombasa on the 30 December, 1898. A telegram from Mr. George Mackenzie of Smith Mackenzie & Co. informed the Foreign Office that the captain of the Bhundara feared a mutiny would occur on his steamer if prompt steps were not taken to satisfy his passengers.¹⁵ The Bhundara problem was resolved in the early weeks of January 1899 when a plague camp, intended to act as a temporary Quarantine Station, was established at Manda, an island in the Lamu Archipelago off the Northern Kenyan coast. It became the first public health measure to involve all the British East African colonies since each country had previously instituted its own measures. In 1898, the Plague Regulations for Zanzibar and East Africa, prompted by the Bhundara case, were sanctioned by the authorities in London.¹⁶

The detention of the Bhundara caused distress among individual traders and the commercial agents in India and Zanzibar. For instance, the Bengal Chamber of Commerce addressed a strong protest to the Indian Government when the Bhundara was detained. The Chamber condemned the restrictive measures taken by the Zanzibari and Kenyan Government against the plague-stricken steamer. The Chamber stated that “every possible precaution was taken at Karachi in connection with the embarkation of ‘coolies’ proceeding to Africa by the S.S. Bhundara”.¹⁷

The British colonial administrators in East Africa feared that the situation might worsen as the plague was raging at Tamatave, in one of the Madagascan ports.¹⁸ In correspondence with the British authorities, London, German officials in Tanganyika made it clear that “they [would] not allow the German mail ship to enter Dar es Salaam, even with a clean Bill of Health because she [the mail ship] had touched Madagascar where plague was introduced by

¹⁵ PRO FO 2/433, ‘From Marquess to Hardinge, 30 December 1898’, Case of the “Bhundara”, p. 82.

¹⁶ PRO FO 2/433, ‘From Hardinge to Marquess, 17 January, 1899’, Case of the “Bhundara”, p. 259.

¹⁷ ZNA BA 104/8, ‘Indian Plague’, *Zanzibar Gazette*, 15 March 1899, p. 5.

¹⁸ PRO FO 2/912, Africa (East) ‘From Hardinge to Marquess, 15 December, 1898’, Quarantine Station on Prison Island Zanzibar 1894-1904’, p. 1.

Indians”.¹⁹ This became the stance of the colonial authorities in East Africa in responding to the occurrence of bubonic plague.

In Zanzibar, the government immediately increased its staff in the Sanitary Department, fearing that the plague might spread to Zanzibar. A staff of one hundred and twenty sweepers under nineteen supervisors and two inspectors cleaned the town daily. That the number of staff in the department was huge compared with other departments within the administration, goes to show how important health and medical matters were considered by the government in a time of perceived emergency.

Lime and other disinfectants were distributed by the government in all quarters of the town. Mr. Sorabji Manekji, Head of the Sanitary Department, reported to Lloyd Mathews, the First Minister in Zanzibar (1890-1901) that twenty-two pushcarts were employed daily in carrying away dirt and rubbish from the town.²⁰ Passengers who arrived in Zanzibar port from Madagascar were isolated at the Prison Island.²¹ Aware that in 1897, Paul-Louis Simond a French biologist and Waldemer Haffkine, a Calcutta bacteriologist, had proved that the plague-carrying fleas were distributed through rats in Zanzibar every precaution was taken to eliminate rats. In 1896, when bubonic plague started to ravage in India, it was not yet established that black rats were the main carriers of the disease. It was thought that “the human body and the conditions of human habitation and sanitation were ... primary factors in the spread of the disease”.²² According to Chandavarkar, Simond published a paper in 1898 identifying it “as a rat disease and postulating that its transmission to man occurred through rat fleas. The case was not experimentally proven to the satisfaction of his fellow bacteriologists and least of all the Indian Plague Commission”.²³

¹⁹ PRO FO 2/433, ‘From Hardinge to Marquess, 27 December, 1898’, Case of the “Bhundara,” p. 81.

²⁰ ZNA BA 104/8, ‘Plague Precautions in Zanzibar’, *Zanzibar Gazette*, 25 January 1899, p. 6.

²¹ ZNA BA 104/7, ‘Plague’, *Zanzibar Gazette*, 16 March 1898, p. 2; ZNA BA 104/8, ‘Plague’, *Zanzibar Gazette*, 4 January 1899, p. 2.

²² Arnold, *Colonizing the Body*, p. 210.

²³ Rajnarayan Chandavarkar, ‘Plague Panic and Epidemic Politics in India, 1896-1914’, in Terence Ranger and Paul Slack (eds.), *Epidemics and Ideas: Essays on the Historical Perception of Pestilence* (Cambridge: Cambridge

Between January and June 1899, the British authorities in Zanzibar and Mombasa organized several meetings to discuss how Zanzibar and East Africa in general could fight the threat of bubonic plague. In early June, 1899 a meeting was held at the Foreign Office at Whitehall attended by Mr. Bertie and Sir Thorne Thorne, a Health advisor at the Colonial Office. Thorne was formerly the Medical Officer of Health in London and a British delegate at the third International Sanitary Conference, which was held in 1866 at Constantinople. Others present were Sir Christopher Hill from Foreign Office, Sir John Kirk, the British Consul in Zanzibar in the 1870s and early-1880s and Sir Arthur Hardinge, the Consul-General in Zanzibar between 1894 and 1900. The meeting also considered Dr. Charlesworth's views on health matters as he was one of the senior Medical Officers (MO) in Zanzibar at that time.²⁴ The meeting decided that a joint Quarantine Station for East Africa, to be established on Prison Island, which faced Zanzibar Town.²⁵ The Island had been used before as a prison for those convicted of smuggling slaves after the abolition of the slave trade in Zanzibar in 1873. It was also decided that if plague cases occurred in more than one ship, Bawe, another small island near Prison Island could be used.

The meeting also decided that the cost of maintaining this Quarantine Station must be divided into four; one half to be paid by the Uganda Railway Authority, a quarter by the East African Protectorate, and a quarter by the Zanzibar Government.²⁶ The Uganda Railway Authority was to bear half of the cost for the maintenance of the Quarantine Station because this company frequently used the port of Mombasa for the transportation of

University Press, 1992), pp. 215 and 216. In 1894 Alexandre Yersin, a Franco-Swiss microbiologist and a student of Pasteur, suggested that the rat was the major factor in the transmission of the disease. Myron Echenberg, *Black Death, White Medicine, Bubonic Plague and the Politics of Public Health in Colonial Senegal, 1914-1945* (Oxford: James Currey Ltd., 2002), p. 20.

²⁴ PRO FO 2/912, 'East Africa Plague Precautions- A Meeting at the Foreign Office, 9 June 1899', Quarantine Station on Prison Island Zanzibar 1894-1904. Dr. F. C. Charlesworth graduated from Edinburgh University in 1882. In 1887, he came to Zanzibar and became a Consulate physician. See NW 4/2, 'Medical Services', *Al-Falaq*, 19 August 1939, p. 20.

²⁵ PRO FO 2/912, 'East Africa Plague Precautions- A Meeting at the Foreign Office, 9 June 1899', Quarantine Station on Prison Island Zanzibar 1894-1904, p. 147.

²⁶ PRO FO 2/912, 'East Africa Plague Precautions- A Meeting at the Foreign Office, 9 June 1899', Quarantine Station on Prison Island Zanzibar 1894-1904, p. 147.

labourers and equipment. It was inferred that the Indian labourers might introduce more epidemics into East Africa. It was also decided that the:

Zanzibar Government should be prepared to accept [the] entire responsibility for the control of the joint Quarantine Station on Prison Island. The Zanzibar Government should undertake the whole of the initial outlay, amounting to £2,800, in addition to what had already been expended on the purchase of the Island from the Omani Sultanate, and the erection of buildings, and should provide for the proper supervision of the station and for maintaining it in an efficient state of repair, whilst on the other hand the East African Protectorate and Uganda Railway administrations should be jointly responsible for the expenditure arising out of salaries, medicines etc. The cost should be divided equally between the East African colonies.²⁷

Zanzibar was chosen as the site of the Quarantine Station for the East African British colonies first, because the Zanzibar port was busy at that time, receiving ships to and from Asia and Europe. It became important to have a station where surveillance of any incoming epidemics could occur. Second, it was explained at the meeting in London that “there is no island in the neighborhood of Mombasa which could be utilized as a quarantine station”.²⁸

These measures were introduced at a time when quarantine measures were still controversial. Since the mid-nineteenth century, in Britain, social movements had pressurized the government to stop the quarantine practices which were thought to interfere with free trade and imperial commerce. According to Anne Hardy, this opposition to quarantine, as well as the development of sanitary reforms, led to a shift in practices: public health measures in the

²⁷ ZNA AJ 16/11, ‘Quarantine Station, 1899’, Quarantine Station Equipments, Repairs’.

²⁸ PRO FO 2/912, ‘From Hardinge to Marquess, 15 December, 1898’, Quarantine Station on Prison Island Zanzibar 1894-1904, p. 3. In Singapore, a Quarantine Station was established with the development of the island as a modern port and a centre of trade and finance in the period between 1890 and 1930. The port-city was part of an Asian-wide network of steam shipping and human movement. The Station became necessary with the importation of Chinese labourers in the island, when the eruption of bubonic plague in China was considered to endanger the island. See: James Francis Warren, *Rickshaw Coolie, A People's History of Singapore, 1880-1940* (Singapore: Singapore University Press, 2003), p. 258; Likewise, in Japan several quarantine stations were established at Hiroshima, Hikoshima Island and Sakurajima in order to isolate thousands of Japanese soldiers who returned home after the Sino-Japanese War which began in 1894 to 1896. The importance of quarantine for the returning soldiers was to make sure no virulent and infectious diseases entered Japan. The soldiers' clothes and all their belongings were disinfected with steam or a chemical...agent...See:http://www.pcf.city.hiroshima.jp/Virtual/VirtualMuseum_e/exhibit_e/exh0403_e/exh0403_e.html/. Accessed on 26 October, 2008.

ports were to be administered, not by the custom officials, but by medical officers.²⁹ From 1872, Port Sanitary Authorities had been introduced in Britain to prevent the entry of dangerous communicable diseases into the country. Port health officers became responsible for checking for any suspected cases.

In the later 1870s, this port authority system was also adopted in India. As in Britain, in India it was feared that the quarantine would interfere with trade. The Port Health scheme under a Port Health Officer was first instituted in Calcutta and was extended to other ports in India. Mark Harrison states that in India:

Based on the British scheme, established on the recommendation of John Simon, the port health officer was charged with responsibility for the sanitary condition of the port and its environs, and with the medical inspection of ships. Instead of quarantining all persons arriving from infected ports, he was to isolate and detain only those suspected of carrying diseases.³⁰

This new practice was adopted in Zanzibar and in 1898, in the fear that Indian indentured labourers might introduce plague. In Natal medical officers adopted the 'English Quarantine' system whereby they recorded the details and future whereabouts of passengers disembarking from the vessels for the purposes of monitoring them for signs of illness.³¹

The Quarantine Rule in Zanzibar was proclaimed by Sultan Humoud Mohammed (r.1896-1902) in the *Zanzibar Gazette* of November 1899.³² The rule was framed in accordance with the provisions of the Venice Sanitary Convention of 1897 for the Port of Zanzibar.³³ The rule was according to Article 45, (1) of the East Africa Order-in-Council, 1897 whereby Her

²⁹ Anne Hardy, 'Cholera, Quarantine and the English Preventive System', *Medical History*, 37 (1993), pp. 250-269.

³⁰ Harrison, *Public Health in British India: Anglo-Indian Preventive Medicine, 1859-1914*, p. 120.

³¹ Sheik, 'This Most Perilous and Epidemical Disease', pp. 11 and 54.

³² ZNA BA 107/24, 'The Quarantine Rule', *Zanzibar Gazette*, 20 November 1899, p. 4.

³³ PRO FO 2/912, 'From Hardinge to Marquess, 15 December, 1898', Quarantine Station on Prison Island Zanzibar 1894-1904, p. 4.

Majesty's Commissioner and Consul General had the power to make regulations relating to public health. This also led to the introduction of the East African Infectious Diseases Regulations. The regulations ordain that:

(n)o person or goods coming from an infected or suspected port shall be permitted to land at any port or place in the East African Protectorate, hereinafter called the Protectorate, except Mombasa, Lamu, or Kismayu, until they have obtained at one of the three ports aforesaid a clean bill signed by the Medical Officer of the Province, or by a qualified Medical Officer empowered to act on his behalf.³⁴

Thorne, who commented on the earliest draft of the Quarantine Rules in Zanzibar in 1899, objected to the way the British authorities in Zanzibar had proposed new clauses which had not been mentioned in the Venice Article of 1897. He observed that some of the proposed clauses of the Quarantine Rules in Zanzibar “find no place either in the Venice Convention of 1897, or any modern Conventions dealing with the prevention of diseases”. He disputed the use of the term Sanitary Camp and preferred the use of the term Sanitary Station.³⁵ Responding to this, Sir Lloyd Mathews in a letter to Lord Salisbury, the Foreign Minister in London, argued that “it is inadvisable to insist in a country such as this (Zanzibar) on the strict and literal application of every provision of the Venice Convention”.³⁶ Hardinge also argued that:

My humble opinion has always been that we ought not in these Protectorates [Kenya and Zanzibar] to be tied down too closely to the Venice Rules. These rules, as I have before had the honour to point out, were not only drawn up without any consideration for the peculiar local conditions of East Africa which at the time when they were drafted was threatened by plague, but admit of differential application in Europe, the Red Sea and the Persian Gulf.³⁷

³⁴ PRO FO 2/912, ‘East African Plague Regulations’, Quarantine Station on Prison Island Zanzibar 1894-1904, p. 13.

³⁵ PRO FO 2/912, ‘Richard Thorne Thorne to Zanzibar Government, 9 February 1899’, Quarantine Station on Prison Island Zanzibar 1894-1904, pp. 28-9.

³⁶ PRO FO 2/912, ‘From Hardinge to Marquess, 4 April 1898’, Quarantine Station on Prison Island Zanzibar 1894-1904, p. 46.

³⁷ PRO FO 2/912, ‘From Hardinge to Marquess, 4 April 1898’, Quarantine Station on Prison Island Zanzibar 1894-1904, p. 47.

British officials based in Britain considered however that the continent required public health measures similar to those that had been established in Britain. Vaughan contends, however that the appeal to local conditions was also not broadly shared: “they [medical doctors and administrative officials] regarded the problems of public health in colonial Africa to be much the same as those experienced in Victorian Britain and amenable to the same ‘sanitary’ solutions”.

Other ideas and views which influenced the adoption of quarantine rules in Zanzibar came from the British officers who worked in India during the plague period. Sir Lloyd Mathews wrote to R. W. Hornabrook, a former British medical officer who worked in India in 1896 and who in 1899 became a Plague Officer to the Transvaal Chamber of Mines in South Africa in order to seek opinion on how Zanzibar could apply quarantine measures. Hornabrook demonstrated that the dangers of the importation of plague by ships coming from the plague-infected ports were threefold: the occurrence of plague among passengers, the landing of rats from the plague infected ships and the importation of infected cloth.³⁸

In the early period of the establishment of the Quarantine Station in Zanzibar, Dr. Johnson, an Assistant Medical Officer, was dispatched from Mombasa to take charge of the Station.³⁹ At the same time, Lloyd Mathews applied to India for Plague Assistants, who would carry out the medical supervision of plague victims. These were hospital assistants, a category of medical helpers first introduced in India in 1835 at the Calcutta Medical College. A candidate had to undergo two years of courses and an apprenticeship at a recognized medical institution in India.⁴⁰ The posts of plague assistants were inaugurated to help plague victims from the mid-1880s. Mathews did not succeed in his bid, however, as many Indian Hospital Assistants were employed in South Africa during the South African War of 1899 to 1902.

³⁸ PRO FO 2/912, ‘From R. W. Hornabrook to Lloyd Mathews, 2 May 1899’, Quarantine Station on Prison Island Zanzibar 1894-1904, p. 71.

³⁹ PRO FO 2/912, ‘From Hardinge to Marquess, 15 December, 1898’, Quarantine Station on Prison Island Zanzibar 1894-1904, p. 1.

⁴⁰ Harrison, *Public Health in British India: Anglo- Indian Preventive Medicine, 1859- 1914*, pp. 7-8.

In 1899, Mathews appointed Dr. Henry Alfred Spurrier as Chief Medical Officer for the Station. Spurrier was required to take responsibility for everything connected with boarding ships from infected or suspected ports, or from wherever plague was rumoured to exist. Among his duties was to see that the 'Venice Convention' was strictly carried out, despite Mathew's belief that this was not necessary. He had to cooperate with the medical doctors of the Government Hospital, Drs. Nariman and MacDonald, and to report monthly on the sanitary condition in the town. Spurrier took charge of all the duties of Port Health Officer, inspecting vessels, including dhows of every kind and superintending the completion of the necessary buildings at Prison Island.⁴¹ The Quarantine Station, which also had fumigation facilities, was established to monitor and quarantine people and incoming vessels and merchandize from any port in the world.

Infectious Disease Regulations in Zanzibar led to the prohibition of migrants, traders and visitors, mainly from India and Arabia, from entering the town. In 1920, trachoma, the eye infection disease, which was contagious and widespread at Muscat, Oman, was listed as a quarantinable disease. The Port Health officers banned infected persons from Oman from entering the town. They were required to stay on board the dhows, and later, at the start of the monsoon, to return at home. In 1940, the Arab Association leaders fought this decision and claimed that it restricted passengers from Muscat from visiting their relatives in Zanzibar. In 1942, Sheik Said Ali el Mugheiry, a member of the Legislative Council (LEGCO) who represented the Association was concerned that trachoma had become a restricted infectious disease and immigrants suffering from it were not allowed entry in the town and the Island. The Arab Association requested the Colonial Government in Zanzibar to amend the 'Immigration Regulation and Restriction Decree' by removing the word

⁴¹ ZNA AB 2/286, 'Quarantine Station at Zanzibar'; Spurrier, who was born in 1852 in Surrey, was a medical student at the London Hospital where he graduated in 1887. He was also involved in ministerial work. He studied Philosophy and Theology at the Gregorian University, Rome. In the early-1890s, Spurrier had been a surgeon of the cable ship, the John Pender, and later a Medical Officer to the Eastern Telegraph Company in Zanzibar. Since colonial medical officers in Zanzibar were very few; Spurrier was appointed to take the post. For further information on Dr. Spurrier see: ZNA AB 86/53, Personal File, 'Dr. A. H. Spurrier Medical Officer, Letter from Lloyd Mathews 28 August 1899 to Dr. Spurrier'; See also, *Zanzibar Voice*, 6.x., 1935; pp. 137-138; ZNA CA 1/3, 'Spurrier Papers 1925, 'In Memoriam of Alfred Henry Spurrier (October 14, 1862 - July 5, 1935), 'The Spurrier Memorial Fund under the Distinguished Patronage of H.H the Sultan and H.B. Resident, Zanzibar', pp. 1 and 3; R. H Crofton, *Zanzibar Affairs 1914-33* (London: Francis Edwards Limited, 1953).

‘trachoma’ from the definition of “Prohibited Diseases”. However, the colonial government refused to amend the rule and pointed out that the disease was dangerous as it caused blindness.⁴² Other regulations were imposed in Zanzibar in 1899 following the occurrence of a smallpox epidemic.

Throughout the colonial period in Zanzibar, the detention of vessels at the Quarantine Station (indicated in Table 3.1) depended on the occurrences of epidemics in other parts of the world. Neither in Zanzibar nor in London do the archival sources have adequate information on the operation of quarantine services at the Island.

Table 3.1: The number of ships and passengers at Quarantine Station, 1916-1925

Year	Ships infected	Passengers Quarantined
1916	5	1738
1917	2	1520
1918	2	771
1919	2	579
1920	3	1704
1921	5	2009
1922	0	0
1923	2	913
1924	4	1923
1925	3	1765
	28	12922

Source: These data were compiled from ZNA AB 2/286, ‘Quarantine Station at Zanzibar’, 1900-1950.

⁴² ZNA AJ 5/26, ‘Letter from Arab Association to the Director of Medical Services (DMS), 7 May 1942’, Emigration and Immigration Correspondence and Statistics etc’.

Dhows, Port Inspection and the Establishment of the Infectious Diseases Hospital in 1899

From at least the early years of the nineteenth century, a link had been observed between the migration of people to Zanzibar Town and the spread of diseases. After the abolition of slavery and the colonization of Zanzibar by the British, more labourers were needed to work in the clove and coconut plantations and at the port. From the early-1890s, there was an unsuccessful attempt to use Indian indentured labourers in Zanzibar to supply the labour shortage, but the British authorities in India forbade this. In 1891, Gerald Portal, British Consul-General in Zanzibar wrote to the Secretary of the Government for India and Foreign Department in London requesting for cheapest rate indentured labourers from India to carry on the work of the town, the port and the plantations.⁴³ However, Zanzibar's request was turned down as the New Act, which amended the Indian Emigration Act, XXI of 1883, prohibited the use of Indian labourers in other than "Her Majesty's Government". Zanzibar was said to be a Sultanate state.⁴⁴ As a result, labourers were procured from the mainland of East Africa, especially from Tanganyika from 1900. This led to a marked increase in diseases, new to Zanzibar and brought by those labourers.

Colonial administrators' reports in Zanzibar convey how the economy was affected by the decisions to abolish the slave trade and slavery. Lloyd Mathews warned in his 1901 'Memorandum on Labour' that the economy would decline if the labour shortage persisted for a further two years. He explained that "the plantations of these islands were fully cultivated and profitable prior to the decree. Now, many of them are out of cultivation for want of labour; others are worked at a loss, and labour is getting scarcer everyday".⁴⁵ Mathews further stated that "I cannot blind my eyes to the fact that it [the decree to abolish

⁴³ PRO FO 107/106, 'From G. Portal, Consul General to the Secretary of the Government, India, 8 September 1891', Zanzibar Coolie Emigration from India into Zanzibar and Pemba, 1896-8.

⁴⁴ PRO FO 107/106, 'From G. S. White, Calcutta 12 February 1896 to Lord George Hamilton, H.M Secretary of State for India', Zanzibar Coolie Emigration from India into Zanzibar and Pemba, 1896-8.

⁴⁵ Lloyd Mathews, 'Memorandum on Labour, Zanzibar, 19 January 1901', *Documents-Acte général*, 1901, p. 196.

slavery] has not been of benefit to these islands up to present. How to turn into a benefit is a question we have to solve”.⁴⁶

The Port Health Officers were assigned the task of inspecting the dhows coming to Zanzibar Port. For the whole of the nineteenth century, dhows and their crews brought epidemics such as cholera and smallpox to Zanzibar.⁴⁷ In 1899, the ‘Dhow Regulations’ were passed. These regulations stipulated that all northern and Indian dhows coming to Zanzibar during the north-east monsoon, from Arabia, the Persian Gulf, and India must stop and undergo inspection in the town port. Any incoming vessel had to communicate with the Quarantine Officer (QO) before landing and if plague was present in the vessel, it had to stop at the Quarantine Island, (QI).⁴⁸ Dhow captains were required to show names, nationalities, and port of embarkation, sex and particulars of the travellers, as well as valid travel documents and passports. These regulations were sometimes evaded as dhows arrived during the night without the notice of Port Health Officers which led to even more severe outbreaks of contagious and infectious diseases.⁴⁹

The colonial authorities in Zanzibar established an Infectious Diseases Hospital in order to stop the spread of infectious diseases, mainly smallpox, from India and Arabia. Michael Worboys, writing about the British Empire more generally has shown that “in the 1880s, the desire to control smallpox was the major impetus for the construction of isolation hospitals, which became the physical embodiment of the contagious powers of bacteria and of

⁴⁶ Mathews, ‘Memorandum on Labour’, p. 196.

⁴⁷ This is an emerging theme in the Indian Ocean historiography which is now paying special attention to the interconnections between continents formed through these dhows: my work in this thesis is part of this newly compiled history. See for instance: Amina A. Issa, ‘Dhows and Epidemics in Indian Ocean Ports’, *ZIFF Journal* 2, Zanzibar (2006), pp. 20-31. A number of scholars have contributed material concerning the cultural, political and economic relationships around the Indian Ocean region. In the 2008 ZIORI Conference, slavery, commercial ties, the history of these port cities and other cultural linkages associated with food and clothes have been discussed. See: ‘The Dialogue between Civilisations’ International Conference on the Indian Ocean—the largest cultural continuum, Zanzibar, 15th -17th August, 2008.

⁴⁸ ZNA BA 104/8, ‘Dhows Regulations’, *Zanzibar Gazette*, 6 December 1899, p. 8.

⁴⁹ ZNA AJ 5/26, ‘From DMS to Provincial Commissioner, Urban, 19 September 1940’, Emigration and Immigration Correspondence and Statistics etc’.

personal infection”.⁵⁰ Isolation hospitals were also built in Europe in order to control infection.

Initially, in 1895, a tiny Smallpox Hospital was founded by the Universities’ Mission to Central Africa (UMCA) missionaries at Kisiwandui at the edge of the Creek which divided the Stone Town and Ng’ambo. This was a temporary measure in response to the immediate epidemic, which occurred in that year, when thousands of people, not only in the town but also on the islands perished. Innoculation services were introduced at the UMCA Station to respond to the spread of smallpox and chickenpox, which broke out on the mainland, whenever a fresh group of emancipated young slaves arrived in Zanzibar.⁵¹ The Roman Catholics introduced smallpox facilities at the mission dispensary at Mtakuja.

In 1897, the British government in Zanzibar established a smallpox ward at Kiungani, adjacent to the Government Leprosarium.⁵² Similarly, in the wake of the 1901 smallpox epidemic, the new Infectious Diseases Hospital was established at Gulioni in the edge of Zanzibar Town. The Hospital normally received cases which had occurred during epidemics in the town and the more serious cases from the Quarantine Station. More cases of smallpox occurred in 1909. In 1913, there was another outbreak of smallpox and the majority of the cases came from the Indian bazaar in the neighbourhood of Mkunazini and Sokomuhogo in Stone Town. Many precautions were however taken by the Health and Medical Department staffs to ensure that the disease did not last long. House-to-house visits and disinfection of the infected houses were normally carried out.

The Arab and Indian Association leaders cooperated with the government to control the disease.⁵³ They established special facilities for their own members. The victims were

⁵⁰ Michael Worboys, *Spreading Germs, Disease Theories and Medical Practice in Britain, 1865-1900* (Cambridge: Cambridge University Press, 2000), p. 236.

⁵¹ *Central Africa*, ‘Smallpox in Zanzibar’, XV, 1895, p. 20

⁵² ZNA BA 104/8, ‘Smallpox’, *Zanzibar Gazette*, 8 November 1899, p. 5.

⁵³ These two associations were created in the early decades of the 20th century due to political and economic circumstances. The aim of these associations was to regain the political and economic control that they lost after the abolition of the institution of slavery in 1897 and the British political dominance over Zanzibar. For

segregated in community halls or small huts (*banda*) introduced for the purpose. These leaders encouraged their fellow community members to be vaccinated by the government health officers.⁵⁴ The willing participation of community leaders in anti-smallpox campaigns casts doubt on the idea that Western medicine was a merely a 'tool of empire'. This marked a stage in the acceptance of state medical intervention and responsibility which became part of a new social order during British colonial rule in Zanzibar. We shall see in Chapter Six that from the early-1930s, the community leaders became popularizers who advocated Western medicine to their respective association members. This was a stage in the coming alliance between nationalist ethnic organizations and biomedicine as a part of a modern agenda.

The sporadic occurrence of epidemics of smallpox in Zanzibar Town however continued to be in part due to the opposition to immunization both in India and in Zanzibar. David Arnold maintains that vaccination processes were resisted by many people. Although the government of Bombay had passed a Vaccination Act as early as 1877, some of the passengers from Bombay who migrated to Zanzibar may have escaped vaccination in India.

The Health Department administrative files in Zanzibar show that smallpox outbreaks were closely associated with Indian migrants. It was reported that for many decades this disease was traced directly to passengers from India. These Indian migrants travelled as deck passengers. Vessels from India sometimes carried 600-800 passengers, chiefly from Bombay. By the late-1910s, it was reported that many of the IDH beds were occupied by poor Indians, who were in Zanzibar Town as seasonal migrants. Many Indian immigrants arrived in Zanzibar to work as skilled artisans, labourers, and petty traders.⁵⁵

The IDH continued to be used for first three decades of the twentieth century. From 1936, the medical authorities in Zanzibar decided to move the Hospital, as the town was expanding towards the Hospital. It was not until 1955 that the new Infectious Diseases Hospital was opened at the Quarantine Island, at an estimated cost of £3,000 from the

more information see: Abdul Sheriff, 'Conclusion', in Abdul Sheriff and E. Ferguson, *Zanzibar under Colonial Rule* (London: James Currey, 1991), p. 255.

⁵⁴ ZNA BA 7/2, Public Health Report for the Year 1913, p. 39.

⁵⁵ ZNA AB 2/356, 'Smallpox in East Africa', Vaccination of Natives and Immigrants more particularly from India 1921-48'.

'Development Funds'; it was designed to be used by the other East African colonies as well as by Zanzibar.⁵⁶

The failure of lymph used in vaccination due to climatic condition was another cause of the spread of the disease in the town. From the early twentieth century, the Dr. MacDonald, the Principal Medical Officer (PMO) in Zanzibar mentioned the danger of the spread of smallpox infections from the spoiled lymph. He established in 1913 that:

A possible explanation of the large number of the failures is that a very high proportion of the people vaccinated nowadays have already been vaccinated once before, but I think besides that, the strains of lymph we were using not as good as in former years. Also both fatal cases were in children under five years of age and neither had been previously vaccinated.⁵⁷

In 1913, 11,164 people were vaccinated against smallpox in Zanzibar Town.⁵⁸ They were approximately 31 percent of the urban people. The 1910 census shows that 35,204 people were living in Zanzibar Town.

The medical authorities responded to the quick deterioration of lymph imported from India by importing fresh lymph prepared in the Bacteriological Laboratory in Dar es Salaam.⁵⁹ More efforts were made by the Government to make sure that people were vaccinated. In 1920, the 'Public Health Decree Section 60' which insisted on the vaccination of babies before they reached the age of six months was passed. No child could be admitted to school until he or she produced clear vaccination marks. The intensive campaign to vaccinate the population of Zanzibar Town was started in 1935.⁶⁰

⁵⁶ ZNA AJ 9/6b, 'Infectious Disease Hospital', Infectious Disease Hospital Gulioni, Building, Repairs, Patients, etc.'

⁵⁷ ZNA BA 7/2, Public Health Report for the Year 1913, p. 39.

⁵⁸ ZNA BA 7/2, Public Health Report for the Year 1913, p. 39.

⁵⁹ ZNA BA 7/44, Annual Reports on the Medical and Public Health Departments for the year 1922, p. 31.

⁶⁰ ZNA AJ 18/31, 'Smallpox', Smallpox Outbreaks, Preventive measures, Report, etc; ZNA BA 7/13, Annual Medical and Sanitary Report for the year ended 31st December 1934, p. 17.

People's responses to the vaccination campaign varied. Colonial medical records show that many parents refused to send their children to be vaccinated. By the 1930s, vaccination campaigns were common in urban areas but they were resisted in rural areas. In 1935, reports of parents' reactions to vaccination came from the head teachers of Marumbi and Mkwajuni in rural Unguja. In 1938, the head teacher of Donge School in northern Unguja requested the Education Department to stop the vaccination, as the incidence of school drop-out had increased and was linked to the campaign. In the same year, parents in Chwaka in the east-central Unguja approached the *Sheha* (a local leader), with request that their children should not be vaccinated. Parents' resistances to vaccination were also noted in schools in Pemba Island.⁶¹ By 1955, school children were no longer vaccinated against smallpox in their respective schools. Khamisa Abdulla, who joined Std. 1 at Kikwajuni Girl's School in Ng'ambo in 1955, told me that smallpox vaccination was no longer carried on during her time.⁶²

By the 1950s, vaccination programmes continued to operate in dispensaries, in clinics and at the hospitals. In rural areas, the vaccinations mainly took place in dispensaries which were remote from the scattered villages, leading to poor attendance at the vaccination centres. Nevertheless, the archival records in Zanzibar are not clear as to whether cultural forces were decisive factors in anti-smallpox campaigns.⁶³

Before 1920, the medical authorities insisted that migration surveillance in the port had to be restricted to Indian and Arab vessels and migrants only. But as many infected persons came from the mainland during the clove seasons, strict inquiries made of these mainland vessels. According to the British medical officers, clove pickers from the mainland of East Africa migrated to Zanzibar and sometimes infected the town population. The passengers from the

⁶¹ ZNA AJ 18/24, 'Health of School children', School Children Medical Inspection and Examination Of.

⁶² Interview with Bi Khamisa Abdulla at Kikwajuni, 3 December 2007.

⁶³ While explaining the resistance of people to smallpox vaccination in the late nineteenth century India, David Arnold shows that it was particularly in the Muslim areas of eastern Bengal. They saw vaccination as being a form of interference with God's will. Apart from that, according to Arnold, most of the Hindu population decided to turn to the goddess Sitala as she was believed to be responsible for bringing and preventing the disease. See: Arnold, *Colonizing the Body*, p. 48 and 56.

mainland may have entered Zanzibar Island with early, minor signs of smallpox though sometimes they carried vaccination certificates. These infected migrants brought the disease to the clove plantation areas where many people met. After the clove season, which normally lasted for three months, the local population spread the disease to other areas of the islands, including the town itself. From 1948, during clove harvest seasons the medical authorities in Zanzibar tried to prevent the disease from endangering more people by opening vaccination offices at the clove camps.⁶⁴

Furthermore, in 1952, the medical authorities in the town requested that “all passengers, including Africans [from the mainland] should continue to present themselves to the Health Officer and to the Immigration Officer before disembarking”.⁶⁵ The periodic outbreaks of smallpox epidemics in Zanzibar Town continued to the end of colonial period as people avoided vaccination and dhows avoided inspection. The disease persisted in Zanzibar as in India and was only finally eradicated through the international smallpox campaign of the 1960s and 1970s.

The Outbreak of Bubonic Plague in Zanzibar Town in 1905

Despite the establishment of the Quarantine Station and the introduction of Port Health Services, bubonic plague broke out in Zanzibar Town in 1905. The 1905 bubonic plague in urban Zanzibar is given detailed cover in the colonial records. They indicate that the Department of Health enforced more public health rules in response to the epidemic. As I will explain later, the official reports also detail the reactions of the people to the epidemic. The reports demonstrate that the epidemic led to an expansion in the British colonial government’s intervention in the life of the town population in the name of public health. This increased the role of the state, but was finally beneficial: medical benefits were brought

⁶⁴ ZNA BA 7/48, Health Department, Annual Report 1957, p. 18.

⁶⁵ ZNA AJ 28/56, ‘From the DMS to the Chief Secretary (CS), Zanzibar, 6 January 1952’, Health Department: Checking and Examination of Passengers Arriving; ZNA AJ 5/26, ‘Smallpox in Zanzibar’, Emigration and Immigration Correspondence and Statistics etc.

to the people of Zanzibar. Western biomedicine was not always provided to control the Arabs, Indians and Africans, and these urban communities would eventually demand biomedical and public health services. This did increase the state's role but also eventually medical benefits were brought to the people of Zanzibar.

The first suspected case of plague to be noticed by the medical officers in the Stone Town area was on 3rd of August 1905 and came from a German trader, Herr Ratje, who was involved in the transportation of hides from East Africa to Germany. Ratje died a few days from excessive body temperature and heart failure. Dr. Friedrichsen, a private German doctor who treated him, sent the material from Ratje's 'post mortem' to the German bacteriologist Professor Robert Koch who was in Tanganyika at that time, involved in investigating anthrax. A medical doctor in Zanzibar thought that the case might be anthrax as the deceased was involved in dealing in hides. Professor Koch did not believe the case was anthrax.⁶⁶ He suspected it was bubonic plague.

On August 31, Dr. Howard of the UMCA Hospital found plague bacilli in an African patient. This patient was an employee of one of the Indian traders near the port in the town. Later on, as Map 3.2 shows, it was noticed that many of the plague cases occurred in apartments and shops around Malindi, near the port and at Bazaar centres. The total number of people who were affected with the disease was 154, out of an estimated population of 100,000. About 123 people died and 31 recovered. The epidemic became more severe in the Stone Town area, where 133 cases were reported. Very few cases had occurred in Ng'ambo where only fourteen cases were noted. Also, seven cases were reported in rural areas. Table 3.2 depicts number of plague cases among various communities in Zanzibar Town.

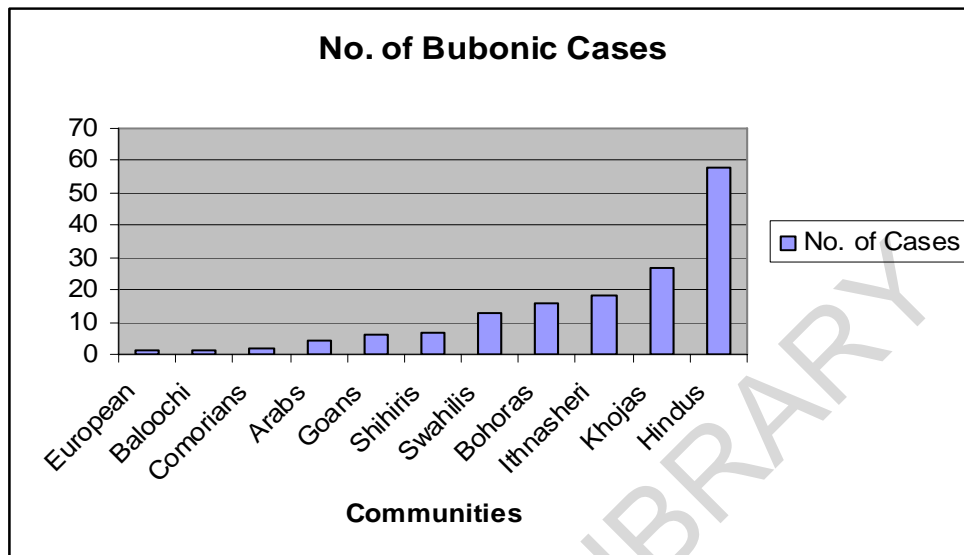
⁶⁶ ZNA BA 8/1, Alfred Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar' (Zanzibar: Government Press, 1905), p. 2.

Map 3.2: Bubonic Plague in Zanzibar Town, 1905



Source: ZNA BA 8/1, Alfred Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar' (Zanzibar: Government Press, 1905), Appendix II.

Table 3.2: Numbers of Bubonic Cases, 1905



Source: Alfred Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar' (Zanzibar: Government Press, 1905), Appendix I.

It took one month for the Health Department to announce the presence of the disease in the town because of the uncertainty as to whether the disease was bubonic plague or anthrax. Anthrax was reported in the south of Pemba Island at that time. Finally, the colonial authorities in Zanzibar announced the presence of plague in the town on 1 September, 1905.⁶⁷

The sanitation measures were introduced focusing on removal of rubbish which according to the reports of health officers attracted rats. The enormous amount of rice and cereals in the bulky *godowns* (warehouses) throughout the town was noted to provide rats, abundant food. The wood and iron roof tops and match-boarding partition work of the houses gave them nesting facilities. Stables and cow houses too, scattered thickly through the town, were for the most part floored with loose boarding and gave the rats harbour and sustenance

⁶⁷ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', pp. 1- 2.

under the same roof.⁶⁸ More public health rules and decrees on cemeteries, building rules, town sanitation, food inspection, waste collection, removal of cow sheds and stables outside the town and registration of birth and death were made compulsory from 1908. These rules were part of the colonial government's actions to fight against diseases.

The medical authorities in Zanzibar were unable to explain when and where the bubonic plague originated. But it was "traceable in the opinion of Dr. Friedrichsen to a cargo of rice brought by the Deustch Ost Afrika Line, (D.O.A.L) on S. S. *Sultan* on her voyage from Bombay to Durban in June 1905. The ship arrived in Zanzibar on June 16 and left for the south on June 20".⁶⁹ It was also maintained by the medical officers in Zanzibar that "the greater part of the cargo of rice brought to Zanzibar on the voyage from Bombay was stored in a catacomb-like *godown* of an Indian and thence distributed to other *godowns* and shops in the town. Some of the first cases occurred amongst this Indian's clerks and *godown* hands".⁷⁰

Government's Reactions to Bubonic Plague

The colonial authorities in Zanzibar took the immediate action of declaring Zanzibar Town and the port infected with plague on 2 September 1905. This was followed by the publication of a 'Plague Decree' in the Official Gazette (*Zanzibar Gazette*) on 3 September; a decree gave powers to the medical authorities to detain suspected plague victims, to segregate, to hospitalize them and to destroy the property of plague victims.⁷¹ Similarly, the 'Epidemic Disease Act' in India "gave the government the power to detain and segregate plague suspects, to destroy property, inspect, disinfect, evacuate and even demolish dwellings suspected of harbouring the plague, to prohibit fairs and pilgrimages, and to examine road and rail travellers".⁷² This 'Epidemic Disease Act' introduced strong measures to control or

⁶⁸ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 2.

⁶⁹ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 5.

⁷⁰ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 6.

⁷¹ ZNA BA 104/14, 'Plague Decree', *Zanzibar Gazette*, 3 November 1905, p. 5

even prevent the spread of plague. In contrast, the smallpox legislation in India only prohibited the practice of variolation. A fine of Rs. 200 or three months imprisonment was fixed. The actual number of prosecutions was very small and variolation continued to be practiced in areas where it had formerly been practiced.⁷³

In addition, “the town was divided into 14 districts and each placed in the charge of an European Inspecting Officer and a Medical Officer who were supplied with gangs of men and carts to assist the Sanitary Department in a thorough simultaneous cleaning up of the town, visiting all houses and seeing them emptied of all hoarded rubbish, and carrying out general whitewashing”.⁷⁴ Houses were lime-washed at government expense. Lime was supplied freely. A shop-to-shop inspection of foodstuffs was done by the Sanitary Inspector aided by the District Officers. At the port, all passengers and crews of every ship were detained at the Quarantine Station for ten days before being allowed to leave on steamers or dhows.⁷⁵

Also, “considerable use was made of the Press in imparting information and in attempting to stir up the householders, merchants and shopkeepers generally to cleanse their premises and the surroundings. Leaflets in Gujerati, Arabic, English and Swahili using Arabic script⁷⁶ were left at every house, their matter and form being varied from time to time to invite fresh attention”.⁷⁷ Dr. Macdonald, a Principal Medical Officer in the Government Hospital was assigned the task of delivering special lectures in English through Indian and Swahili

⁷² David Arnold, ‘Touching the Body: Perspectives on the Indian Plague, 1896-1900’, in Ranajit Guha (ed.) *Subaltern Studies* (New Delhi: Oxford University Press India, vol. V, 1987), p. 59.

⁷³ Arnold, *Colonizing the Body*, pp. 151-152.

⁷⁴ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 3.

⁷⁵ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, pp. 11-14.

⁷⁶ At least from 12th century A. D. the Swahili language was written in Arabic script. From 1906, the Roman alphabets replace Arabic letters in many government schools. The replacement of Arabic characters was resisted by Muslims in Zanzibar. For more information see ZNA AB 1/390, Teaching of Koran and Arabic in Government Schools, Zanzibar.

⁷⁷ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 11; The same measures were applied in Uganda during 1920 bubonic plague. See Vaughan, *Curing their Ills*, pp. 40-41.

interpreters to the town dwellers on practical measures to be taken in combating plague to the representatives of the different communities within the town.⁷⁸

The colonial intervention, in violation of religious convention, by announcing that “all deaths should be reported at the Health Office and no burial was to take place until the body had been inspected by a Medical Officer and all sick persons were to be reported and to be permitted to be seen by a medical man”.⁷⁹ Of course this was done to ensure no further deaths occurred but the notice itself required the town people to open their privacy to officials. This decree was enforced by heavy penalties for non-compliance.⁸⁰ This marked the introduction of the ‘Birth and Death Registration Act’, passed in 1908 to monitor the population of Zanzibar Island.

Sick people, mostly Indians, were identified and removed swiftly to the Government Hospital and their relatives were segregated in an ‘Observation Camp’ at Ziwani in the south-east of the town. The Camp was under the charge of Dr. F. Paul, an MO at the Government Hospital. A hospital was opened outside the town at Maruhubi, on the north road, being an extension of the regular hospital for smallpox cases. Photo 3.2 shows, an African Patient with ‘bubo’ around the neck approaching the ‘Plague Hospital’ at Maruhubi in 1905. It was under the authority of Dr. MacDonald. He was assisted by Miss Brewerton, a matron at the UMCA Hospital, and other UMCA Hospital staff. Other staff included Durgadas Soni, an Indian Hospital Assistant, and eight African ‘Ward boys’.⁸¹ Similarly, in India, health camps were introduced immediately in order to respond to the massive death rate of plague victims.⁸² We do not know to what extent the Isolation Camps or lazarettos

⁷⁸ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 11.

⁷⁹ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 3.

⁸⁰ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 3.

⁸¹ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 3.

⁸² Rajnarayan Chandavarkar, ‘Plague Panic and Epidemic Politics in India, 1896-1914’, in Terence Ranger and Paul Slack, (eds.) *Epidemics and Ideas: Essays on the Historical Perception of Pestilence* (Cambridge: Cambridge University Press, 1992), p. 207.

were used to detain people infected with the plague virus in East Africa. We assume that the camps existed there.

Photo 3.2: 'Plague Hospital' at Maruhubi, 1905



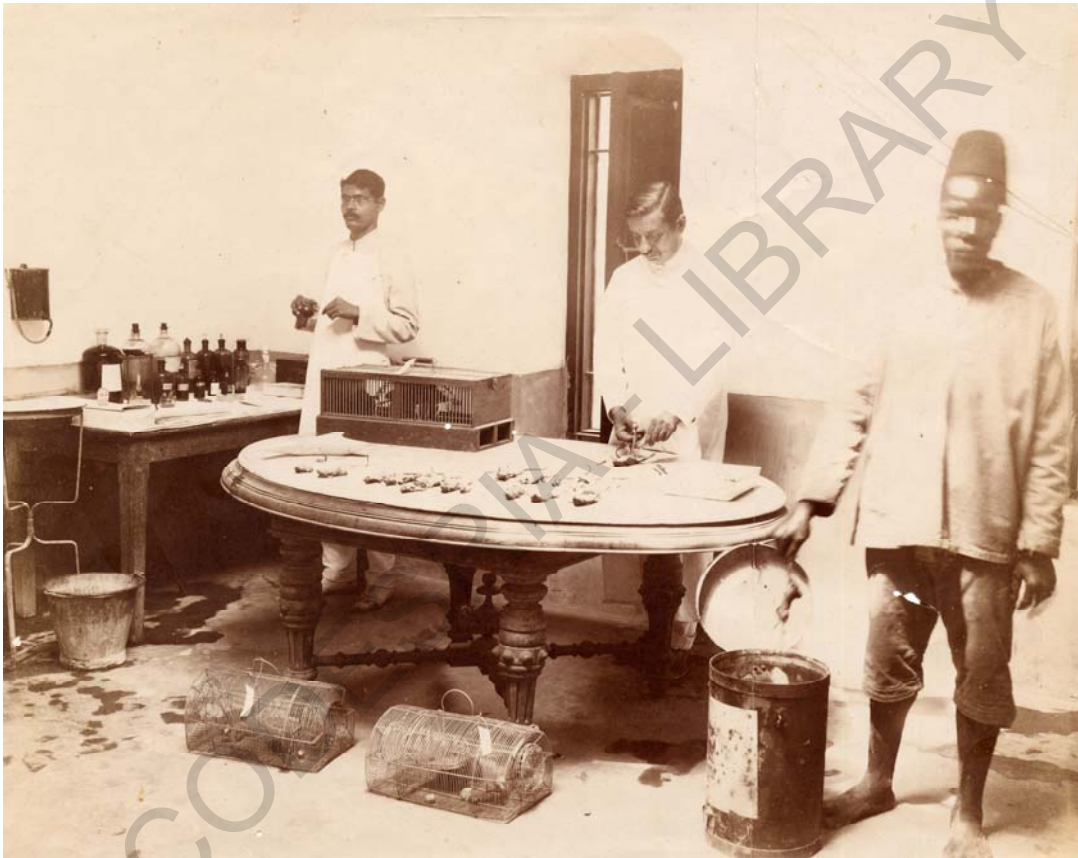
Source: ZNA AV 28/32, Health staff serving the patient in Ambulance, 1905.

Supplies of Haffkine's Plague Prophylactic were telegraphed for to India and the stock of disinfectants reinforced by orders to Bombay and London⁸³ and a convenient and commodious house was occupied as the Health Office and a Laboratory for chemical and

⁸³ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 3.

rat work opened in an outbuilding of the former Military Hospital. The two were subsequently united in a larger building with great benefit to the work and economy of the time.⁸⁴

Photo 3.3: Rat Dissection works, 1905



Sources: ZNA AV 28/28, Health Department officers dissect rats for plague research.

⁸⁴ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 3. W. M. Haffkine, a Bombay and Calcutta bacteriologist developed a plague prophylactic in 1896 during the plague period. He started to produce large quantities of this prophylactic in 1902. The vaccine produced by Haffkine was met with resistance in India due to the idea that it had been prepared using pig and cattle flesh, a combination which was met with disgust by the Muslim and Hindu communities in Bombay and in the Bengal area. See: I. J. Catanach, 'Plague and the Tensions of Empire: India 1896-1918', in David Arnold, *Imperial Medicine and Indigenous Society* (Manchester: Manchester University Press, 1988), pp. 154 and 159 and John Hays, *The Burdens of Disease, Epidemics and Human Response in Western History* (Rutgers: Rutgers University Press), p. 199.

As the disease was associated with fleas from rats, the catching and killing of rats was insisted on in Zanzibar at that time. A reward of two *annas* for sending a live or dead rat to the Department of Health Office was announced at the onset of the outbreak of the plague in 1905. Rat dissection works were carried on at the laboratory which was located at the Health Department building. The photograph 3.3 above illustrates rat dissection works. Underneath, there are traps which were used.

Rat catching was initially instituted in 1898, in the fear that the plague from India which had begun in 1896 might spread to Zanzibar. The notice stated that:

The Zanzibar Government has reason to believe that the plague and other contagious diseases may be conveyed from place to place by rats and mice. A reward of two pices or *annas* [money equivalent to cent] for each rat, alive or dead will be paid. Such vermin must be produced before such Officer as may be appointed for that purpose at the Zanzibar Government Military Hospital near the Barracks between the hours of 8 a.m. and 12 o'clock daily.⁸⁵

The killing of rats however caused substantial ill feeling among Hindus, both in India and in Zanzibar. In Zanzibar, a plague notice, which ordered the killing of rats, was seen as interference with Hindu belief which prohibited killing anything, from insects to animals. The 'rat killing' had also had little success among high-caste Hindus in the Punjab area.⁸⁶ An example of this was the resistance of devout Hindus, who sabotaged the traps.⁸⁷ In most cases in Zanzibar Town they responded negatively, leaving rats to increase. An anonymous writer, presumably a European, wrote in the *Central Africa* of October 1905, pointing out that:

In the first place, we trusted to the extermination of rats to do away with the most common germ-carrier. This work has been carried on for several years by the government, which has paid hard cash for every rat delivered at the Police Barracks. But there are Indians whose religious conscience forbids the killing of a rat. Therefore in very many houses rats run free: and in some

⁸⁵ ZNA BA 104/8, 'Bubonic Plague', *Zanzibar Gazette*, 8 November 1899, p. 5.

⁸⁶ Catanach, 'Plague and the Tensions of Empire: India 1896-1918', p. 162.

⁸⁷ Hays, *The Burdens of Disease*, p. 197.

cases pious Asiatics have been known to redeem rats from the Africans who wished to slay them.⁸⁸

Other methods used included the application of carbolic powder and Jeyes Fluid in houses to kill the fleas from rats. Sometimes the town fire-engine was used to spray the fluid. Houses were also to be disinfected and sprayed with perch-chloride of mercury solution. As happened in India, floors were dug up and personal items fumigated or burnt. 'Clayton Gas' was also used in the drains of the town. During the plague time rat poisoning was carried out. The chief poison brands were: 'Common Sense', 'Rough on Rats', 'Grosboisine Paste and Powder', and 'Danzy Rat Virus'. All were supplied by the medical officers. The Disinfecting staffs were led by a European officer, T. S. Shaw; a Goan officer, F. de Souza, and twenty-two Africans were employed. Generally, European staffs were in senior positions, Indians were appointed as junior staff while Africans and poor Arabs were employed in lower positions.

The combined efforts to halt the plague involved the cooperation of British medical authorities from Kenya and the Colonial Office in London. Six nurses from the Colonial Nursing Institution were applied for from London and arrived on October 28, 1905. A British female doctor and inoculators were obtained from Nairobi. Nursing staff was borrowed from the UCMA Hospital, and from the Roman Catholic Sisters of St. Joseph, both of Zanzibar.⁸⁹ Miss Margaret Catherine Roseburg (b.1868), an experienced nurse who had worked in Bombay and Sitara in 1899 during the plague period and was employed thereafter to work at the British South African Company Hospital in Rhodesia, was recruited to Zanzibar in 1905 to nurse plague victims. The letter of her appointment indicates that she was required to take care of both European and 'native' victims.⁹⁰

⁸⁸ Anonymous, 'Plague in Zanzibar', *Central Africa*, XXV, 274 (October, 1905), 14.

⁸⁹ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 3; *Central Africa*, 'Story of Katie Kadamweli', XXIV (1906), p. 329.

⁹⁰ ZNA AE 16/3, Agreement with Nurse (Miss Margaret Catherine Roseburg) to serve on Plague Duty in Zanzibar for six months.

The Responses of the Urban Population to the Bubonic Plague

The response of the Zanzibar Town population to the plague measures was often violent. Cases of violence were reported among Indians who were severely affected by the epidemics. There is substantial evidence drawn from the other writings on the social history of bubonic plague elsewhere in the world which shows that many of the states used coercive measures to fight plague. These provoked the people to react fiercely.⁹¹ In India, in Bombay, Calcutta and in the Punjab Presidencies, fierce fighting with police and other colonial officers occurred as Indians resisted anti-plague measures. Arnold demonstrates that “because of the manner in which it was perceived by the colonial authorities and the nature of the sanitary and medical measures deployed against it, bubonic plague provoked an unparalleled crisis in the history of state medicine in India”.⁹²

In urban Zanzibar, people fled to the rural areas after the declaration of an outbreak of plague and the publication of the Decree. Also, “whole bazaars were closed in protest and rioting by the different Indian communities was feared”.⁹³ The situation was not as extreme as in Bombay, where “out of a population of nearly 850,000, an estimated 380,000 people deserted the city between early October 1896 and the end of February 1897, bringing the commercial and industrial life of India’s second largest city almost to a standstill”.⁹⁴ Commercial activities in Zanzibar Town had stopped by that time due to the enforcement of the public health measures against plague. Merchandise from outside Zanzibar, especially from India where the plague was carried on was prevented from entering the port. Another

⁹¹ For this discussion see the work of I. J. Catanach, ‘Plague and the Tensions of Empire: India 1896-1918’, in David Arnold, *Imperial Medicine and Indigenous Society* (Manchester: Manchester University Press, 1988), pp. 149-71; Rajnarayan Chandavarkar, ‘Plague Panic and Epidemic Politics in India, 1896-1914’, in Terence Ranger and Paul Slack, (eds.) *Epidemics and Ideas: Essays on the Historical Perception of Pestilence* (Cambridge: Cambridge University Press, 1992), pp. 203-40; Nancy Elizabeth Gallagher, *Medicine and Power in Tunisia, 1780-1900* (Cambridge: Cambridge University Press, 1983); Carol Benedict, *Bubonic Plague in Nineteenth-Century China* (California: Stanford University Press, 1996); Myron Echenberg, *Black Death, White Medicine Bubonic Plague and the Political Health in Colonial Senegal, 1914- 1945* (Portsmouth: Heinemann, Oxford: James Currey, and Cape Town: David Phillip, 2002) and John T. Alexander, *Bubonic Plague in Early Modern Russia, Public Health and Urban Disaster* (Oxford: Oxford University Press, 2003).

⁹² Arnold, *Colonizing the Body*, p. 202.

⁹³ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, pp. 3-4.

⁹⁴ Arnold, *Colonizing the Body*, p. 207; Catanach, ‘Plague and the Tensions of Empire: India 1896-1918’, p. 151.

difference from India is that colonial “state medicine” was at its founding moment, with as yet no legitimacy to be forfeit.

Bishop Dr. Hine of the UMCA mission station in Zanzibar, who was in the town during the plague period, wrote to William Traves, a UMCA Secretary in London, on 5 September, 1905 informing him of the plague in Zanzibar. Hine reported that he met an excited crowd at Malindi, and in one of the Indian houses in which a plague victim was identified his family refused to let him be moved to the Plague Hospital. Hine noted that the urban dwellers resisted Government Regulations on plague. They roamed in the streets with knives with intentions of stabbing anyone who might remove plague victims. Indeed, Hine informed Traves that the UMCA Hospital was almost empty as the town people feared to come to the Hospital, thinking that Dr. Howard might send them to the Plague Camp at Ziwani near the Police Barrack.⁹⁵ The character of the urban population responses to plague epidemic measures suggested how alien Western public health measures were in Zanzibar at that time.

This reluctance to allow the removal of plague victims hindered the government’s efforts to stop the spread of plague in Zanzibar. According to the government report, in Zanzibar Town “the different castes objected to go to the one general Government Hospital for all and wished for their own community hospitals, a proposal welcomed by the Government when the right to inspect to secure efficiency was conceded”.⁹⁶ The medical officers in Zanzibar were ready to inspect the private hospitals owned by the Khoja (Ismaili), the Ithnasheri and the Hindus in Zanzibar to make sure that they were competent to treat bubonic plague cases. A similar case could be observed in colonial India. Chandavarkar has shown that during the late nineteenth century outbreaks of bubonic plague in India, people were hostile to hospitalization which was available to diverse social groups. This hostility was not only present among various Indian castes but also extended to hospitals established and managed by Hindus for members of their own caste.⁹⁷

⁹⁵ Rhodes House Library (RHL) Mss., ‘From Hine to Travers, Mkunazini, 9 September, 1905’, Bishop Hine 1905-1906, Box A1 XIII, p. 299.

⁹⁶ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 4.

⁹⁷ Chandavarkar, ‘Plague Panic and Epidemic Politics in India, 1896-1914’, p. 229.

Dr. Spurrier reported that “those belonging to the Ismaili community were transferred to the Hospital got ready by that community, formerly Livingstone’s house. The Banyans’ and Ithnasheris’ Hospitals were not convenient for the reception of convalescents”.⁹⁸ So the medical authorities in Zanzibar had to use force to hospitalize the victims at the Government Hospital. Also, “objection was taken to the covered cots used for conveying cases to Hospital as being in shape like the *Mohammedan* [Muslim] burial biers. This was overcome by permission to take the sick on ‘native’ beds, which remained in the hospital”.⁹⁹ This grievance was issued by the Hindu community in the town.

The white-washing of houses caused problems as many properties were damaged in the process. The townspeople were not happy with these anti-plague measures and resisted them. One anonymous author wrote in *Central Africa*, that Indians in the town resisted sanitary measures by showing that “in the second place we trusted to the cleanliness of the town ... orders for the cleaning of houses were often issued; whitewash was provided for the poorer classes; every effort was made to keep the town sanitary. But the Indian population prefers dirt, so what can a government do?”¹⁰⁰ It is unlikely that the people preferred dirt but they resisted government interference.

During the plague, the Indian and Arab Association leaders criticized the medical authorities who prevented the families of the plague victims from visiting their ill-relatives. It was reported that “exclusion from visiting the sick was strongly objected to and permission to enquire at the Hospital entrance where a daily bulletin announcing the condition of each patient was posted with a provision that when very ill the cases could be visited in the wards under supervision went some way to silence this objection”. Also, “any examination of the dead for diagnostic purposes remained to the end strongly objected to by the Arabs”,¹⁰¹ who perceived this as interference with their religion. In India, corpse inspection had been

⁹⁸ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 13.

⁹⁹ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 4.

¹⁰⁰ Anonymous, ‘Plague in Zanzibar’, *Central Africa*, XXV, 274 (October 1905), p. 258.

¹⁰¹ ZNA BA 8/1, Spurrier, ‘Report for the Outbreak of Bubonic Plague, Zanzibar, 1905’, p. 4.

instituted in order to register the plague cases and as a check to further spread of the disease. However, the inspection of Muslim corpses fuelled riot and protest in Bombay Presidency in 1898.¹⁰²

The treatment of plague victims caused deep concern not only in the local people but in medical doctors too. Hine was trained as a medical doctor at the University College, London in the 1870s.¹⁰³ In 1905, he commented on the way the bodies of plague cases were examined by showing that:

To me it seems that the modern scientific medical training is much more brutalizing than it was in my time. The sick person is nothing. He is only an anatomical specimen- his tissues forming material for myopic examination – himself of no account. The great thing is to see some kind of micrococcus – a something with or without a flagellum that perhaps has not been seen before. Pathogen is the only thing considered and ruled the medical mind. The sick individual is merely case X or case XII. This doctor is simply scientific – he has no human feelings.¹⁰⁴

Recent historians such as Vaughan argue the same, while explaining the characteristics of the colonial medical procedures in the anti-plague campaigns in the British colonies in East and Central Africa. Vaughan shows that “colonial subjects here are being codified and numbered, deprived of their clothing and of any individual choice; they are herded into an enclosure where various agents of the state make a direct assault on their bodies”.¹⁰⁵

At the same time the quarantine restrictions interrupted the movement of people from one area to another. Hine reported to London on 9 September, 1905 that “I have to report that on 2 September bubonic plague was declared to exist in the town of Zanzibar. This will

¹⁰² Arnold, *Colonizing the Body*, pp. 216-217.

¹⁰³ Hine became a Senior Residence Medical Officer at Radcliffe Infirmary, Oxford in 1881 to 1882 and joined the UMCA in Zanzibar in 1888. The information on his history was collected from the *Zanzibar Gazette*, April 29, 1908 during his farewell and departure from Zanzibar, p. 4.

¹⁰⁴ RHL Mss. ‘From Hine to Travers, Mkunazini, 5 September, 1905’, Bishop Hine 1905-1906, Box A1 XIII, p. 299.

¹⁰⁵ Vaughan, *Curing their Ills*, p. 52.

considerably hamper our movements to the mainland. I do not as yet know what regulations are being enforced by the German Government".¹⁰⁶

The urban population resisted the public health regulations as they ran counter to religious precautions although the archival sources are silent on that. In other Muslim areas in Africa, conflict arose between the government medical officers and Muslims who opposed interference with their religion. For instance in Tunisia, people had resisted Western public health facilities during the 1784 bubonic plague epidemic due to the fact that most of these facilities differed from the religious safety measures. The wearing of amulets and prayers was commonly adopted. During the 1834 plague in Egypt, as Kuhnke La Verne explains, Muhammad Ali, the ruler of Egypt, ordered the police chief to instruct the Quarantine Board members to avoid any measures that might conflict with Islamic law or offend Muslims. They should not require examination of bodies, or the destruction of corpses of Muslims by quicklime, or the removal of families of the deceased from their homes.¹⁰⁷

Likewise, in Zanzibar Town, many communities preferred privacy for their female members and they objected to the visiting and inspection of houses, which in most cases, was done by the male medical officers, who alone were available at that time.¹⁰⁸ Similarly, several violent episodes happened in India when women were physically examined by European male doctors. According to Arnold, "most doctors were male as well as white; their touch was considered polluting or worse, as tantamount to sexual molestation. This was especially so when, in searching for the bodily signs of plague, doctors tried to examine women's necks, thighs, and armpits".¹⁰⁹

Compulsory vaccination was introduced during the plague period in Zanzibar. Initially, the urban population was not ready to be vaccinated. The composition of Haffkine's serum

¹⁰⁶ RHL Mss. 'From Hine to Travers, Mkunazini, 9 September, 1905', Bishop Hine 1905-1906, Box A1 XIII, p. 329.

¹⁰⁷ La Verne, *Lives at Risk*, p. 80.

¹⁰⁸ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 4.

¹⁰⁹ Arnold, *Colonizing the Body*, p. 214.

remained a debatable subject to the end amongst very strict Indian caste members.¹¹⁰ Sources are not clear on the reasons behind such resistance. Possibly, as in India, resistance to vaccination was associated with the belief that the lymph had been prepared using pig and cattle flesh. Additionally, in many parts of the world where Haffkine's Plague Prophylactic was introduced, it led to fever, painful swellings of the lymph nodes and soreness at the point of inoculation.¹¹¹ In Zanzibar, community leaders were approached by the Medical Officers, which was a successful move. The inoculation with Haffkine's Plague Prophylactic was begun on September 26, 1905 and up to 30 September, 23,422 people in the town were inoculated. Since the population census had not yet started at that time, it is unknown to what percentage of the population this represented, but the population of the town as estimated by the Austrian Consul in 1895 was 100,000.¹¹² Instructions to be followed after inoculations were posted in many places in the town.

Much of the damage resulting from the destruction of property occurred in the town during the epidemic period. Moreover, the Indian communities suffered loss in their business when the port was declared infected. A Compensation Board, led by J. H. Sinclair, the British Consul and assisted by H. Lascari, a British barrister, one Medical Officer and one Disinfecting Officer was set up to investigate the claims. The government decided to pay for goods which were destroyed during the events.¹¹³

Sometimes, however, community leaders assisted in mitigating tension. Indeed there were reports that occasionally, urban people collaborated with the colonial government in the evacuation of plague victims. In 1905, during the bubonic plague in Zanzibar, the Aga Khan supported the government efforts to control the epidemic. He visited Zanzibar and urged his followers to be inoculated.

¹¹⁰ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 4.

¹¹¹ Echenberg, *Black Death, White Medicine*, pp. 103-104.

¹¹² In 1895, Oscar Baumman, the Austrian Consul in Zanzibar did survey of the town. He estimated the number of the inhabitants to be 100,000. See Oscar Baumman, *Die Insel Zanzibar* (Leipzig: Dunker and Humbolt, 1897).

¹¹³ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 13.

Photo 3.4: The Arrival of Aga Khan in Zanzibar, 1905



ZNA AV 3/25, H. H. Aga Khan's visit in Zanzibar, 1905.

Photo 3.4 depicts the arrival of the Aga Khan at the Zanzibar harbour in 1905. Aga Khan wearing black cap and black trouser is disembarking from the Sultan's barge. Dr. Alfred Henry Spurrier, the senior Health Officer during the epidemic reported that "a great help towards inoculation was given at the outset by His Highness the Aga Khan who was on a visit to Zanzibar and ordered all the members of his community, some 2,800 in all to be inoculated".¹¹⁴ Also, in India during bubonic plague, the Aga Khan advised his followers to obey the government's plague regulations and to accept inoculation against the disease.¹¹⁵

¹¹⁴ ZNA BA 8/1, Spurrier, 'Report for the Outbreak of Bubonic Plague, Zanzibar, 1905', p. 9.

¹¹⁵ Arnold, *Colonizing the Body*, p. 272.

By the end of the epidemic, which had lasted for three months, the Khoja Shia Ismailia Community of Zanzibar delivered an address to show the gratitude of the community to Dr. Archibald Donald Mackinnon¹¹⁶ and Dr. Alfred Spurrier in preventing the spread of plague. The Khoja organized meeting and invited friends from different nationalities to honour them.¹¹⁷ The colonial state in Zanzibar had opportunities to interfere in the life of the townspeople through these public health laws and decrees. It had however, carried out its obligations in protecting the population against the epidemics.

Continuously, throughout the early two decades of the twentieth century, the colonial government intervened people's life in urban Zanzibar through public health measures. The Mosquito Brigade Unit which was formed in 1907 introduced health measure which disregarded private spaces. The Unit employed several workers to search for anopheline eggs and mosquitoes in wells and water storage containers in houses, mosques and in burial sites. They put the life of the people into risky through these health intrusions. In Zanzibar, the activities of the anti-malaria mosquito brigades were described in the 1913 Annual Report:

The whole of town, west of the tidal creek was divided into four quarters. Each quarter was put in charge of a sub-inspector, whose duty is to visit every house, garden, ruin and compound in his district...Each sub-inspector has under him three Swahili 'boys.' Two of these carry a light ladder and the other a large tin of kerosene oil and a common garden watering pot. On arrival at a house the sub-inspector asks leave to enter.¹¹⁸

It was also reported that:

Should larvae have been found on any premises a sample of the water with the larvae is collected in a test tube, labelled, and brought back to the Health Office ... The names of whose houses' larvae have been found are entered in

¹¹⁶ Dr. Archibald Donald Mackinnon, 1864-1937 was a Scottish Medical doctor who was employed in Imperial British East African Company, IBEA Co. in Kenya as a staff surgeon during the British expansionism period in East Africa from the early-1880s. He served in medical works in Kenya, Uganda, Zanzibar and India. He was a senior medical officer in Zanzibar between 1900 and 1906. For the history of the British Colonial Medical officers, See the work of Anna Crozier, 'The Colonial Medical Officer and Colonial Identity: Kenya, Uganda and Tanzania before World War Two' (Published PhD Thesis, University College London, 2005).

¹¹⁷ ZNA CA 1/10, Misc. Spurrier.

¹¹⁸ ZNA BA 7/2, Public Health Report for the Year 1913, p. 44.

a card index. A 'notice' to abate the nuisance is served on the offender that evening. Should larvae be found again on that man's premises within a period of twenty days he is summoned to court, and, if convicted, is fined.¹¹⁹

With health campaign workers going from house to house, and laying charges against people on whose premises mosquito breeding sites were found, these health measures amounted to a radical intrusion by the colonial authorities into the lives of the town population.

The Zanzibar brigade workers also inspected dhows weekly, especially during monsoon seasons when several hundred dhows from Arabia, the Persian Gulf, Somalia and Lamu came to Zanzibar. The dhow inspection works also involved dhows which brought mangrove poles from the Rufiji Basin, the ecology of which made it a major habitat for mosquitoes.

The Anti-Malaria Brigade Unit was criticized by the urban populace who regarded themselves as ill-treated by the Unit's staff. In 1938 an anonymous town resident (probably an Indian) wrote to the *Zanzibar Voice* to express his dislike of the brigade's interference: mosquito searches often resulted in urban dwellers being fined up to fifty or hundred shillings, which was a great deal for the poor people.¹²⁰ Dr. S.W.T. Lee, the Director of the Health Services in a letter to the editor says that "mosquito searches only discover the offences; the Magistrate decides the fines. The cases are only taken into court after a warning notice has been previously served and breeding is found a second time".¹²¹ Generally, people in urban Zanzibar were not opposing the health measures but they were mainly resisted disturbances to their homes and bodies.

¹¹⁹ ZNA BA 7/2, Public Health Report for the Year 1913, p. 44.

¹²⁰ ZNA WN 23/2, 'The Town Sanitation', *Zanzibar Voice*, 31 October 1938, p. 3. See also ZNA AJ 28/7, 'The Town Sanitation', Health Department: Comments and Observations.

¹²¹ ZNA NW 23/2, 'Mosquitoes in Zanzibar', *Zanzibar Voice*, 18 November 1938, p. 3. See also ZNA AJ 28/7, 'Mosquitoes in Zanzibar', Health Department: Comments and Observations.

Conclusion: Population, Plague and Public Health

We have seen in this chapter that between 1898 and 1914, the colonial government in Zanzibar was involved in a fight against bubonic plague and smallpox. These two diseases created enormous fear among the people and the colonial government. During the nineteenth century, these diseases frequently affected Zanzibar and many other parts of the world due to movements of soldiers, migrant labourers, and merchandise. The long established maritime trade activities around Indian Ocean ports and the rise of trading entrepôts in these regions contributed to the spread of diseases. The etiology of plague was only fully understood in 1918. Although smallpox vaccinations had been in use in Europe since the end of the eighteenth century and India since the early-1800s, in Zanzibar they were introduced to many people from the late-1890s. Before 1930, the campaigns were of limited use because of lack of funds and poor quality vaccine.

Between 1890 and 1914 public health measures and programmes were introduced to prevent the spread of bubonic plague and smallpox in urban Zanzibar. As happened elsewhere in Asia and colonial Africa, the British colonial administration and medical doctors intervened extensively in the life of the town population, fearing that the plague epidemic might spread to the whole island. It was feared that the epidemic might ravage not only the Indian, Arab and African population but also the Europeans who were living in the town, within a few metres of Indian, Arab and African houses and huts. In India, swift measures were employed to stop the epidemic due to the possibility of an European embargo on Indian trade unless the epidemic was quickly brought under control. In Zanzibar, however there was no such fear of embargo recorded, as the epidemic lasted for only three months. The health measures were successful in Zanzibar and the plague brought under the control. Western medicine was not merely seen as 'a tool of empire' and became important for the reduction of the death due to the infections.

Responses to public health measures were varied. Some of these measures were accepted and others rejected. People in the town became angry when health measures threatened their lifestyle. Some of the measures were accepted because they helped to stop the disease. The colonial government started to delegate part of the responsibilities to the local community

leaders in order to lessen confrontation with the people. This had happened during 1905 bubonic plague. Community leaders influenced their members to attend health education meetings organized by the medical and public health officers.

Plague epidemics caused significant advances in the development of public health regulations in Zanzibar. Soon after the 1905, bubonic plague, in 1906, the Bacteriology Department under Dr. A. G. Carment who had graduated from the University of Edinburgh in the 1890s was formed in order to carry out more research. The Department was responsible for all chemical and bacteriological tests. This involved clinical examination of faeces, blood, urine, sputa, milk and water from Bububu and Welezo springs. It was formed in order to control more epidemic diseases, which increasingly devastated the town population, due to migration and trading activities with Asian and European traders from the early nineteenth century. It was involved in scientific investigations as well as routine clinical and pathological tests and post-mortem examination. The colonial government in Zanzibar set aside funds for rat catching campaigns, which were successful. Sanitation measures which included sweeping the streets and collection of rubbish were extended. Generally, between 1890 and 1914, public health measures in Zanzibar were believed to have been introduced to control the people, but many of the measures which were implemented helped to control the epidemics. The next section examines the provision of biomedicine by the colonial government between 1930 and 1963.

CHAPTER FOUR: THE COLONIAL GOVERNMENT AND THE PROVISION OF BIOMEDICINE TO 1930

The Foundation of the Medical Services in Urban Zanzibar

The hospitals established by the colonial government in Zanzibar up to the First World War were mainly utilized by those who were employed by the state. Lack of sufficient funds and personnel hindered their expansion in the urban area. The reluctance on the part of the population to attend Government Hospitals and dispensaries was significant in the period. There is evidence, however, suggesting that people in Zanzibar were ready to utilize the biomedical facilities whenever they believed they needed to. Between 1920 and 1930 substantial developments occurred in terms of medical care, especially in conjunction with international health agencies such as the British Empire Royal Leprosy Association (BERLA) and other inter-territorial organs in East Africa.

From its beginning in 1897, the Department which dealt with hospitals and medicine was involved in supplying medical facilities related to the needs of the colonial state in Zanzibar. First priority was given to the European community and to soldiers in Zanzibar Town. Before the Second World War, much of the work of the Department of Medicine was financed not by the British Colonial Office but through local funds and individual donations. This was typical of other British colonies in East Africa: Indian philanthropists helped finance the provision of medical services in Tanzania, Kenya and Uganda.¹ The establishment of colonial hospital facilities followed a predictable course, giving priority to servants of the administration and its armed forces, providing custodial care for the mentally ill and for lepers, before broadening to curative services to the general population.

¹ For the works of Indian philanthropists in East Africa, see Robert Gregory, *The Rise and Fall of Philanthropy: Asian Contribution* (New Brunswick, NJ: Transaction Publishers, 1992).

The British Military Hospital (BMH) in Urban Zanzibar: 1896-1900

Scholars of the social history of medicine offer insights into how biomedical services functioned in the colonization process of much of Africa from the late-1800s. John Farley argues that colonial tropical medicine was an imperialist project which emerged as part of western colonialism.² Colonial medicine was introduced during the late nineteenth century. Jean Comaroff has argued that medicine and imperialism were played off against each other within the unfolding of a particular historical process.³ Tropical medicine was an essential adjunct to imperialist expansion. By the late-1800s, throughout colonial Asia and Africa the colonial powers prioritized the provision of biomedical facilities to their military personnel. Later, these services were extended to prisoners, government employees and those who worked in large private plantations owned by European settlers. David Arnold claims that the army and the jails since their personnel had no options became sites of medical observation and control in nineteenth century colonial India, where they offered unique opportunities for medical investigation and experimentation.⁴ In Zanzibar, like elsewhere in colonies in India and in Africa, these services were extended to school children after the inception of Western education by the government in 1907. They too became sites of medical observation.

The British imperial power extended biomedical facilities in colonial urban Zanzibar for the use of local and European military armies from the late-1890s. Little effort was made by the colonial state in East Africa to ensure that medical facilities reached the majority of people. One factor was lack of funds, which became an obstacle to the extension of biomedical services in the late nineteenth and early decades of twentieth century. Ann Beck claims that

² John Farley, *Bilharzia: A History of Imperial Tropical Medicine* (Cambridge: Cambridge University Press, 1998: 1998), pp. 1- 2.

³ Jean Comaroff, 'The Diseased Heart of Africa Medicine, Colonialism, and the Black Body', in Shirley Lindenbaum and Margaret Lock (eds.), *Knowledge, Power and Practice The Anthropology of Medicine and Everyday Life* (London, Los Angeles, University of California Press, 1995), p. 306.

⁴ David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth Century in India* (California: California University Press, 1993), p. 113.

“before 1900 the administration of medical affairs in East Africa was of little significance to the Colonial Office”.⁵

In 1896, the British Military Hospital (BMH) was established in Zanzibar. Earlier, in 1894, the British colonial administration in Zanzibar had approached a Bohora Indian, Sivji Bhai Haji Paru, popularly known as Sewa Haji,⁶ and requested him to donate money for the building of a Government Hospital in the town, primarily for the use of the local army.⁷ It was reported in the *Zanzibar Gazette* of September 1894 that Sewa Haji had donated Rs. 12,400 to the Zanzibar government for the founding of the Government Hospital, which had also intended to treat Africans, Arabs and Indians living in Zanzibar Town.⁸ This hospital was located in the Old Barracks area at Mnazimmoja. Hatim Amiji explains that during the late nineteenth century, traders like Sewa Haji “participated in national politics at the Sultan’s daily *Barazas*, [meetings] not as representatives of their caste or sect, but as economically successful entrepreneurs whose influence, friendship, and counsel the Sultan or foreign consul could use”.⁹

The provision of medical services to military staff in Zanzibar became important in order to monitor the health of soldiers. The history of military services in Zanzibar goes back as far as 1876, during the suppression of the slave trade. The British Royal Navy had been involved in seizing dhows which smuggled slaves to Arabia, Zanzibar, Mombasa and Lamu

⁵ Ann Beck, ‘Problems of British Medical Administration in East Africa between 1900 and 1930’, *Bulletin of the History of Medicine*, XXXVI (1962), p. 275.

⁶ Sewa Haji was a Bohora Indian trader born in Zanzibar in 1860s from a trading family. His father arrived in Zanzibar in 1800. Sewa Haji, who inherited business fortunes from his father, was involved in a lucrative trade in clothes from India to Zanzibar. He also controlled most of the trade caravans from the East African coast, which started at Bagamoyo and moved inland. The German colonial government requested Sewa Haji to donate money in the building of hospitals in Tanga, Bagamoyo and Dar es Salaam in Tanganyika before his death in 1893. See: Hatim Amiji, ‘Some Notes on Religious Dissent in Nineteenth-Century East Africa’, *African Historical Studies*, IV, 3 (1971), pp. 603-616 and Naseem Waheed, *Nature and Extent of the Indian Enterprise along the East African Coast and Subsequent Role in the Development of Kenya, 1840-1905* (Unpublished PhD dissertation, St. John’s University, New York, 1975).

⁷ ZNA AC 1/92, ‘From Foreign Office to Zanzibar’, Inward Letters 1907 June- July.

⁸ ZNA BA 104/1, ‘Government Hospital’, *Zanzibar Gazette*, 19 September 1894.

⁹ Amiji, ‘Some Notes on Religious Dissent in Nineteenth-Century East Africa’, p. 603.

after the proclamation of the decree ending the slave trade in Zanzibar in 1873. In 1875, Sir John Kirk, British Consul between 1868 and 1887, suggested that a small army should be raised and placed under the command of a British officer to control illegal slave trading activities. Lord Mathews was engaged as the first commander of the troops.¹⁰ Some of these local troops were involved in monitoring illegal slave trading on the mainland of Tanganyika.

In 1892, before the establishment of the British Military Hospital, Dr. Pestanji Nariman, a Parsee from Bombay was appointed by Lord Mathews to be a medical attendant of local armies. Nariman became a surgeon of the Military Hospital when it was established in 1896. His medical background is unknown but he came to Zanzibar in 1888 and was appointed as physician to Sultan Khalifa Said (r.1888-1890) after the latter's accession to the throne in 1888.¹¹ Another medical officer who worked at the Military Hospital was Dr. de Souza, a Catholic Indian who graduated from Bombay University in the late-1880s. He came to Zanzibar in the mid-1890s and worked as a private medical practitioner in Zanzibar Town. He joined the Government services in 1897, after the opening of the first Government Hospital. Most of the Indian medical doctors in Zanzibar were retired medical officers from India. Nariman's brother in Bombay was often asked by the British authorities in Zanzibar to assist in recruiting hospital assistants.¹² According to David Arnold, in nineteenth century India, many wealthy Parsees in Bombay donated money for the construction of hospitals for the use of the local populace.¹³

¹⁰ Lawrence Hollingsworth, *Zanzibar under the Foreign Office 1890-1913* (London: Greenwood Press, 1975), pp. 15-16; For the history of Abolition of Slave Trade and Slavery in Zanzibar see: Basil Cave, 'The End of Slavery in Zanzibar and British East Africa', *Journal of African Society*, 9, 33 (October, 1909), pp. 20-33; G. L. Sullivan, *Dhow Chasing in Zanzibar Water, Slave Catching in the Indian Ocean* (London Gilbert and Rivington, Printers, St. John's Square, 1871) and Henry Newman, *Banani: The Transition from Slavery to Freedom in Zanzibar and Pemba* (New York: Negro Universities Press, 1898).

¹¹ ZNA AC 1/3, 'Government Staffs', Correspondence between Zanzibar Government and Foreign Office, 1891 May- December; ZNA AC 1/91, 'Government Staffs', Correspondence between Zanzibar Government and Foreign Office, 1907 April- June; ZNA AC 1/147, 'Government Hospital', Correspondence between Zanzibar Government and Foreign Office, 1911 June- Aug.

¹² ZNA AC 1/112, 'Letter of Captain Barton, First Minister 13 April 1909', From Zanzibar Government to Foreign Office, 1909 January- April.

¹³ Arnold, *Colonizing the Body*, pp. 261, 267, 271-272.

In the late-1800s, few British medical doctors were dispatched to Zanzibar. Although the numbers of these medical doctors were very small, they probably had an influence and power in excess of their numbers. Dr. G. MacDonald, a graduate of the Royal College of Surgeons and Medical School at Edinburgh, was employed by the government in Zanzibar and became the first British medical doctor to run the state Military Hospital from 1896. MacDonald was born in 1869 in St. Vincent of Scots parents and was employed at the British Consulate in Zanzibar as a medical doctor from the early-1890s.¹⁴ The colonial government in Zanzibar requested hospital assistants from the Indian government in the late-1890s. These hospital assistants were needed to supplement the small number of medical officers. However, the Indian hospital assistants were not available to pioneer the services in Zanzibar since many of them were employed as 'Expeditionary Force in China'.¹⁵ Some of the Indian medical assistants were also employed by the British during the Anglo-Boer War of 1899-1902. Very few were posted in Zanzibar after the War.

The role played by the Indian Hospital Assistants has been given little attention by the scholars of medical history in Africa. Most of these Hospital Assistants arrived in East Africa during the early years of the British conquest of East Africa and were employed to look after the health of the Indian soldiers. Sikh infantry was sent from India to East Africa accompanied by seven Hospital Assistants from the Indian Medical Services (IMS). The main task of these Hospital Assistants was to check venereal diseases among the soldiers.¹⁶ This suggests that imperialism did not flow directly from Britain, but was influenced by their experiences in India.

¹⁴ ZNA AC 1/3, 'Government Staffs', From Zanzibar Government to Foreign Office, 1891 May- December; ZNA AC 1/142, 'Government Staffs', From Zanzibar Government to London, 1911, February- March; ZNA AC 1/147, 'Government Staffs', Zanzibar Government to Foreign Office, London, 1911 June- August.

¹⁵ ZNA AC 1/63, 'Letter from India Office, Whitehall 4 April 1901 to the Secretary of the State, London', Foreign Office Correspondence, 1900 November- May, 1901.

¹⁶ ZNA AC 1/33, 'Letter from India Office, Whitehall 18 April 1896 to the Secretary of the State, London', Foreign Office Correspondence, 1896 January – March; ZNA AC 11/10, 'Hospital Assistants', Correspondence with British East Africa Protectorate, 1897 January – August.

The opening of the British Military Hospital became important in 1896 due to events which occurred at that time. In 1896, after the death of Hamed Thuweiny (r.1893-1893), Khalid Barghash, the son of the third Omani ruler in Zanzibar, with political support from the German authority in East Africa, usurped the throne. The British colonial authorities in Zanzibar reacted by forcing Khalid to move from the Beit el Ajaib Royal Palace. When Khalid resisted, the palace was bombarded by the British fleet. Most of the wounded local soldiers (mainly Arabs, Persians, Baloochis, Comorians, a few local African-born Zanzibari and freed slaves) were treated at the Universities' Mission to Central Africa (UMCA) Hospital, Mkunazini.¹⁷ The injured British army officers were also sent to the missionary hospitals of the UMCA and the French Mission Hospital. These were the hospitals which mainly treated the European community in Zanzibar Town at that time.¹⁸ Hence, the need for a British Military Hospital became urgent.

Besides treating land and naval troops and police, a small percentage of the town population was also treated at the Military Hospital in the early twentieth century. Western medical facilities were limited to the tiny population of the town, as I have mentioned earlier. However, the small number of patients choosing to attend the Government Hospital was a major challenge for the British colonial administrators in the early period of the establishment of the Government medical services. The Annual Report of Zanzibar Government in 1902 shows that the number of soldiers treated as outpatients and the town population was 3624, or a daily average of 10 new cases, compared to the situation in 1901 when the clinic had received 1267 cases. In other words, it was only gradually that new patients began to attend the hospital, and the numbers were small in relation to the population of the town.¹⁹ Nevertheless, according to information that I obtained in an interview with Dr. Hassan Attas, a retired medical doctor, who has collected historical information concerning the medical services in Zanzibar on which the archival records are silent is that few people attended the hospital as they could not afford to pay the hospital

¹⁷ ZNA AC 1/36, 'Zanzibar Affairs', From Zanzibar Government to Foreign Office, 1896 July- December.

¹⁸ ZNA BA 109/3, A Handbook of Zanzibar 1912, p. 10; ZNA BA 109/7, Zanzibar Protectorate Annual Report 1913, p. 32; ZNA BA 104/5, 'French Hospital', *Zanzibar Gazette*, 9 September 1896.

¹⁹ ZNA BA 83/1, Zanzibar Government, Annual Report 1902, p. 12.

fee.²⁰ I argue that acceptance of biomedical facilities was growing at this time. One of the factors for rejection was the economic one. Many poor people did not afford to pay the fees.

It seems likely that low attendance at the hospital was also due to the antipathy of local people, who perceived biomedical services as alien. Many town people continued to use Islamic, Ayurvedic and African medicines. The townspeople employed Galenic-Islamic and African therapy techniques and medicine in treating many diseases. Hindu Ayurvedic medicine became more prominent in the town from the late-1800s due to the arrival of a large number of Hindu families. This was similar to the situation in late nineteenth century colonial India where, as Arnold points out, “the active survival of indigenous medicine, ranging from various forms of folk practice to the complex system of Ayurveda [Hindu] and Yunani [Muslim], restricted the demand for Western medicine and limited the scope for a rival medical profession”.²¹

In 1906, a dispensary for treating the army and their families was established at Ziwani, southwest of Zanzibar Town. This dispensary was opened exclusively for treating local soldiers in order to allow urban civilians to attend the British Military Hospital. Most of the European army officers were treated at the Missionary hospitals of the UMCA and the French Catholics up to 1912. In 1913, the European Hospital was established by the colonial government in Zanzibar for the treatment of Europeans. The Hospital was located near the seashore, as shown in Figure 4.1 below.

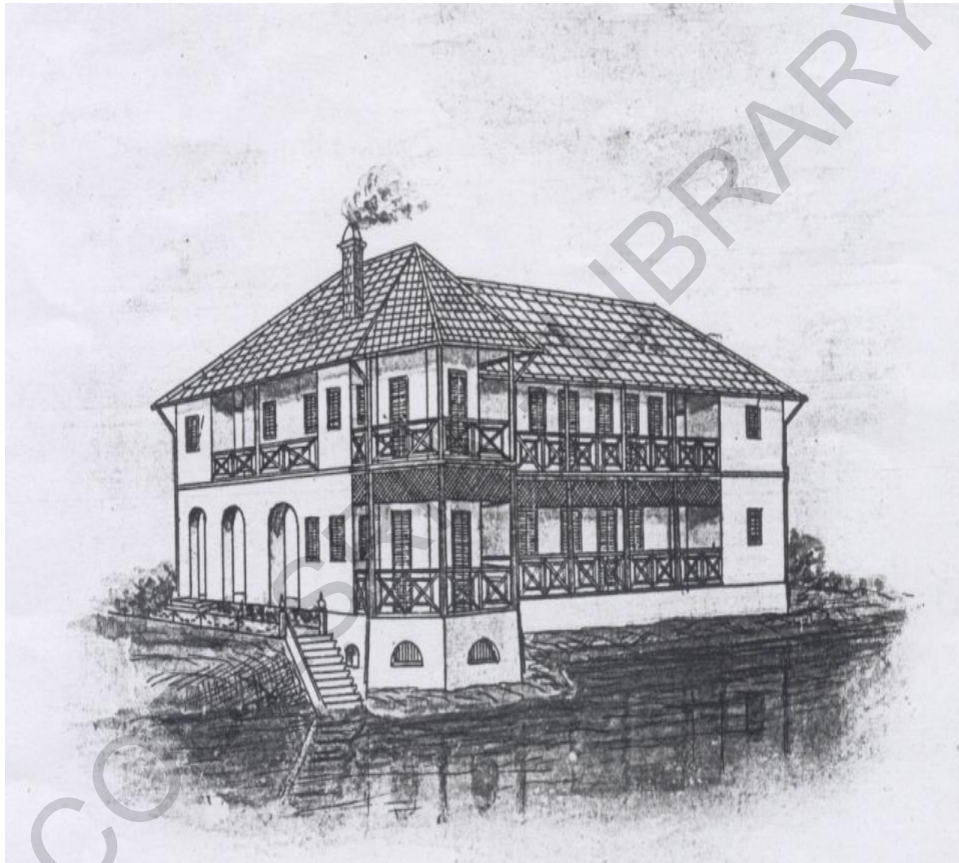
The Annual Report of the Medical Division for the Year 1915 shows that in 1914, 91 men out of 122 inpatients who were treated at the European Hospital came from the ships of the Royal Navy in Zanzibar. Many of them had sustained wounds from shelling in the campaign against the military forces in German East Africa during the First World War. Chronic cases and some convalescents were shipped to Simon’s Town, a British naval base near Cape

²⁰ Interview with Dr. Hassan Attas, a retired medical doctor from the government medical services, at Mchangani in Zanzibar Town on 2 February 2008. He is still continuing with medical practices in his private dispensary. Dr. Attas has done research on the history of medical services.

²¹ David Arnold, ‘Crisis and Contradiction in India’s Public Health’, in *Dorothy Porter (ed.), The History of Public Health and Modern State* (Amsterdam- Atlanta: Rodopi B. V., 1994), p. 339.

Town in South Africa.²² This implies that even the nominally better facilities for the European community were not very good. The coming section looks at the course of history of the Government Hospital from 1900 to 1930.

Figure 4.1: European Hospital, 1913



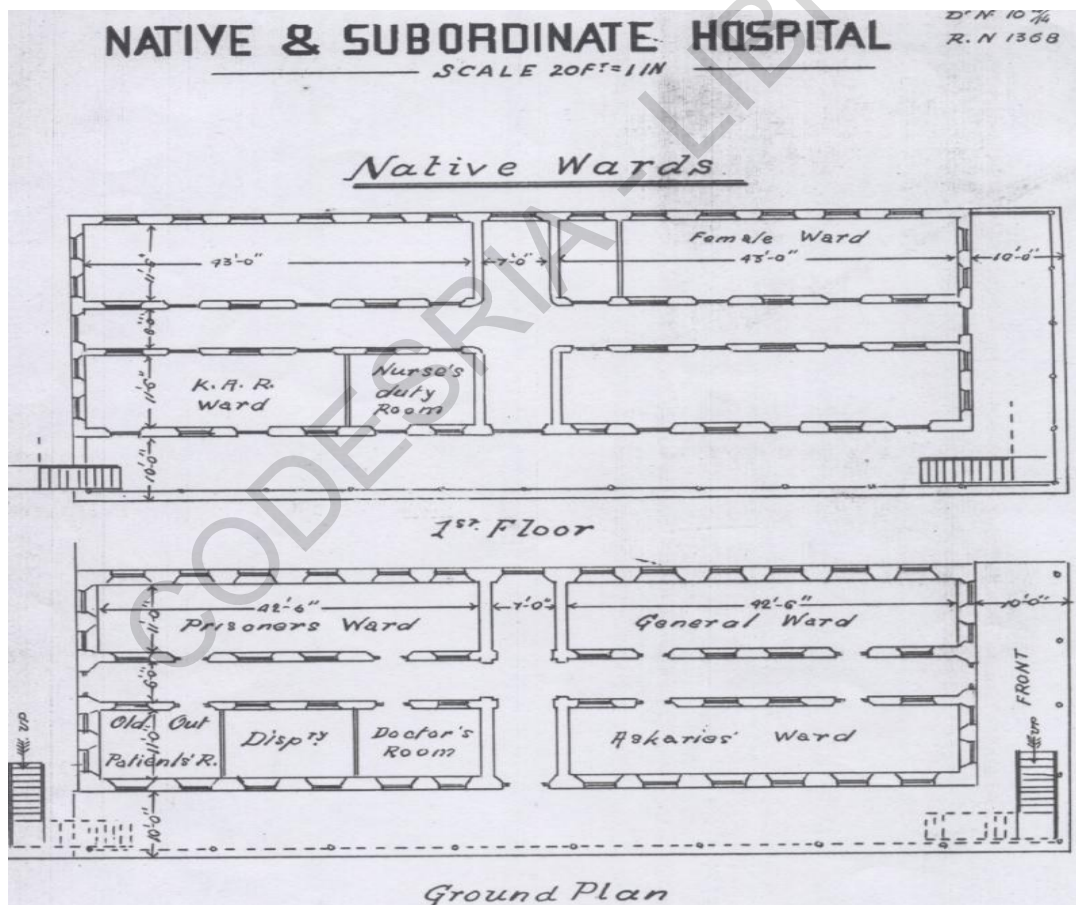
Source: ZNA AW 15/2, Design of European Hospital, 1913.

²² ZNA BA 7/4, Report on the Medical Division for the Year 1915, pp. 70-73.

'Government Hospital for Natives and Subordinates' (GHNS), 1900-1930

In 1900, the British Military Hospital at Mnazimmoja changed its name to become the 'Government Hospital for Natives and Subordinates' (GHNS) (See Figure 4.2 and 4.3). The hospital concentrated in treating the urban civilians. The terms used are significant, indicating that British administrators in Zanzibar allocated biomedical facilities according to belief about "race" and social and economic position since Europeans were given extensive medical services, to be followed by the rich Arabs and Indians and lastly to poor Indians, Arabs and Africans.

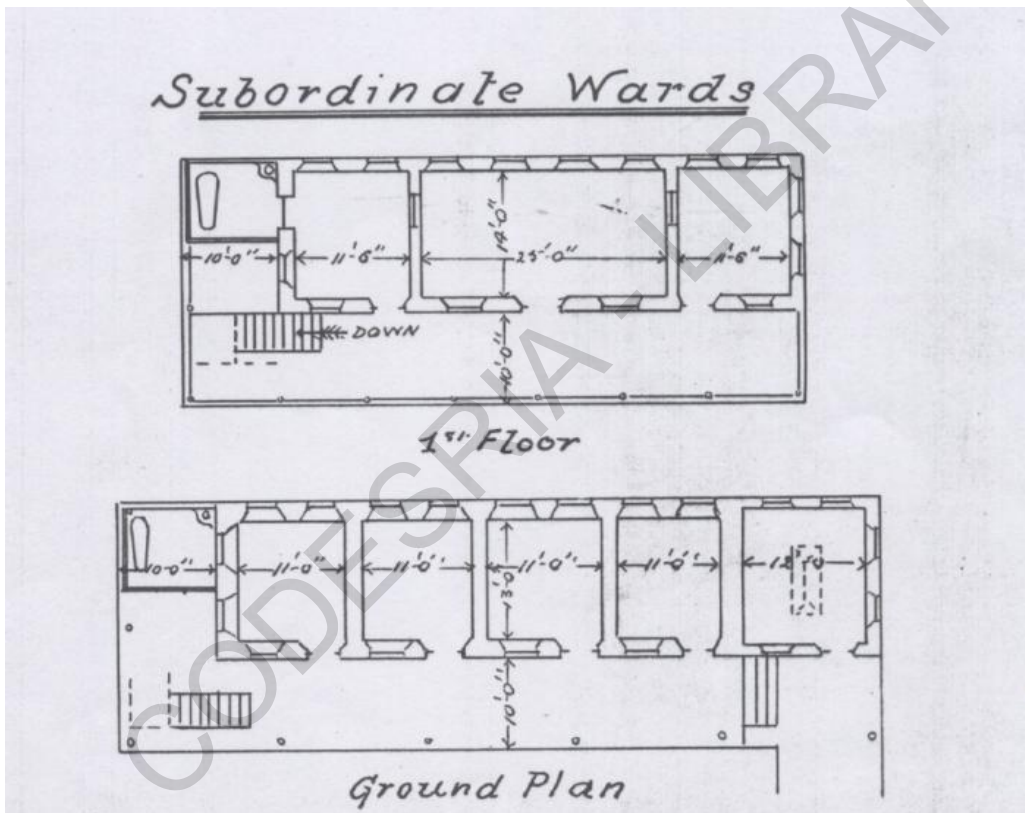
Figure 4.2: Plan of the Native Wards, 1900



Source: ZNA AW 15/2, Plan of the Natives and Subordinates Hospital.

Tapio Nisula has pointed out that, “(t)his division is an illuminating example of the way health services were associated with the alleged needs of diverse races and offered according to medical standards created for racial categories in accordance with colonial thinking”.²³ Bi Sihaba Ismail, a retired nurse and a political activist pointed out during an interview, many poor Arabs and Indians received assistance from their wealthy community members. Many poor Africans had to depend on the government discriminatory medical services.²⁴

Figure 4.3: Plan of the Subordinate Wards, 1900



Source: ZNA AW 15/2, Plan of the Natives and Subordinates Hospital.

²³ Tapio Nisula, *Everyday Spirits and Medical Interventions, Ethnographic and Historical Notes on Therapeutic Conventions in Zanzibar Town* (Saarijärvi: Transactions of the Finnish Anthropological Society, NRO, XLIII, 1999), p. 235.

²⁴ I would like to thank Bi Sihaba Ismail to give me her precious time at her home, Kikwajuni in Zanzibar Town during my field work in September and November 2007.

By 1906, biomedical services still catered for a small percentage of the town's population. In that year it was reported in the Zanzibar Medical and Sanitary Progress Report that the physicians were rarely consulted by the local population. It was also noted that "it is impossible to give any statistics under this heading (natives) as the majority of the natives prefer to employ their own medicine men... practically only those in the employment of Europeans seek the advice of qualified men as they are compelled to do so". As in the past, those who attended the Hospital as out-patients were the government employees, the majority of whom were soldiers, *askaris* and their families and inmates in jails.²⁵ Clearly, by the early twentieth century, the government medical services remained state services since those who were attended the Government hospitals were government employees and those who were under the control of the state.

At that time, the most serious diseases which were receiving medical attention at the GHNS and at Ziwani dispensary were malaria, bronchitis, venereal diseases, rheumatism and ulcers.²⁶ Malaria fever was common in urban Zanzibar after every heavy rainy season. Measures to combat malaria were introduced from the early-1910s. This will be discussed in detail in Chapter Five. Venereal diseases were easily spread in Africa during nineteenth century through movements of soldiers and European traders and sailors. Karen Jochelson observes that "garrison and port towns became a focal point for the transmission of STDs in the Cape Colony. Over 13 percent of troops were hospitalized for VD between 1887 and 1896. During 1899 to 1902 Anglo-Boer War, British troops spread VD".²⁷

Also, child mortality was another serious problem. In 1908, the Medical Department assigned the task of investigating the decrease of the population of Zanzibar including children to Drs. McDonald and Curwen, two senior medical doctors of the department. They reported that many deaths occurred in the islands due to cholera and smallpox, which

²⁵ ZNA BA 7/4, Report on the Medical Division for the Year 1915, p. 7.

²⁶ ZNA AC 1/91, 'Report from the Government Military Hospital', Government Correspondences, 1907 April – June; ZNA AC 1/109, 'Medical Report 1907', Zanzibar's Correspondence to Foreign Office, 1908 August.

²⁷ Karen Jochelson, *The Colour of Diseases Syphilis and Racism in South Africa, 1880- 1950* (London: Palgrave, Macmillan, 2001), p. 16.

led to mortality among children. Also, jiggers were reported to cause considerable mortality from secondary ulceration and blood poisoning.²⁸ In 1908, it was decided by the medical authorities in Zanzibar to send Miss Taylor, a British nurse, to England to attend a six month course on midwifery as a response to the high rate of infant mortality.²⁹ The idea of sending British nurses in Zanzibar for midwifery courses in England was recommended by Sir E. Grey, the Secretary of State in London.³⁰

The state's focus on this high death rate can be linked to international and national efforts in Western Europe in curbing child mortality. Sujata Mukherjee demonstrates that, "in the changing international scenario of the early twentieth century, improvements in maternal and infant health became matter of worldwide interest".³¹ In addition to that, as Ann Davin explains, in 1906, in Britain:

[T]he first National Conference for the Prevention of Infant Mortality took place, which insisted the appointment of qualified women health visitors, public provision of pure milk, earlier notification of births, the regulation of child-minding, the amendment of the 'Infant Life Protection Act', the powers of local authorities, and the operation of the Midwives Act.³²

After the First World War, nation-wide health education campaigns for children and mothers were introduced in India. The programmes included the organization of baby shows, and publicity and the sale of medical literature. Many of these women and children

²⁸ ZNA AC 1/91, 'Administrative Report, 1906', Letters from Zanzibar Government to Foreign Office, 1907 February– March.

²⁹ ZNA AC 1/120, 'Letter from Zanzibar Government to Foreign Office 10 October, 1909', Government Correspondence, 1909 October- November.

³⁰ ZNA AC 1/119 'Letter from Foreign Office to Walrond Clerk, British Consul, Zanzibar, 19 November, 1909', Zanzibar Government, 1909 October- November.

³¹ Sujata Mukherjee, 'Disciplining the Body? Health Care for Women and Children in Early Twentieth-Century Bengal', in Deepak Kumar (ed.) *Disease and Medicine in India, A Historical Overview* (New Delhi: Tulika Books, 2001), p. 204.

³² Ann Davin, 'Imperialism and Motherhood', in Frederick Cooper and Ann Laura Stoler (eds.) *Tensions of Empire Colonial Cultures in a Bourgeois World* (Berkeley, Los Angeles and London: University of California Press, 1997), pp. 106-107.

health programmes were organized by individuals like European ladies and wives of colonial governors.³³

One set of interests in curbing child mortality in Zanzibar were connected with the state's concern for labour. I have explained in detail the government's concern over the labour shortage in Zanzibar in the previous chapters. In 1913, the Director of Public Health in Zanzibar insisted on the provision of sound medical and health services in order to improve health of the people. He stated that:

Whatever happens to this country its economic future does depend on the maintenance of its indigenous labour supply. It is useless to us to have look to the Kavirondo and the Kikuyu [societies in Central Kenya] for our labour... Neither are matters in the least degree improved by any increase in the Indian community, as this class is a trading one, or else it members recruit the skilled labour situation.

Moreover, while reporting the distribution of ankylostomiasis in Zanzibar in 1914, Dr. G. A. MacDonald, the Principal Medical Officer, (PMO) noted that “if only in the interests of maintaining the already limited supply of labour for agricultural purposes it is of the utmost importance that the Health and Medical Departments should unite and organize some means of eradicating the infection”.³⁴ Ann Beck while discussing the history of the provision of medical services in British colonies in East Africa shows that “the medical administrators were requested, first, to preserve the health of the European community; second, to keep the African and Asiatic labour force in good working condition; and third, to prevent the spread of tropical epidemics”.³⁵

By 1908, medical and health officers in Zanzibar marked the increase of the attendances of people to the hospital. This went together with the reduction of hospital fees to attract many town people, especially poor Africans. Also, a women's out-patient clinic was inaugurated in

³³ Mukherjee, “Disciplining the Body?”, p. 200.

³⁴ ZNA BA 7/2, Annual Report for Medical Department, 1914, p. 3.

³⁵ Ann Beck, *A History of the British Medical Administration of East Africa, 1900-1950* (Cambridge: Harvard University Press, 1970), p. 200.

that year though the report continued to show that Arab, Indian and Swahili women elites were the only patients. In a medical report, it was stated that, “the Government Hospital continues(ed) to increase in popularity and the people greatly appreciate(d) the services of the European nurses”.³⁶ At that time, Dr. Curwen, an assistant PMO became in charge of the Hospital. Also, Mrs. Elspeth K. Zurcher from Arran, Scotland became its first matron.³⁷ From 1896, British women began to be recruited in colonies as Nursing Sisters by the newly formed Colonial Nursing Association (CNA). The CNA played an important role in the recruitment of nurses for Africa until sometime after independence.³⁸

Mrs. Zurcher was assisted by other junior assistants such as Simeon Livingstone b. 1868, an African liberated slave under the UMCA who became apprenticed at the Church Missionary Society’s (CMS) centre at Mombasa, Kenya. He was employed in the government services as dispenser in 1900.³⁹ Also, in the 1907 Government staff list, J. B. Martin and F. L. Gomes were noted as the dispensers.⁴⁰ They were drawn from the Goan community in Zanzibar. Most of them had received their junior education under the French Catholics in Zanzibar. A few numbers of Indian Hospital Assistants borrowed from the Indian Medical Services (IMS) were employed at the GHNS by that time. According to John Iliffe, by the early twentieth century, Zanzibar possessed the most skilled medical attendants of all the British services in East Africa.⁴¹ Generally, few British nurses were sent to Zanzibar during the colonial period. They were assisted by the local dispensers. Indeed, from the mid twentieth century, the Zanzibar Government made deliberate efforts in training local nurses. This will be discussed further in Chapter Six.

³⁶ ZNA AC 1/109, ‘Administrative Report 1907’, Correspondence between Zanzibar Government and Foreign Office, 1908 August.

³⁷ ZNA AC 1/92, ‘Medical Board July 1907’, Correspondence between Zanzibar Government and Foreign Office, 1907 June- July’.

³⁸ Pat Holden, *Nursing Sisters in Nigeria, Uganda, Tanganyika* (Oxford Development Records Project Report 18, Rhodes House Library, Oxford, 1984), p. 3.

³⁹ ZNA ARC 1/30, Employment of Simeon Livingstone by the Sultan’s Government.

⁴⁰ ZNA AC 1/92 ‘Staff List- 1907’, Inward, 1907 June- July.

⁴¹ John Iliffe, *East African Doctors: A History of the Modern Profession* (Cambridge: Cambridge University Press, 1998), pp. 12-15, and 30.

While it would seem that the extension of health services to urban population in Zanzibar by European nurses helped to reduce local resistances to biomedicine, in her article '(Ad)ministering Angels: Colonial Nursing and the Extension of Empire in Africa', Sheryl Nestle has argued that European nurses were instrumental in controlling African patients. She explains that:

White nurses, while constrained in a variety of ways, brought to the colonial setting technologies developed in the metropole for the control of subaltern populations. They inserted natives into nursing hierarchies transplanted from 'home' onto African soil and created knowledge of populations at the most intimate and detailed levels.⁴²

There were however very few British nurses in Zanzibar to influence local people. Rather, it was local born-Zanzibaris who influenced people's attitude towards the use of biomedicine.

Between 1909 and 1910, as Table 4.1 shows, patients' attendance at the Government Hospital declined. This was due to the government interference in terms of a newly introduced policy enforced to acquire more labourers. The Medical Department refused to grant off-duty time to those Government servants who were suffering from syphilis. The policy was introduced fearing labour decrease. It was stated in the colonial government report in Zanzibar that:

We fear that the present wide-spread discontent amongst natives and their dislike for anything connected with 'Zirkal' (government) is a much more potent factor, as is also the rule brought into force in the middle of the year by which government employees are fined so long as they are off duty from venereal diseases.⁴³

⁴² Sheryl Nestle, '(Ad)ministering Angels: Colonial Nursing and the Extension of Empire in Africa', *Journal of Medical Humanities*, 19, 4 (1998), p. 273.

⁴³ ZNA BA 83/3, Annual Reports for 1909 and 1910, p. 40.

Table 4.1: The number of patients, GHNS, 1907-1913

Year	Inpatients	Outpatients	Total
1907	902	5743	6645
1908	1299	7089	8388
1909	1050	6108	7158
1910	1169	5771	6940
1911	1282	6910	8192
1912	1230	7179	8409
1913	1503	9087	10590

Source: ZNA: Annual Medical Reports between 1907 and 1913.

Furthermore, it was reported that in 1909, “deaths amongst in patients numbered 58, a mortality of 5.5 percent of patient admitted, the corresponding mortality was 3.1 for 1908 and 2.09 for 1907. The number of mortality is high because of paupers who were sent by the police in a dying condition. And by large number of children who were brought from the King’s African Rifles dispensary at Ziwani who were admitted with Pneumonia, Bronchitis, and Fever”.⁴⁴ Similarly, in colonial India, by the mid-nineteenth century any attempt to make people attend hospital failed since hospitals were associated with pollution, low-caste people, paupers and prostitutes. Negative attitudes towards medical work emanated from the fact that a lot of people died in hospitals. Also, police visits to these hospitals for treatment purposes deterred people from attending, since they associated police with state power and control.⁴⁵

Apart from the army and police, the prisoners – who presumably had little choice in the matter – were also brought within the ambit of Western biomedicine as they were treated at a dispensary that had been built at the Central Prison, at Kilimani. As I have mentioned before in this chapter, the army and the jails were two important sites whereby medical observations were conducted. They offered unique opportunities for medical investigation

⁴⁴ ZNA BA 83/3, Annual Reports for 1909 and 1910, p. 41.

⁴⁵ Arnold, *Colonizing the Body*, pp. 250 and 258.

and experimentation.⁴⁶ The prisoners were largely suffering from malaria, ankylostomiasis, respiratory, digestive and skin diseases.⁴⁷ Another problem that the prisoners faced was vitamin deficiency. The problem was particularly severe among African prisoners who were given a less nutritious diet compared with European, Indian, and Arab prisoners. This could lead to pellagra. Only in 1940 was the diet of African prisoners was modified and fruits and vegetables were added in their meals. However, up to the late colonial period in Zanzibar, the number of inmates who suffered hookworm, schistosomiasis and malaria was still high despite the measures taken.⁴⁸ This shows that despite the extension of medical services in the jails, the health of the African inmates was poor due to anaemia which was caused by a poor diet.

From the early decades of the twentieth century, British colonial administrators in Zanzibar extended medical services in government schools in order to monitor the health of school children. The first people to employ a British medical doctor in school were Ismailis. As early as 1891, Dr. Andrade, a British medical doctor was a physician of the Sir Euan Smith Madressa, an Ismaili Indian school. The first government school was founded in Zanzibar Town in 1903 by Sultan Ali Hamoud (r.1898-1911). In 1907, the British appointed Mr. S. Rivers-Smith, a former Director of Education in Egypt to become the first Director of Education in Zanzibar. One year later, the PMO in colonial Zanzibar proposed the idea of introducing health inspection at the school. In a report that was sent to the Foreign Office, London in 1908, the colonial authorities in Zanzibar had made it clear that “medical inspection must play a part in the organization of any system of schools”.⁴⁹

⁴⁶ Arnold, *Colonizing the Body*, p. 113.

⁴⁷ ZNA, BA 7/4, The Annual Report of Medical, Sanitary and Biological Division of 1927, p. 47.

⁴⁸ ZNA BA 7/11, The Annual Report of Medical, Sanitary and Biological Division of 1934, pp. 34-35; ZNA BA 7/22, The Annual Report of Medical, Sanitary and Biological Division of 1955, p. 177; ZNA BA 7/38, The Annual Report of Medical, Sanitary and Biological Division of 1961, pp. 35- 36. Also, the interviews that I conducted with Dr. Attas, Bi Sihaba, and Dr. Mohammed Kaumbwa confirmed that malaria and hookworm were the afflictions that troubled the people most during the colonial period. They told me however that the malaria death rate among children in the urban area was reduced by the early-1960s.

⁴⁹ ZNA AC 1/109, ‘Medical Report, 1907’, Dispatches to Foreign Office, London, August 1908.

The reasons behind government's efforts in supplying medical services in these schools were to ensure healthy labourers to serve the government. As well, in Egypt, school medical services were inaugurated in 1835 by the Egyptian government under Mohammed Ali to safeguard the health of young children who were expected to serve in the armed forces or the civil bureaucracy. According to Kuhnke La Verne, each school in a provincial capital was to have an infirmary, pharmacy, and health office to treat emergency cases and headmasters and school supervisors were penalized when they neglected the students' health.⁵⁰

In Zanzibar, it was also proposed that "every pupil on being admitted to a Government School must submit to a medical examination and to vaccination".⁵¹ It was also stated that "every pupil in the Government School will be medically examined once every three weeks. In the event of any people being detected with a venereal, contagious or infectious disease, he will be removed at once to the Government Hospital to receive proper medical treatment, unless his father or guardian will undertake to take in one of the Government doctors to attend him at home".⁵² Generally, the school medical services were introduced to school children at the time when the other town populations were not fully utilizing the services.

In addition, the School Medical Clinic was established in Zanzibar Town in 1913, ten years after the introduction of Government education. Like the early established biomedical services in colonial Zanzibar Town, the School Medical Clinic's building was erected at a cost of Rs. 15,000 from the *Wakf* (endowment) Funds, which were derived from the Arab, African and Indian Muslim *Wakf* estates.⁵³ The intentions behind introducing the medical services to school children in the town were made clear by the PMO who said that: "first it is

⁵⁰ Kuhnke La Verne, *Lives at Risk: Public Health in 19th Century Egypt* (Berkeley: University of California Press, 1990), pp. 137-138.

⁵¹ ZNA AC 1/109, 'Medical Report, 1907', Dispatches to Foreign Office, London, August 1908.

⁵² ZNA AC 1/109, 'Medical Report, 1907', Dispatches to Foreign Office, London, August 1908.

⁵³ ZNA, AJ 18/28, 'Funds from Wakf Commission', School Clinic, 1913-45; The endowments of Muslim properties are known under Islamic law as *Wakf*. Rents or produce generated by *Wakf* property, such as land or houses could be used to endow a mosque or any other public building like a school or dispensary for the use of Muslim community.

intended to familiarize the rising generation of the population with European medicine. Second, a certain amount of information is collected, which had an anthropometric importance. Thirdly, it aimed to be an aid to the hygiene and discipline instruction”.⁵⁴

By 1924, the Director of Medical and Sanitary Services (DMSS) apparently considered the local African students as the ‘cleanest, sturdiest and generally the fittest’. Indians came next and the Arabs were observed as being ‘anemic’ and ‘of poor physique’. It was reported that most of these Arabs came from Pemba and the *shamba* (rural) and were extensively infected with malaria and ankylostomiasis which retarded their physical wellbeing and growth.⁵⁵ We might note that this was related to actual living conditions and had nothing to do with supposed ‘race’. The colonial authorities thought that ‘race’ meant poor habits, which led to poor health. They could not recognize these material realities but instead blamed ‘race’ and ‘character’. Most of the Indians in the town lived in crowded conditions, with little ventilation or space in their houses. This obviously negatively affected their health condition as is reflected in the reproduced Table 4.2.⁵⁶

Table 4.2: The Medical Examination of School Children in Zanzibar Town, 1924

	Indians	Arabs	Swahilis and others
1. Lack of cleanliness	12%	11.5%	2%
2. Defective teeth	21%	23%	9%
3. Enlarged tonsils	21%	9%	5%
4. Defective vision	42%	23%	24%
5. Enlarged spleen	33%	37%	28%
6. Parasitemia	3%	6.8%	10%

⁵⁴ ZNA BA 7/5, Annual Report on the Medical and Public Health Department for the Year 1924, p. 30.

⁵⁵ ZNA BA 7/5, Annual Report on the Medical and Public Health Department for the Year 1924, p. 30.

⁵⁶ ZNA BA 7/5, Annual Report on the Medical and Public Health Department for the Year 1924, p. 30.

Vaughan maintains that the emphasis on culture rather than racial difference had been around among anthropologists in colonial Africa since the early twentieth century. By the 1930s, the idea was incorporated in medical discourse.⁵⁷

By 1930, which was a different era in terms of both medicines, nutritional science and colonial 'development' policies in Africa, the medical and health authorities in Zanzibar observed that the most common problems among school pupils in the town were undernourishment, enlargement of spleen and skin diseases. Paludrine, (anti-malaria tablets), cod liver oil and iron were given to the children regularly.⁵⁸ In 1940 school vegetable gardens were introduced as a measure to improve the health of school children, but these were abandoned a few years later because the children did not have enough time during the course of the school day to be able to tend the gardens.

Western medicine had therefore become important for a portion of the urban population by the early decades of the twentieth century. These included government servants, prisoners, elites (mainly the Arabs and Indians and a very few Comorians and Swahilis), and school children as they were under the direct control of the colonial state. As we have noted in Chapter One and Two, the other local people who were familiar with biomedical facilities were the African Christians and a handful of Muslim urban Africans, Arabs and Indians. Most interesting is that most of the Indian and Arab elites had direct connection with colonial governments as administrators and in business activities and a large number of these Indian elites had access to medical services in India. Again, these elites represented a small percentage of the town population as a whole. The medical services therefore covered only a small segment of the town population by this period. Greater efforts to popularize biomedical works in colonial urban Zanzibar started from the 1930s onwards. Again, it was community leaders and medical philanthropists who played an important role in the popularization of biomedicine. This will be detailed in Chapter Six. The next section returns to the state provision of medical facilities in the form of leper and lunatic asylums in Zanzibar. These are both areas of state control, but did also offer a needed service.

⁵⁷ Megan Vaughan, *Curing their Ills: Colonial Power and African Illness* (London: Polity Press, 1991), p. 46.

⁵⁸ ZNA AJ 18/28, 'Medical Observations', School Clinic, 1913-45, p. 63.

The Confinement of Lepers in Urban Zanzibar, 1896-1930

In Zanzibar, the incarceration of the people who suffered from leprosy, what today is more correctly called Hansen's disease, had started before 1897 when the first government leprosarium was established by the Zanzibar Government. At unknown dates possibly during the 1880s, several lepers organised themselves in villages. This challenges the idea that the colonial state imposed totally alien medical regimes and institutions on indigenous peoples. Eric Silla explains that in pre-colonial Mali, lepers isolated themselves from the community and formed their own villages once the disease began to be noticed by their neighbours.⁵⁹

Other such villages had been founded by Muslim Arab slave masters in the clove plantation zones of Unguja and Pemba. According to the archival sources, these masters cared for lepers as a religious act. For example, in Pemba at Kish Kash in the Wete District on the island near Njao two Arab landlords, Mohamed Juma and Salam Ali, established a settlement for lepers. At another area near Jondeni, at Kiunga Creek in the Wete District, an Arab donated land for the use of leprosy-diseased people. They grew maize, millet, beans, sugarcane, tobacco and bananas, and had large flocks of goats and poultry and large canoes for fishing. Another leper village was established at Nduni in the Chake District by an Arab master, Kassim Sultan.⁶⁰ On Unguja Island, leper villages were established at a place known as Kisiwa cha Pili near Makoba in northern District. Other scattered leper villages were at Mwera and Chwaka in southern District.⁶¹

From 1896, the colonial government in Zanzibar made an effort to gather lepers who could be found roaming in many streets in urban and in rural Unguja and Pemba Island. In an interview I conducted, Dr. Attas noted that, according to information that he had collected

⁵⁹ Eric Silla, *People Are Not the Same, Leprosy and Identity in Twentieth-Century Mali* (James Currey: Oxford, 1998), pp. 32 and 33.

⁶⁰ ZNA AB 2/341, 'Report from F. Farler on leper Settlement in Pemba to A. S. Roger, the First Minister in Zanzibar (1904-8) in 1904', Segregation of Lepers, 1896-1931.

⁶¹ ZNA AB 2/341, 'Report from the Collector of Mkokotoni, relating to the local communities demanding the removal of lepers, Zanzibar, 1913', Segregation of Lepers, 1896-1931.

decades ago from a number of town people, apart from being scattered around the town and rural areas some lepers were also detained at the Quarantine Station and at the Infectious Diseases Hospital. They had probably arrived in Zanzibar from India, Oman or Yemen.⁶²

In 1896, one year before the establishment of the Government Leprosarium, Dr. Alfred Spurrier, the first Director of Health in Zanzibar was sent by the colonial government to Robben Island Asylum at the Cape Colony in South Africa to study the maintenance of leprosaria. The Cape Colony was more advanced in its facilities for lepers, lunatics and the chronically ill.⁶³ In his report to Lloyd Mathews, Dr. Spurrier suggested that the government should choose a suitable site for the segregation of lepers in order to examine their progress. He also proposed that lepers must be numbered and registered and must have medical facilities such as hospital wards if there were cases which needed an operation. Furthermore, he proposed that segregation facilities needed to be maintained throughout and that lepers should understand that the reason for their segregation was that it was necessary to detain them so they would not infect others.⁶⁴

Subsequently, in 1897, a government leper settlement was established at Kiungani, Migombani near the Chukwani Road, about four and half miles southwest of Zanzibar Town. The *Shamba*, a plot of land belonging to the late Mr. Frederick Holmwood, an Assistant British Political Agent in the early-1870s, was purchased by the government for accommodating lepers of Unguja Island, and another portion of it was allocated for use as an Isolation Ward for smallpox patients.⁶⁵ The report noted that the site had sufficient soil for cultivation both as therapy and for food and that it was free from swamps or streams that would harbour mosquitoes. According to a UMCA nun who visited the area, Mahomet

⁶² Interview with Dr. Hassan Attas on 2 January, 2008.

⁶³ Harriet Deacon, 'Insanity, Institutions and Society: The Case of the Robben Island Lunatic Asylum, 1846-1910', in Roy Porter and David Wright (eds.), *The Confinement of the Insane International Perspectives, 1800-1965* (Cambridge: Cambridge University Press, 2003), pp. 20-53, p. 20.

⁶⁴ ZNA AB 2/341, 'Report from Dr. Alfred Spurrier to Lloyd Mathews, 1896', Segregation of Lepers, 1896-1931.

⁶⁵ ZNA BA 104/6, 'Leprosarium', *Zanzibar Gazette*, 25 August 1897, p. 5.

Sayid, a locally-born Arab and a government employee, was in charge of the leper village. Most of the lepers were Muslims.⁶⁶

Leprosy had come to the attention of Western medical administrators in many colonial African countries after the first World Leprosy Conference in Berlin in 1897.⁶⁷ The delegates at the conference endorsed a policy of strict isolation for lepers everywhere in the non-western world. Segregation became a compulsory measure in order to prevent the spread of the disease.⁶⁸ However, segregation policies had been endorsed in other countries before 1897. For instance, a segregation policy was passed in Hawaii in 1865, in terms of which lepers were sent to Molokai, a 'leper colony' since 1866. Moreover, an 'Act for the Maintenance of Poor Lepers' was passed by the Norwegian government in 1877 following the discovery of *Mycobacterium leprae* bacillus by Dr. Hansen in 1874.⁶⁹ In South Africa, legislation to segregate lepers was introduced in 1892. In German East Africa (Tanganyika), the first law requiring the isolation of lepers was enforced in 1912.⁷⁰

State actions to isolate and detain lepers on Unguja and Pemba islands came after the abolition of slavery in 1897. In order to ensure the supply and stability of labour, and to boost economic productivity, police were given the power to arrest anyone – including lepers – found wandering in the streets. In discussing Zanzibar's labour history in the aftermath of abolition, Frederick Cooper has demonstrated that "the police and the criminal law were being used to force people into dependent relationships and into labour that was regarded as productive, even as court-enforced contracts and a variety of techniques of

⁶⁶ *African Tidings*, 'The Leper Settlement', X, 172 (October, 1901), p. 7.

⁶⁷ John Iliffe, *The African Poor, A History* (Cambridge: Cambridge University Press, 1987), p. 216.

⁶⁸ Sheldon Watts, *Epidemics and History: Disease, Power and Imperialism* (New Haven: Yale University Press, 1997), p. 68.

⁶⁹ Eric Silla, *People Are Not the Same, Leprosy and Identity in Twentieth-Century Mali* (James Currey: Oxford, 1998), p. 25.

⁷⁰ Iliffe, *The African Poor*, p. 218.

recruitment were being used to affect the same ends”.⁷¹ He has further shown that “beginning in 1897, police forces were augmented and a large number of arrests were made for categories of crime that were invariably, in official minds, linked: vagrancy, theft – especially of farm produce, adultery, assault and drunkenness”.⁷² He concludes with the observation that “crime statistics often reveal more about the people who define crimes than about those who commit them”.⁷³

Government administrative reports as well as those by medical doctors show that police officers, *Mudiri* and *Shebas* were responsible for detaining lepers. *Shebas* were originally hereditary leaders and were appointed to lead their respective villagers. During colonial period, their roles were transformed: they became agents of the government, whose principal functions were to maintain order and justice in their areas and to bring to the notice of the government any unusual occurrence that took place in their area. They were obliged to report to the government the occurrence of disease which affected many people in their localities. They were endowed with the powers of a police constable and were generally members of the District Councils.⁷⁴

In 1904, in Pemba, police reports noted that twenty ‘stray’ lepers were sent to Kisiwani Kengeja.⁷⁵ *Shebas* were also requested by the medical doctors to send them information about anyone who suffered from leprosy. In 1911, the *Sheba* of Chake brought to the hospital one Salmini Musa of Mwelani (which is about two and half miles from Chake) for examination after his fellow villagers had threatened to kill him.⁷⁶ On the other hand, the

⁷¹ Frederick Cooper, *From Slaves to Squatters, Plantation Labor and Agriculture in Zanzibar and Coastal Kenya, 1890-1925* (New Haven and London: Yale University Press, 1980), p. 111.

⁷² Cooper, *From Slaves to Squatters*, p. 111; Frederick Cooper, ‘From Free Labour to Family Allowances: Labour and African Society in Colonial Discourse’, *American Ethnologist*, 17, 4 (1989), p. 748.

⁷³ Cooper, *From Slaves to Squatters*, p. 111.

⁷⁴ Hamad Hassan Omary, ‘Zanzibar Administrative History 1840 to the Post-Revolution Period’ (Unpublished M. A. dissertation, University College, London, 1985), p. 53.

⁷⁵ ZNA AB 2/341, ‘Medical Report on Pemba’, A Letter from Dr. McDonald (PMO) to Edward Clarke, the Consuls-General, 20 April 1911, Segregation of Lepers, 1896-1931.

medical officers also reported that some of the villagers in Chake respected lepers. They lived with them, ate and drank from the same utensils. They bathed in the same place, wore the same clothing and slept together.⁷⁷ Many Shehas were not sure if some of the sick persons in their villages were really suffering leprosy.⁷⁸ They might be suffering yaws which was common in many rural areas.

Meanwhile, in 1898, the government leprosarium was moved from Kiungani to Welezo in the south of the town. The Welezo buildings were constructed at the expense of the 'Mathews Memorial Hospital' in London.⁷⁹ The opening of the leprosarium at Welezo was praised by Dr. Robert Koch, who visited Welezo in 1898. He came from Dar es Salaam where he was involved in research on human trypanosomiasis and malaria in Tanganyika. While in Zanzibar, Dr. Koch gave advice on the leprosy work which was carried out at Welezo. It was here that Koch's understanding of leprosy came about, since the leprosy bacilli were very similar to the tuberculosis bacillus which he had researched extensively.⁸⁰ When he received his Nobel Prize in 1905, Koch argued strongly for the strict isolation of persons suffering from chronic contagious diseases, and he linked tuberculosis and leprosy in this respect.⁸¹

By 1898, the Zanzibar Government Leper Asylum was firmly established. It was designed for the reception of 60 leprosy cases although at that time it had only 25 patients.⁸² Likewise,

⁷⁶ ZNA AB 2/341, 'Medical Report on Pemba', From Dr. McDonald to Clarke, 20 April 1911', Segregation of Lepers, 1896-1931.

⁷⁷ ZNA AB 2/341, 'Medical Report on Pemba', From Dr. McDonald to Clarke, 20 April 1911', Segregation of Lepers, 1903-1931.

⁷⁸ ZNA AB 2/341, 'Medical Report on Pemba', From Dr. McDonald to Clarke, 20 April 1911', Segregation of Lepers, 1903-1931.

⁷⁹ ZNA AB 2/341, 'A Letter from Lloyd Mathews to Dr. Alfred Spurrier', Segregation of Lepers, 1903-1931.

⁸⁰ ZNA BA 104/6, 'Government Leprosaria', *Zanzibar Gazette*, 31 March 1897, p. 5.

⁸¹ Alison Bashford, *Imperial Hygiene A Critical History of Colonialism, Nationalism and Public Health* (Palgrave Macmillan, 2004), p. 88.

⁸² ZNA BA 104/7, 'Government Leprosaria', *Zanzibar Gazette*, 18 May 1898, p. 6; ZNA AC 1/81, 'Report on Health 1905', Correspondence between Zanzibar Government and Foreign Office, 1905 June – 1906 August.

in the same year the German colonial authorities at Dar es Salaam began the construction of Tanganyika's first and largest government leprosarium. The British colonial authorities in Zanzibar assisted the Germans in establishing this leprosarium by organizing free trips for Europeans and rich Indians who were living in Zanzibar Town to attend a charity event regatta in Dar es Salaam, held for the purpose of raising funds for a leper asylum. By the end of 1898, the German colonial authorities in Tanganyika had opened a leprosarium, which was financed by Sewa Haji and also through charitable contributions.⁸³

In 1904, the colonial government in Zanzibar decided to cooperate with the French Catholic Sisters in the caring of lepers. The French Missionaries bought a plot of land at Welezo, near the Government Leprosarium. The French Fathers and Sisters of Cluny, ten in number, were placed in charge of both the Government Leprosarium and the Poor House at Welezo.⁸⁴ The Zanzibar Government also signed an agreement with the French Roman Catholic Mission by which the government had to pay to the Mission Rs. 1500 per month for giving care to lepers. The government was responsible for providing living quarters, furniture, medical attendants, medicines, drugs and dressings. The Mission on their part agreed to feed, clothe, nurse and take charge of lepers and the inmates of the Poor House.⁸⁵ By 1905 the number of leprosy inmates at Welezo had reached 60.⁸⁶ Some of the lepers were coming voluntarily while others were sent by government officials, police and medical doctors. Photo 4.1 shows the Holy Ghost missionaries and lepers at Welezo at the beginning of the century.

⁸³ ZNA BA 104/2, 'Government Leprosaria', *Zanzibar Gazette*, 20 September 1893, p. 2; Iliffe, *The African Poor*, p. 197.

⁸⁴ ZNA BA 109/3, A Handbook of Zanzibar 1912, p. 14; ZNA AB 22/58, 'Welezo Leprosarium', Roman Catholic Mission.

⁸⁵ ZNA AC 1/93, 'Reports for the Year ending December 31, 1906', Correspondence between Zanzibar Government and Foreign Office, 1907 June-1908 March.

⁸⁶ ZNA AC 1/81, 'Report on Health 1905', Letters from Zanzibar Government to Foreign Office, 1905 June-1906 August.

Photo 4.1: French missionaries and Lepers at Welezo



Source: ZNA AV 36/86, Mission of Holy Ghost.

The colonial government's provision of free meals and other necessities to lepers should not be seen solely as charity and benevolence. One important motivating factor was the fear that the disease would endanger European life in the town. In addition, Rod Edmond has argued that by the early-1900s the main imperial concern was the danger of leprosy returning to metropolitan centres from which it had long disappeared. He comments that "reported cases from the Cape and from Australian colonies undermined the idea of the white settler colony as a healthy offspring of the metropolitan parent".⁸⁷ Edmond sees a link between

⁸⁷ Rod Edmond, *Leprosy and Empire: A Medical and Cultural History* (Cambridge: Cambridge University Press, 2007), pp. 80-81.

Europeans' growing concern about their susceptibility to leprosy and "tropical disease", and their anxiousness to "preserve identity by sealing the metropole and the colonizer from the world they were colonizing".⁸⁸ Sheldon Watts has pointed out that these fears bore little relation to the actual number of people afflicted by leprosy, which was in any case not particularly contagious – though this latter fact was not then known. Watts demonstrates that during the 'Imperial Danger Scare' of the late nineteenth century, only five percent of the people in African colonies were affected by leprosy.⁸⁹

Before the Second World War, in many colonial African and Asian countries nursing care at most of the leprosaria was provided by European and American missionaries. They associated the disease with what they called "sinful and shameful sexual intercourse". According to Sheldon Watts, "while in colonial Asia and Africa, missionaries and missionary doctors perceived leprosy as God's punishment for dark, hidden thoughts, words and deeds, always involving disgusting forms of sex".⁹⁰ This is a very sweeping statement and perhaps the reality was more varied and, perhaps even, more compassionate than this. Watts further argues that missionaries were concerned that lepers needed moral upliftment more than they needed medical care. This is why most of the work among lepers in India and Africa was carried out by missionaries, missionary doctors, and religiously motivated volunteers from the European homeland.⁹¹

In an article on leprosy and colonization, R. D. K. Herman shows that, from the late nineteenth century onwards, the connection between missionaries and leprosy "was reinforced over time by the confluence of a new racial science emerging with the expansion of empire in the nineteenth century".⁹² One of several factors that spearheaded racial discourse in Europe and knowledge about leprosy at that time was the emergence of the

⁸⁸ Edmond, *Leprosy and Empire*, p. 142.

⁸⁹ Watts, *Epidemics and History*, p. 43.

⁹⁰ Watts, *Epidemics and History*, p. 43.

⁹¹ Watts, *Epidemics and History*, p. 43.

⁹² R. D. K. Herman, 'Out of Sight, Out of Mind, Out of Power: Leprosy, Races and Colonization of Hawai'i?', *Journal of Historical Geography*, 27, 3 (July, 2001), pp. 319-337, p. 322.

theory of Social Darwinism. “This claimed that modern science had proved that created humankind was divided into higher (white) and lower (black and coloured) racial types”.⁹³

In the same period, Christianity brought additional layers of stigma. As I have noted, missionaries linked leprosy with shameful behaviour. The solution was to instil Christian teachings. At the Welezo government leprosarium the French missionaries read the Bible to lepers and told them stories about the life hereafter. This corresponds to Rod Edmond’s comments about missionary stigmatization of lepers in Asia, Africa and the Oceanic regions. Edmond observes that “in leper colonies run by missionaries, mediation was not between the institutional world and the home world of the leper, but between the leper colony and the afterlife”.⁹⁴ In 1900, one of the UMCA Sisters wrote about her visit to Welezo leper colony where she explains that, “a great many listen attentively to the Bible stories I tell them”, adding that, “as a rule, they are quite pleased to come being so thoroughly sick of the outcast life they live in the town. No one can bear them to come near, and so, as a rule, they have hardly anyone who cares for them ... One can scarcely imagine anything much more hopeless and degraded than a heathen leper”.⁹⁵ The archival records suggest that indigenous attitudes towards lepers varied greatly. They were harshly treated in some rural villages but people tolerated them in other rural areas. In the town, some people shunned lepers while others gave them money and food.

In 1920, the UMCA missionaries at Funzi, in Pemba Island (see Map 4.1) had managed to convert some of the lepers who were under their care. Petro, a new convert, was reported to be “thankful” to the missionaries, who took care of him when his fellow villagers turned away from him.⁹⁶ In 1931, at Funzi Leper Asylum, one of the UMCA missionaries wrote that “it is a great privilege to see joy and light coming into these lives, and the wonderful

⁹³ Watts, *Epidemics and History*, p. 75.

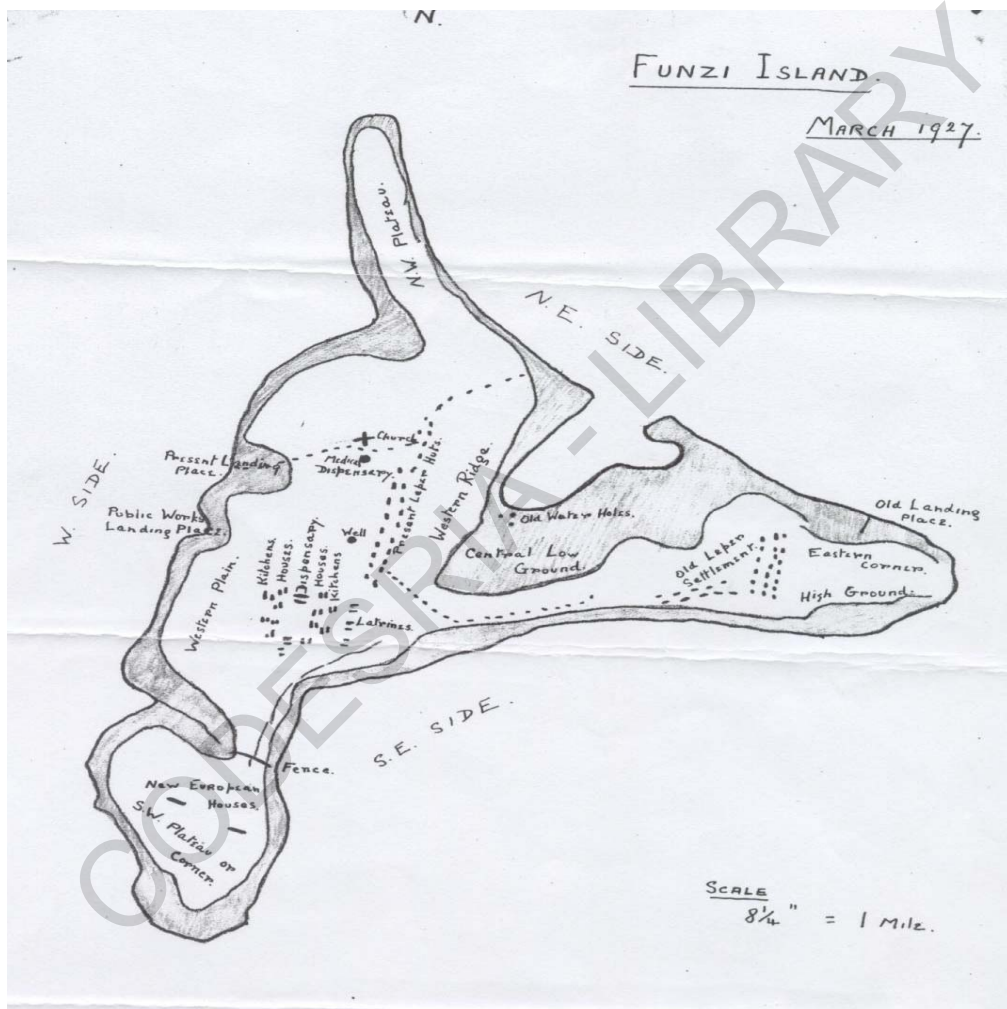
⁹⁴ Edmond, *Leprosy and Empire*, p. 144.

⁹⁵ *African Tidings*, ‘Lepers at Welezo’, X, 172 (October, 1901), p. 7.

⁹⁶ *African Tidings*, ‘Funzi Lepers’, XXXVII, 457 (March, 1928), p. 29.

growth of courage in witnessing to the faith amongst their Muhammadan teaching and making a stand against all the evil against witchcraft".⁹⁷

Map 4.1: Funzi Leprosarium, Funzi Island, 1927



Source: Rhodes House Library, UMCA: SF Series 43.

⁹⁷ *African Tidings*, 'Funzi Lepers', XLIX, 478 (February, 1931), p. 29.

In terms of legislation, the first decree which directly affected lepers was enforced by the colonial government in Zanzibar in 1911, when Francis Barton (1863-1947), the First Minister in Zanzibar (1908-1913), issued 'The Zanzibar Prisons Decree, 1911', by which a portion of the premises at the Welezo Leper Asylum known as 'the Magazine' was decreed to be a Prison Infirmary for the confinement of convicted persons suffering from leprosy and as a branch of the Zanzibar Town Prisons Infirmary.⁹⁸ The Decree was passed when one drunken male leper had assaulted a female leper with knife, inflicting a serious wound upon her.⁹⁹ 'The Leprosy Ordinance' followed shortly after, in 1913. This was "An Ordinance to Make Provision for the Isolation and Detention of Persons affected with Leprosy".¹⁰⁰ This was a consequence of the world-wide call to segregate lepers in special camps after the first World Leprosy Conference at Berlin in 1897 and the second World Leprosy Conference at Bergen in 1909. The 1909 Congress reaffirmed the policy of isolation and even recommended removal of children from leprous parents.¹⁰¹

Similarly, in colonial Mali, the first leprosy decree was passed in 1911. This decree "legally obligated village chiefs to report leprosy along with eighteen other diseases including yellow fever, smallpox, and diphtheria". The decree was passed in order to control lepers who had run away from isolation centres due to the poor services there. That these were indeed poor is confirmed when we note that between 1907 and 1915 almost all of the French West Africa's isolation centres lost their patients due to the lack of funds to maintain these leprosaria or to construct buildings and pay staff.¹⁰² Also, most of these leprosaria were vacated because lepers resented their forced isolation. From the 1930s, however, leprosaria in Mali were coming to be seen as a refuge, within which lepers made their own world.

⁹⁸ ZNA AB 2/341, 'The Zanzibar Prisons Decree, 1911', Segregation of Lepers, 1896-1931.

⁹⁹ ZNA AB 2/341, 'The Zanzibar Prisons Decree, 1911', Segregation of Lepers, 1896-1931.

¹⁰⁰ ZNA AB 2/341, 'The Leprosy Ordinance, 1913', Segregation of Lepers, 1896-1931.

¹⁰¹ Silla, *People Are Not the Same*, p. 25.

¹⁰² Silla, *People Are Not the Same*, p. 99.

According to Eric Silla, the leprosaria were “the basis of collective action and empowerment”.¹⁰³

In Zanzibar, the 1913 decree made Welezo a leprosarium to confine lepers from Unguja Island, and Funzi a leprosarium to confine lepers from Pemba Island. The three leper settlements in Pemba which had been located at Nduni, Pujini and Kengeja were combined to form one large leper settlement, this being Funzi. The Public Health report for 1915 indicated that the colonial government’s intention was to make Funzi like the Robben Island Leper Asylum off the tip of the Cape coast and Hendela Settlement near Colombo in Ceylon in terms of medical services and care.¹⁰⁴ Also, it was decided by the medical authorities to send to Welezo “non-infectious or burnt-out cases” from Funzi. They were transferred to Welezo Poor House as most of them were no longer tolerated by their communities owing to the severeness of the disease. In burnt-out stage, as Watts explains, lepers acquire the collapsed nose, and the claw-like remains of feet and hands.¹⁰⁵

At Welezo, lepers were under the care of Sister Frieda Bertha, a French Catholic nun who was born in 1888 in France and took charge of the Leprosarium from 1914. In 1923, however, the Zanzibar government terminated the contract with the French missionaries and decided to take responsibility for the care of the lepers themselves.¹⁰⁶ The administrative and the Health and Medical departments’ reports do not clearly indicate the reasons behind this decision but this was the time when leprosy came to be regarded as a disease which required medical treatment.

The Welezo leper settlement also began to receive more lepers from Pemba following the introduction of new segregation policies in Zanzibar in 1914. In 1913, Professor Simpson,

¹⁰³ Silla, *People Are Not the Same*, p. 192.

¹⁰⁴ BA 109/7, Zanzibar Protectorate, Public Health Report for the Year 1913, p. 26.

¹⁰⁵ Watts, *Epidemics and History*, p. 43.

¹⁰⁶ ZNA AJ 11/47a, ‘Welezo’, Welezo Leper Settlement. Sister Bertha became in charge of the Poor House and TB ward, which situated adjacent to the Leprosarium after terminating her services from the government.

an advisor to the Secretary of State for the Colonies on health matters, visited East African British colonies including Zanzibar. Professor Simpson proposed the establishment of one larger asylum either at Funzi or at Makongwe in southern Pemba.¹⁰⁷ Like Welezo, Funzi Asylum, which had been under the care of the UMCA Sisters, was handed over to the government in 1934. The reasons given were that the state decided that lepers should receive more medical attention.

In Zanzibar, state involvement in the treatment of lepers had begun in the early twentieth century, even though effective medicines for treating them had not yet been developed. In 1898, Dr. Alfred Spurrier requested that a supply be sent to the leper settlements of the ethyl esters of chaulmoogra oil, which was prepared at Wellcome Bureau of Scientific Research in London.¹⁰⁸ Historian Jane Buckingham has shown that chaulmoogra oil began to come to the attention of medical profession in Europe after the decline in favour of gurjon oil, which had long been used for the treatment of gonorrhoea.¹⁰⁹ European doctors had begun experimenting in the later part of the nineteenth century with chaulmoogra, which had been used by Indians to cure leprosy for thousands of years. And by the early twentieth century this indigenous remedy had become the basis of leprosy treatment both in India and internationally.¹¹⁰ It was injected into the patient in oil form. Unfortunately, in most cases the results were disappointing. The illness of many people who were treated with chaulmoogra was probably arrested naturally.¹¹¹ Eric Silla also shows that as early as 1906 lepers in Mali and in other French West African countries had lost faith to chaulmoogra

¹⁰⁷ ZNA AJ 11/2, From the Director of Medical and Sanitary Services (DMSS) to the Chief Secretary (CS), 4 November, 1930, Leprosy Decree Rules, Directions, Re Under, Repealing.

¹⁰⁸ ZNA CA 1/2, 'Leprosy', Spurrier Paper: 1920-1924.

¹⁰⁹ Jane Buckingham, *Leprosy in Colonial South India Medicine and Confinement* (Houndmills, Basingstoke, Hampshire and New York: Palgrave Publishers, 2002), pp. 88, 93-94; Gurjon oil was a treatment developed by Surgeon Dougall of the Madras Medical Service in the early-1870s. Dougall began to use the oil after reports that leprosy had been effectively treated in Venezuela by the application of cashew nut oil. Gurjon oil was derived from the wood of a tree native to south India and was rubbed onto the skin: <http://www.history.ac.uk/ihr/Focus/Empire/reviews/harrison.html/> (29 October 2008) Mark Harrison, 'Review Article Buckingham, August 2002.

¹¹⁰ Watts, *Epidemics and History*, p. 79; Buckingham, *Leprosy in Colonial South India*, p. 37.

¹¹¹ Iliffe, *The African Poor*, p. 225; Watts, *Epidemics and History*, p. 79.

since it was too slow to show results. Hence, many of them decided to run away from these leprosaria, though a number of them chose to remain.¹¹²

In the early-1920s, the use of hydnocarpus and chaulmoogra in intravenous injections to treat lepers was started in many British colonies including Zanzibar. In Tanganyika, the use of hydnocarpus oil and chaulmoogra in intravenous injections had begun in Dar es Salaam in 1921.¹¹³ In Zanzibar, it started in 1922. This is evidenced by a 1922 letter addressed to the British Resident in Zanzibar from the British Government at Downing Street approving the use of chaulmoogra in intravenous injections. A similar application had also been made by Dr. P. T. Harper, the Medical Superintendent of the Leper Asylum at Makogai, Fiji and it was approved by the Advisory Committee of Tropical Diseases Research Fund. The letter to Zanzibar claimed also that “good results had been obtained in Calcutta by the use of sodium hydnocarpate, which was a derivative from chaulmoogra oil”. While my archival sources in Zanzibar unfortunately do not indicate the responses of lepers to hydnocarpus injection, at the Dar es Salaam Leprosarium (according to the Director of Medical Services) only a few lepers had submitted themselves for these injections as the effect of this treatment was very slow.¹¹⁴

The discovery in 1923 by American doctors and by Sir Leonard Rogers (a British physician working in India who would found a British Empire Royal Leprosy Association, BERLA, in 1927) of less a painful method of injection, combining chaulmoogra and hydnocarpus oil in the form of sodium salt under the trade name of *Alepol* marked a change of strategy in curing leprosy in the world in general and in Zanzibar in particular. In 1924, experimentation in treating lepers with Alepol started in Zanzibar.¹¹⁵

¹¹² Silla, *People Are Not the Same*, p. 98.

¹¹³ ZNA BC 25/1, Tanganyika Territory, Annual Medical Report for the Year 1922, p. 111.

¹¹⁴ ZNA BC 25/1, Tanganyika Territory, Annual Medical Report for the Year 1922, p. 110.

¹¹⁵ ZNA AB 2/335, 'Report of Mr. Oldrieve on Leprosy Work in the Zanzibar Protectorate, 1930', The British Empire Leprosy Relief Association Treatment of Leprosy: Report of Mr. Oldrieve on Leprosy Work in the Zanzibar Protectorate.

John Iliffe, who has also examined the history of leprosy in colonial Africa, believes that these painful hydnocarpus injections were mere a ‘confidence trick’ since they were ineffective in curing leprosy. Many lepers remained in the settlements hoping that more effective medicine would be developed. This was the time when yaws was cured by penicillin, a newly invented injection in 1928.¹¹⁶ Again it is impossible to tell from the archival records whether this is the case. Lepers decided to remain in the leprosaria as they feared stigmatization from their fellow villagers or from the people in the town. The hydnocarpus injection was used globally for the treatment of leprosy until the 1940s when sulfide became available.

In 1926, another Zanzibar Leprosy Decree was introduced. In this Decree a leper was described as “a person who is the subject of any form of the disease known as leprosy or Lepra Vera and segregation is compulsory in order to prevent its spread”. Also, any person who suspected by another of having the disease had to report this to the District Commissioner. The British Resident was given the legal power to detain and discharge lepers.¹¹⁷ Lepers were also categorized in the following ways: “reputed leper, unconfirmed leper, observed leper, suspected leper, segregated leper, and paroled leper”.¹¹⁸ This Decree gave both the power and the responsibility to individuals in the communities to report the presence of lepers to the authorities. Many of the earlier decrees had required the colonial administrators, not medical doctors, to restrain the afflicted. But the Decree of 1926, allowed the medical authorities to deal with people who were suffering from leprosy. The development of treatments to cure Hansen’s disease and other major reforms concerning leprosy in Zanzibar will be further discussed in Chapter Six. The next section examines the confinement and care of lunatics, which was another example of the colonial intervention on the provision of medical facilities in colonial Zanzibar before the Second World War.

¹¹⁶ Iliffe, *The African Poor*, p. 216.

¹¹⁷ ZNA AB 2/333, ‘The Leprosy Decree No. 13 of 1926’, The Leprosy Decree No. 13 of 1926.

¹¹⁸ ZNA BA 14/38, ‘The Leprosy Decree, 1926’, The Leprosy Decree, 1926.

The Confinement of Lunatics at the Kilimani Lunatic Asylum, 1896-1930

The practice of confining lunatics together with the town prisoners had started in urban Zanzibar in the late nineteenth century. The Lunatic Asylum began to operate in 1896 in the same area in which the Military Hospital was situated.¹¹⁹ Initially, the African lunatics (the only lunatics in the asylum) and African prisoners were confined at the Old Barracks, which had been built in the 1880s to house the Sultan's troops and army. By the early-1900s, lunatics were housed at the Kilimani Prison, a newly-built prison in Zanzibar Town, which functioned as the Central Prison through to the end of the British colonial period. Space was selected within the prison blocks to confine male lunatics, while female lunatics were left at the Old Barracks owing to the limited space at the Kilimani Prison.

Africans continued to comprise the majority of the inmates, including those certified as criminal lunatics, with convictions ranging from homicide down to mere disturbers of the peace, who had no relatives to control or care for them. These inmates had been arrested by the police for creating disturbances by noise, setting fire, flinging stones, and committing mild assaults. They were brought before the Town Magistrate and certified by a Medical Officer (MO). There were also certified pauper lunatics, described as mild or dangerous, and again these people were either without relations or had been rejected by them.¹²⁰ Also accommodation at the Asylum was provided for insane "natives", whose control and care by relatives had consisted of confining them in a dark room, chaining them to a tree, or shackling both legs.¹²¹

In 1908, some of these wandering lunatics were noted by Ethel Younghusband, the wife of a British officer working in Zanzibar, who records that:

¹¹⁹ ZNA AB 2/363, 'History of Lunatic Asylum', Administration of Lunatic Asylum 1917-1947; ZNA AB 2/157, 'Acting PMO to CS, 10 August, 1915', Mental Hospital Buildings, 1915-1940.

¹²⁰ ZNA AB 2/363, 'From the Governor of Prisons to CS, 5 October 1917', Administration of Lunatic Asylum, 1917-1947.

¹²¹ ZNA AB 2/363, 'From the Governor of Prisons to CS, 5 October 1917', Administration of Lunatic Asylum, 1917-1947.

There were several wandering, harmless lunatics that we often saw; one was a good-looking finely built Swahili woman, who having lost her baby appeared to go mad, and wandered past our house daily, shouting, singing, and laughing, which at first annoyed me, till my husband told me he saw her daily. And was told, poor thing, that she was mad.¹²²

Another individual she describes was:

A funny old character who thought he was a white man, and a certain major to boot; he whitened his face and smeared his arms, hands and legs with whitening, and wandered about in a sack with holes in it for his head and arms, wearing the while a sickly grin. No one troubled about him.¹²³

There was also:

A third creature [who] frightened me somewhat – an Arab with a silly-looking grinning face, and very prominent “tummy”, on which rested a huge dagger. One evening he would walk close behind my husband and I, and insisted on saying “Good-day”. When we went into a shop, he followed. I grew quite nervous, as my husband and I were parting company later, but he told me the man was only a harmless lunatic they called the Sultan’s jester, so I went on home alone.¹²⁴

The three illustrations of Younghusband’s narrative show both medical and popular views about the nature of psychiatric problems in that period. Mental illnesses were linked with gender or culture or ‘race’ of the people. For instance, many scholars of psychiatry in both Western Europe and colonial Africa in the late nineteenth and twentieth centuries have shown that that medical rationales linked women’s psychiatric condition with afflictions of the body. At this time, “menstruation, childbirth, lactation and menopause were all times at which a women’s already deficient intellect and weaker will rendered her especially

¹²² Ethel Younghusband, *Glimpses of East Africa and Zanzibar* (London: John Long Limited, 1908), pp. 235-236.

¹²³ Younghusband, *Glimpses of East Africa and Zanzibar*, p. 236.

¹²⁴ Younghusband, *Glimpses of East Africa and Zanzibar*, p. 236.

susceptible to the vagaries of her emotions and passions”.¹²⁵ Younghusband notes that the ‘Sultan’s jester’ tried to present himself as a white man.

A small asylum for confining lunatics of Unguja and Pemba islands was built in the compound of the Central Prison in 1909. At that time, the handful of people confined at the Kilimani Asylum were detained there after apprehension on the grounds mostly that they were violent lunatics wandering in the streets of the urban area. The Police Department, which had the power to detain beggars, paupers, lepers, the insane and vagrants, was small. It was only in the urban areas that it was able to operate. This was not unusual as in the early twentieth century; in many colonies in Africa (excluding South Africa) most of the lunatics who were confined in the Asylum were criminal lunatics who were reported to be roaming the streets.

The 1909 Annual Medical Report reports that the medical and health authorities were concerned about the health of lunatics in the Prison as there was a higher rate of mortality among them due, apparently, to their “improper care”. The fact that health conditions were bad for them must raise questions about British ‘civilizing’ influences. Indeed, medical doctors seldom visited the lunatics at the Asylum. After 1910, mentally ill males and females were kept at the Lunatic Asylum building which had been completed in that year at Kilimani Prison. However, in 1911, owing to congestion in the Prison the new Asylum was converted and became another wing of the Central Prison.¹²⁶ In 1913, the medical and prison authorities decided, in view of the increase of prisoners, to transfer the male mentally ill back to the Old Barracks .

The majority of those legally detained for reasons of insanity continued to be criminal lunatics or paupers who were wandering in the streets with no apparent family or social

¹²⁵ For a recent overview of the literature see Julie Parle, *State of Mind, Searching for Mental Health in Natal and Zululand, 1868-1918* (Pietermaritzburg: University of KwaZulu-Natal Press, 2007), Chapter One. This quotation is from p. 53.

¹²⁶ ZNA BA 83/3, Annual Reports for 1909 & 1910, p. 97; BA 83/5, Report on the Zanzibar Protectorate from 1911-1923, by John H. Sinclair, British Resident 1922-1923; ZNA AB 2/363, ‘From the Governor of Prisons to CS, 5 October, 1917’, Administration of Lunatic Asylum 1917-1947; ZNA AB 2/157, ‘Acting PMO to CS, 10 August, 1915’, Mental Hospital Buildings, 1915-1940.

support. The archival records are silent on those suffering from mental illnesses which made them suicidal or eccentric or alcoholic. Possibly they were not yet thought to be the right sort of patients or inmates for these asylum facilities.

Table 4.3: Number of Lunatics at Kilimani Asylum, 1909 and 1927

Year	Male	Female	% of population
1909	9	6	0.04
1913	4	4	0.02
1923	8	8	0.01
1926	13	7	0.01
1927	11	7	0.01
Total	45	29	

Source: Calculations based on the Annual Reports of Medical Departments between 1909 and 1927

Between 1909 and 1927, the Annual Reports of the Department of Health show that Kilimani Asylum received very few lunatics and that these represented less than one percent of the urban population in the town. The table above shows the number of lunatics who were detained over that period.

Though the numbers of lunatics who were detained in the Asylum were very small the Principal Medical Officer (PMO) insisted on separating lunatics and prisoners. In 1915, Dr. Curwen, the PMO requested the Chief Secretary (CS) of the government in Zanzibar to construct a separate building in which to keep the insane. He proposed that an asylum be built in which different races would be kept separately, declaring that “once an asylum is permanently established I believe there will be many applicants for admission considering

the prevalence of epilepsy and VD (Venereal Diseases) throughout the Protectorate”.¹²⁷ In the 1915 Annual Medical Report, it was established that there were 380 cases of syphilis, mainly among the local soldiers.¹²⁸ Syphilis expanded across many parts of the world during the war periods. Before the discovery of penicillin and its wide use to cure syphilis after 1945, many sufferers of the disease progressed to its tertiary stages developing general paralysis of the insane (GPI) or syphilis of the brain. The British Resident in Zanzibar ruled, however, that while the government was ready to build a small asylum it was not in a position to build and maintain an asylum such as that envisaged by the medical men. The purpose in building the asylum at Kilimani, according to the Resident, was to get the lunatics out of the Old Barracks near his home and into a more suitable position.¹²⁹

In 1917, the Lunatic Asylum building, which was the largest than the previous one was constructed adjacent to the Prison building. This was the time when the first legislative measure was passed specifically relating to lunacy. It was simply called the “Lunacy Decree of 1917”. It gave authority to the District Magistrate to restrain any ‘suspect’ African and hold an enquiry as to the state of mind of the suspect and did not extend to Indians or Arabs. This gave power to the Magistrate to determine whether a person was insane or not; but only in the case of Africans, and not Europeans, Arabs and Indians who were living in the islands. Juli McGruder argues that:

The civil authorities in Zanzibar were interested only in preserving public order by confining ‘adjudicated’ lunatics, dangerous lunatics and paupers who were mad and a nuisance, but the ‘Lunacy Decree’ codified the possibility of confining lunatics of moneyed classes and those who were not criminally committed to the institution.¹³⁰

¹²⁷ ZNA AB 2/157, ‘Acting PMO to CS, 10 August, 1915’, Mental Hospital Buildings, 1915-1940.

¹²⁸ ZNA BA 7/4, Zanzibar Protectorate Report on the Medical Division for the Year 1915.

¹²⁹ ZNA AB 2/157, ‘From CS to Acting PMO, 20 August, 1915’, Mental Hospital Buildings, 1915-1940.

¹³⁰ Juli McGruder, ‘Madness in Zanzibar: ‘Schizophrenia’ in three families in the ‘developing’ world’ (PhD dissertation, University of Washington, 1999), p. 58.

There were divergences of opinion between medical and prison personnel on how to manage the Asylum after its establishment in 1917. Criminal lunatics were put in the custody of the Prison authorities, while civil lunatics fell under the Department of Health and Medicine. In practice, the Chief Prison Officer came to be in charge also of the Asylum, as the two buildings were on the same site using the same door. In 1917, in a letter to the Chief Secretary, the Governor of Prisons stated that “the Principal Medical Officer objects to my taking over this Asylum and also to the use of the word ‘warder’. I agree with him and think that it would not be right to staff the Asylum on the lines and from the personnel of the Prison Department”.¹³¹

By the early period of the twentieth century, many asylums in colonial Africa still clung to what in the West were outmoded ways of treating the insane. In Nigeria, “colonial prisons and asylums were functionally equivalent: they confined deviant or troublesome individuals, and refrained from cure, rehabilitation, or otherwise normalizing their inmates for return to the outside”.¹³² Megan Vaughan has demonstrated that, before 1930, asylum attendants at Zomba in colonial Nyasaland were brought in from the older ranks of prison warders. After 1930, an attempt was made to differentiate between prison warders and asylum attendants, who were provided with khaki field service caps in place of the blue ones used by prison warders.¹³³

Jonathan Sadowsky argues that in the early period of the twentieth century, “the Asylum” in Africa “lay in the middle of a spectrum between prisons and hospitals, reflecting ambiguity in colonial rhetoric as to whether lunatics were essentially a health or social control problem”.¹³⁴ Generally, the early period of the twentieth century saw the slow expansion of

¹³¹ ZNA AB 2/363, ‘From the Governor of Prisons to CS, 5 October, 1917’, Administration of Lunatic Asylum, 1917-1947.

¹³² Jonathan Sadowsky, ‘Confinement and Colonialism in Nigeria’ in Roy Porter and David Wright (eds.), *The Confinement of the Insane, International Perspectives, 1800-1965* (Cambridge: Cambridge University Press, 2003), p. 302.

¹³³ Vaughan, *Curing their Ills*, p. 120.

¹³⁴ Sadowsky, ‘Confinement and Colonialism in Nigeria’, p. 302.

Western medicine and psychiatric knowledge in treating lunatic patients. There was a clash of regulations pertaining to lunatics as to whether these were a hospital or a prison responsibility. In Zanzibar, the new lunatic asylum was established as a wing of the Central Prison intended to segregate the criminal insane from other prisoners, but the boundaries between lunatic and criminal lunatic remained vague until the late-1940s, when a Mental Hospital was finally established, which was distinguished from the earlier asylum in terms of law, legal definition and psychiatric knowledge.

Not surprisingly, class, race and gender were fundamental criteria in defining and confining lunatics in colonial Zanzibar. Before 1917, as I have already mentioned, it was only African lunatics who were confined in the Asylum. Separate spaces were reserved for the Arabs and Indian lunatics from the early-1920s.¹³⁵ This may represent a new and increased demand from local people. In 1923, the first Arab mental patient was admitted at Kilimani Asylum. It was decided by Alfred Hollis, the British Resident (1923-1929) that the cost for maintaining a new room to confine Ahmed Hamed, a clove plantation owner at Selemu, should be recovered from the patient himself. Ahmed Hamed not being a criminal lunatic, the British Resident accordingly designated a space at Kilimani for non-criminal lunatics.¹³⁶ The provision of medical services in colonial Zanzibar hinged in many respects on race and class. Rich Indians and Arabs had access to better medical services than poor Indians, Arabs and Africans. It was recorded that “Indians and Arabs will be allowed subject to medical requirements superior accommodation as far as possible, and be given beds, their own clothing and bedding, and be permitted to receive food prepared by their relatives or friends”.¹³⁷ However, British-Indians and Europeans were to be repatriated and the Arab mental patients had to pay if had the means to do so.¹³⁸

¹³⁵ ZNA AB 2/363, ‘From the Governor of Prisons to CS, 5 October, 1917’, Administration of Lunatic Asylum, 1917-1947; ZNA AB 2/157, ‘From PMO to CS, 6 April, 1955’, Mental Hospital Buildings, 1915-1940.

¹³⁶ ZNA AB 2/361, ‘The Lunacy Decree, 1923-24’, Regulations under the Lunacy Decree, 1923-24; ZNA AB 2/363, ‘From BR to the Governor of Prisons, 4 July, 1923’, Administration of Lunatic Asylum, 1917-1947.

¹³⁷ ZNA AB 2/363, ‘From the Governor of Prisons to PMO, 14 June, 1923’, Administration of Lunatic Asylum, 1917-1947; ZNA AB 2/157, ‘From Dr. Taylor (PMO) to CS, 19 March, 1923’, Mental Hospital Buildings, 1915-1940.

The law that facilitated the transfer of Europeans and Asians to Mathari Mental Hospital in Kenya was promulgated at the Conference of Directors of Medical Services of the British East African colonies in Nairobi in 1943. It was also decided at this Conference that no African mental patients were to be removed outside their countries for medical treatments.¹³⁹ In his account of Mathari Mental Hospital, which was opened in 1910, Jock McCulloch observes that in the 1940s only Europeans, Arabs and Indians from the other East African countries were admitted. The majority of the patients at the Hospital were white settlers, Asians and Africans from Kenya.¹⁴⁰ The colonial authorities in Zanzibar were not ready to pay for the cost of repatriating African lunatics to Mathari. Additionally, the archival records in Zanzibar show that there were only two instances of the repatriation of mentally ill patients to Mathari. One involved an Arab, Soud, and the other was of an Indian ex-teacher, Valji who became a wandering insane person in 1938 and was repatriated to Mathari in 1943.

Information about lunatics was reported to the Police Station and to the court by police officers, government clerks, or watchmen, or by nurses and doctors who took care of the lunatics who were sent to the Government Hospital. For example, on 20 January in 1922, Juma, a wandering lunatic was admitted to the GHNS suffering from fits. The report further shows that Juma had no proper person to take charge of him. After the discharge from the Hospital, the court decided to send him to the Kilimani Asylum.¹⁴¹ Also, on the same date at the H. H. Sultan's Court, Azzani, a ten year-old wandering lunatic was sent before the Magistrate. He was found "wandering about aimlessly at Chwaka" in South District two days

¹³⁸ ZNA AB 2/363, 'From the CS to the Governor of Prisons 23 June, 1934', Administration of Lunatic Asylum, 1917-1947; ZNA AB 2/157, 'A Meeting of the Directors of Medical Services for East Africa, Nairobi, 5 October, 1928', Mental Hospital Buildings, 1915-1940.

¹³⁹ ZNA AB 2/369, 'A Conference of the Directors of Medical Services for East Africa, Entebbe, Uganda, 27-29 October, 1943', Accommodation and Treatment of Mental Patients.

¹⁴⁰ Jock McCulloch, *Colonial Psychiatry and 'the African Mind'* (Cambridge: Cambridge University Press, 1995), p. 23.

¹⁴¹ ZNA HC 14/4, H. C. Lunacy Case No. 6/22, Juma, 20 January 1922.

earlier by D. Falleiro, a Goanese government clerk. The court decided to remand the insane boy at the prison for a week for a medical examination to determine his state of mind.¹⁴²

There was also the case of Suleiman, a wandering lunatic who trespassed into the oil installation office in the town and created a disturbance there, in the morning of 24th April, 1922. The case was reported to the Police Station at Ng'ambo by Kassim Mattar, a watchman at the oil installation office. As Julie Parle argues, "the presence of persons in a place where they were not legally entitled or socially expected to be could also lead to suspicion of mental instability".¹⁴³ Additionally, Lynette Jackson has shown that in colonial Zimbabwe detention of black insane patients at Ingutsheni Asylum (and later Mental Hospital) were linked "to a suspect's mobility and location on the European colonizer's spatial, social, and economic map".¹⁴⁴ Also, there was a case of the wandering lunatic whose name was unknown. On the evening of 12th May 1922, the insane man threw stones at the police officer, Salim Rusanga at the Central Police Station, Malindi. The lunatic was then remanded at the Central Prison and subsequently transferred to the Asylum.¹⁴⁵

By no means all lunatics were sent to the Asylum by the police or other state organs and employees. There is evidence that on occasion the family, friends and relatives of insane persons took responsibility for informing police officers about their violent insane. The Zanzibar Archives are full of stories of how relatives cooperated with government institutions to have their insane relatives confined in the Asylum. Between 1920 and 1930, reports from several institutions such as the court of the High Highness the Sultan, the Police Department, and the Prison and Medical Department illustrate how relatives were ready to assist in the confinement of their mentally unsound relatives.

¹⁴² ZNA HC 14/4, H. C. Lunacy Case No. 5/22, Azzani, 18 January 1922.

¹⁴³ Parle, *State of Mind*, p. 158.

¹⁴⁴ Lynette Jackson, *Surfacing Up, Psychiatry and Social Order in Colonial Zimbabwe, 1908-1968* (Ithaca and London: Cornell University Press, 2005), p. 102.

¹⁴⁵ ZNA HC 14/1, H. C. Lunacy Case No. 20/22, 'Wandering Lunatic'.

“Violence” and “destructive habits” were increasingly recorded as being the decisive factors in having an afflicted person sent to the Asylum. On 22 January 1922, Ahmed Masaid of Mchangani in Zanzibar Town had reported to the Central Police Station at Malindi in Zanzibar Town that his relative Mohamed Ahmed, who had been living at Ahmed’s house since his arrival from Yemen about seven days before, started to shout loudly on that evening and caught hold of one Salim Abdulla by the throat and started biting and assaulting him with fists. Ahmed went to Salim’s aid and Mohamed bit him on his cheek.¹⁴⁶

Between 1920 and 1936, the Department of Police Annual Reports recorded that a number of insane who were under the police and prison custody were either sent to the Asylum or handed over to their relatives or friends. In 1926, 12 out of 46 people who had been arrested for being dangerous were taken before the Sultan’s Court, certified to be insane and sent to the Lunatic Asylum at Kilimani.¹⁴⁷ In 1934, among 10 cases of homicide that had occurred in that year, two of the murderers were found to be of unsound mind. Indeed, of 57 people who injured others by using dangerous weapons three were insane.¹⁴⁸ In 1936, 23 alleged lunatics were taken to court, seven were admitted to the Asylum and the remainder handed over to their relatives or friends.¹⁴⁹ Also between 1937 and 1939, 24 male and 30 female lunatics were sent to the Central Prison for observation. 8 male lunatics and 7 female lunatics were certified as insane and were sent to the Kilimani Lunatic Asylum.¹⁵⁰ The Kilimani Lunatic Asylum having been created to confine the lunatics of two islands of Unguja and Pemba, in 1939, for example, fifty percent of inmates at Kilimani Asylum came from Pemba.¹⁵¹

¹⁴⁶ ZNA HC 14/5, H. C. Lunacy Case No. 10/22, Mohamed Ahmed Shihiri, 22/1/1922.

¹⁴⁷ ZNA BA 47/1, Report on the Zanzibar Police for the Year 1926, p. 58.

¹⁴⁸ ZNA BA 47/5, Report on the Zanzibar Police for the Year 1934, Appendix.

¹⁴⁹ ZNA BA 47/7, Report on the Zanzibar Police for the Year 1936, p. 22.

¹⁵⁰ ZNA BA 49/3, 4, and 5, Report on the Zanzibar Prison for the Year 1937, 1938 and 1939.

¹⁵¹ ZNA AB 2/157, ‘From DMS to CS, 3 February, 1940’, Mental Hospital Buildings, 1915-1940.

Even though some people did refer their relatives to the courts for violently insane behaviour, between 1897 and 1930 most urban dwellers in Zanzibar hesitated to send their mentally ill persons to the asylum, for several reasons. Possibly the reluctance emanated from the fact that Kilimani Asylum was inside the Central Prison area. Until recently the Mental Hospital was known as 'Jela ya Wenda Wazimu' (Jail for Mad). Similarly, in early colonial India, the limited confinement of mentally disturbed persons was associated with the low willingness of family members to send their patients to the asylums. Family members frequently rejected the idea of sending their insane patients to asylums because of where these asylums were originally located: namely inside the prisons, where lunatics were treated badly. Sanjeev Jain has shown that poor conditions, and the "barbarous practice of using jails" as asylums, were often a cause for complaint.¹⁵² Leland Bell has also told us that "the asylum in Africa was in its early age a 'foreign institution', a politically alien place, a colonial establishment... medically and therapeutically removed from African society".¹⁵³ More recently, Julie Parle has argued against the assumption that the asylum continued to be such an "alien place", indicating that for Africans it also gradually became an acceptable place of care or detention in some circumstances, especially in the case of violence in the home.

In her discussion of the 'Reception Orders', or patient committal papers, in the records of the Registrar of the Supreme Court at Pietermaritzburg in Natal Colony, Parle illustrates that archival records cannot indicate the numbers of mentally ill people who were never committed or who recovered outside the asylums:

They do not testify to the existence of the many who were successfully treated outside the walls of the asylum, or who spontaneously recovered before they got there, or whose suffering was borne in private. Nor do they tell us about those who were inadvertently or forcibly hidden from public view, although they do reveal the number of those whose suffering led them to seek its resolution through suicide. And unfortunately, they do not reveal much about the ubiquitous practices of daily and propitiatory healing rituals, prayers, supplications to deities, sacrifices, friendship, support structures and

¹⁵² Sanjeev Jain, 'Psychiatry and Confinement in India', in Roy Porter and David Wright (eds.) *The Confinement of the Insane, International Perspectives, 1800-1965*, (Cambridge: Cambridge University Press, 2003), p. 278.

¹⁵³ Leland Bell, *Mental and Social Disorder in Sub-Saharan Africa: The Case of Sierra Leone, 1787-1990* (London: Greenwood Press, 1991).

personal strategies for survival that form the heart of the negotiation of relief from mental illness and which are scarcely visible to the historical record.¹⁵⁴

I would argue that these insights are relevant, too, to Zanzibar in the period covered in this dissertation. It can be inferred that most of the town population continued to depend on their indigenous medicines in treating mad people. Sending insane relatives to the asylums was an option but not a first choice. Local healers, *Maalim*, Muslim teacher, priests, or ritual leaders were employed to treat the problem. In both Muslim communities and African societies madness was associated with “supernatural beliefs, witchcraft, the trespass of sacred places, the influence of evil spirits and the working of charms”.¹⁵⁵ The evil spirits were associated with mental illness, epilepsy, madness, or depression. The mentally ill became victims of spirits who possessed their minds.¹⁵⁶

In order to counter the effects of the evil magic, many Muslim communities in the world sought the protection of talismans or the help of individuals or cultic groups known for their ability to defeat such influences. The work of Linda Giles on spirit possession on the Swahili coast had credited Zanzibar Town with several spirits, many of them not to be found in the other Swahili coastal communities. These spirits had their historical connection with the nineteenth century urban history of Zanzibar. Linda Giles demonstrates that in Zanzibar Town there were people who were possessed by Muslim Arab spirits, as well as spirits said to be Swahili (indigenous), and *Kibara*, (from the mainland). The *Zar* possession healing dance was practiced mainly by people from Ethiopia. Other spirits originated from Sudan, Madagascar and Comoro.¹⁵⁷

¹⁵⁴ Parle, *State of Mind*, p. 169.

¹⁵⁵ McCulloch, *Colonial Psychiatry and 'the African Mind'*, p. 29.

¹⁵⁶ Nancy Elizabeth Gallagher, *Medicine and Power in Tunisia, 1780- 1900* (Cambridge: Cambridge University Press, 1983), p. 9; McCulloch, *Colonial Psychiatry and 'the African Mind'*, p. 125.

¹⁵⁷ Linda Giles, 'Possession Cults on the Swahili Coast: A Re- Examination of Theories of Marginality,' *Africa: Journal of International African Institute*, 57, 2 (1987), pp. 234-258, p. 242; Linda Giles, 'Socio-cultural Change and Spirit Possession on the Swahili Coast of East Africa', *Anthropological Quarterly*, 68, 2 (1995), pp. 89- 106, pp. 90, 95-96, and 99-100.

There was also a combination of curative knowledge and techniques used to cure mental illness. Allyson Purpura has noted that Muslims in Zanzibar employed numerous methods in treating their patients including the mental ill persons. The same is true for the period I am covering in this thesis. Preparation of medicinal plants and roots, calling and exorcising of spirits, astrology, computational techniques using Arabic numbers and letters, divination techniques, expertise in un-doing magical spells and prayers, and the preparation of assortments of amulets were and are still practised.¹⁵⁸ In Sudan, mental illness was treated by thrashing the patients with a green *jarida* (palm stem) on which were inscribed verses of the Quran. According to Bayoumi “the explanation offered for this ‘shock therapy’ is that the beating is administered to the *jinn* that posses the patients and not to the patient himself”.¹⁵⁹

The interaction over centuries between Muslim and African traditional cultures in Zanzibar had profound effects on the Swahili language and on the words used to denote madness. The Swahili language which is spoken in Zanzibar has two words to denote madness. The first is *majinuni*, which is corrupted from the Arabic *majnun*, (the one who possessed by jinn, spirit). Insanity was, however, perceived as either demonic, its victims to be exorcised or ritually purified, or sacred and the mad to be respected or even emulated.¹⁶⁰ Among the Algerian Muslim communities mad people were venerated. This was noted in the work of psychiatrists Frantz Fanon and Francois Sanchez in the early-1950s.¹⁶¹ The second word is *wazimu*, which comes from the Swahili Bantu language. *Wazimu* is corrupted from *mzimu* which means spirit. In Ndebele language, the word for spirit is *vadzimu*.¹⁶² The word has the same root with Swahili word *wazimu*.

¹⁵⁸ Allyson Purpura, *Knowledge and Agency: The Social Relations of Islamic Expertise in Zanzibar Town* (PhD Dissertation, The City University of New York, 1997), pp. 279- 280; See also, Caleb Chul-Soo Kim, *Supernaturalism in Swahili Islam: With Special Reference to the Therapeutic Cults of Jinn Possession* (PhD. Dissertation, Fuller Graduate School, 2001).

¹⁵⁹ Ahmed Bayoumi, *The History of Sudan Health Services* (Nairobi: Kenya Literature Bureau, 1979), p. 39

¹⁶⁰ Michael Dols, *Majnun: The Madman in Medieval Islamic Society*, Diana Immisch (ed.) (Oxford: Clarendon Press, 1992), pp. 136 and 222; Michael Dols, ‘Insanity in Byzantine and Islamic Medicine’, *Dumbarton Oaks Paper*: Vol. 38, Symposium on Byzantine Medicine (1984), p. 148.

¹⁶¹ McCulloch, *Colonial Psychiatry and ‘the African Mind’*, p. 125.

¹⁶² Jackson, *Surfacing Up*, p. 32.

In her account of the history of madness in colonial Africa, Megan Vaughan has described the difficulties encountered by the colonial authorities who tried to differentiate between spirit possession and witchcraft with insanity.¹⁶³ The authorities did not consider that a belief in spirits or witchcraft could either cause madness or be a sign of insanity. In 1915, conflict arose between the colonial government and the local people in Zanzibar when the government issued 'The Witchcraft Prohibition Decree'. This banned spirit possession dances and prohibited the use of any kind of witchcraft.¹⁶⁴ The colonial authorities in Zanzibar considered "the *ngoma ya pepo* (spirit possession practice) as a mild form of witchcraft".

By the early-1920s, efforts were made by the medical officers in Zanzibar to make people and the colonial authorities understand that madness was a disease which needed medical care. In 1923, Dr. J. A. Taylor, a newly appointed PMO requested the colonial government in Zanzibar to institute reforms in the Asylum. He asked the British Resident to allow the establishment of a dispensary for patients within the Asylum. Dr. Taylor insisted on good care for the lunatics in order to encourage relatives to send their lunatic relations. Taylor stated that "in a civilized country now madness is illness not a crime".¹⁶⁵ The archival sources do not indicate clearly what kinds of reforms Dr. Taylor favoured. Possibly, he was influenced by changes that were made in South Africa where new legislation in 1916 provided for greater differentiation of categories of mental disorders.¹⁶⁶

The British Resident in Zanzibar was not, however, ready for new changes in asylum. Instead, he allocated part of what was then the Infectious Diseases Hospital building for use as a new asylum. Female lunatics were sent to this building from 1924.¹⁶⁷ Moreover, it was also proposed in 1924 to establish separate sections for lepers and lunatics on the island of

¹⁶³ Vaughan, *Curing their Ills*, p. 106.

¹⁶⁴ ZNA AB 31/20, 'The Witchcraft Prohibition Decree, 1915', Witchcraft in Pemba, 1910-1925.

¹⁶⁵ ZNA AB 2/157, 'From Dr. Taylor (PMO) to the British Resident, 19 March 1923', Mental Hospital Buildings, 1915-1940.

¹⁶⁶ Parle, *State of Mind*, p. 241.

¹⁶⁷ ZNA AB 2/361, 'The Lunacy Decree, 1923-24', Regulations under the Lunacy Decree, 1923-24.

Pembe near Funzi so that the same Medical Officers (MO) could serve both lepers and lunatics, but this proposal was not carried out owing to lack of funds. In 1925 there was a proposal for the establishment of another lunatic asylum at the Old Migombani Palace.¹⁶⁸ However, all these extension works had to be delayed firstly because of the Great Depression of the late-1930s and then because of the Second World War. Medical developments for people who were suffering leprosy and mental disorders in Zanzibar between the 1930s and 1963 will be further discussed in Chapter Six.

Conclusion: The Limitations of Western Medicine

Between 1896 and 1930, the colonial government introduced medical facilities for the people who were living in Zanzibar Town. Initially, the focus was on the British, and local soldiers. By the early twentieth century, families of the soldiers including African, Arab and Indian soldiers, started to receive medical services that were provided by the government, although the services for local soldiers were inferior in standard compared with those provided to the European soldiers. In the provision of health services, and especially hospitals, the colonial state lacked sufficient funds, and these services were sponsored by local Arab and Indian entrepreneurs and capitalists. Their important role has received attention in this and other chapters and in my view these findings supplement if not challenge the work done by medical historians who have concentrated on the medical facilities introduced by missionaries and by the colonial state on its own as part and parcel of a metropolitan, imperial project.

Those who were brought into the ambit of Western medicine and health institutions during this time included prisoners, government staff, people suffering from leprosy, lunatics and school children. Policies leading to the establishment of new institutions intended in part to care for people also set in place new instruments of control to detain vagrants, including lepers and lunatics, in the interests of maintaining a docile and healthy labour force. By the

¹⁶⁸ ZNA AB 2/157, 'Extension of Lunatic Asylum, 1924', Mental Hospital Buildings, 1915-1940.

end of the First World War, the health of the African prisoners and school children remained poor; efforts were made by the government to supply meals to these school children, and the diets of African prison inmates were also upgraded.

Before the Second World War, the medical services that were provided by the colonial government in Zanzibar were not particularly effective. There were very few British doctors and so a number of Indian doctors were employed. Also very few British nurses were dispatched. A number of imported and locally-born Indians and African Christians who received education at the Mission centres became the first junior staff. Overall, I would argue that in Zanzibar at least, in the early twentieth century, Western medicine was not an effective tool of empire. Few British were in a position of controlling the population. Apart from that, Western medicine was only slowly adopted by the majority of people and it was forced to compete with a number of different therapeutic options. Moreover, the possibilities for colonial state medical interventions without the consent of the people remained limited into the 1930s. The next chapter looks at the anti-malarial and sanitation measures which were introduced in Zanzibar Town from the early twentieth century to 1963. The state role expanded from the 1930s in the provision of medical and health services.

CHAPTER FIVE: MALARIA CONTROL PROGRAMMES IN URBAN ZANZIBAR, 1913-1963

Public Health and the Urban Population

Colonial states in Africa began implementing measures to stop malaria in the late nineteenth century. Malaria had spread widely during the process of colonial conquest and occupation in these countries, accelerated by the extension of the colonial economy, the introduction of transport infrastructures, and urbanization. Colonial states initiated measures to curb malaria mainly in order to safeguard the welfare of the European colonial populations, but fear of the effect the disease could have on the available pool of African labour was another strong motivation for white administrators, settlers and medical officers to combat its spread. In 1929, Britain had passed the Colonial Development Act to reduce financial difficulties which delayed the economic development in her colonies. Funds were provided in order to increase productive capacity of the population in the colonies, and yet, according to Doyal and Pennell, “the material significance of colonial assistance must be gauged in relation to the severe economic cutbacks which occurred in the colonies during the 1930s and the War which followed”.¹ Ann Beck argues that “between 1929 and 1940, the Development Act did not live up to expectations. During the depression years, development planning was not given priority... The Act provided funds for loans and cash grants, but until the middle of the 1930s, fear of a repeat of another depression, rather than the confidence in the future ruled”.² Some of these funds were directed to the anti-malarial measures and the sanitation of the town.

The chapter is divided into four chronologically overlapping sections. The first part examines the vector control programmes in the period between 1913 and 1956 and the use of insecticides and other environmental and sanitary engineering works in order to control malaria. The second section concentrates on the use of drugs as an anti-malaria measure.

¹ Lesley Doyal and Imogen Pennell, *The Political Economy of Health* (London: Pluto Press, 1979), p. 253

² Ann Beck, *Medicine, Tradition and Development in Kenya and Tanzania, 1920-1970* (Massachusetts: Crossroads Press, 1981), p. 3.

Quinine and Paludrine were distributed to the people as a preventive measure against malaria. The third section gives attention to the urban planning systems. From 1913, the colonial government in Zanzibar instituted urban planning programmes in order to control mosquitoes, flies and other insects. Health education programmes were simultaneously introduced to the people to combat diseases in general. Between 1957 and 1963, the World Health Organization (WHO) and the United Nations International Children's Economic Fund (UNICEF) assisted Zanzibar in the eradication campaigns. This will be the fourth part of this chapter.

Studies of anti-malaria programmes in colonial India and Africa have been done by several medical historians. Raymond Dumett, working on imperial British history, draws attention to the researches into malaria conducted from the late-1800s onwards by Patrick Manson, Ronald Ross and Robert Koch which influenced British anti-malaria policies in Africa.³ The outcome of malaria research by Ross and Koch had profound impact to malaria programmes in Zanzibar.

Philip Curtin in 'Medical Knowledge and Urban Planning in Colonial Tropical Africa' illustrates British responses to malaria in its colonies in Africa. Curtin shows that in many colonial cities European and African residential quarters were segregated from one another on the recommendation of Ronald Ross (1857-1932), who also insisted on a direct attack on the malarial mosquitoes' breeding areas. According to Curtin, Ross "was much impressed by the segregationist argument; his previous experience in India convinced him that the cantonment policy worked".⁴ John Cell also argues that segregation policies that were implemented in West Africa from the late nineteenth century had originated in India. The Royal Commission on Army Sanitation was founded in 1858 in India and it proposed the separation between cantonments and civilian surroundings. Cell argues that "it is in the context of this general debate on malaria, with its emphasis on attacking the disease in the

³ Raymond Dumett, 'The Campaign against Malaria and the Expansion of Scientific Medical and Sanitary Services in British West Africa, 1898-1910', *African Historical Studies*, 1, 2 (1968), pp. 153-197, p. 161.

⁴ Philip Curtin, 'Medical Knowledge and Urban Planning in Colonial Tropical Africa', in Steven Feierman and John Janzen (eds.), *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992), p. 240.

Indian population at large, that the advocacy of segregation by the Royal Society's expedition to West Africa must be seen".⁵

Unlike in West Africa, colonial urban planning in Zanzibar only to a very limited extent led to segregation. The long history of Zanzibar as a port-town and the recognition of the Sultan as a monarch whose decisions were respected circumscribed British chances of segregating its urban space. The Indian merchant elites and the Arab landlords who controlled the economy concentrated in the Stone Town area. Some of the poor Indians and Arabs and most of the poor Comorians and Africans, relegated to Ng'ambo far from European officers in 1915, were placed there as a class.

David Clyde concentrated on the anti-malarial works during the German and British rule in Tanganyika and Zanzibar.⁶ Ibrahim Sundiata, a historian of slavery in Africa and America, examines the possibility that malaria caused the death of a large number of Omani Arab plantation owners in Zanzibar.⁷ He looks at the medical reports from the early-1920s to show how the health of the Arab children and adults was affected by malaria. In addition, Abdalla Mkumbukwa observes that anti-malaria campaigns in Zanzibar focussed on controlling rather than eradicating the disease. Sundiata's studies however drew examples from rural Zanzibar. Mkumbukwa's studies have focused on the islands of Unguja and Pemba in general. The next section deals with the environmental engineering measures that were introduced in urban Zanzibar between 1913 and 1963.

⁵ John Cell, Anglo-Indian Medical Theory and the Origins of Segregation in West Africa, *The American Historical Review*, 91, 2 (April 1986), pp. 307-335, p. 330.

⁶ David Clyde, *Malaria in Tanzania* (London: Oxford University Press, 1967).

⁷ Ibrahim Sundiata, 'Twentieth Century Reflections on Death in Zanzibar', *International Journal of African Historical Studies*, 20, 1 (1987), pp. 45-60, p. 51.

Malaria in Urban Zanzibar

Malaria is an ancient disease, present for the whole of human history in many parts of the world. The term malaria originates from medieval Italian, *mala aria* (bad air) and the disease was formerly called ague or marsh fever due to its association with swamps. Beginning in the early nineteenth century, many attempts were made to understand its etiology. While working in Constantine, Algeria in 1880, Alphonse Laveran, a French army doctor discovered the malaria pathogen from one of his patients. He demonstrated that the malaria parasite, to which he gave the name plasmodium, went through several stages of development in the human bloodstream before causing the illness. In the 1890s, two Italian bacteriologists, Ettore Marchiafava and Angelo Celli, identified three species of malaria parasites, *Plasmodium vivax*, *P. falciparum* and *P. malariae*, correlating them with three types of fever: benign tertian, quartan and malignant tertian.⁸ Investigation of the role of anopheles mosquitoes in spreading malaria confirmed earlier work done by the British physician, Patrick Manson, on the role played by mosquitoes in the transmission of filariasis which causes elephantiasis.

In 1896 and 1897, while working in Calcutta, India, Ronald Ross proved the role of the anopheles mosquitoes in the transmission of malaria. In 1898 Ross established further that a *Culex* mosquito transmitted malaria from diseased to healthy birds by inoculation. Raymond Dumett explains that the “acceptance of the mosquito theory not only revolutionized the study of tropical disease”, but also endowed “tropical sanitation with scientific status as a means of malaria prevention”.⁹ In 1899, as a professor of tropical medicine at the Liverpool School of Tropical Medicine, Ross went to Sierra Leone in order to identify the breeding habits of the anopheles mosquito and to devise methods for destroying anopheles breeding sites. He found that the *Anopheles gambiae* (then called *Anopheles costalis*) vector of falciparum malaria bred in small puddles, ditches and potholes and *A. funestus*, vector of vivax malaria bred mainly in clear placid water near the banks of streams.¹⁰

⁸ Gordon Harrison, *Mosquitoes, Malaria and Man: A History of the Hostilities since 1880* (London: John Murray, 1978), p. 14.

⁹ Dumett, ‘The Campaign against Malaria’, p. 164.

The results of Ross's field expedition in Sierra Leone were well received by the medical and health authorities in Zanzibar. Several articles on Ross's works were published in various issues of the *Zanzibar Gazette*. Additionally, further information on malaria preventative measures proposed by Patrick Manson also appeared in the *Zanzibar Gazette*.¹¹ From the early twentieth century, Zanzibar endorsed anti-malarial programmes that focused on controlling mosquitoes in their breeding sites and on the distribution of quinine to stop transmission. The earliest state initiatives which were focused on controlling malaria breeding sites were carried out by Dr. Alfred Spurrier, the Director of Health Services. In 1900, Dr. Spurrier found the presence of malaria mosquito breeding areas in the town at Kiungani, Migombani and at the top swamp of Mr. Holmwood's plot, *shamba*. Also, he found mosquito larvae in the disused stone water tank at Forodhani, near the *Baytil Sabil* Palace.¹² The Kiungani and Migombani areas as we shall see later in this chapter began to receive attention in 1908. The stone water tank was demolished immediately in 1900.

A few years later, public health officers from Britain were posted to Zanzibar. Dr. Edington was the first British bacteriologist. His main duties were to carry on researches on mosquitoes, insects and bacteria in a new established bacteriological laboratory, which was founded after the 1905 bubonic plague.¹³ From the early-1910s, Dr. W. Mansfield-Aders, a graduate from the Liverpool School of Tropical Medicine who specialized in entomology was appointed to work as a bacteriologist at the Department of Health in Zanzibar. He conducted several surveys of mosquitoes and insects in Zanzibar. In 1917, for instance, he recorded that *Anopheles funestus* bred in flooded rice-fields in the suburbs and in rural areas.¹⁴

¹⁰ Harrison, *Mosquitoes, Malaria and Man*, pp. 124-125.

¹¹ Zanzibar National Archives (ZNA) BA 104, *Zanzibar Gazette*: 16 September 1898; 14 December 1898; 21 December 1898; 28 December 1898; 4 January 1899; 25 January 1899; 1 February 1899; 5 February 1899; 6 September 1899; 25 October 1899; 24 January 1900; 14 February 1900; 21 February 1900; 28 March 1900; 18 April 1900; 25 April 1900; 16 May 1900; 23 May 1900; 30 May 1900; 6 June 1900; 13 June 1900; 20 June 1900; 27 June 1900; 18 July 1900 and 18 October 1899.

¹² ZNA BA 104/9, 'Malaria', *Zanzibar Gazette*, 7 February 1900, p. 5.

¹³ ZNA AC 1/97, 'Report on Zanzibar', Correspondence, Zanzibar and Foreign Office, 1907 August – December.

¹⁴ W. Mansfield-Aders, 'Insects Injurious to Man and Stock in Zanzibar', *Bulletin of Entomological Research*, VII (1917), p. 391.

In 1926, Dr. Mansfield-Aders conducted further research and identified six species of the anopheles mosquito in Unguja and Pemba islands: *Anopheles costalis* (later standardised as *gambiae*), *Anopheles funestus*, *Anopheles mauritanus*, *Anopheles maculpalpis*, *Anopheles squamosus*, and *Anopheles longipalpis*. He reported that *Anopheles costalis* was the major vector of malaria while *Anopheles funestus* played a secondary role. He published his findings in 1927 in the *Transactions of the Royal Society of Tropical Medicine and Hygiene*.¹⁵

Dr. Mansfield-Aders also spotted *A. costalis* on large open swamps, shallows and back-waters of rivers, scattered across the islands. He observed that “*A. costalis* showed a great preference for borrow-pit, which was dug all over island for collecting water in the dry season, and pools between the heaped up beds of earth made by the people while planting manioc, [cassava] and sweet-potatoes”.¹⁶ He reported that:

They have been found breeding in shallow depressions in coral rocks just above high-water mark. In the town, they have been detected ovipositing under various conditions, such as in hoof-prints of cattle, earthen jars, sailing boats, canoes, lighters, and in any receptacle containing water which when exposed to the sun may serve as a nursery.¹⁷

A. funestus were recorded in shallows at the sides of rivers, seepage water from hills, and the edges of swamps. Mansfield-Aders described “these larvae [as] are always found in shady areas and in water fully exposed to the sun”.¹⁸ Both species of mosquito were reported to “enter houses, engorge themselves with the blood of the human inmates, and remain in a torpid condition until the late afternoon when they again become active”.¹⁹

¹⁵ ZNA BA 7/6, Annual Report of Medical, Sanitary and Biological Divisions for 1925, Appendix III, p. 72 and W. Mansfield-Aders, ‘Notes on Malaria and Filariasis in the Zanzibar Protectorate’, *Transactions of the Royal Society of Tropical Medicine and Hygiene*, XXI, 3 (November, 1927), pp. 207-214, p. 208.

¹⁶ Mansfield-Aders, ‘Notes on Malaria and Filariasis in the Zanzibar Protectorate’, p. 208.

¹⁷ Mansfield-Aders, ‘Notes on Malaria and Filariasis in the Zanzibar Protectorate’, p. 208.

¹⁸ Mansfield-Aders, ‘Notes on Malaria and Filariasis in the Zanzibar Protectorate’, p. 208.

¹⁹ Mansfield-Aders, ‘Notes on Malaria and Filariasis in the Zanzibar Protectorate’, p. 211.

Early twentieth century environmental and sanitary engineering campaigns implicated five major areas in Zanzibar. As records from the Department of Medicine and Public Health and other administrative files from the Provincial Administration Department and Public Works Department show, they included the reclamation of swampy ground and canalization of streams. Scattered cattle and goat pens in Stone Town were removed to Ng'ambo. The Zanzibar colonial Government decided to extend a piped water supply throughout Stone Town to prevent the use of shallow wells. But wells continued to exist in Ng'ambo until the 1960s. The filling of natural depressions caused by quarrying works started from 1930. These measures were a response to the growing medical understanding that malaria was spread by mosquitoes.

Environmental, Sanitary Engineering and Vector Control Programmes, 1913-1963

From the early twentieth century, Zanzibar decided to embark on anti-malarial campaigns which focused on controlling both *Anopheles gambiae* and *A. funestus*. These two malaria species, as I have mentioned before in this chapter, bred in swamps, banks of rivers, potholes, shallow depressions, in hoof-prints of cattle, earthen jars, sailing boats, canoes, lighters, borrow-pit and flooded rice-fields. In 1913, the Colonial Office sent Professor W. J. Ritchie Simpson, a British physician and a pioneer in tropical medicine to visit British colonies in East Africa. Simpson, who formerly worked as a Health Officer for Calcutta, India in the 1890s and was a founder of the *Journal of Tropical Medicine* in 1898, was from 1913 an advisor of the Secretary of State for the Colonies on health matters. He visited Zanzibar, Kenya and Uganda to investigate health conditions, and to propose measures to be taken to improve health of the “native” population, (Indians, Arabs and Africans).²⁰ Simpson's survey confirmed that mosquitoes bred during rainy seasons. He recommended to the Zanzibar authorities that they refill the Creek in order to stop epidemics; if this was done the open space created would create a neutral zone between Stone Town and Ng'ambo, and between the town and plantation-breeding anopheline mosquitoes.

²⁰ W. J. Simpson, Report on Sanitary Matters in East African Protectorate, Uganda and Zanzibar (Colonial Office, London, 1915), pp. 4-5.

The anti-malarial works that focused on reclamation of land and swamps had just started in the United States of America. Since the early-1900s, the United States had been involved in the campaigns against yellow fever in the Panama Canal area. In 1901, the famous and influential American physician, William Crawford Gorgas established anti-yellow fever brigades in Havana, Cuba during the Spanish American War. The work had also involved controlling the breeding sites of anopheles mosquitoes. Gorgas, chief sanitary officer of the Panama Canal Commission between 1904 and 1913, eliminated the mosquito in the region of the canal and made possible the building of the Panama Canal. Gorgas 'sanitary squads' drained swamps and cleared out weeds, spreading a concoction of carbolic acid, resin and caustic soda.²¹ According to Philip Curtin, "the success of American public health officers in combating yellow fever in Cuba and Panama helped raise false hopes for mosquito control in Africa".²² In Tanganyika, the German authorities recruited a malaria control specialist who had formerly worked in the malaria and yellow fever eradication campaigns in Panama, but the project was abandoned with the outbreak of the First World War.²³

The canalization of the Creek which separated Stone Town and Ng'ambo was proposed earlier by the medical and health authorities in Zanzibar. Lack of funds delayed the work. In the eyes of the Europeans who began visiting the town in the mid-nineteenth century, the Creek was more of a 'fetid lagoon', with all the dirt and drainage pollution that ran into it from the town. In 1897, the colonial authorities attempted to build embankments around the Creek for the use of the town population. W. K. Firminger, a lay brother and a priest-in charge of the Universities' Mission to Central Africa (UMCA), who was stationed in the town at that time, welcomed the decision to build the embankment. Informing William Trevars, Secretary of the UMCA, London, of the government's intention to do this, Firminger declared that "we shall now have a very considerable frontage towards the creek,

²¹ Harrison, *Mosquitoes, Malaria and Man*, p. 161.

²² Curtin, 'Medical Knowledge and Urban Planning', p. 241.

²³ D. Ferguson, 'The Political Economy of Health and Medicine in Colonial Tanganyika', in M. H. Y. Kaniki (ed.), *Tanzania under Colonial Rule* (London: Longman, 1980), pp. 307-343, p. 331.

which if the Government carry out their intentions of making an embankment will become most valuable. It will improve the station greatly”.²⁴

The filling-in of the Creek was not undertaken immediately as the matter was somewhat controversial and became a matter of debate among medical officers in Zanzibar. In 1914, soon after the departure of Simpson, Dr. Curwen, the acting Principal Medical Officer (PMO) in Zanzibar wrote that “I think Professor Simpson is wrong in describing it [the Creek] as formerly being a breeding place for mosquitoes in the wet season; it was washed by salt water and too porous for rain water to lodge”. Also, the medical and health officers in Zanzibar decided not to fill the Creek for drainage purposes. It was reported that “its tidal waters served to daily remove much offensive drainage that was discharged into creek”.²⁵

It was only after much discussion that it was finally decided in 1935 to fill the Creek for health and safety reasons. The new Director of Medical Services (DMS), Dr. W. Leslie Webb, who had served in a medical post in Uganda before coming to Zanzibar, felt that it needed to be done. He regarded the Creek as a source of many diseases. The work of filling up was carried out by “putting refuse and a number of old flattened colas [concrete blocks] drums to form a sort of palisade at the base of the dump to keep the refuse in and to keep some of the water out”. The work started at the west side of Hollis Road abutting on the premises of Peera Champsi.²⁶ As late as 1956, refuse tipping continued at the southern part of the Creek above the Darajani Bridge. The photograph below shows the filling of the Creek at Darajani in 1943.

Town people born in the early-1930s, still remember the existence of the Creek. People used the ferry when it was high tide and crossed by foot when the tide was out. Salama Ali who lived in the Vikokotoni neighbourhood remembers how the Creek was at that time. She

²⁴ Rhodes House Library (RHL), ‘From Firminger to Trevars, 28 February, 1896’, Mss. W. K. Firminger, Priest in Charge, Zanzibar, Box A1 VIII, p. 523.

²⁵ ZNA AB 2/264, Professor W. J. Simpson, Report on the Sanitary Matters in the East Africa, Uganda and Zanzibar Protectorate, p. 73.

²⁶ ZNA AJ 3/36, ‘From the Director of the Medical Services (DMS) to Provincial Commissioner, 19 May 1935’, Creek Filling in Re of.

recalls that people living nearby were disturbed by mosquitoes which bred near the bank. What her grandmother did was simply to close the windows and doors of their house before sunset. She still remembers people's concern about the Creek filling project. Some people were happy as mosquito breeding was stopped. But other people who used the Creek to earn money by ferrying passengers were not happy.²⁷

Photo 5.1: Filling of the Creek at Darajani, 1945



Source: ZNA AV 23/153, Darajani Bridge before the final reclamation of the Creek.

²⁷ Interview with Bi Salama Ali at Michenzani on 12 March, 2005.

The work of blocking up the Creek caused a lot of strife. The refuse that was used to fill the Creek attracted flies which then bred in the area. In 1938, a Miss Gunn from the UMCA complained to the medical authorities in Zanzibar about the smell that was caused by rotten refuse. She reported that the smell caused her a sore throat.²⁸ Indeed, the Indian National Association (INA) registered their disapproval by sending a petition to the Government. Rustom Sidhwa, the Town Council representative from the INA sent a petition to the Sanitary Board.²⁹ However, the work of filling the Creek continued as planned, although it was only in 1961 that the work came to an end south of the Hollis Bridge. A large area of the Creek north of the bridge at Funguni near the sea still remained to be filled and this was done later, after 1963.³⁰ Generally, the reclamation work did a lot to restrain epidemics in the town. Nevertheless, it was rather a combination of several anti-malarial measures which halted malaria, typhoid and cholera.

Canalization of streams and swampy areas in the town was another malaria eradication strategy. For centuries swamps areas were connected with fever. James Webb explains that since first millennium BCE, the Romans had drained swamps in order to stop miasmatic diseases. The Abbasid Caliphate in the seventh century Iraq also reclaimed swamps in order to control fever.³¹ From 1902, Ronald Ross supported the reclamation of swamps and drainage as war against *Anopheles gambiae* and *A. funestus*, which prefer to breed on large swamps and on edges of swamps respectively.³² In urban Zanzibar, reclamation of swamps started in 1907 soon after the formation of the Anti-Mosquitoes Brigade. The Kiungani tunnel which linked Ziwani was constructed. In 1910, the entrance to Kiungani tunnel was

²⁸ ZNA AJ 3/36, 'Miss Gunn to DMS, 3 July, 1938', Creek Filling in Re of.

²⁹ ZNA AJ 15/232, 'From R. Sidhwa to DMS, 25 August, 1956', Disposal of Town Refuse. In 1957, after the formation of Afro-Shirazi Party (ASP), Rustom Sidhwa became one of its frontline leaders. According to Michael Lofchie some prominent Hindu merchants decided to join ASP to show their opposition and dislike of Oman Arabs landowners. See Norman Bennett, *A History of the Arab State of Zanzibar* (London: Methuen & Co Ltd, 1978).

³⁰ ZNA AJ 15/134, Annual Report of Health Department, 1962-72.

³¹ James Webb, *Humanity's Burden, A Global History of Malaria* (Cambridge, New York, Madrid, Cape Town, Singapore, São Paulo and Delhi: Cambridge University Press, 2009), p. 129.

³² See Ronald Ross, *Mosquito Brigades and How to Organize them* (London: George Philip and Son, Liverpool: Philip, Son and Nephew, 1902).

lowered by three feet, which caused the Migombani swamp to dry out. In 1908, the Ziwani and Polo Ground ditches were constructed and by 1909 earth ditches had been cut from the Ziwani tunnel outlet to the sea. Other ditches were cut in the Gulioni and Dhobi Station swamps,³³ and in the channels of the Mpepo River, which formed the northern boundary of the town, and the Miwaleni River, which cut through the boundary between Mkele and Shauri-Moyo. These areas were believed to be the chief source of anopheline mosquitoes in the northern portion of the town. The other swamps at Sebuleni, Mwanatenga, Jang'ombe, Migombani and Kiungani were filled in the late-1950s.³⁴

Similarly, in Tanganyika, during the Second World War, the British government employed the Royal Army Medical Corps to carry out anti-malarial works. The Corps concentrated on drainage, straightening of streams (to increase the flow of water), oiling of puddles, cleaning the banks of drains in order to facilitate the flow of predatory fish, and surveillance of livestock so that they would be kept far from streams and swamps. Livestock surveillance was aimed at preventing hoof prints in places that could offer conditions for mosquito breeding.³⁵

Some people in Zanzibar reported to the Health Department that the filling of marshes caused substantial numbers of problems including soil erosion. In 1935, Bishop Heffernan of the UMCA wrote to the Director of Health arguing against the anti-malarial measures about to be introduced near the Mission area. The Bishop was critical of the decision to fill the well near the mission *shamba* plot at Kiinua Miguu, as he said it would create a water shortage. Also, he was worried that the drainage work near the *shamba* had caused problems of soil erosion.³⁶ The canalization and filling of wells was however necessary in order to prevent malarial mosquitoes from breeding.

³³ ZNA AJ 29/243, 'From DMS to the Chief Secretary (CS), 10 June 1911', Anti-Malarial Drainage Schemes, Suggestions Re For.

³⁴ ZNA AJ 16/5, 'From the Medical Officer of Health (MOH) to the Secretary of the Town Board, 8 December 1934', Quarrying in the Township of Zanzibar Prohibition, Control, License, For.

³⁵ Clyde, *Malaria in Tanzania*, p. 47.

In 1944, growing of rice was prohibited in several swamps in the town, such as on the left of Fumba Road, near the Migombani valley, east side of Sebuleni swamp, the area adjoining Mto Mpepo and between Saateni Bridge and the sea. This was enforced through, “The Public Health (Prevention of Mosquito- Breeding) (Amendment)” Decree of 1944 which stated that “without the written authority of the MOH first hand and obtained, no person shall plant or cause to be planted rice, or prepare a land for the planting of rice, within a radius of three miles of the General Post Office (at Shangani) in the Town of Zanzibar”.³⁷ As a result, people around these areas had to rely more on imported polished rice as a substitute to the local grown rice for their subsistence.

The canalization of swamps and other preventive measures had helped to reduce the number of people who were diagnosed with malarial fever. By the 1950s, number of patients who attended at the Hassanali Karimjee Jivanjee (HKJ) Hospital for the treatment of malaria had been reduced to 40 percent of the whole patients who went to the Hospital for treatment. The 1956 Annual Medical Report shows that the swamp drainage helped to reduce the mosquito breeding. The anti-larval methods were widely employed. In 1955, £5800 was voted for the drainage purposes.³⁸

The post of Malaria Research Officer (MRO) was introduced in 1934, in an attempt to control malaria in Zanzibar. The colonial government in Zanzibar applied for the funds from the Colonial Development Funds (CDF) to sponsor the malaria survey which started in that year. Dr. McCarthy, a Senior Medical Officer was appointed as the first MRO to investigate malaria problems in Zanzibar Town and adjoining areas.³⁹ In 1929, Captain Sydney Price James, a former medical officer in Indian Medical Services (IMS) between 1897

³⁶ ZNA AJ 29/243, ‘From Bishop Heffernan to DMS, 29 April 1935’, Anti-Malarial Drainage Schemes, Suggestions Re For.

³⁷ ZNA AB 2/331, The Public Health (Prevention of Mosquito-Breeding) Rules, 1935 and The Public Health (Prevention of Mosquito- Breeding) (Amendment)” Decree of 1944.

³⁸ ZNA BA 7/46, Annual Report Department of Health 1955, p. 14.

³⁹ ZNA AB 58/29, ‘From British Residence to CS, 8 May 1934’, Colonial Development Fund, 1930-1949.

and 1914, suggested for the appointment of a malariologist to investigate malaria problems in East Africa.⁴⁰

In Zanzibar, the MRO concentrated on ascertaining the “splenic index” in and about the town and determining the parasitic infestation indices. The “splenic index” was done through checking the human spleen in order to understand the acuteness of malaria. Normally, enlarged spleens were noticed among those children who were exposed to malaria infection. The MRO was also responsible for investigating all actual and potential mosquito breeding places in and near the town and for the typing of the various anopheline which were found in the area. He was involved in investigating the infection rates of the various species of mosquitoes and considering statistical evidence with regard to the correlation of the malaria problem with meteorological conditions, vital statistics and sociological circumstances.⁴¹ In 1935, Dr. McCarthy reported to the Chief Secretary in Zanzibar that the survey progressed smoothly.⁴²

The MRO reported that malaria infections were chiefly conveyed by *A. gambiae* and to a lesser degree by *A. funestus* as it had been pointed earlier by Dr. Mansfield-Aders. Dr. McCarthy explained that both types of mosquitoes bred freely all the year round in permanent swamps and streams outside the town boundary. The boundary was roughly one and half miles east of the Shangani Post office and one mile from the main part of the town. He further reported that during the dry season adult anopheline mosquitoes were found only in the areas adjacent to the above mentioned permanent breeding grounds. Anopheline infestation had been found to decrease in the town as the distance from the town boundary

⁴⁰ In 1914, James had been appointed as an advisor on tropical diseases at the Ministry of Health in London after his retirement from the IMS services. Between 1901 and 1934, Captain S. P. James had published several works on mosquito taxonomy. He had conducted research on the causation and prevention of malarial fevers and wrote on the prevention and treatment of malaria for health care providers.

⁴¹ ZNA AJ 1/37, ‘From Dr. McCarthy to CS, 18 November 1934’, Anti-Malarial Measures, Zanzibar.

⁴² ZNA AJ 1/37, ‘From Dr. McCarthy to CS, 7 March 1935’, Anti-Malarial Measures, Zanzibar.

increases. The anopheline infectivity rate increased in the town proportionately with the distance from the boundary.⁴³

From 1935 onward, a special anti malaria gang under the supervision of Dr. McCarthy was involved in many new programmes that aimed to control malaria in Zanzibar. All owners of land in the town had been requested to clear the bushes and tall grass. This applied to graveyard areas as well. Notice was delivered by the MRO during *masika* or heavy rain season and reminded the people that it was an offence to keep premises, estates, gardens or *shamba*, plots of land in such a state that unprotected water was allowed to stand and so enable mosquitoes to breed. Leaflets and posters, which indicated measures to be taken by householders, were posted in the town. The leaflets notified that malaria mosquitoes bred in stagnant water, such as jars, tanks and holes which were excavated for planting trees. The leaflets also instructed that no bottles, whole or broken, tins, broken pieces of earthenware, coconut shells or seashells, calabashes and scrap metal were to be kept lying in the houses' compounds.⁴⁴

The MRO furthermore recommended that quarrying for rock within the town boundary and for two miles beyond was to be prohibited and that the keeping and grazing of cattle in the town area should be forbidden. He advised too on the formulation of schemes for the better drainage of low lying areas and the extension of the piped water supply to certain parts of Ng'ambo to allow shallow wells to be filled in.⁴⁵ In 1935, the Colonial Development Funds (CDF) sponsored water supply installation to serve the town of Zanzibar.⁴⁶ It was only in the early-1960s, that the tapped water system was sufficient to cover the whole urban population.

⁴³ ZNA AJ 1/37, 'From Dr. McCarthy to CS, 7 March, 1935', Anti-Malarial Measures, Zanzibar.

⁴⁴ ZNA AJ 1/37, 'From Dr. McCarthy to CS, 7 March, 1935', Anti-Malarial Measures, Zanzibar.

⁴⁵ ZNA BA 7/13, Annual Medical and Sanitary Report for the Year ended 31st December, 1934, p. 13.

⁴⁶ ZNA AB 58/29, 'Report from Zanzibar Government to the Colonial Office', Colonial Development Fund, 1930-1949.

Moreover, following MRO recommendations, stone quarrying and the keeping of cattle were totally moved outside the town. The prevention of quarrying in the town was introduced as water retained in these holes permitted mosquitoes to breed. Initially, the decree to stop the digging of holes in the town was enforced in 1929. The decree ordered that “no person shall make or cause to be made any excavation, which is likely to foster the breeding of mosquitoes, on any land within any place which has been or may be declared to be a Town under the Towns Decree 1929 or within two miles of the boundary of any such Town”. At that time, the decree did not intend to stop the quarrying of stones in Zanzibar Town.

In 1934, the medical authorities accepted the advice of Dr. McCarthy, that quarrying works which were going on at both the Kikwajuni private and government quarries, behind the house of the Commissioner of Police and throughout the town had to be stopped. Dr. Lee, the Director of Medical Services wrote to the Secretary of the Town Board requesting that a rule to be made under section 79 of the Public Health Decree to prohibit all quarrying for stone or digging inside the town boundary or within a distance of two miles from the town boundary.⁴⁷ In 1935, the colonial authorities in Zanzibar introduced laws to stop quarrying within the Town of Zanzibar.⁴⁸

From 1934 effectively, all cattle and goat pens were removed from the town area. It was established that:

These animals, driven as they are, backwards and forward from Mji Mpia, cut up all the soft grassy places into a mass of hoof marks which, unless carefully watched after the rain season, soon begin to produce *A. Costalis* in prodigious number... In Ziwani swamps the constant daily driving of herds of cattle backwards and forwards across them while they are still wet, pulps the surface of the ground into a honeycombed mass which will neither dry up quickly nor drain normally. These cattle also caused considerable damage to the drains themselves by breaking down the sides and thus blocking the channel.⁴⁹

⁴⁷ ZNA AJ 16/5, ‘From MOH to the Secretary of the Town Board, 8-12-1934’, Quarrying in the Township of Zanzibar Prohibition, Control, License, for.

⁴⁸ ZNA AJ 3/17, ‘Zanzibar Town Board Meeting, 15 December, 1934’, Cattle in the Township of Zanzibar Prohibition for Keeping Re Of.

The Parsee Indian community, however, resisted the order. They requested the medical and public health authorities to allow them to keep cattle in the town for religious purposes. The medical authority allowed only one cow in total to be kept by their priest.⁵⁰

In Zanzibar, the use of chemicals in the control of mosquitoes had started in the early-1910s. The Zanzibar malaria eradication brigade had focused on applying kerosene in order to control larvae breeding of mosquitoes to collections of water. For water in ditches, automatic oilers were employed, using either drip cans or a ball of rags soaked in kerosene, as two of my informants explained to me. Kerosening of ditches and holes worked during the dry season but it was impossible to apply kerosene to flowing rain water. Some successes were nonetheless achieved through a combination of different preventive measures.⁵¹

The introduction of tiny fishes to eat mosquito larva was applied at the same time as to the use of kerosene. In Zanzibar millions of fish (*Haplochilus playfairii*) were distributed by the Unit workers in ponds, fountains, mosque tanks and other places where water was kept permanently.⁵² In 1914, larvivorous fish (*Gambusia affinis*) were introduced into Zanzibar by Dr. W. Mansfield-Aders.⁵³ From 1934, in attempt to eradicate malarial mosquitoes in Zanzibar, Paris green was applied in ponds in urban surroundings. Paris green (a mixture of diesel oil and copper aceto-arsenite), which was long in use against pests of food crops was first used in malaria control in the 1920s in countries like India, South Africa and Brazil. Although it was much cheaper than oil and non-toxic to animals and fish and could be used

⁴⁹ ZNA AJ 16/5, 'From MOH to the Secretary of the Town Board, 8-12-1934', Quarrying in the Township of Zanzibar Prohibition, Control, License, for.

⁵⁰ ZNA AJ 3/17, 'Zanzibar Town Board Meeting, 15 December, 1934', Cattle in the Township of Zanzibar Prohibition for Keeping Re Of; See also: ZNA AB 2/331, 'Rules on Mosquito Breeding', The Public Health (Prevention of Mosquito-Breeding) Rules, 1935.

⁵¹ Interview with Mr. Simai Haji and Mr. Mohammed Ali, two retired health officers, at Mwembeladu and Jang'ombe on 1 August, 2007.

⁵² ZNA BA 7/2, Public Health Report for the Year 1913, p. 43.

⁵³ ZNA AJ 1/37, 'From DMS to MRO, 25 October, 1935', Anti-Malarial Measures in Zanzibar.

on ponds it was abandoned in many parts of the world as it was unable to kill adult mosquitoes.⁵⁴

The fight against malaria and malarial-carrying mosquitoes took a new turn after the Second World War with the introduction of dichloro-diphenyl-trichloroethane (DDT). In 1941, Paul Muller, a Swiss, synthesized DDT for use by soldiers in as a safe and efficient insecticide for killing the clothes moth. It was later employed as anti-malarial tool. According to Gordon Harrison, “Britain gave the manufacture of DDT the highest war wartime priority along with radar and penicillin”.⁵⁵ Unlike Paris green, DDT was used to kill adult mosquitoes and it stayed for a very long time. According to Webb, “in most areas of seasonal malaria transmission, two applications per year were enough. Where DDT was laid down, the number of new malarial infectious plummeted toward zero”.⁵⁶

The spraying of DDT in urban areas began after the Second World War. The Zanzibar Mosquito Brigade staff sprayed DDT in houses and dhows but the DDT spray was unhelpful in the *makuti* (thatch) huts of Ng’ambo, since, as Prothero explains, “the insecticide may not cling to reed or grass thatch, or to leaves. On any of these materials the toxic effects are soon lost”.⁵⁷ Similarly, in Tanganyika, larvicidal air spraying was first tried in 1945, and DDT was used for residual spraying in houses in 1946.⁵⁸ As mosquito infestation continued to be a problem, private newspapers owned by individual politicians, wealthy merchants and landlords urged the government to take more strong measures to ensure that mosquitoes were eliminated in the islands. In 1950, the editor of *Mwongozi* wrote an article entitled: ‘DDT performs miracle not in Zanzibar’. The editor cites the examples of countries such as Cyprus and British Guiana where several types of anopheles mosquitoes which were

⁵⁴ Harrison, *Mosquitoes, Malaria and Man*, pp. 186-7.

⁵⁵ Harrison, *Mosquitoes, Malaria and Man*, pp. 211 and 218.

⁵⁶ Webb, *Humanity's Burden*, p. 160.

⁵⁷ Prothero, *Migrants and Malaria*, p. 18.

⁵⁸ Clyde, *Malaria in Tanzania*, p. 45.

the main carrier of malarial viruses had been drastically reduced. He finished his article with the words “but Zanzibar remains where it has been for much too long”.⁵⁹

In the early-1950s, the malaria campaigns were linked with other malaria research programmes in East Africa through the East African High Commission. The East African Institute of Malaria and Vector-Borne Diseases at Amani, Tanganyika assisted Zanzibar in the campaigns. The Zanzibar anti-malaria programmes sought advice from the Director of the East African Malaria Unit. In 1951, for instance, Dr. Bagster Wilson, a parasitologist who did research on the health impacts of malaria control measures in north-eastern Tanganyika and south-eastern Kenya, commented that to safeguard the health of the town population, the Zanzibar authorities should put effort into eradicating malaria in rural areas. As a result, “all houses and huts in the first half mile belt outside the Town of Zanzibar were sprayed with DDT-wettable powder. In conjunction with this, mosquito control stations were established on the outer and inner side of this treated belt to ascertain the value of the anti-malarial buffer”.⁶⁰ In order to determine the effectiveness of methods to destroy the mosquito in the larvae stage, at the special control stations in the town, daily visits were paid for adult mosquito catching.⁶¹

In 1953, Wilson’s advice was that to reduce malaria in the town there should be year-round efforts to deal with adult mosquitoes in three rural districts in Zanzibar. In addition a protective belt extending to a depth of one mile outside the Zanzibar Township boundaries, and running from north to south, was regularly kept under control in order to reduce the number of adult mosquitoes entering the town.⁶² The use of anti-malaria drugs in the suppression of the diseases was carried on throughout colonial period. The next section looks at the distribution of these drugs in urban Zanzibar.

⁵⁹ ZNA NW 12/2, ‘DDT performs miracle not in Zanzibar’, *Mwongozi*, 7 July 1950, p. 1.

⁶⁰ ZNA AJ 28/52, ‘From DMS to Provincial Commissioner, 3 July 1951’, Health Department: Malaria Control and Measures.

⁶¹ ZNA BA 7/22, Medical and Sanitary Report for the Year ended 31st December 1953, p. 10.

⁶² ZNA BA 7/22, Medical and Sanitary Report for the Year ended 31st December 1953, p. 10.

Drugs and the War against Malaria

From the early-1900s, quinine increasingly became an important drug for the suppression of malaria. In 1897, Professor Robert Koch validated the use of quinine as anti-malarial drugs as it destroys malarial parasites in human blood. It also suppresses malaria fever if it is used as prophylactic. Supplying quinine to colonial populations became a concern for colonial administrations in the early twentieth century, which had not hitherto been the case. The use of quinine was encouraged by the Colonial Office, which supported the malaria prevention approaches proposed by Patrick Manson. Manson believed that malaria would be controlled by using mosquito screens, bed nets and regular quinine dosage. Ronald Ross, on the other hand, questioned the use of quinine as a preventive measure, arguing that it all it did was to suppress the disease. Ross prioritized drainage and the use of larvacides to eliminate mosquito breeding sites.⁶³ In the event, many countries in Africa, including Zanzibar, adopted a combination of both Manson's and Ross's preventive measures for malaria eradication.

Koch's researches in Dar es Salaam in 1897 had led him to believe that smaller doses of quinine were effective in killing the malaria parasite and inclusive quininization was introduced in Dar es Salaam and Tanga.⁶⁴ German physicians in Tanganyika were mostly not convinced that quinine would help to eliminate malaria and beginning in 1904, they adopted a combination of quinine medication and chemical destruction to destroy breeding sites.

In Zanzibar, quinine tablets were distributed to officers at their work places, to school children in their schools, and in urban and rural areas through local community heads and local leaders, the *Masheba*. Possibly the use of community leaders and the *Masheba* were meant to simplify the anti-malarial programmes. There were precedents elsewhere in the British Empire. For instance in Bengal, India, the distribution of anti-malaria tablets through Post Offices and Vaccination Departments had commenced in 1892.⁶⁵ There too, 'native'

⁶³ Dumett, 'The Campaign against Malaria', p. 165.

⁶⁴ Ann Beck, 'Medicine and Society in Tanganyika, 1890-1930: A Historical Inquiry', *The American Philosophical Society*, 67, 3 (1977), pp. 15- 16.

doctors were used to supply the anti-malarial drugs. The state's decision to use 'native' doctors in this role was prompted by Bengalese resistance, in many cases, to public health campaigns.⁶⁶ Up until the 1950s, in Dar es Salaam, Tanganyika, quinine tablets were sold at the Post Office.⁶⁷

The Director of the Public Health Department wrote in the Annual Report of the Department of Health in 1913 that Headmasters, under directive from Medical Officers, distributed quinine to school children twice a week "in the form of the tannate [a salt of tannic acid] made up of chocolate coating".⁶⁸ Though quinine was supplied in schools in major towns and in rural areas, the programme failed to reach its goal as it was found that the medicines caused trouble to empty stomachs. The Department of Health in cooperation with the Department of Education then decided to provide breakfast to school children, while schools decided to introduce vegetable gardens.⁶⁹ From 1910 in Accra, Ghana, quinine with chocolate candy was also distributed in schools. As K. David Patterson shows, however, the programme was not successful as the chocolate did not obscure the bitterness of quinine. School truancies were noted especially on 'quinine day'. Students would apparently also throw away the medicine they received from their teachers. Despite all these problems the Department of Health in Ghana continued to deliver the drugs to school children.⁷⁰

In Zanzibar, from 1913, the Medical Officers of Health supplied quinine tablets at Police Line, Ziwani to European and local soldiers and their families twice weekly. Indian and Arab

⁶⁵ Ihtesham Kazi, *Malaria in Bengal from 1860-1920: A Historical Study in a Colonial Setting* (Unpublished PhD University of Michigan, 1986), p. 78.

⁶⁶ Arabinda Samanta, *Malarial Fever in Colonial Bengal, 1820-1939, Social History of an Epidemic* (Kolkata: Firma KLM Private Ltd., 2002), p. 14.

⁶⁷ Ferguson, 'The Political Economy of Health and Medicine in Colonial Tanganyika', p. 331.

⁶⁸ ZNA 7/2, Public Health Department Report for the Year 1913, p. 43.

⁶⁹ Interview with Mr. Ali Juma, a retired nurse at Kwahani on 27 July 2007.

⁷⁰ K. David Patterson, *Health in Colonial Ghana: Disease, Medicine, and Socio-Economic Change, 1900-1955* (Massachusetts: Crossroads Press, 1981), pp. 35-36.

government staffs posted to rural areas at Mkokotoni and Chwaka were required to take quinine weekly.⁷¹ The state was plainly determined to see this policy carried out so as not to lose labourers. Officers who refused to take quinine were warned that they “[were] liable to receive no pay if they [were] absent from duty on account of an attack of malarial fever”.⁷² The archival records go no further on this point. Possibly the government servants were willing to obey orders.

In 1913, the Assistant District Officer, through the Health Department’s officers, began to distribute quinine tablets in rural areas. The 1913 Annual Report of the Department of Health states that “a certain amount of sulphate of quinine in powder was sent to the Assistant District Officer at Mwera [a locality in South District] for distribution to Masheha”.⁷³ Sundiata notes that this area posed a particular danger to the health of Omani immigrants there.⁷⁴ The medication was sold at one pice (a unit of currency) per packet of five grains. The Health Department also planned to distribute sulphate of quinine to other districts.⁷⁵ The establishment of dispensaries in urban areas, suburbs and rural areas gave an added boost to the distribution of quinine and malaria treatment. By 1910, there were dispensaries at Mkokotoni in North District and at Chwaka in South District. By 1924, dispensaries and hospitals had been built in rural Unguja and Pemba, at Selem, Mbiji, Mahonda, Mangapwani, all in North District, at Kizimkazi in South District, on Unguja Island, and at Wete in Pemba. By 1938, Unguja had thirteen dispensaries and one General Hospital in the urban area while Pemba had seven dispensaries and three general hospitals located at Wete, Chake and Mkoani.⁷⁶

⁷¹ ZNA BA 7/1, Medical and Sanitary Report for the Year 1913, p. 6.

⁷² ZNA BA 7/2, Public Health Department Report for the Year 1913, p. 43.

⁷³ ZNA 7/2, Public Health Department Report for the Year 1913, p. 43.

⁷⁴ Sundiata, ‘Twentieth Century Reflections on Death in Zanzibar’, p. 51

⁷⁵ ZNA BA 7/2, Public Health Department Report for the Year 1913, p. 43.

⁷⁶ ZNA AJ 12/13, ‘Report on Medical Services, 1910-1950’, Medical Services Pemba and Zanzibar.

Further impetus to quinine distribution to treat, or as prophylactic against, malaria was due to its encouragement by the League of Nations. In the early-1920s, a Malaria Commission of the League of Nations insisted on the administration of quinine to reduce mortality from the disease in a short time. However, quinine supply programmes in Zanzibar, like elsewhere in Africa, faced many problems. Many people were not in a position to buy the drugs. As a result, local people continued to depend on their local medicines. People boiled *Neem* (azadirachta) leaves and bark to treat malaria. According to Mr. Ali Juma, these medicines became widely adopted and replaced quinine in urban and rural areas.⁷⁷ Urban and rural Arabs continued to employ other familiar therapies such as cauterization in order to overcome swellings of the spleen. In 1920, one Medical Officer stated that many Arab children had “numerous round cicatrices over their upper abdomen and spleen region, due to the barbarous habit of cauterizing with hot copper coins to relieve the pain and swellings”.⁷⁸ Khalfan Said of Mwera confirmed to me that cauterization was not meant to cure malaria. It was used to reduce the swellings.⁷⁹ Distribution of quinine in colonial Ghana faced similar problems. According to Patterson, “individuals benefited, especially those with some cash, education and access to distribution centres, but except for a relatively few elite Africans, the impact on the public was small, and the long-term results negligible”.⁸⁰

In the second half of the 1940s, Paludrine, another anti-malaria drugs in tablet form, manufactured in Europe began to be used.⁸¹ In Zanzibar, Government officials and their families were given a free issue of Paludrine, which was also distributed in schools. Bi Khamisa Abdulla, a sixty-two year housewife who joined Standard 1 at Kikwajuni Girl’s School at Ng’ambo in 1955, told me that they used to receive quinine every month in their school.⁸² These anti-malarial tablets helped to reduce death from malaria but had no effect

⁷⁷ Interview with Mr. Ali Juma, a retired nurse, at Kwahani on 27 July 2007.

⁷⁸ ZNA BA 7/7, Medical and Sanitary Report for the Year 1921, p. 34.

⁷⁹ Interview with Mr. Khalfan Said, a local practitioner, at Mwera on 1 August, 2007.

⁸⁰ Patterson, *Health in Colonial Ghana*, p. 36.

⁸¹ ZNA AJ 18/28, School Clinic, 1913-45, p. 63.

⁸² Interview with Bi Khamisa Abdulla at Kikwajuni, 3 December 2007.

on the eradication of mosquitoes. The colonial government in Zanzibar used other methods in the elimination of mosquitoes that caused malaria.

Urban Planning Programmes

There are a number of scholars who have discussed the process of urban planning in colonial Zanzibar. In *Verandahs of Power: Colonialism and Space in Urban Africa*, the historical geographer Garth Andrew Myers explains the introduction of urban planning in colonial Zanzibar and in other colonial cities such as Nairobi, Lusaka and Lilongwe. He examines the process of urban planning and the experiences of colonial powers, the middle-class elites and the majority urban citizens. He concludes that the urban planning measures were introduced in order to control the people.⁸³ The anthropologist William Bissell regards the situation in Zanzibar as far less controlled and indeed describes the British urban planning process in Zanzibar as chaotic. Lack of funding for urban planning was experienced throughout the British colonial period in Zanzibar.⁸⁴ An examination of urban management and inspection with reference to public health suggests that neither Myers nor Bissell is entirely correct.

From the early twentieth century, the urban planning programmes in Zanzibar had been simultaneously with the sanitation measures introduced focusing on vector control. Medical officers believed that huts which were occupied by low income and poor Africans, Arabs and Indians were a reservoir of mosquitoes. In order to eliminate breeding of mosquitoes, town planning and improved housing schemes were suggested by Professor Simpson. In 1913, Simpson recommended wider spacing between buildings in the Stone Town area and the removal of thatch huts from Stone Town to Ng'ambo.

Following Simpson's visit, medical officers of health started to think how they could improve the town. They had the view that houses which were built by Indians and Africans

⁸³ Garth Myers, *Verandahs of Power: Colonialism and Space in Urban Africa* (Syracuse: Syracuse University Press, 2003).

⁸⁴ William Bissell, 'Conservation and the Colonial Past, Urban Planning, Space and Power in Zanzibar', David Anderson and Richard Rathbone (eds.), *Africa's Urban Past* (London: Heinemann, 2000), pp. 246-261, p. 254.

were “unplanned and ill ventilated”, and sources of diseases such as malaria, bubonic plague and tuberculosis. In the Public Health Report of 1913, it was noted that:

The types of houses proposed by the local Indian architects are in general bad. The central rooms had no light or ventilation, except through the other two; and as regards the ground floor, the front room is usually the shop and is therefore closed at night. The excuse always made by the builder is that the middle room is meant as store room and not as a living room. But even if the plan is adhered to, the result is almost as bad as if the room were used as a living or a sleeping apartment, because, if it is used as a store, it soon becomes rat ridden and flea infested, and if as a sleeping or a living room, it is usually indescribably dirty, filthy and stuffy.⁸⁵

In 1913, the health authorities under a ‘Public Health Order’ decided to demolish thatched houses that covered the southern and north-eastern part of the Stone Town, at Mji Mpya and Funguni. These areas were mostly occupied by poor Comorians, Indians, Arabs and Africans. Most of these houses were reported to be a reservoir of mosquitoes that caused malaria. Major Dudley Sheridan Skelton, a Health Officer in the Public Health Department pronounced that:

In regard to Town planning, no *makuti* hut, or rather no hut built in the native fashion, which is without any sort of proper lighting or ventilation and with its ‘*choos*’ in the back kitchen, shall be allowed to remain within certain areas of the Township, because these dark houses are the hiding places and reservoir of all sorts of mosquitoes, whilst the cess-pits inside them are found to be the breeding places of both *Culex* and *Stegomyia*.⁸⁶

It was also reported that:

A previous Medical Officer of Health put it on record that the principal breeding places of our domestic varieties of mosquito were the ‘choo’ pits (open privy cesspits) which exist in practically every Asiatic, Arab and African house and hut, and that the protective oiling [kerosening] of these was an impossibility.⁸⁷

⁸⁵ ZNA BA 7/2, Public Health Report for the Year 1913, p. 25.

⁸⁶ ZNA BA 7/2, Public Health Report for the Year 1913, p. 25.

⁸⁷ ZNA BA 7/40, Annual Report on the Public Health Department for the Year 1916, p. 11.

Dr. Curwen, the acting Principal Medical Officer disputed, however, that local huts were a problem, arguing that:

This term [slum] may certainly be applied to the many ramshackle structures favoured by the poorer British Indian residents and the old dwelling houses converted by them into unwholesome lodging houses, but to apply the term to native huts is a misuse of the term in the European sense.⁸⁸

The work of demolishing thatched huts within the Stone Town area was started in 1916. The Director of Health Department noted that “(u)seful work in acquiring open spaces by demolition of huts has been carried on, and a good scheme for acquiring and improving an area of the town as an European quarter has been evolved”.⁸⁹

But the poor people were not ready to move out of Stone Town. Force was used to make sure that they vacated the area and the government compensated them by giving them money to build new houses in the Ng’ambo areas. The open space created became a new European quarter, which differed in terms of style from other buildings in the Stone Town. Similarly, in Dar es Salaam in Tanganyika, before the First World War the German authorities, and later the British after the War, enforced racial patterns of segregation, with separate localities for Europeans, Indians and Africans.⁹⁰

From 1935, people living in Mkunazini and Kokoni in Stone Town were required to rebuild their houses or to move to Ng’ambo. These areas were mainly occupied by low-class Arabs and Indians. At the same time, the colonial government decided that new houses had to be built in Ng’ambo to replace the former thatched houses. The Provincial Commissioner wrote to the District Commissioner about how the government could assist in providing bricks for building houses in Ng’ambo. But the project of rebuilding Ng’ambo had to wait until 1946, when the colonial government supplied funds for the project. The introduction

⁸⁸ ZNA AB 2/264, Acting Principal Medical Officer, Dr. Henry Curwen, Review of Simpson Report, 21 June, 1915.

⁸⁹ ZNA BA 7/40, Annual Report on the Public Health Department for the Year 1916, p. 11.

⁹⁰ Ferguson, ‘The Political Economy of Health and Medicine in Colonial Tanganyika’, p. 330.

of the 'Ten Years Development Plans' from 1946 furthered the town planning programmes in British colonies in Africa.

To ensure that building and sanitation works were conducted smoothly, the Zanzibar Town Board was established in 1935, and it took over most of the functions of the Central Board of Health which had been involved in making recommendations for planning and sanitation.⁹¹ The "Town's (Building) Rules, 1939" decree was promulgated to supervise and prevent poor construction.⁹²

In other areas, like Malindi near the harbour, which did not attract European dwellings, the plan was to build small new houses for public allocation. In 1938 the Medical Officer requested the government to build dwellings in the Malindi area to reduce congestion. These houses had to accommodate Hindu fishermen from Diu, Oman and Yemen Arabs and Somali dhows' crews who arrived and stayed in Zanzibar for three months until the end of the monsoon seasons, and casual members of the African or Arab floating population of Zanzibar, most of whom lived with their friends or in brothels. It was further proposed by the Director of the Medical Services that a cheap housing scheme be built, or "a communal lodging house of the 'doss house' type where a man could get a bunk for a night and the use of a cooking fire".⁹³ But nothing was done to improve Malindi, owing once more to a lack of funds.

Town people were not happy about these planning rules and regulations. Although they sometimes received compensation, they could not afford to build new houses. In 1938, one of the town residents wrote to the *Zanzibar Voice* about what he regarded as intimidation by the colonial authorities. He complained that town residents felt they were being harassed by

⁹¹ ZNA AJ 2/13, From CS to DMS, 5 November 1935', Central Board of Health.

⁹² ZNA AJ 19/10, From CS to DMS, 1 April 1940', Town Planning of Zanzibar Scheme for Development and ZNA AJ 29/258, 'From CS to DMS, 30 August 1939', Towns [Building] Rules 1939.

⁹³ ZNA AJ 19/11, 'From DMS to CS, 10 March 1938', Treatment of Congested and in Sanitary areas in Zanzibar Town.

the Building Authority and the Medical Officers of Health in the application of these rules.⁹⁴ But the complaints were to no avail: as Bissell shows, “the overwhelming majority of Zanzibaris lacked the means to fight the bureaucracy at its own game; faced by an official decision to tear down their huts and relocate elsewhere; they could either comply or risk being compelled by force”.⁹⁵

G. Andrew Myers, discussing the planning process in Zanzibar, explains that two separate Building Authorities (BAs) were established for Stone Town and for Ng’ambo. These were given authority to approve or disapprove the permits which were required to construct or repair houses. The Director of Public Works Department (PWD) was in charge of Stone Town’s building control measures, but the Medical Officer of Health (MOH) was the authority for Ng’ambo.⁹⁶

In 1943, the “Town’s (Native Locations) Rules” was introduced to minimize housing congestion in Ng’ambo. These rules stated that:

The Court shall give notice to the occupier of the native hut in respect of which such an order has been issued requiring him to move there from within... no compensation shall be paid by the Building Authority to the owner or occupier of any native hut in respect of the demolition thereof as aforesaid, and from the date of demolition order no rent shall be due or payable by or on behalf of the occupier in respect of such native hut.⁹⁷

Interestingly, three years later, the colonial government decided to compensate those people who were affected by the demolition process.

⁹⁴ ZNA NW 23/2, ‘The Town Sanitation’, *Zanzibar Voice*, 31 October 1938, 4.

⁹⁵ Bissell, ‘Conservation and the Colonial Past’, p. 256.

⁹⁶ G. Myers, *Reconstructing Ng’ambo: Town Planning and Development on The Other Side Of Zanzibar* (Unpublished PhD dissertation, University College Los Angeles, California, 1993), p. 166; G. Myers, ‘Sticks and Stones: Colonialism and Zanzibari Housing’, *Africa*, 67, 2 (1997), pp. 252-272, p. 260-1; See also: ZNA AE 5/2, Town Planning Board Minutes and Schemes, 1932-63 and ZNA AB 39/26, Town Building Rules, 1929-1955.

⁹⁷ ZNA AJ 28/42, ‘Town’s (Native Locations) Rules, 1943’, Health Department: An- Authorized Buildings and Huts- Demolition.

Following the introduction of the “Town’s (Native Locations) (Amendment) Rules, 1946”, house and ‘slum’ clearance began in Ng’ambo and at the northern tip of the Creek inhabited by poor people, under the supervision of the health authorities. Dr. R. S. Taylor, the MOH, insisted that most of the ‘Native’ type huts in Ng’ambo and Funguni needed to be demolished, and the colonial authorities agreed to compensate the victims of the demolition process so that they could build new houses. But some owners of these ‘Native’ type huts that were demolished were not compensated “owing to the premises being in a ‘ruinous’ condition or having collapsed”. Afterwards, fifty-one new standard type huts were erected on the vacant sites created.⁹⁸ In 1948, however, the Zanzibar Public Health (Amendment) Decree, “Demolition of Unfit Buildings”, was promulgated to enforce a new demolition process throughout the town.⁹⁹

More changes in housing occurred following the introduction in 1946 of the first ‘Ten Years Development Plan’ to organize development in the islands. After the Second World War, the British government introduced economic development plans for each of its colonies in Africa, with the largest share of the country’s resources being allocated to social services and communication.¹⁰⁰ In Zanzibar, the first ‘Ten Years Development Plan’ that covered the period from 1946-1955, concentrated on upliftment of living standards for Africans and all other poor people in Ng’ambo. Eric Dutton, Chief Secretary in the Zanzibar Government, selected Mwembetanga and KwaBijokha, which were the most congested areas in Ng’ambo, as the places where the demolition and construction works would start. Under the ‘Mwembetanga Housing Scheme’, utility houses were built in which the owner of the huts had to provide drainage or sullage pits.¹⁰¹ By 1950, a total of 139 houses had been demolished and 100 houses had been built in Ng’ambo by the colonial authorities, the new

⁹⁸ ZNA AJ 2/3, ‘From Dr. Taylor (MOH) to CS, 13 September, 1946’, Buildings Sanitary Surveys, Unauthorized Works, Defects, Demolition, Complaints.

⁹⁹ ZNA BA 7/27, Annual Medical and Sanitary Report for the Year ended 31st December, 1948.

¹⁰⁰ For the information on economic development in Africa after the Second World War, see: Robert L. Tignor, W. *Arthur Lewis and the Birth of the Development Economics* (Princeton: Princeton University Press, 2005).

¹⁰¹ Garth Myers, ‘Intellectual of Empire: Eric Dutton and Hegemony in British Africa’, *Annals of the Association of American Geographers*, 88, 1 (March, 1998), pp. 1-27, p. 16.

houses comprising between one and three rooms together with an *ukumbi* or sitting room.¹⁰² But the project ceased soon afterwards when funding ran out.

According to the authorities, all these measures were introduced to control diseases such as cholera, plague and smallpox which continued to erupt sporadically in the town. Myers argues however that the Ng'ambo huts were demolished in order to control the people. He quotes Vincent Glenday, British Resident 1946–1951, who declared that “quite apart from any moral responsibility, slum conditions are the breeding ground for social evil and unrest”.¹⁰³ African women in Ng'ambo were particularly uncomfortable with the new government-built houses. Myers records that “residents of Ng'ambo took to calling Mwembetanga ‘Poland’ for its similarity in devastation to what they had seen in newsreel footage of that country in 1945”. These women disliked the fences that were erected in the backyards as they cut them off from their backyard neighbours.¹⁰⁴

The archival records contain cases that were filed against the colonial government's decision to demolish houses or prohibit erection of new premises in the town. In 1953, for instance, a Comorian woman, Mwanzalha Mohamed, asked for help from the Welfare Office as she had been forced to demolish her hut. She was described as extremely poor and disabled. The Welfare Officer wrote to the District Commissioner to consider her case.¹⁰⁵ On 10 October 1957, *Afrika Kwetu*, a newspaper launched by the African Association, attacked the colonial government on the issues of the acquisition and demolition of huts. The paper was concerned that most of the acquired areas were given to new persons who afterwards built

¹⁰² ZNA AJ 2/3, 'Report on Development Housing Scheme at Mwembetanga, KwaBijokha and Kiswandui', Buildings Sanitary Surveys, Unauthorized Works, Defects, Demolition, Complaints.

¹⁰³ G. Myers, 'A Stupendous Hammer: Colonial and Post-Colonial Reconstructions of Zanzibar's Other Side', *Urban Studies*, 32, 8 (1995), pp. 1345-1360, p. 1353.

¹⁰⁴ Myers, 'Intellectual of Empire', p. 16.

¹⁰⁵ ZNA AJ 1/39, 'From Welfare Officer to District Commissioner, 4 February, 1953', Acquisition of Hut.

new houses;¹⁰⁶ it is not clear whether this was done intentionally or was an unanticipated consequence of the scheme.

The upgrading of the town was also considered in the second ‘Ten Years Development Plan’, which started in 1955 and ended in 1960. A Housing Office was set up to supervise and make recommendations on building works in Zanzibar in 1955. The Housing Officer showed that most of houses in Ng’ambo were badly situated: too close together, and constructed with perishable materials, *makuti*, and mud. The overcrowding was great. Most of these houses were said to harbour vermin and favour the breeding of mosquitoes. They were built in the shade and lacked ventilation. They had poor kitchen facilities and the danger of fire was noted. They lacked lavatory and bathing facilities and had earth floors which were not easy to wash. The Housing Officer proposed to establish ‘A Zanzibar Housing Cooperation’ to introduce and facilitate the use of improved building materials.¹⁰⁷ This led to the promulgation of the “Town’s (Hut Locations) Rules, 1956”.¹⁰⁸

The urban planning programmes had also focused on controlling *Culex fatigans*, the carrier of *filarial bancrofti* which cause elephantiasis and *Stegomyia*, which carry yellow and dengue fever viruses. *Culex fatigans* normally bred in cess pits. A report that was written in 1910 by Dr. Robert Howard of the UMCA Mission Hospital¹⁰⁹ noted that one in five patients who were admitted at the hospital was infected by microfilaria.¹¹⁰ In 1941, 206 people had attended at

¹⁰⁶ ZNA AJ 1/39, *Afrika Kwetu*, 10 October 1957- Huts in Ng’ambo’, Acquisition of Huts.

¹⁰⁷ ZNA AJ 8/7, ‘From Housing Officer to CS, 20 June, 1955’, Housing Programme, Zanzibar.

¹⁰⁸ ZNA AJ 29/258, ‘Town’s [Hut Locations] Rules 1956’, Town’s [Building] Rules 1939 and Town’s [Hut Locations] Rules 1956.

¹⁰⁹ By the early-1890s, Dr. Robert Howard, a UMCA medical doctor was posted at the UMCA station in Zanzibar. He was later in 1899 transferred to the UMCA station at Likoma, Nyasaland. He briefly worked in Zanzibar in the early-1900s before returning to Nyasaland. See Michael Jennings, ‘This Mysterious and Intangible Enemy: Health and Disease amongst the Early UMCA Missionaries, 1860 – 1918’, *Social History of Medicine*, 15, 1 (2002), pp. 65-87 and Charles Good, *The Steamer Parish, The Rise and Fall of Missionary Medicine on an African Frontier* (Chicago and London: The University of Chicago Press, 2004).

¹¹⁰ ZNA 7/2, Public Health Department Report for the Year 1913, p. 24.

the Government Hospital for Natives and Subordinates (GHNS) for the treatment of elephantiasis. The number had been reduced to 150 in 1942.¹¹¹

From the early-1930s, Zanzibar increasingly took measures in the control of *Stegomyia* due to the international pressure. Europeans feared that yellow fever might increase. The start of commercial air travel in the inter-war period globalized disease concern. In 1932, under the League of Nations, an early meeting of the Chief Health officers of the British and Portuguese East African Colonies with those of the Union of South Africa, Northern and Southern Rhodesia and West African countries was proposed to consider writing the draft on Convention for the Sanitary Control of Aerial Navigation, with particular reference to the question of the transmission of yellow fever.¹¹²

After the Second World War, more efforts were made by the Zanzibar Government to control *Culex* and *Stegomyia*. The Public Health Department (PHD) supplied oil or jeyes fluid to kill mosquitoes. From 1948, DDT cubes supplied to the people. In 1948, people in urban area begged the PHD mosquito searchers to give them some oil or jeyes fluid for their *choo* pits since DDT gave a very bad smell.¹¹³ The health authority responded that the use of disinfectants in the cesspits of the latrines had interfered with the septic action, and thus increased the bad odour. The Health Office recommended the public to cover the squatting holes over the pits after use.

But until 1953, the control of *Culex fatigans* faced many economic and social problems. People in Ng'ambo continued to use cesspit latrines. According to A. C. Howard, the Director of Medical Services between 1952 and 1953, "the control of the culicine mosquito is [was] the most difficult problem...although efforts were made to reduce the breeding in the numerous pit latrines in the town by oiling; the problem will [would] remain until gradually the conversion of pit latrines to the water flushed system eliminate(d) the breeding

¹¹¹ ZNA 4/7, 'From MOH to CS, 6 October, 1942', Diseases, Miscellaneous, Eradication, Propaganda, Schemes, Assistance etc.

¹¹² ZNA AB 2/77, 'From CS to DMS, 7 August 1932', Conference of Health Officers at Cape Town, 1932.

¹¹³ ZNA NW 12/1, 'Mosquitoes', *Mwongozi*, 6 August 1948, p. 5.

places".¹¹⁴ The anti-mosquito elimination projects done by the Health Office in 1953 is summarized below.¹¹⁵

Breeding Places Found

	Zanzibar Township	Protective belt outside township
Anopheles	52	55
Aedes	226	116
Culex	241	215

Adult Mosquitoes caught in Control Stations

	Zanzibar Township	Protective belt outside township
Anopheles	-	16
Aedes	2	34
Culex	2702	427

By 1955, the Aedes Index as ascertained by house-to-house searching in the town of Zanzibar remained at the low figure of 0.04 per cent.¹¹⁶

In the early-1950s, worldwide campaigns to control insects were mobilized. The ocean-going ships extended insect-borne diseases around the world leading the Italian government, for example, to propose that the World Health Organisation formulate legislation to compel ships to undergo fumigation if they touched Sardinia which was regarded as mosquito free.¹¹⁷ In 1952, the Insect Research Scheme was operated at the Livingstone House in Zanzibar. A letter that was written by the head of the scheme to the DMS shows that Zanzibar was affected by several types of insects which were arriving in Zanzibar annually.

¹¹⁴ ZNA BA 7/22, Medical and Sanitary Report for the Year ended 31st December, 1953, p. 10.

¹¹⁵ ZNA BA 7/22, Medical and Sanitary Report for the Year ended 31st December, 1953, p. 11.

¹¹⁶ ZNA BA 7/46, Health Department- Annual Report 1955, p.13.

¹¹⁷ ZNA AJ 19/6, 'From Deputy Chief Medical Officer, London to Zanzibar Government, 22 May 1952', Insect Borne Diseases.

The head mentioned that dhows were greater sources of danger than large ocean going vessels, especially as far mosquitoes were concerned. Small boats which travelled between Zanzibar and mainland of Tanganyika were a source of danger. The spraying of ships and dhows with DDT was aimed to control all species of diptera, fleas, bugs, beetles and ticks.¹¹⁸

Flies were still disturbing urban dwellers despite all these measures. In 1958, in *Mwongozi*, Mohamed Suleiman Masoud of Unguja wrote a poem 'Jamani Nzi Wamezidi Visiwani' (Flies are extreme in our islands). The author cites many localities in Zanzibar where flies bred in quantities.¹¹⁹ Two weeks later, in the same newspaper, an anonymous urban dweller wrote that 'Mainzi Yanaendelea Kuzaliana', which means 'Flies are increasingly breeding'. The author asked the Department of Public Health (DPH) to take immediate action to stop more flies.¹²⁰ On 19 December, 1958, a poem which was written by 'Mkamanda' also focused on the question of increase of flies. The author asked the government to provide ways to eliminate flies which were breeding mainly at the town's market area.¹²¹

On January 1962, the Zanzibar Municipal Council came into existence and the former Township Council was dissolved. Several local health services were handed over to the Municipality. These were street cleaning, refuse collection and disposal, maintenance and cleaning of public conveniences, and maintenance of stormwater drains excluding sewers and underground drains. The remaining public health services, such as port and airport health control, communicable disease control, food hygiene, abatement of nuisance, inspection of all registered premises, water sampling, and other smaller matters such as arrangements for the burial of the destitute and the care of certain graveyards and open plots of land belonging to the government continued to be administered by the Central

¹¹⁸ ZNA AJ 19/6, 'From Insect Research Scheme, Livingstone House, Zanzibar to DMS, 26 May, 1952', Insect Borne Diseases.

¹¹⁹ ZNA NW 12/12, 'Jamani Nzi Wamezidi Visiwani', *Mwongozi*, 2 May 1958, p. 2.

¹²⁰ ZNA NW 12/12, 'Mainzi Yanaendelea Kuzaliana', *Mwongozi*, 16 May 1958, p. 4.

¹²¹ ZNA NW 12/12, 'Tumechoka Pungo Hizo Tupeni Dawa ya Nzi (means: We are tired on winnowing, give us proper insecticide)', *Mwongozi*, 2 May 1958, p. 5.

Government.¹²² To ensure that housing remained part of health matters, the Ministry for Health and Housing was introduced in 1961 under the Caretaker Government. All housing issues continued to be regarded as part of health issues.

Alongside these interventions, 'health education' became part and parcel of the sanitary measures in the Zanzibar Town in particular and of the islands in general. Health education films were screened, health-related topics were publicized, and museum exhibitions were mounted to alert people on the matter of diseases and health. From as early as 1913, the Health Department in cooperation with the Department of Education had shown interest in introducing health-related topics in Government schools. The Director of the Health Department once reported that:

The extension of education and the habits learnt in the Government School must tell in the long run. Whilst on this subject, I would like to see the senior boys in the Government School actually receive instruction in elementary hygiene. No one can deny that even a slight knowledge of the principle of sanitation is just as valuable as a deep knowledge of arithmetic.¹²³

From 1915, Dr. Mansfield-Aders, the Government bacteriologist, and other Department of Health staff gave 'Health Lectures' to Sisters from the French Mission and the staff of the Universities Missions for Central Africa, and to teachers and students in government schools.¹²⁴ In addition, throughout the 1930s and 1940s, lectures on matters of housing were given by Zanzibar health and medical officers. Dr. S.W.T Lee, MOH from 1934 to 1938, played an active role in housing design and neighbourhood layout. His lectures also included health-related topics on diet, disease avoidance, and maternity and child welfare.¹²⁵ Lee believed that "it is rather by personal talk, personal example ... that education of the African

¹²² ZNA AJ 15/134, 'Annual Report of the Health Department for the year 1962', Annual Report for Health Department 1962-72 and ZNA AJ 15/379, Transfer of Health Services to Zanzibar Municipal Council.

¹²³ ZNA BA 7/2, Public Health Report for the Year 1913, p. 63.

¹²⁴ ZNA BA 7/4, Report on the Medical Division for the Year 1915, p. 86.

¹²⁵ ZNA BA 7/14, Annual Report Department of Health for 1935', p. 41; ZNA BA 7/15, Annual Report Department of Health 1936, p. 30; ZNA AB 39/203, Town Improvement Scheme, 1922-1931 and ZNA BA 7/16, Annual Report Department of Health 1937, p. 30.

has to proceed".¹²⁶ In 1938, the Health Department organized a permanent exhibition at the Zanzibar Museum. The exhibitions were aimed at imparting knowledge on better housing and making people aware of the idea of public health.¹²⁷

'Hygiene' was introduced as a subject in Government schools and the Teachers' Training College in 1944. The syllabus included anatomy and physiology, together with description, and the transmission and prevention, of some common diseases such as smallpox, plague, bilharzia, filariasis and trypanosomiasis. The syllabus also included topics on Sanitation and Hygiene.¹²⁸ In addition, in 1954 the Department of Health in Zanzibar planned to translate and circulate in schools a book entitled, 'Health Education for Asians'. It was written in Gujarati and Hindustani by Indian doctors from Kampala and intended mainly for Asian women. The topics which were included in this book were personal hygiene, food, ante-natal and post-natal care, family planning, child care, communicable diseases and domestic and community hygiene.¹²⁹ The publication of the book was however halted because of lack of funds.

From the mid-1920s, the Colonial Office began to explore possibilities of using films and radio in Africa to impart knowledge and information. In 1929, the Health Department in Nigeria began showing films on health-related subjects under the directives of W. Seller, a British film maker who was supported by the Colonial Development Fund (CDF). Sellers used "the magic lantern and health propaganda films obtained from England for his work with the Medical Health Services".¹³⁰ In Zanzibar and other British colonies in East Africa,

¹²⁶ ZNA BA 7/14, Annual Report Department of Health, 1935, p. 49.

¹²⁷ Myers, 'Reconstructing Ng'ambo', p. 123. Dr. S. W. T Lee was a Museum Board member in 1937. See, ZNA AB 86/62, Dr. S. W. T. Lee, Senior Medical Officer.

¹²⁸ ZNA AJ 8/21, 'From the Director of Education (DE) to DMS, 31 January 1944', Hygiene for Teachers Syllabus.

¹²⁹ ZNA AJ 8/3, 'From DMS to DE, 5 May 1954', Hygiene Subjects and Health Education, 1920-1962.

¹³⁰ Rosaleen Smyth, 'The Development of British Colonial Film Policy, 1927-1939, with Special Reference to East and Central Africa', *Journal of African History*, 20, 3 (1979), pp. 437-450, 437 and 440. See also Nicholas Reeves, 'Film Propaganda and Its Audience: The Example of Britain's Official Films during the First World War', *Journal of Contemporary History*, 18, 3, *Historian and Movies: The State of Art: Part I* (July 1983), pp. 436-494.

instructional cinemas were introduced in 1934. The Bantu Educational Kinema Experiment (BEKE) sponsored by Colonial Office produced films on agriculture and health.¹³¹

In 1947, the Zanzibar colonial government, under the auspices of the ‘Ten Years Development Plan’, had managed to build a ‘Civic Centre’ at Rahaleo, Ng’ambo, where films on health issues were screened. Bi Rehema Juma and Ali Hussein of Rahaleo who are today in their mid-70s remember that people in Ng’ambo used to attend at the Civic Centre to watch the movies on health-related matters in the 1960s. They recall how the colonial government used radio to attract people to Rahaleo Civic Centre. *Shebas* visited people and encouraged them to attend the shows.¹³² I asked them how people reacted to these films. They both replied that some people, especially those who were literate, loved the films as they were educative. But people who were illiterate mostly “did not really understand stuff like mosquitoes and the breeding cycle of flies”.¹³³ Unfortunately the records do not say much about how people responded to these health films.

Megan Vaughan in her discussion of the health related films that were screened in many British colonies in Central and East Africa comments that the films portrayed Africans as ignorant, stressed cultural differences, and were intended to make people learn new hygiene methods in an acceptance of European behaviour and norms.¹³⁴ These particular films may not have been shown in cosmopolitan Zanzibar. In an account of cinema history in mid-twentieth century urban Zanzibar, Laura Fair makes the point that despite the introduction of American films to make people attracted to western life and modernity, audiences preferred the more familiar Indian and Egyptian films which had been showing in Zanzibar since the early-1920s.¹³⁵ Both acceptance and rejection of various western ideas on life – or on medicine – were common throughout the colonial period.

¹³¹ Andrew Roberts, ‘Africa on Film to 1940’, *History in Africa*, 14 (1987), pp. 189-227, p. 201.

¹³² Interview with Bi Rehema Juma and Ali Hussein at Rahaleo on 12 October, 2007.

¹³³ Interview with Bi Rehema Juma and Ali Hussein at Rahaleo on 12 October, 2007.

¹³⁴ Megan Vaughan, *Curing their Ills: Colonial Power and African Illness* (London: Polity Press, 1991), pp. 186, 192 and 197.

The Zanzibar colonial authorities decided to focus their attention on young students in the government schools. In the 1950s, the Zanzibar Department of Health launched a series of talks on 'Health in Africa' commissioned by The Royal African Society, which organized monthly discussions on health issues on Africa conducted by public health officials. The talks were mainly attended by government staff. The Department of Education encouraged teachers to attend these talks in order to pass the knowledge on to their students. Also, films on health matters were obtained from the Health Education Office in Nairobi, which as the office involved in supplying film strips, broadcast material and literature on health for educational purposes. In 1958, some of these films were shown at the Agakhan Secondary School, on themes such as: 'the house fly', 'lice and disease', 'rats and plague', 'food and health', 'carbohydrates and the calorie', 'fats and proteins', 'vitamins and mineral salts' and 'clean milk'.¹³⁶

In 1961, the US Information Services in Nairobi supplied a series of educational films which were seen in Zanzibar by school children and townspeople, topics such as 'Infant Care and Feeding', 'Insects as Carrier of Disease', and 'Winged Scourge'- a Walt Disney cartoon showing how malaria was carried by the anopheles mosquito and how it can be prevented.¹³⁷ These educational health films intended to alert people to health issues and the dangers of diseases. Health instruction lessons in schools helped to reinforce their messages.

“Ng’ambo Still Groans”? Anti-Malarial Programmes, 1955-1963

This heading appeared in *Mwongozi* of 31 May 1957 in which the editor draws the attention of the public to the way people in Ng’ambo were still threatened by mosquitoes and flies. In the previous month, Ali Muhsin, a member of the Legislative Council representing the Arab Association, had requested the government to take immediate action on the increase of mosquitoes and flies in Ng’ambo and at Funguni. In reply, the Director of Public Health

¹³⁵ Laura Fair, “‘Hollywood Hegemony’? Hardly: Audience Preferences in Zanzibar, 1950s-1970s’, *ZIFF Journal* 1, 1 (2004), pp. 52-58.

¹³⁶ ZNA AJ 8/3, 'Educational Films, 1948-1960', Hygiene Subjects & Health Education.

¹³⁷ ZNA AJ 15/237, 'Educational Films, 1950- 1961', Educational Films.

attributed the increase breeding of mosquitoes to “weather conditions and to the non-cooperative attitude of the population”.¹³⁸ A few days later, however, new anti-malarial programmes were inaugurated, assisted by the World Health Organization (WHO), and the United Nations International Children’s Economic Fund (UNICEF).

By 1955, malaria was still a problem in Zanzibar despite the use of a variety of methods adopted to eliminate the disease. Reviewing a ‘health development programme’ for the Protectorate in 1955, the medical and health authorities considered the eradication of malaria to be of prime importance.¹³⁹ In that year, £5800 was voted for malaria control work. Also, it was planned early in 1956 to introduce a new method of control for the Town of Zanzibar in the creation, through spraying, of a *cordon sanitaire* across the base of the triangular promontory on which the town was situated, using a residual insecticide.¹⁴⁰

In 1948, the World Health Organisation was formed. It took over the malaria projects that had been carried on by the League of Nation. In 1950, WHO convened meeting at Kampala, Uganda aiming to introduce anti-malaria campaigns in Africa. In Kampala, DDT and chloroquine was considered as important for the eradication campaigns. In 1955, the WHO launched the World Health Assembly and adopted the ‘Global Malaria Eradication Campaign’ to be introduced in many areas of the world.¹⁴¹ Beginning in 1957, technical advisors and experts on malaria were posted in many countries including Zanzibar. UNICEF was also involved in the programmes in supplying funds and technical assistances. According to Michael Worboys, these WHO programmes “drew heavily on post-second World War optimism about the power of science and technology, and its ability to accelerate social development”.¹⁴² As Randal Packard shows however these WHO-UNICEF programmes

¹³⁸ ZNA NW 12/3, ‘Ng’ambo Still Groans’, *Mwongozi*, 31 May 1957, p. 8.

¹³⁹ ZNA AO 1/288, ‘From DMS to CS, 26 February 1956’, Health Department (General)

¹⁴⁰ ZNA BA 7/46, Health Department Annual Report 1955, p. 14.

¹⁴¹ Richard Tren and Roger Bate, *Malaria and the DDT* (Institute of Economic Affairs: London, 2001), p. 37.

¹⁴² Michael Worboys, ‘The Spread of Western Medicine’, in Irvine Loudon (ed.), *Western Medicine Illustrated History* (Oxford and New York: Oxford University Press, 1997), p. 259, pp. 249-263.

failed to address the links between health services and social and economic development, and the WHO defined health in very broad terms.¹⁴³

In Zanzibar, the WHO-UNICEF malaria control programmes began in 1957. After arriving in Zanzibar, the WHO experts conducted researches on the extent of malaria in the colony. A medical officer from the Zanzibar Department of Health also attended a six week malaria course at the Amani Research Centre, Tanga, in Tanganyika, under the auspices of the WHO.¹⁴⁴ The WHO malaria report on Zanzibar shows that the annual migration of about 17,000 clove pickers from the mainland of Tanganyika, the arrival of over 1000 dhows from Arabia and the importation of mangrove poles from Kwale Island in Rufiji Delta had led to the expansion of malaria in Zanzibar.¹⁴⁵

In 1958, in the first cycle DDT was sprayed in all houses in urban areas except Stone Town, as that area was free from mosquitoes owing to the earlier efforts made by the Zanzibar Government. Stone Town was mostly occupied by Europeans, wealthy and middle class Arabs, and Indians. Before the commencement of spraying works, *Mudir* and *Shebas* informed the populace about the project. Also information was delivered through radio, and lectures were given at dispensaries and schools. Handouts in Kiswahili were distributed in schools and to literate persons. A total of 80,068 houses were sprayed in Unguja and Pemba islands, of which 8,545 were in Ng'ambo. Also, 560 blood smears were taken from infants.¹⁴⁶

The local people were reported by the Director of the Health Department to be cooperative. They had been requested in advance to remove their household effects from their houses

¹⁴³ Randall Packard, 'Post Colonial Medicine', in Roger Cooter and John Pickstone (eds.), *Medicine in the Twentieth Century* (Amsterdam: Harwood Academic Publishers, 2000), pp. 97-112, p. 104.

¹⁴⁴ ZNA BA 7/48, Health Department Annual Report 1955, p. 5; Amani Malaria Research Center was established at Tanga in north-east Tanganyika in the early-1900s during the German rule. It concentrated much in doing researches on plants and soil. Cinchona was introduced from Java and was planted in large number. For more information see Dorothy Smith, 'Scientific Research Centers in Africa', *African Studies Bulletin*, 10, 3 (December, 1967), pp. 20-47, p. 24 and Ann Beck, 'Medicine and Society in Tanganyika, 1890-1930: A Historical Inquiry', *The American Philosophical Society*, 67 (1977), p. 34.

¹⁴⁵ ZNA AJ 22/21, 'Malaria Project, 1957-1963', WHO Malaria Project.

¹⁴⁶ ZNA AJ 22/21, 'Malaria Project, 1957-1963', WHO Malaria Project.

and make ready a bucket of water for use by the spray teams, and in most instances they were said to have complied with the instructions. According to the Director of the Public Health Department, the support of the people in both urban and rural areas saved much time and made the spraying operation easier. It was also reported that when resistance was encountered *Sheba* were called in to assist, while the more stubborn ‘cases’, of which there were reported to be very few, were usually reconciled after a talk from the officer in charge and the local *Mudir*.¹⁴⁷

The second cycle began early in 1959 in Ng’ambo. Before it began, the Town *Mudir* gave a radio address urging people to cooperate with the spraying team. Usually, meetings were organized to inform people of the work but because of *Ramadhan*, the fasting period in the Muslim calendar, radio was used instead.¹⁴⁸ It was reported in the Annual Report of Health Department in 1959 that the malaria parasite survey of infants born in Unguja Island during the first six months after the area in which they lived had been sprayed showed that of 111 children examined only 4 had been found with malaria parasites. These children were reported to have spent some time outside the island. Between January and April in 1959, 182 were examined for malaria parasites in rural areas. All of them were founded to have no malaria parasites in their blood.¹⁴⁹

Again it was reported that, “On the whole the cooperation of the public had been excellent, and only very few definite refusals to allow the team to enter houses were encountered”.¹⁵⁰

The Director of the Health Department reported the success of the programme by saying that:

It has already been shown that the spraying campaign has been a success, and many children’s lives, which normally would have been lost due to malaria, must have already been saved. It is Government’s aim to eradicate this disease from the Protectorate and there is every indication at present that this

¹⁴⁷ ZNA BA 7/49, Health Department Annual Report 1958, p. 18; ZNA AJ 22/21, WHO Malaria Project; *Zanzibar Voice*, ‘WHO Malaria campaigns’, 8 June 1958, p. 5.

¹⁴⁸ ZNA AK 13/49, ‘From DMS to CS, 10 May 1959’, Medical: Public Health Sanitation.

¹⁴⁹ ZNA BA 7/38, Health Department Annual Report 1959, p. 20.

¹⁵⁰ ZNA AK 13/49, ‘From DMS to CS, 10 May 1959’, Medical: Public Health Sanitation.

will be possible. But it can only be achieved if the public continue to cooperate whole-heartedly as they have done up to now by allowing their houses to be sprayed again as last year.¹⁵¹

Some problems were noticed during the campaigns. People reported to the Public Health Department (PHD) that the insecticides caused an increase of bedbugs and other insects in their houses. The Director of Medical Services had once reported that:

Some people had complained that the incidence of insect pests, such as bedbugs, fleas etc has increased since the spraying took place last year. It should be understood that the insecticide used for killing the mosquito that transmits malaria, is capable also of killing any insect pests and for a period of some weeks after the spraying these pests tend to disappear, however, these bed bugs, fleas etc, live in furniture and bedding and after a while, commence breeding and again trouble the public... it must be emphasized that the spraying cannot, and does not in fact, bring these pests. They are there already, and it must be accepted that such insects as bed-bugs, etc, thrive only in unclean conditions.¹⁵²

In October 1959, Dr. N. G. Gratz, WHO Entomologist, came to Zanzibar as a consultant to study the reported increase of bed bugs and other insects after the anti-malaria spraying campaign. Since the Stone Town area of Zanzibar was the only unsprayed area available for use as a control, the WHO expert found that it was possible to make accurate observations of the relative density of bed bugs before and after spraying. Both in unsprayed Stone Town and sprayed Ng'ambo and rural areas, the infestation of bed bugs varied widely from house to house, and although none of the infestations seen in the Stone Town were as dense as some of those in rural areas they appeared to be quite as frequently encountered.¹⁵³

Amid these anti-malaria campaigns the Public Health (Prevention of Mosquito-Breeding) (Amendment) Rules, 1960 were introduced. The Rules:

(g)ave access to Medical Officer or any authorized person to enter into or upon any premises with or without assistant or workmen for the purposes of

¹⁵¹ ZNA AK 13/49, 'From DMS to CS, 10 May 1959', Medical: Public Health Sanitation.

¹⁵² ZNA AK 13/49, 'From DMS to CS, 10 May 1959', Medical: Public Health Sanitation.

¹⁵³ ZNA BA 7/38, Health Department, Annual Report 1959, p. 2.

spraying such premises. Any person who refuses to allow any MOH ... to enter into or upon his premises in accordance with the provisions of subsection (1) shall be guilty of an offence and shall be liable on conviction thereof to a fine not exceeding three hundred shillings or to imprisonment for a term not exceeding 3 months or both such fine and imprisonment.¹⁵⁴

Meanwhile, the third cycle commenced in May 1960 and was completed in October that year. A change of insecticide from DDT to Dieldrin was made.¹⁵⁵ Afterwards, in 1961, Dr. de Meillon and Dr. Maffi, the WHO malaria advisers, decided that the project should proceed to the next stage of complete eradication, and a new 'Plan of Operations' was drawn up on May 1961.¹⁵⁶ The fourth cycle was accordingly begun in November 1961 using Dieldrin in Unguja Island, and in Pemba in December but using D.D.T as the supply of Dieldrin was not enough to cover the whole island. In 1961, UNICEF allocated \$75,000 for the Zanzibar Malaria Eradication Project for purchasing supplies and equipments.

Generally, the 1958-61 malarial sprayer projects were very successful in reducing malarial mortality, especially of children under five years old. According to the 1960 Annual Report of the Department of Health, the number of cases of malaria treated by medical units in Zanzibar fell from 23,548 to 12,609 in 1959 and in 1960 the numbers were further reduced to 7,823. The decline in the number of cases, according to the Director of Public Health Department, was clearly connected with the Malaria Eradication Campaign. The statistics of cases which were reported in these medical units were the results of spleen and parasites surveys.¹⁵⁷

The 1960 Department of Health Annual Report shows that in the early infant parasite survey in Zanzibar Island which was completed by the end of November children less than 11

¹⁵⁴ ZNA AJ 15/141, 'Infectious Diseases Order, 1958', The Public Health (Declaration of Infectious Diseases) Order, 1958.

¹⁵⁵ ZNA AJ 15/134, 'Annual Report of Health Department 1962', Annual Report of Health Department 1962-72; Dieldrin was started to be produced from 1948 in Europe and later it was banned in 1970 as it was toxic to human, animal and plants.

¹⁵⁶ ZNA BA 7/39, Health Department Annual Report 1960, pp. 2-3.

¹⁵⁷ ZNA BA 7/39, Health Department Annual Report 1960, p. 25.

months produced only eight positive cases among over 1000 examined, with an overall rate of 0.7 percent. Among children aged 12 to 23 months, an overall rate of 2 percent was found among 833 cases seen.¹⁵⁸ In 1961, a parasite survey done by WHO experts showed that in both Zanzibar Town and rural areas malaria transmission among infants was at a very low level. At dispensaries, infestation of infants below one year of age was between 1 percent and nil (January – April) and rising to 4 percent in August 1961. Among the 6 to 10 age group the rate averaged 3 percent in Zanzibar Town and 5 percent in the rural areas. The rate for the age group 20 years and over was approximately 1 percent. However, after extended rain an increase was observed in July 1961, and following the high rainfall at the end of the year a further increase occurred.¹⁵⁹

The anti-colonial struggles in Zanzibar which arose from the mid-1950s also had an impact on the anti-malaria programmes. Political conflicts between rival political parties were reflected during the 1961 malaria spraying activities. The Afro-Shirazi Party (ASP) and Zanzibar Nationalist Party (ZNP) members fought one another in the June election of 1961, with a total death toll of 68 and 381 wounded. Houses were burnt, *shambas* were destroyed and domestic animals were killed, and women were among those who were convicted.¹⁶⁰ Some of the houses at Fuoni were opened and sprayed by force while the owners were absent during the sprayer works. This led to damage of food and properties. It was reported by the medical officers that some of workers in the sprayer teams damaged properties if they found that the owner of the house was a member of the rival political party.¹⁶¹ Those people who were victimized during the sprayer works put complaints in writing to the Senior Commissioner's office. Affected persons listed in the report of the Provincial Administration included Khalid Thney, Salim Mohamed, Bakari Ali, Humud Nassor, Ali Suwedi and Mgeni

¹⁵⁸ ZNA BA 7/38, Health Department - Annual Report 1959, p. 20 and ZNA BA 7/39, Health Department - Annual Report 1960, p. 25.

¹⁵⁹ ZNA AJ 15/134, 'Annual Report of Health Department 1962', Annual Report of Health Department, 1962-72.

¹⁶⁰ Amina Issa, A History of Women's Participation in the Struggles for the Independence of Zanzibar, 1951-1964 (Unpublished M.A. Thesis, University of Dar es Salaam, 2004), p. 125

¹⁶¹ ZNA AK 13/49, 'Report on Malaria Campaigns, 1960', Medical: Public Health Sanitation.

Nassor. All of them were reported to be Arabs and supporters of the Zanzibar National Party (ZNP).¹⁶² By the end of 1963, Ng'ambo was not groaned. Mosquitoes and flies' infestations had decreased

Conclusion: Growing Popularity of Health Services

This chapter has shown that from the early-1900s, the colonial government in Zanzibar through its Health and Medical Department staff introduced several measures to control malaria in Zanzibar. The formation of the 'Anti-Malaria Brigade Unit in 1907 spearheaded the programmes. The Unit employed a large number of workers who oiled holes, pits, water tanks, swamps and rivers. Drainage was constructed, mainly to accommodate rain water flow. By the 1930s, some of the swamps had dried out. In 1934, Department of Health workers started to fill the Creek. The work was finished in 1963.

From 1913 onwards, health and medical workers distributed quinine in schools and government offices and through Headmasters, *Mashebas* and *Mudirs*. Quinine was also sold through the Post Office. In 1943, quinine was replaced by Paludrine which began to be manufactured at that time. Moreover, from the early decades of the twentieth century, demolition and construction of new houses took place in urban Zanzibar to control malaria, cholera and plague. Cleaning of streets and clearing of garbage were undertaken by Health Department staff. Health education and health related measures were introduced from the early twentieth century. At the same time, after the Second World War, DDT was sprayed in houses. From 1957, WHO and UNICEF funded the anti-malarial programmes in Zanzibar. The programme was successful, as infant mortality from malaria infections decreased.

Throughout the twentieth century, the Zanzibar colonial government was faced with financial problems. Many of its plans were never fulfilled, which led to deterioration of facilities. In the face of weak government capacity, the success of many social services programmes in colonial Africa owed much to people's willingness to accept the services.

¹⁶² ZNA AK 13/49, 'Report on Malaria Campaigns, 1960', Medical: Public Health Sanitation.

People in Zanzibar were ready to accept those measures which did not interfere with their cultural and religious beliefs. Sometimes they accepted measures which were enforced by the government since they had little power to resist the government.

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CHAPTER SIX: THE DEVELOPMENT OF MEDICAL SERVICES, 1930-1963

Government, Citizens and Biomedicine

In this chapter, I examine the development of medical services in urban Zanzibar between 1930 and 1963. I have divided the chapter into four main sections. The first section deals with the contribution made by medical philanthropists, community leaders and individual local agencies, such as Indian philanthropists and the affluent Omani Arab plantation owners who played a major role in the establishment of hospitals and in educating their children in medical fields. Other local agencies included women's networks that to a large extent, made Western medicine acceptable to women of urban Zanzibar. Attention is also given to the part played by cultural brokers and other intermediaries such as African, Arab and Indian medical doctors, nurses, midwives and dispensers. The role of newspapers in promoting the expansion of medical services will also be investigated. The second section will analyze the development of medical services at the Leprosy Hospital. The main focus is to consider medical and scientific developments relating to leprosy in Zanzibar and how local people reacted to such developments. The third section of the chapter considers the Mental Hospital in urban Zanzibar during this period. Here, I examine the role played by both the government and the urban population in promoting what would now be called mental health services. The last section looks at the role of political parties and leaders in the expansion of Western medicine during the anti-colonial struggles from the 1950s onwards. My main purpose here is to illuminate how from the 1930s onward the extension of Western medicine in Zanzibar was achieved partly by the colonial government and partly by volunteer participation on the part of various local agencies and cultural brokers.

“God, don’t let us going to hospital”? The Popularization of Medical Services

The sub-title of this section is from a 1950 issue of *Mwongozi* (the Path), a local weekly newspaper founded in 1942.¹ An Anonymous author was unhappy about the long queues at the Government Hospital for Natives and Subordinate (GHNS - later, in 1955, renamed the Hassanali Karimjee Jivanjee Hospital (HKJH)), and in this newspaper requests the government to extend the facilities.² From the early-1930s, Western medical services in Zanzibar were extended by the local agencies such as community and political leaders and through women’s networks. These leaders pressed the colonial government to extend the facilities. At the same time they encouraged their community members to use the facilities. Indians used their enormous wealth to fund medical institutions and affluent Arabs furthered medical education for their children.

In colonial Zanzibar in the early-1900s, Muslim *Wakf* funds began to be used to finance the establishment of medical services. In 1913, *Wakf* money was utilized to build the School Clinic at Vuga, adjacent to the Medical and Public Health Department buildings. Again in 1923, the *Wakf* Commission provided Rs. 30,000 to the government for the construction of the Mwembeladu Maternity Home. The funds for the building of the Maternity Home were drawn from money left by the late Jafferbhoy Tharia Topan, a Shiite Indian, for the construction and maintenance of a Sunni mosque in Zanzibar.³ Since the 1830s, Sunni, Ibadhi and Shia Muslim merchants and landowners donated money for the maintenance of mosques irrespective of sects. From the late-1890s, Shia Muslim merchants started to donate funds for the construction of hospitals. Some Muslim Indians, however, fought bitterly against the use of mosque funds for the construction of the Maternity Home. The use of

¹ *Mwongozi* was founded by Ahmed Seif Kharusy and Masoud Mohamed Riamy, educated Zanzibari of Omani descendants in favour of the Arab Association. p. 223; Antony Clayton, *The Zanzibar Revolution and Its Aftermath* (London: Hurst and Company, 1981), p. 38; For further information on the history of newspapers during colonial period see Michael Lofchie, *Zanzibar: Background to Revolution* (Princeton: Princeton University Press, 1965) and Maryam Hamdan, *Zanzibar Newspapers, 1902 to 1974* (Diploma Thesis, Tanzania School of Journalism, 1981).

² Zanzibar National Archives (ZNA) NW 12/3, ‘Tuepushe Rahmani na Kwenda Hospital’, *Mwongozi*, 17 November 1950, p. 2.

³ ZNA AB 2/258, ‘History of Maternity Services in Zanzibar, 1917-1950’, Midwifery Services. Jafferbhoy Tharia Topan was a son of Tharia Topan, a Khoja Indian magnate who built the first private hospital in 1887.

Wakf funds to support government social services came to an end in 1930. The *Wakf* Commissioner stated that “it was recognized some years ago that any attempt on the part of Government to incorporate *Wakf* funds in the Protectorate balance sheet or make use of *Wakf* funds for the purposes of reducing a Protectorate overdraft would be liable to cause a serious religious disturbance and was highly undesirable”.⁴

While the Maternity Home was only one issue with a larger social and political contretemps, individual Muslims nonetheless continued to fund medical services throughout colonial period. Since 1905, after the formation of the *Wakf* Commission, a growing tension had developed between the Commission and Muslims in Zanzibar as the government decided to introduce ground rents on the former *Wakf* land in the possession of Indian and Omani Arab landlords. Other *Wakf* lands were owned by Sunni Muslim Africans. According to Laura Fair, since the mid-nineteenth century, former *Wakf* land under Omani Arabs landlords in Ng’ambo had been given to manumitted slaves. From the late-1890s, some of this land began to come into the ownership of Indian landlords, and in the same period the colonial government enforced hut and ground rents to force people into the wage labour economy. By 1928 the hostility between the urban poor and the government had nurtured the “Ground Rent Strike”.⁵

From the early decades of the twentieth century, the Medical and Public Health departments in Zanzibar provided for advisory voices on medical and health services following the inauguration of the Legislative Council in 1927. Most of the local bodies were based on racial representation and were composed of Indian and Arab merchants and landowners. Members of the African community were appointed in these bodies only after the Second World War, when the nationalist movements grew. The Central Health Board, inaugurated in 1931, was appointed under the Public Health Decree of 1929 which stated that “it shall be the duty of the Board to advise the Director of Medical Services on questions affecting the

⁴ ZNA HD 10/6, ‘Miscellaneous, Auditors, Recommendations for Account’, *Wakf* Commission, 1905-1950.

⁵ Laura Fair, *Pastimes and Politics: Culture, Community, and Identity in Post- Abolition Urban Zanzibar, 1890–1945* (Oxford: James Currey, 2001), pp. 133-134 and 148.

public health and it shall be incumbent to every member to bring before the Board any matter within the scope of the provisions of this decree”.⁶

Dr. Copland, a Senior Medical Officer (SMO) of the government medical services, together with three members from the Arab Association and two members from the Indian Association became the Board members. In 1932, the prominent Indian merchant, Tayabali Karimjee became one among the Board members.⁷ Karimjee’s contribution to the expansion of medical works was enormous. In 1946, he spent large amounts of money for the extension of the ‘Asiatic’ wing. In 1952, he contributed £62,000 for the expansion of the GHNS. He also donated £100,000 for the building of the Zenubai Karimjee Hospital (ZKH), which was a Tuberculosis Sanatorium.⁸ The involvement of these Association leaders in the Health Boards can be seen as philanthropic, but also as politically motivated. These leaders wanted to secure better positions in the administration of the islands. According to Zinnat Bader, “the only way for them [Indians] to survive under the racially segregated colonial system would be to adhere to the ‘middle position’ in commerce, industry and administration”.⁹

My research shows that Association leaders played a major role in the expansion of medical services in colonial Zanzibar. Beginning in the early decades of the twentieth century, the British government in Zanzibar had encouraged the formation of ethnic or communal Associations based on three racial groupings: African, Indian, and Arab. Eventually there were twenty-three of these Associations. Abdul Sheriff observes that “most of these associations contained a cross-section of classes dominated by the most powerful

⁶ ZNA AJ 2/13, ‘From the Chief Secretary (CS), Zanzibar to the Director of Medical and Sanitary Services (DMSS), 12 May 1931’, Central Board of Health.

⁷ ZNA AJ 2/13, ‘From CS to DMSS, 12 May 1931’, Central Board of Health.

⁸ ZNA AJ 4/70, ‘Opening of HKJH’, Donation for the Construction of New Hospital Zanzibar 60,000-1,200,000 and New T.B. Sanatorium Dole 5,000/, 100,000/ by Mr. Tayabali Karimjee.

⁹ Zinnat Bader, ‘The Contradictions of Merchant Capital, 1840-1939’, in A. Sheriff and E. Ferguson (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991), p. 178.

interests”.¹⁰ These community leaders pressed the colonial authorities, including the Medical Department, to extend provision of facilities so that services would reach all community members. They also spearheaded medical development in colonial urban Zanzibar by providing medical facilities to serve their community members. As two examples: the Nasur Nur Mohamed Dispensary and the Free Hindu Dispensary were established in 1900 and 1920 respectively for the Ithnasheri and for Hindu communities in the town. The Ismailis and the Bohoras provided facilities to their own community people. These dispensaries employed the services of the qualified Indian doctors.¹¹

All through the 1930s, there was demand for a larger hospital in Zanzibar Town. In 1935, the Indian National Association (INA) pressed the colonial government to expand the ‘Asiatic’ (mainly for Indians) wing of the hospital. In 1937, *Samachar*, a newspaper which mostly focused on Indian affairs in Zanzibar, also requested the colonial government to expand the ‘Asiatic’ section at the GHNS.¹² In 1940, the editor reiterated that “more nurses were needed for the ‘Asiatic’ wing”. In 1941, Mr. Ibrahim Kassam, Secretary of INA and editor of the *Zanzibar Voice*, another newspaper representing Indian merchant class interests, urged the Medical Department likewise to expand the ‘Asiatic’ wing of the Government Hospital. He insisted on the need for “a separate ward for Asiatics with Asiatics and Indian nurses trained in India”.¹³ The medical authorities replied that “the ‘Asiatic’ wing of the hospital has been put under the care of an Indian staff nurse trained in India... Every effort

¹⁰ For instance, Arabs were split between those who hailed from Oman and those who hailed from Yemen. People from Yemen were also divided between those who came from the coast and those who came from the mainland. Indians were separated according to religion, caste, sect and linguistic groups. There were associations that represented Africans among the indigenous population and others representing people from the mainland. Africans from the mainland were grouped according to their ‘tribal’ affiliations. See Abdul Sheriff, ‘Conclusion’, Abdul Sheriff and E. Ferguson (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991), p. 255.

¹¹ Interview with Mr. N. Harilal, a senior Hindu leader in Zanzibar at Vuga, 20 December 2005.

¹² ZNA NW 14/4, ‘Asiatic Wing’, *Samachar*, 6 June 1937 and 26 July 1937, the editor of *Samachar* had proposed for the introduction of an Asiatic wing and nurses in the Government Hospital. For the whole colonial period in Zanzibar, the term ‘Asiatic’ was specifically used to mean Indians.

¹³ ZNA AJ 3/20, ‘Enquiries from the LEGCO’, Committee of Enquiry on Zanzibar Hospitals Accommodation and Treatment, etc., 1930-1940.

has been made to attract and to train Indians for this work, but without success".¹⁴ As already noted, it was in 1946 that the 'Asiatic' wing was erected, enabled by funds donated by Sir Tayabali Hassanali Karimjee.¹⁵

From the 1930s onwards, there were also complaints from the Arab Association about the inadequacy of medical facilities. This was a time when members of the Zanzibari Arab community were becoming increasingly politicized, unhappy with their position in an economic environment where wealthy Indians were now dominant. In 1927, the colonial authorities formed the Clove Growers' Association to help Arab clove planters regain their position. This caused a serious conflict between the Arab landowning class and the Indian merchants during the interwar periods.¹⁶ The Arab Association's newspaper, *Al-Falaq* (The Dawn), begun in 1927, became a mouthpiece for the Arab clove planters. In the early-1950s, according to A. Babu, the newspaper came out strongly on the side of the peasants' uprising which occurred at that time, and blamed the British for their exploitative economic system.¹⁷ The attitude of wealthy Arab landlords towards the state-provided medical services was mostly positive. As we shall see later in this chapter, the Arab Association leaders and the landlord class popularized the state provision of medical services to the general populace.

Further pressure for the extension of biomedical facilities to their communities came from the representatives of Indian and Arab Associations in the Zanzibar Legislative Council

¹⁴ ZNA AJ 3/20, 'Enquiries from the LEGCO', Committee of Enquiry on Zanzibar Hospitals Accommodation and Treatment, etc., 1930-1940.

¹⁵ ZNA NW 14/1, *Samachar* 1929; The history of Karimjee family as it is explained in 1929 issue shows that Jivanjee Budhabhoy, a founder of the merchant enterprise, arrived penniless in East Africa in 1819. He was a survivor of a storm-wrecked dhow and managed to swim ashore and subsequently found a trading dynasty. In 1825, Budhabhoy established a small trading firm in Zanzibar under his own name. He began to work as a small trader, a *dukamwallah*, exchanging American and Indian textiles for Zanzibar's traditional spices and agricultural products as well as more lucrative standard items from the mainland. As he was just one of many Indian traders who had come to try their luck in Zanzibar, competition was stiff and expansion slow. Budhabhoy died in 1861 leaving three sons: Pirbhoy, Karimjee, and Esmailjee, each running separate businesses. The most famous was Karimjee Jivanjee, who established Karimjee Jivanjee and Company. p. 45.

¹⁶ J. Mlahagwa and A. Temu, 'The Decline of the Landlords, 1873-1963', in A. Sheriff and E. Ferguson (eds.), *Zanzibar under Colonial Rule*, (London: James Currey, 1991), p. 158.

¹⁷ A. Babu, 'The 1964 Zanzibar Revolution: Lumpen or Vanguard?', in A. Sheriff and E. Ferguson (eds.), *Zanzibar under Colonial Rule*, (London: James Currey, 1991), p. 223.

(LEGCO). Throughout the 1930s, Legislative Council's debates regularly focused on questions of public health, intensifying after the outbreak of war in 1939, when war measures took priority in Zanzibar revenue allocation and health and medical services deteriorated with the absence on military service of many of government medical officers (among them senior medical officers such as Drs. Lee, Roberts, McCarthy and Pilkington).¹⁸

In 1941, Tayabali Karimjee, then an INA member of the Legislative Council, asked the colonial government whether it was in a position "to appoint a Committee of Inquiry, consisting of officials and members of the public, to investigate the conduct of the Asiatic and Native Hospital and to make recommendations thereon". He further enquired "will the government be pleased to appoint a Visiting Committee, consisting of members of the Indian Community, to pay monthly visits to the Asiatic wards of the Government Hospitals in Zanzibar and Pemba, with power to make suggestions for increasing efficiency and remove causes of complaint?".¹⁹ Dr. W. Hart, the Director of Medical Services (DMS) responded that:

The Visiting Committee might form a useful link between the hospital and the public and help to remove cause of misunderstanding... and they would not, of course, be composed of Indians only but of the representatives of all nationalities, especially Swahilies [sic], who form the majority of patients in the hospital.²⁰

British policy in Africa during the War insisted on common citizenship having priority over particular interests.

Accordingly, in July 1941, the Government Hospital Enquiry Committee was established in Zanzibar. It was comprised of the European medical officers, the District Commissioners, and members from the Arab and Indian Associations. In the same year, it proposed the

¹⁸ ZNA AJ 1/14, Annual Medical Report 1942, p. 30.

¹⁹ ZNA AJ 3/20, 'Enquiries from the LEGCO', Committee of Enquiry on Zanzibar Hospitals Accommodation and Treatment, etc., 1930-1940.

²⁰ ZNA AJ 3/20, 'Enquiries from the LEGCO', Committee of Enquiry on Zanzibar Hospitals Accommodation and Treatment, etc., 1930-1940.

formation of the Patients' Welfare Committee with representatives from the Arab, Indian, Goan and Hadhrami communities and one member each from the Universities Missions to Central Africa (UMCA) and the Roman Catholic Mission.²¹ The Hospital Visiting Committee was inaugurated in 1947 with representatives from the Arab, Indian and African communities. After the War, a Health Advisory Committee was set up; between 1947 and 1953 this committee was composed of members from various ethnically aligned groups. John Fikirini and Christabel Majaliwa were representatives from the African Association.²² Ali Masoud Riyami was a representative from the Arab Association and Nurbani Gulamal and Mussa Jetha represented Indian Nationalist Association.²³

In 1953, Ali Muhsin Barwan, a representative of the Arab Association, asked the medical authorities whether hospitalization was structured on racial lines. Dr. A. C. Howard, the Director of Medical Services between 1952 and 1953, replied that "the organization of the hospital is not on racial lines. All patients receive the best treatment that can be given them irrespective of race... [although at] Zanzibar Hospital the layout is such that it has been convenient to concentrate European patients in one block. This has been done for administrative reasons arising from differences in diet and customs".²⁴ The colonial authorities claimed that segregation was required because different races practiced different health standards. Earlier on in 1936, the Arab Association was worried about racism in terms of the employment of midwives. The Secretary of the Association wrote in *Al Falaq* that only Africans were trained as midwives for rural services, while in Zanzibar Town, Arab women formed the majority of midwives who took care of Africans. Dr. Leslie Webb, the

²¹ ZNA AJ 3/20, 'From Chief Secretary (CS) to Director of Medical Services (DMS) 25 July, 1941', Committee of Enquiry on Zanzibar Hospitals Accommodation and Treatment, etc.

²² Christabel Majaliwa, a daughter of early African converts, was born in 1896 at Mbweni Slave Village. After finishing her primary education at St. Monica girls' school in 1910, she started teaching at the same school. In 1932, she joined the African Association which was established in that year, mainly by people with mainland origins. Later, in 1957, she joined the Afro-Shirazi Party (ASP). In 1960, she became the only female member of the Legislative Council representing the ASP. For more information, see: Amina Issa, 'A History of Women's Participation in the Struggle for the Independence of Zanzibar, 1951-1964' (Unpublished M.A Thesis, University of Dar es Salaam, 2004), p. 100.

²³ ZNA AB 2/9, 'Minutes, 13 November, 1943', Health Advisory Committee, Zanzibar.

²⁴ ZNA NW 12/3, 'Colourbar in the Government Hospital', *Mwongozi*, 11 December 1953, p. 3.

DMS between 1934 and 1939 confirmed that “in future there will be no race restrictions for medical and midwifery services”.²⁵ From the 1950s onwards, political parties began to take an active role in popularisation of biomedicine, with both leaders and party members directly involved in demands for the extension of medical services.

Arab Association leaders were active in the popularization of biomedicine in Zanzibar from the early twentieth century. Many of the wealthy Omani Arab elite who became the leaders of the Association began sending their children to Egypt for a secular education. This also opened opportunities for women from Zanzibar to study medicine – further heightening the appeal of Western medicine when it was aimed at and practiced by women. Concurrently, Ali Humoud, the ninth Omani ruler in Zanzibar (r.1902-1911) impressed by Egyptian developments in education, established the first government school in Zanzibar in 1903. He requested the Egyptian government to send three teachers to Zanzibar to inaugurate a new educational system²⁶ which helped to provide a foundation for educational development in colonial Zanzibar.

The history of Omani Arab involvement in the modernization process in Zanzibar, driven mainly by the Western-educated elite, began in the late nineteenth century. Two important factors can be identified. Firstly, there was the important influence in Zanzibar of the modernizing economic transformation taking place at that time in Egypt, initiated by local Egyptian rulers. Secondly, Islamic reform movements in Egypt in the same period attracted many influential persons in the Zanzibari Omani Arab landowning class.²⁷ Importantly, according to Ibrahim El-Zein Soghayroun, a historian of East Africa:

²⁵ ZNA AB 2/53, ‘From DMS to the Arab Association, 19 June 1936’, Training of Natives for Zanzibar Native Medical Services.

²⁶ Norman Bennett, *A History of the Arab State of Zanzibar* (London: Methuen & Co Ltd, 1978), pp. 185, 194 and 195. According to Bennett, Ali Humoud was the first member of the Omani Royal family to receive western education at Harrow, England in 1898, p. 185.

²⁷ Egyptian economic transformation started in the mid-eighteenth century under Ali Bey (1760-72). Further economic changes occurred from the early nineteenth century under Muhammad Ali (1805-48) who opened Egypt to European economic penetration. Apart from that, Egypt’s fame and popularity was enhanced from the early-twentieth century through Islamic reform movements initiated by Muhammad Abduh (1849-1905), a Muslim reformer and an Al-Azhar intellectual who wanted Muslims all over the world to harmonize with science and technology. See M. Rifaat Bey, *The Awakening of Modern Egypt* (London & Toronto: Longmans,

One of those Arabists with whom the Zanzibari elite frequently corresponded was Jurji Zaydan (1861-1914) an icon of Arab renaissance; ... He was the editor of the Egyptian based journal, *al-Hilal*, 'Crescent', a journal that enjoyed wider circulation among the Zanzibari elite... He communicated regularly with Sultans Humoud bin Muhammad (r.1896-1902) and his son Ali bin Humoud (r.1902-1911).²⁸

P. Vatikiotis, a Middle-East and Arab historian observes that Jurji Zaydan used *Al-Hilal* to inform readers about Arab-Islamic civilization and culture. In the later part of the nineteenth century, he published five volumes on the subject.²⁹

The Arab Association leaders and other affluent Omani Arabs trained their children in medical fields. The training of medical doctors will be discussed later in this chapter. Apart from sending their children abroad for medical training, Association leaders and the Arab elites called on young Arab women to take up nursing as a career. They also persuaded Arab parents of the importance of training of their daughters as nurses, which was unusual at that time. These leaders served as intermediaries between the Medical Department and the Arab community. In 1945, Dr. J. C. Earl, the Director of Medical Services between 1943 and 1947 approached Sk. Mohamed Nassor Lemky, an influential and educated Zanzibari of Oman origin, and Sk. Ali. S. Kharusy, Secretary of the Arab Association, about the Government's proposal to train educated Arab girls as nurses and sisters. Dr. Earl reported that in the past every effort to enrol educated Arab women in the nursing field had failed.³⁰ During the Second World War, there was a severe shortage of nurses both in Britain and in the colonies. Shula Marks notes that, in 1943 Britain established its 'State Enrolled Nurses' programme in

Green & Company, 1946); John Iliffe, *Africans: The History of a Continent* (Cambridge: Cambridge University Press), pp. 163- 4.

²⁸ Ibrahim El-Zein Soghayroun, The Role of Traders and Muslim Scholars in the Spread of Islam and Muslim Culture in Zanzibar and East Africa, Paper Presented at the Symposium on Islamic Civilization in Southern Africa, 1-3 September, 2006, University of Johannesburg, South Africa, p. 6.

²⁹ P. Vatikiotis, *The History of Egypt from Muhammad Ali to Mubarak* (London: Butler and Tunner, Third Edition, 1985), p. 186.

³⁰ ZNA AJ 25/8a, 'Training of local Zanzibaris in Zanzibar', Zanzibar Native Medical Service Training, Syllabus and Examination Results. By 1939, there were only five British nurses at the Government Hospital. See ZNA AB 2/25, 'Medical Department- Nursing Staff, 1920-1960.

order to overcome the shortage.³¹ In the same year, it was proposed by the authority in London to increase the salary of European nurses in the East African colonies to be able to attract nurses from abroad where they were better paid. The salary of the East African nurses was revised in 1945.³²

The DMS also reported that Arab girls were not interested in hospital work, which they associated with the menial tasks of the slavery era. Most Arab parents also disliked the idea of their daughters working in male wards or on night shift. Most of these Arab women who finished their primary education were engaged in teaching.³³ According to my interviewee, Zuhura Salim, who is a former nurse, in the early-1940s, very few young female Arabs were ready to join nursing. But slowly this began to change after 1945.³⁴

It was also noted that part of the problem was very early marriage for Arab girls, since it was very difficult for a married woman to be involved in anything other than domestic affairs.³⁵ In the mid-twentieth century, many Zanzibari women, unmarried and married, still led a restricted life confined to home. Only a very few female teachers had government employment in urban girls' primary schools. Across much of Africa and even in Europe, it was especially not an easy matter for a married woman to remain in paid employment. Moreover, commenting on the general problem facing a nursing career in South Africa in the mid-twentieth century, though with relevance too in Eastern Africa, Shula Marks observes that:

³¹ Shula Marks, *Divided Sisterhood, Race, Class and Gender in the South African Nursing Profession* (Johannesburg: Witwatersrand University Press, 1994), p. 131.

³² ZNA AB 2/37, 'From DMS to the Chief Secretary (CS), 1 April 1947', Salaries and Conditions of Service of Nurses and Midwives (Europeans).

³³ ZNA AB 2/53, Training of Natives for Zanzibar Native Medical Service. See also: AJ 25/8a Zanzibar Native Medical Service training, syllabus and examination results, 1936-1950.

³⁴ Interview with Bi Zuhura Salim, Malindi, 20 June 2006.

³⁵ ZNA AB 2/242, 'Visit of Miss Jane McLarty, Nurse Consultant sponsored by the WHO in Zanzibar, 2-5 May 1953', Nursing Education.

At a time when young men worked as migrant labourers women were forced to remain home. Also given the centrality of marriage in African society, the insistence of the hospitals on training - and employing -unmarried women was yet a further obstacle to the widespread acceptance of nursing as a vocation.³⁶

There was however a growing trend towards the acceptance of biomedicine, and in this the important contribution made by newspapers in putting pressure on medical officers to expand medical services deserves mention. From the onset of the Second World War in 1939, newspapers became the mouthpiece of various ethnic groups and of the population of the islands at large.³⁷ In 1939, *Samachar* published a letter from an ex-patient of the Government Hospital headed, 'Need for More facilities in the Government Hospital'. The author criticised the scarcity of space for accommodating patients. He requested the authorities to build prayer rooms for Muslim patients and to remove the wooden floor since it created noise. He also advised the Nursing Sisters to tell *Ayabs* (nurse-aides) to assist female patients incapable of moving from their beds.³⁸ Newspapers also took a role in mobilizing people to accept medical services. For instance they showed the importance of vaccination against diseases such as smallpox, typhoid and diphtheria.³⁹

In 1948, *Mwongozi* published a piece on the shortage of female doctors to treat female patients at GHNS:

(A) few weeks ago we drew the attention of the authorities to the fact that the single lady doctor who was attending the female outpatients at the Government Hospital was being overworked...Only doctor Sholapurkar worked... Over 200 women and children attend the clinic every morning. On Saturday and Monday the attendance is even higher.⁴⁰

³⁶ Marks, *Divided Sisterhood*, p. 88.

³⁷ For instance, See the work of Jonathon Glassman on newspapers and politics during the mid-twentieth century: Jonathon Glassman, 'Sorting out the Tribes: The Creation of Racial Identities in Colonial Zanzibar's Newspaper Wars', *Journal of African History*, Vol. 41, 3 (2000), pp. 139-143.

³⁸ ZNA NW 14/6, 'Need More Facilities in the Government Hospital', *Samachar*, 23 February 1939, p. 5.

³⁹ ZNA NW 14/6, 'Notes from the editor', *Samachar*, 2 April 1939, p. 5.

⁴⁰ ZNA NW 12/1, 'Lady Doctors and Lady Patients', *Mwongozi*, 22 October 1948, p.1. In 1945, Mrs. V. R. Sholapurkar, a female Sub Assistant Surgeon was employed in the Government services in Zanzibar released

On 8 January 1956, the editor of *Samachar* wrote that:

[he] had received sound and reasonable complaints from several members of the public regarding the high fees charged for taking X-Ray examination at the Government Hospital ... Many poor people who have been advised by their doctors to have X-Ray examinations cannot afford to pay the high charges.⁴¹

Despite increasing popular support for them, the government medical services exhibited numerous shortcomings right through to the end of the colonial period. The chief area of distress at the Government Hospital was the Out-patients Clinic. In 1950, an anonymous urban resident wrote a poem entitled: 'Tuepushe Rahmani na Kwenda Hospitali' ('God, don't let us going to hospital), which I have already referred to. The poem is about the scarcity of Medical Officers at the Hospital, as a result of which people frequently had to queue for the whole day.⁴² Townspeople also complained about poor services caused by the shortage of hospital attendants. In 1953, the editor of *Mwongozi* wrote that:

Most of the trained hospital attendants who failed to pass their final examinations are discharged...It is the public opinion that, it would be a good idea and without scarcity of attendants in the hospital, if the candidates who fail to pass examinations are left to work and then given more chance to sit for other examinations.⁴³

Urban women's networks also played an important role in popularizing Western medicine in Zanzibar. From the early twentieth century, several social groups, which were initiated by the local women themselves and others which were sponsored by the colonial government helped in the adoption of Western medicine. Elite and non-elite women were connected to each other through leisure clubs, neighbourhood networks, and welfare associations and

from the Hindu Free Dispensary, owing to the arrival of Mrs. Noronha from India to work in the Hindu Free Dispensary. Mrs. Sholapurkar was a resident of India and her husband was employed to work in Education Department in Zanzibar. In 1951, when Mrs. V. R. Sholapurkar was on leave, Dr. Talati who had graduated in Medicine at Bombay University and returned to Zanzibar in that year was employed as a female Sub -Assistant Surgeon in the Government Hospital. See ZNA AB 2/44, Sub Assistant Surgeons and ZNA AB 86/69, Mrs. V. R. Sholapurkar, Lady Assistant Medical Officer (AMO).

⁴¹ ZNA NW 14/23, 'X-Ray Fees', *Samachar*, 8 January 1956, p. 6.

⁴² ZNA NW 12/3, 'Tuepushe Rahmani', *Mwongozi*, 17 November 1950, p. 2.

⁴³ ZNA NW 12/6, 'Scarcity of Attendants', *Mwongozi*, 7 July 1953, p. 2.

through the women's wings of political parties. Women's networks forged unity among women. They assisted each other on economic matters. Saving clubs, *upatu* were introduced to overcome economic problems among women. They became a catalyst for the adoption of biomedicine. Bi Inaya Himid, who joined the Forodhani Girls' school in the late-1930s and in the 1960s attained a scholarship to study in England, where she completed a Degree in Education, said that women neighbourhood networks which operated in Ng'ambo were exemplary in attracting other women to attend hospitals or Maternity Homes. These women formed saving clubs and helped each others during weddings, funerals and other occasions, including childbirth. A new born baby was received with much joy and celebration and members bought new clothes for both baby and mother.⁴⁴ After the abolition of slavery in 1896, beginning in the early twentieth century, urban women in Ng'ambo, mainly former slaves and newcomers to urban Zanzibar, formed leisure groups. Contacts between neighbours in religious and wedding celebrations crafted social communities.⁴⁵

From the mid-1940s, urban women founded women's *taarab* groups. *Taarab* music which had been brought by the Oman royal elites from Egypt in the early-1880s was transformed by urban women who used the music to entertain themselves at weddings. Laura Fair who has written on women's leisure groups in urban Zanzibar shows that women's *taarab* groups emerged when women decided to be involved with out-doors activities.⁴⁶ I spoke with Bi Nassra Hilal, a woman activist and a member of 'Sahib el-Arri', one among these women's *taarab* groups, and asked her whether these leisure groups assisted in the acceptance of biomedicine in urban Zanzibar. Her opinion is that "since you are a member of a particular *taarab* group automatically you are the part of the women's community. Women motivated each other to give birth at the hospitals and to adopt Western ideas which were important to their health".

⁴⁴ Interview with Bi Inaya Himid, Malindi, 13 July 2005.

⁴⁵ Fair, *Pastimes and Politics*, pp. 22, 99-100.

⁴⁶ Fair, *Pastimes and Politics*, p. 99.

By the late-1950s, a new form of women's cooperation started with the formation of political parties. Women transformed their dancing groups into highly politicized networks for the exchange of information, the announcement of party rallies and marches and the raising of money for the party. Women became active members in the welfare sections of their political parties. Studies done by myself on women and political participation in colonial Zanzibar, shows that the Afro-Shirazi Party (ASP) and the Zanzibar Nationalist Party (ZNP) women's wings operated first aid classes for other women members in order to raise awareness on the importance of better health. Women political leaders also initiated poultry-keeping and introduced vegetable gardens in rural areas partly to fund political activities and partly to improve women and children's health.⁴⁷

Overall, women assisted each other through neighbourhood networks. They attended at weddings, funerals and other Muslim rituals together. Information about medical services which were available for women and children were spread through these networks. Bi Asha Hassan, a seventy-five year old, a widow and a mother of five children commented to me that, "women like to talk about their daily activities every evening, and while meeting in weddings and in funerals". She told me that "my first attention to midwifery services was through my neighbour who gave birth at home. Since she was my best friend, *shoga*, I was there. I decided to use the services".⁴⁸

Bi Asya Khamis, one among the first female Zanzibari of the African descendants to join the Government Girls' School at Forodhani in the early-1930s and a former school teacher, said that the penetration of Western medicine among women could be linked with women themselves. Those women who attended the services encouraged others.⁴⁹ I asked her whether their husbands allow them to attend at the hospitals or clinics. She replied that some husbands did not allow them but others encouraged and even supported them. She further

⁴⁷ Issa, A History of Women Participation in the Struggle for the Independence of Zanzibar, 1951-1964, especially Chapter 4 on 'Women and Political Activism'.

⁴⁸ Interview with Bi Asha Hassan, Mbuyuni, 12 December 2007.

⁴⁹ Interview with Bi Asya Khamis, Kikwajuni, 18 December 2007.

argued that, in urban areas, many parents who decided to enroll their children in schools were quickly to realize the importance of biomedicine.⁵⁰

The foundation of Ladies Club in 1948 gave opportunities to urban women to adopt the use of biomedical services. The Club was established by Indian, Arab and Comorian female elites who had received their secondary education and who were living in the Stone Town. The chairperson of the Club was Bi Nunuu, the wife of Sultan Khalifa Haroub (1911-1960). The post of the secretary of the Club was occupied by the wives of British Residents. Other European women who were living in Zanzibar became the active members too. Lady Rankine, a wife of John Dalzell Rankine, a British Resident between 1952 and 1954, who succeeded Lady Glenday a founder member of Club, introduced many welfare activities during her term in the early-1950s. The members were involved in a lot of activities including sports like netball and other welfare programmes. They encouraged other women who were living in the Stone Town and mostly confined to their houses to be aware of and ready to use biomedical services. Bi Zarina Yussuf, a seventy years old Muslim Indian woman who was born and bred in the Stone Town told me about the activities of the Ladies Club.⁵¹

The Zanzibari Women's Institute which was founded in the early-1950s also influenced women attendance in the hospitals. The idea of Women's Institutes to look after the affairs of women had originated in Canada in 1897. British women adopted it in 1916. After the First World War, Women's Institutes were established in British colonies in Africa. In Kenya, it was established shortly after the First World War. In 1925, Northern Rhodesian women had started the Women's Institute. The aims of these Institutes were to make women into good mothers and home makers. They met regularly on monthly basis and did crafts, arts or welfare works.⁵² In Zanzibar, the Institute was led by Bi Samira Salim Seif, a

⁵⁰ Interview with Bi Asya Khamis, Kikwajuni, 18 December 2007.

⁵¹ Interview with Bi Zarina Yusuf, Mkunazini, 5 November 2007. Zanzibar National Archives possesses a number of files on 'Ladies Club'.

⁵² Karen Tranberg Hansen, 'White Women in a Changing World, Employment, Voluntary Work, and Sex in Post-World War II Northern Rhodesia' in Nupur Chaudhuri and Margaret Strobel (ed.) *Western Women and*

Zanzibari of Oman origin, and a sister of Dr. Zakiya whom I will discuss later in this chapter. Bi Samira completed her secondary education in Arab Girls' school in the 1940s. In the 1950s, she worked as an education officer, after attaining her B.A Degree in Education in England. Her husband, Soud Ahmed Busaidi, a royal family member, was a District Commissioner in Unguja Urban in the 1960s. The Institute which was formed mostly by female school teachers motivated semi-literate urban and rural women to attend in health care centres. According to Mama Ima, a retired school teacher, who was one among the active members of the association, "women were attracted to it as the services were important for their health".⁵³

Brokering Medical Services in Urban Zanzibar

Medical professionals such as doctors and nurses and other lower ranks of health workers such as midwives, nurse-assistants and dispensers as cultural brokers in mediating Western medicine also served to broaden the reach of biomedical and health facilities and practices. The origin of the term cultural or culture broker is in the field of anthropology in the mid-1900s, when several anthropologists wrote about local people whose role in their society was as a cultural intermediary or cultural broker, usually with the western society. M. Jezewski defines culture broking as "the act of bridging, linking or mediating between groups or persons of differing cultural backgrounds for the purpose of reducing conflict or producing change".⁵⁴ From the early-1930s, Zanzibari local staff at the Government Hospitals and dispensaries became in effect cultural brokers and acted as intermediaries in furthering medical services. As a result, many people in urban and rural Zanzibar grew to recognise the

Imperialism, Complicity and Resistance (Bloomington and Indianapolis: Indiana University Press, 1992), pp. 247-268, p. 257.

⁵³ Interview with Mama Ima, Kikwajuni, 5 January 2008.

⁵⁴ M. Jezewski and P. Sotnik, *The Rehabilitation Service Provider as Cultural Broker: Providing Culturally Competent Services to Foreign Born Persons* (Buffalo, New York: Center for International Rehabilitation Research Information and Exchange, 2001).

importance of biomedical services as an important element in the Zanzibari healing spectrum.

From the late-1920s, the colonial government in Zanzibar had started to train the local born Arabs, Comorians, Indians and Africans in medical fields. For instance, in 1929, Said Mahfudh Bingurnah and Said About, two Zanzibari-born Arabs went to Makerere College in Uganda for medical training, sponsored by Zanzibar government scholarships, to qualify as Assistant Medical Officers (AMO). They studied general medicine, gynaecology and surgery, graduating in 1934. Said Mahfudh Bingurnah, born in Zanzibar in 1909, studied at the Zanzibar Central School and Teacher Training's College before being admitted to Makerere College. He was trained initially as a teacher but the demand for qualified local medical doctors forced the government to sponsor him in his medical studies.⁵⁵ Even by the 1960s, most of the qualified Zanzibari-Arab doctors came from the rich landowning class and wealthier Arabs however. Apart from Kingwaba Hassan, who was an African-born Zanzibari, and Ramaniklal Shah, an Indian-born Zanzibari, the rest of the Zanzibari medical students at Makerere College between 1935 and 1962 were Arab-born Zanzibari.⁵⁶

Arab-born Zanzibaris in medical training at Makerere College outnumbered Zanzibari Africans and Indians for several reasons. There was a great effort on the part of the colonial government to ensure that the Arabs rather than Indians and Africans were given preference in junior positions of administration.⁵⁷ This gave them an advantage compared to Africans, who were given lower priority in the job market. Many Indians preferred to be involved in

⁵⁵ ZNA AB 86/63, 'Employment of Dr. Said Mahfudh Bingurnah', Personal File, Dr. Said Mahfudh Bingurnah, Assistant Medical Officer (AMO).

⁵⁶ ZNA AJ 25/5, 'From DMS to CS, Zanzibar, 15 July 1956', Medical Students Employment Of. Among Zanzibaris who were in England in 1940s studying medicine were: Musallam Seif al-Bualy and Salim Seif Maamiry. By 1948, seven Zanzibari students were at Makerere. See ZNA AB 2/163, 'Mulago Hospital Center and Hospital'. For instance, Othman Shariff joined medicine in 1937 but later he changed to Diploma in Agriculture. In 1941, M. A. Awadh was a third year medical student at Makerere. In 1943, Ali Muhammad Ali Barwan and Abdullah Salim el-Busaidi were first year Medical Students. In 1947, A. Ali and A. A. Baalawy joined Makerere. In 1952, Jabir Suleiman Farsy was a medical student. He finished in 1956. See ZNA AJ 25/5, Zanzibar Medical Students Employment Of. See also ZNA AB 2/62 and 63.

⁵⁷ Bennett, *A History of the Arab State of Zanzibar*, p. 235.

private business activities after finishing their studies, while most Zanzibari-Indian doctors were trained at Indian Universities. The percentage of Africans who enrolled and completed their education at government schools before 1960 was also lower in comparison with Arabs, Indians and Comorians. Also, until 1963, Indians owned about ten community schools in Zanzibar Town. In 1948, 50 Arab students completed Standard 12 of whom 40 were males and 10 were females. Forty Indian students completed Standard 12 (30 men and 10 women). 20 male Comorians reached Standard 12 in 1948. In contrast, no African student reached that level.⁵⁸ It was only at the end of the colonial period, as the British were preparing to leave Zanzibar, that greater numbers of Zanzibari-Africans reached Standard 12.⁵⁹

It was, for the most part, only in the 1960s that Zanzibari-Africans began to take up medicine, under the auspices of the Afro-Shirazi Party (ASP). They were sponsored by communist and socialist countries like Russia, China, East Germany, Romania, Hungary, Czechoslovakia and Cuba which supported the nationalist struggles in Zanzibar. This is discussed in greater detail in the final section of this chapter.

Unfortunately, the Arab and African medical doctors received little coverage in the Annual Medical Reports. They remain therefore inaccessible in terms of the currently available source material. As most of the Zanzibari-Arab doctors emigrated to Europe and Middle East no account from them was easily obtained through the interviews that I conducted. Most people, with whom I had conversation, told me that these Zanzibari doctors were mostly welcomed by the people. They had better knowledge of culture of the people and the religious norms. The majority of them being Muslim, it increased the confidence of the people to biomedicine.

⁵⁸ ZNA BA 28/7, Edward Batson, 'Schooling', *The Social Survey of Zanzibar, Laboratory Tables and Reports* (Cape Town: University of Cape Town Press, Vol., 10, 1961); Except for few Zanzibari of African descendants such as Aboud Jumbe, Ali Hassan, Idrisa Abdulwakil, Othman Shariff, Khamis Hassan and Hasnu Makame who reached Makerere, a lot of Zanzibari-Africans got no such opportunity.

⁵⁹ Interviews with Bi Asya Hemed at Vikokotoni on 12 April 2005.

By the mid-twentieth century, there were a number of sons and daughters of affluent Zanzibari Arabs (mostly of Omani origin) receiving medical training in Egypt and England sponsored by their parents. On completion of their studies many returned to Zanzibar to practice medicine. In 1947, Dr. Zakiya Salim was ready to take up her appointment as medical officer at the Government Hospital for the Natives and Subordinates (GHNS), after completing her medical education at Faculty of Medicine, Fuad I University, Cairo, in 1943.⁶⁰ This was the time when the standards of the School of Medicine in Egypt were rapidly being brought into line with modern schools in Western Europe. In 1940, Abdul-Wahid al-Wakil, an Oxford-trained medical doctor became a professor of Hygiene in the Faculty of Medicine of Fuad I (al-Awal) University.⁶¹ Dr. Zakiya Salim became one of the first female qualified doctors in British East Africa. In 1953, according to John Iliffe, Makerere School of Medicine, the first of its kind in East Africa, admitted its first woman: Josephine Namboze, the daughter of a Catholic teacher at the great Nsambya mission station in Uganda. Namboze graduated in 1959.⁶²

In 1949, Dr. Fatma Ali Rashid El-Lemky, a daughter of another member of the well-to-do Omani Arab elite, completed her studies in Midwifery and Gynecology and Preventive Medicine in Cairo. She returned to Zanzibar for a while and later went on to London for further studies. In 1955, she qualified as a registered midwife at the West London Hospital Medical School. In 1958, she was appointed as a House Officer, Gynaecology, at the King Edward Memorial Hospital, Ealing. Later, she obtained an appointment as House Physician in Solihull Hospital, Warwickshire. In 1960, she returned to Zanzibar and worked at the Hassanali Karimjee Jivanjee Hospital in paediatrics.⁶³ The role played by these female

⁶⁰ ZNA AJ 25/5, 'From CS to DMS, Re: Medical students from Egypt, 19 September 1947', Zanzibar Medical Students Employment of; In *Mwongozi* of 30 November 1956, there is a poem to welcome Dr. Zakiya in Zanzibar after returning from England.

⁶¹ Nancy Elizabeth Gallagher, *Egypt's Other Wars, Epidemics and the Politics of Public Health* (New York: Syracuse University Press, 1990), pp. 9 and 15

⁶² John Iliffe, *East African Doctors: A History of the Modern Profession* (Uganda: Fountain Publishers, 2002), p. 99.

⁶³ ZNA AB 86/71, 'Appointment', Personal File Dr. Fatma Ali Rashid El-Lemky- Woman Assistant Medical Officer; *Mwongozi* on 30 September 1955 published a farewell poem by Moza Ali, a female teacher, for Dr. Fatma Rashid on her departure to England for further studies. See, ZNA NW 12/3, *Mwongozi*, 'A farewell poem for Dr. Fatma Rashid', 30 September 1955, p. 3.

doctors in motivating other Arab and African women to seek treatment in hospital needs to be considered here. Most of them, as my interview with Zainab Sharif showed, adhered to their elitist position and tried to discourage patients from using indigenous medicines.⁶⁴ My interviewee Asha Abdalla, who came from a poor family, told me that she did not think that the educated and rich Arab doctors would take an interest in her. She told me that “these female educated Arab doctors were there to serve their own class and not us the poor”.⁶⁵

Generally, Egypt had been a model of modernization in Muslim Africa since the early-1800s. As early as 1832, a School of Midwives was established in Egypt. Interestingly, students in this school were trained to be both midwives and public health officers. Khalid Fahmy observes that:

At a time when medical men in Europe (especially in England and France) were gradually replacing women in the medical profession on the ground that the latter were weak, unfit for public service, or, with regard to midwives in particular, forming an inferior class of practitioners, the Egyptian School of Midwives was offering women opportunity to receive modern education in medical science and to be part of the state-sponsored medical system.⁶⁶

The training of nurses began in Zanzibar in 1950, when a School of Nursing was opened. In 1955, 23 nurses sat for the Junior Hospital Examination for Nurses; 6 were female and 17 were male. The entrance requirement was Std. 8 for males and Std. 6 for females. Selected for both was by an examination in arithmetic, English and general knowledge. The course took place over three years. The nurses’ examination involved a general nursing paper, a surgical nursing paper, a medical nursing and *materia medica* paper, and a practical and an oral examination.⁶⁷ In due course, this training of local nurses attracted more patients to

⁶⁴ Interview with Bi Zainab Sharif at Mwembetanga, 11 July 2007.

⁶⁵ Interview with Bi Asha Abdalla at Matarumbeta, 19 October 2007.

⁶⁶ Khalid Fahmy, ‘Women, Medicine, and Power in Nineteenth-Century Egypt’, in Lila Abu-Lughod (ed.), *Remaking Women Feminism and Modernity in the Middle East* (Princeton, New Jersey: Princeton University Press, 1998), p. 36; See also Kuhnke La Verne, *Lives at Risk: Public Health in 19th Century Egypt* (Berkeley, Los Angeles and Oxford: University of California Press, 1990), especially Chapter Seven: ‘Women Health Officers’, pp. 121-133.

⁶⁷ ZNA AJ 25/8b, ‘Nursing Examination, Zanzibar 1955’, Zanzibar Native Medical Service Training, p. 6; BA 7/46, Health Department -Annual Report, 1955, p.12.

government hospitals. Many of the female nurses were allocated to female wards to treat female patients. Bi Zuhura Salim, a retired nurse, told me that both Arab and African born Zanzibari nurses worked together in the wards.⁶⁸ On the other hand, another retired nurse, Bi Layla Ali, recalled the racial discrimination at the government hospitals, since hospital staffs were paid according to their racial status rather than their qualifications. Salary scales differed according to the colour of the employee.⁶⁹

In 1955, among the female nurses who worked at the Hassanali Karimjee Jivanjee Hospital (HKJH) were the late Jessie Amour, Tepe Mussa, Ashura Marjeib, Theresa Mwakanjuki and Asya Amour.⁷⁰ The archival records show that between 1945 and 1963, there were more male than female nurses. In 1956, some of these male nurses, such as Musa Maisara and Khalid Msafiri, became leaders of the Medical Workers Union which was established in the early-1950s.⁷¹ Dr. Mohamed Kaumbwa, a retired medical doctor, who is currently practicing at a private hospital, told me of some of the male nurses who had completed their nursing training in 1958: Abdalla Makame, Nassor Talib, Khamis Suleiman and Seif Suleiman.⁷² Photo 6.1, portrays a male nurse who was examined by the Senior Staff tutor and other British doctors at the HKJ Hospital in 1962. The man with a black suit is the late Dr. Idarous Baalawy, a Makerere graduate and a former Medical Officer. He was appointed as

⁶⁸ Interview with Bi Zuhura Salim, Malindi, 20 June 2006.

⁶⁹ Interview which was conducted with Bi Layla Ali, Mpendae, 20 June 2006.

⁷⁰ ZNA AJ 25/8b, Zanzibar Native Medical Service Training, p. 6; By the end of colonial period in Zanzibar, there were about ten qualified nurses who were trained outside Zanzibar. One was Sister Afiya Himid who qualified as nursing sister in 1961 at St. Thomas' Hospital, Haverford West, Pembrokeshire. For more information on Sister Afiya see ZNA AJ 27/47, Miss Afiya H. Yahya, Nursing Sister. Another was Miss F. Hassanali who passed her entrance examination at the Government Girls Secondary School in 1950s. She joined Zanzibar Government Hospital in 1954 and proceeded to England to study nursing at Radcliffe Infirmary in the late-1950s. For further information on Sister F. Hassanali see: ZNA AB 2/244, Nursing Education for Miss F. Hassanali. The most successful of the local Zanzibari Nursing Sisters was Sister Khadija Salum Mecca, a staff nurse who received the Order of the Brilliant Star 4th class from the Sultanate government. Khadija Salum Mecca, who became head theatre Sister in 1960, was trained in England for the Ward Sisters' Course in the early 1960s. See: ZNA BA 7/39, Annual Report of the Health Department for the Year 1960. Also, at the same time, Mr. Masoud Ibrahim, a hospital assistant, was sent to England on a TB nurses' course in 1960. By the early-1960s, 24 Zanzibari were abroad training as nursing sisters, SRN, SCM, and there was one mental nurse student.

⁷¹ ZNA AJ 20/6, 'Activities of the Union of Medical Workers (UMW)', Union of Medical Workers.

⁷² Interview with Dr. Kaumbwa at Al-Rahma Hospital, Kilimani, 8 October 2007.

the Minister of Housing and Health Services in the care-taker government in 1961, two years before the full independence of Zanzibar from the British.

I asked Bi Bahiya what the opinion was of Zanzibari nurses on the use of local medicines. She told me that although they were trained by European nurses and were expected to put aside their beliefs about indigenous medicines they did not discourage patients from using them.⁷³ Bi Aisha Juma also observed that most of these nurses, orderlies and *ayahs* used various local and imported herbs to treat themselves and their families. She told me that “you cannot expect someone to condemn the use of the Quran texts for treatment. This is our belief. Is part of our religion”.⁷⁴

Photo 6.1: A male nurse, a Sister Tutor, Medical Officers and the Minister at the HKJH, 1962



Source: ZNA AV 6/17, Medical Training class.

⁷³ Interview with Bi Bahiya Yussuf, Mchangani, 10 June 2006.

⁷⁴ Interview with Bi Asha Juma, Mwembeladu, 5 December 2006.

It is possible to see these nurses as cultural brokers who interpreted biomedical treatments and methods for their patients. A good example from elsewhere in Africa of this process can be taken from South Africa, where historian Vanessa Noble, describing the experiences of African health assistants in Zulu areas, explains that:

They were brokers who straddled and mediated interactions between the different social and medical worlds of white doctors and their Western biomedical healing approaches, and the racially, economically, and political expressed and supposedly 'traditionalist' African communities they served. With similar cultural backgrounds and language translation skills, many were able to assist white doctors they worked for, but also their African patients to better understand and negotiate Western biomedical health care services.⁷⁵

After the First World War, the colonial government in Zanzibar decided to recruit more Africans to serve as dispensers at the Government Hospitals and in the dispensaries. The decision to train African dispensers was made due to staff shortages, and because it was costly to maintain Indian dispensers and Hospital Assistants. The African dispensers were recruited in the medical field in order to attract other Africans to attend the services.⁷⁶ In 1922, the African dispensers were employed in the Home Treatment Services that were established in that year. The dispensers who were undergoing training as part of their training visited any patient in Ng'ambo who was unable to attend at the town's dispensary or at the GHNS.⁷⁷ The motive behind the establishment of the Home Treatment Services as it was noted in the 1931 Annual Report was to familiarize the town population with the use of these biomedical services. Between April and December 1922, 776 people made use of the services.⁷⁸

From 1927, more dispensers joined the government medical services after the establishment of a central training school at the GHNS. The apprentice dispensers, who knew how to read,

⁷⁵ Noble, "Health is much too important a subject to be left to doctors", p. 133.

⁷⁶ ZNA AB 2/44, 'Letter from the Chief Secretary (CS), Zanzibar to the Director of the Medical and Sanitary Services (DMSS), 7 May 1929', Sub-Assistant Surgeons.

⁷⁷ ZNA BA 7/10, Annual Reports Medical and Public Health Department for the Year 1931, p. 40.

⁷⁸ ZNA BA 7/10, Annual Reports Medical and Public Health Department for the Year 1931, p. 39-41.

write and speak English, were taught the elements of anatomy and physiology and were given a general outline of common diseases and their treatment. They attended the outpatient practices and were trained how to dress wounds and treat minor ailments. They received theoretical training of between six months and a year and on its completion many of them were posted to rural dispensaries. The apprentice dispensers were required to assist in mixing medicines and to learn the dosages of ordinary drugs at the central dispensary, which was located at the GHNS. They also attended lectures on sanitation which were given at the Health Office.⁷⁹ By 1927, the majority of the African dispensers were male as the Government female education started only in that year. Ten years later, most of the male dispensers worked in rural areas.⁸⁰

Between 1927 and 1945, most of the dispensers and other African medical subalterns in Zanzibar were Zanzibari-born of slave descendants. They received their education at the St. Monica School and at the St. Joseph Convent, maintained by the Anglican Church of the UMCA and the French Catholics in Zanzibar respectively. According to J. Kaleza, a daughter of the UMCA school teacher, who was born at Kwahani, Ng'ambo in 1938, very few Muslim Africans were trained as dispensers compared with African Christians.⁸¹ The low level of education among the local Muslim Africans was the reason. For example, in 1948, according to the Social Survey of Zanzibar, 10 local-born African 'Hadimu' boys joined Standard 1 compared with 40 African boys who had originated from the mainland.⁸² After the Second World War dispensers were accepted after finishing Standard 8.⁸³ By 1950, in a meeting of the Directors of Medical Services in East Africa, it was decided that Standard 10 was requisite for those who were joining the training. Up to 1955, at least, the in-service or apprenticeship training of dispensers continued at the HKJ Hospital.⁸⁴

⁷⁹ ZNA BA 7/8, Annual Report on the Medical and Public Health Department for the Year 1927, pp. 39-40.

⁸⁰ ZNA AB 2/171, 'From CS to DMSS 10 January 1929', Construction of New Hospital Unit in Zanzibar.

⁸¹ Interview with the late J. Kaleza, Kwahani, 10 April 2000.

⁸² Batson, E., *The Social Survey of Zanzibar Protectorate* (Cape Town: University of Cape Town Press, vols., 10, 'Schooling', 1961).

⁸³ ZNA AB 2/32, 'From CS to DMS, 7 July 1950', Midwives Board: Appointment.

In urban areas, where people were more familiar with the Government medical services, African dispensers were generally received well by the people. J. Kaleza remembered that the services which were provided by the 'little doctors' were accepted by the urban Muslims and Christians.⁸⁵ The archival files are silent on how the dispensers facilitated the use of Western medicine but through my conversation with Dr. Kaumbwa, it seems that people accepted what they thought was appropriate for them.⁸⁶ On the other hand, most of the African dispensers who worked in rural areas were often ignored by the people as the dispensers were Christians and therefore unfamiliar to the majority of the people. The dispensers did however receive assistance from *Mashebas* and *Mudiris* who intervened to stop any opposition from the local people. We can speculate that African dispensers facilitated the adoption of biomedicine to the rural population as very few European doctors and nurses were posted in the rural areas. It is not clear whether they encouraged other forms of healing or not.

Importantly, Western medicine and health care in colonial Zanzibar were also mediated through the services of Zanzibari midwives and women's health officers. The idea of establishing maternity services for the women in Zanzibar was proposed by both the government and missionaries who were stationed in Zanzibar. During the First World War, Bishop Weston of the UMCA had joined the Carrier Corps services. The British targeted 1000 local Zanzibari to serve at the War. Instead, the government was able to recruit only 100 young males. The Bishop feared that Zanzibar needed better means to deal with this population shortage.⁸⁷ Weston allowed the use of the Mission Hospital and nurses for maternity works. In 1916, a room with four beds was allocated in the Mission Hospital for giving birth. Miss Locket, a UMCA nurse was in charge of the ward.⁸⁸ By the early-1920s, in Tanganyika, the Maternity and Child Welfare Services were similarly provided by the

⁸⁴ ZNA BA 7/46, Health Department - Annual Report, 1955, p. 6.

⁸⁵ Interview with the late J. Kaleza, Kwahani, 10 April 2000.

⁸⁶ Dr. Kaumbwa, Kilimani, 8 October 2007.

⁸⁷ *African Tidings*, 'Zanzibar', Vol. XXIX, 364, June 1920, p. 66.

⁸⁸ ZNA AB 2/259, 'History of the Zanzibar Maternity Association', Zanzibar Maternity Association.

missionaries. As Michael Jennings observes “the dominance in maternal and child welfare services established by the missions did not result from a particular Christian regard for the place of the ‘child’ and ‘mother’, but because their position in local communities allowed the culturally intrusive public health message to be transmitted in a more sensitive and acceptable way”.⁸⁹

Meanwhile, in 1917, the movement for the provision of midwives for Indians, Arabs and Africans had started in urban Zanzibar. A meeting of the representatives of the Indian, Arab, Comorian and Goan communities was held on the 16th March 1917 and a proposal was put forward for the establishment of the Zanzibar Maternity Association (ZMA).⁹⁰ The aims of the Association were to train midwives and to provide midwifery services. Miss Locket became one of the first paid employees of the ZMA. In 1918, the ZMA staffs were two European midwives, Miss B. J. Locket and Mrs. F. S. Young. Mrs. Hemlata Kanji, Miss M. F. Madeira and Miss G. Fernandez came from Bombay. We do not have much information on their medical background but in India women doctors and nurses attended medical training from the late nineteenth century. There were also two African female attendants.

Like the other medical services that I have referred to throughout my thesis, the construction of the first Maternity Home was achieved through funds donated by the Indian philanthropists and from other individual donors. In 1923, a piece of land situated at Mwembeladu in Ng’ambo which was comprised of 1263 square yards was given free by the government to the ZMA.⁹¹ The Wakf Commission in Zanzibar provided Rs. 30,000 and Rs. 9,592 was met from the ZMA funds, mostly as a donation from individuals. Messrs. Karimjee Jivanjee & Co., provided funds for the equipment, such as beds.⁹²

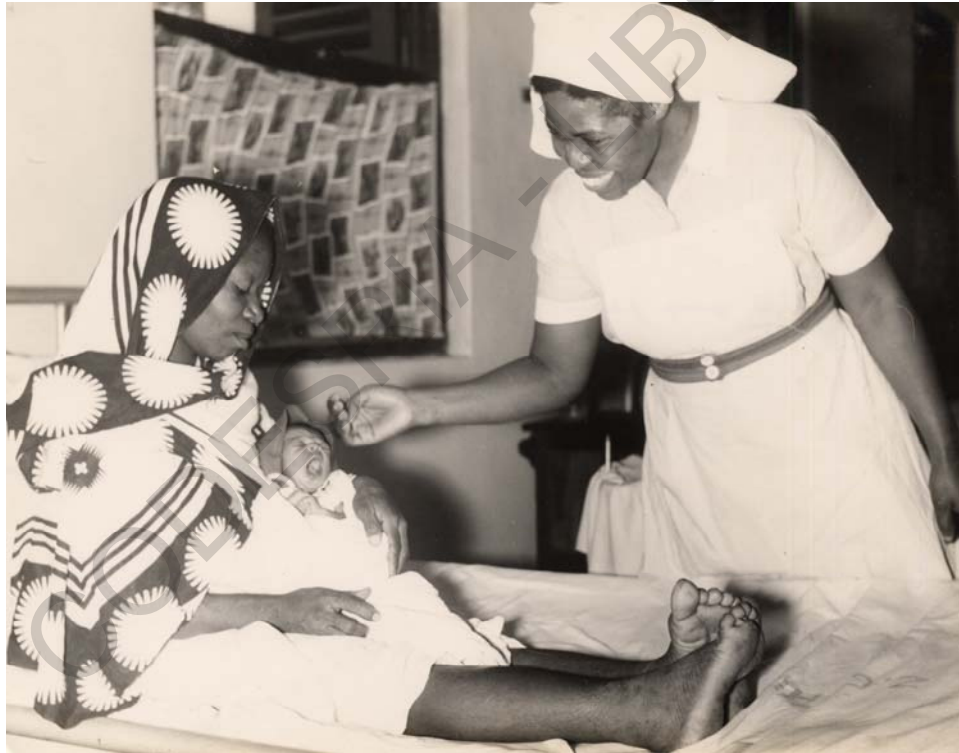
⁸⁹ Michael Jennings, ‘A Matter of Vital Importance’: The Place of the Medical Mission in Maternal and Child Healthcare in Tanganyika, 1919-1939’, in David Hardiman (ed.), *Healing Bodies, Saving Souls, Medical Missions in Asia and Africa* (Amsterdam: Rodopi, 2006), pp. 227-250, p. 247.

⁹⁰ ZNA AB 2/34, ‘Mwembeladu Maternity Home- Posting of medical staffs, From DMSS to the Matron, 10 February 1930’, Postings of Medical Officers; ZNA AB 2/170, ‘Mwembeladu Maternity Home’, Lease of Land at Mwembeladu to the Wakf Commissioners for the Maternity Home and a Dispensary.

⁹¹ ZNA AB 2/170, ‘Mwembeladu Maternity Home’, Lease of Land at Mwembeladu to the Wakf Commissioners for the Maternity Home and a Dispensary, 1923.

In 1935, the colonial government in Zanzibar took the control of the Maternity Home. However, Indian medical philanthropists continued to provide funds for the maintenance of the Home.⁹³ In 1938, the principal contributing parties were the Trust of Datu Hemani and Messrs Karimjee Jivanjee & Co. In 1938, the Hindu Mandal began to pour money for the maintenances of the Maternity Home. The Bhatias, another Hindu sect began to contribute in 1940. The Home provided paying and free services to Africans and poor Arabs. Indian women received free services as their associations paid for them through the annual contribution.⁹⁴

Photo 6.2: A midwife-nurse, A mother and her new-born baby, HKJH, 1962



Source: ZNA AV 6/18, Young Patient and Nurse at HKJ Hospital.

⁹² ZNA AB 2/258, 'History of Maternity Services, Zanzibar', Midwifery Service, 1930- 1950.

⁹³ ZNA AJ 12/17, 'From CS to DMS, 16 February 1935', Mwembeladu Maternity Home- Staff Control by the Government.

⁹⁴ ZNA AB 2/258, 'History of Maternity Services, Zanzibar', Midwifery Service, 1930-1950.

In 1940, the colonial government in Zanzibar built a Maternity Hospital at the GHNS area. It was known as the Seyyida Matuka Maternity Home after the granddaughter of Said Sultan and the first wife of Khalifa Haroub, the tenth Omani ruler in Zanzibar. The fourteen bed Maternity Home was under a European Sister and two trained local midwives. It provided training for six to eight midwives at a time. Two courses were conducted, for untrained women with a minimum of six years' education. Another course was for trained nurses, which was of one year's duration. The training included ante-natal and child welfare services. In 1955, half of the ground floor of the HKJ Hospital which was completed in that year was used as Maternity wards and the Seyyida Matuka Maternity Home was changed into Eye Clinic.⁹⁵ The Midwives' Decree was passed in 1945 to facilitate the childbirth services for the Zanzibar Town area.⁹⁶ The Photo above shows a midwife-nurse at the HKJ maternity ward in the early-1960s, with a young mother and her baby.

The number of women who received midwifery services from the ZMA increased annually. In 1936, 132 Africans and 49 Arabs used the services. In 1937, the number had increased to 146 for Africans and 61 for Arabs. Ten years later, the number had risen to 781 for Africans and Arab women combined. In 1948, the number had reached 834 and 875 in 1950.⁹⁷ According to the 1950 ZMA Annual Report, mostly African women preferred the services of the Association at their own houses. Home visits brought medical services to *purdah* women who were unable to leave their houses.⁹⁸ The users of the services were housewives who had never attended schools and were encouraged to receive the services by their husbands, relatives, friends, neighbours and women leaders of their respective clubs. The semi-literate and literate women who received their primary education and teacher's training education were the majority users of the services. By 1935, 216 girls were in schools in Unguja and Pemba islands. 90 were Africans and the remaining were Arabs. By way of

⁹⁵ ZNA AB 2/257, 'History of the Seyyida Matuka Maternity Home', The Seyyida Matuka Maternity Home; ZNA AB 2/242, 'Visit of Miss Jane McLarty, Nurse Consultant sponsored by WHO in Zanzibar, 2-5 May, 1953', Nursing Education and ZNA AB 2/258, 'History of Maternity Services, Zanzibar', Midwifery Service.

⁹⁶ ZNA AB 2/32, 'The Midwives Decree 1945', Midwives Board: Appointment.

⁹⁷ ZNA AB 2/259, 'Annual Reports, 1936-1950', Zanzibar Maternity Association.

⁹⁸ ZNA AB 2/260, Zanzibar Maternity Association – Annual Report, 1950.

comparison, in 1935, 500 boys were in schools: 114 were African and the remaining were Arabs. Most of them were later absorbed in the government services.⁹⁹ These young men were possibly the one who encouraged their wives to give birth at the Maternity Homes.

In 1935, the maternity services were extended in rural areas. This was the time as I have mentioned earlier in this chapter when the Mwembeladu Maternity Home became under the control of the government. The rural African girls, who finished the government schools, became the first rural midwives. In 1936, the colonial Government in Zanzibar founded the Native Medical and Midwifery Services (NMMS) in order to spearhead the training and the employment of midwives in rural areas.¹⁰⁰ By 1939, the maternity and child welfare services had flourished in rural areas. At Mkokotoni in north of Zanzibar, women and children attended at the dispensary, at an estimated number of 150 a week although the actual number of women and children who were living in the area was not identified.¹⁰¹ By the 1950s, the services were familiar to the women of Makunduchi in the South District.¹⁰²

The ZMA operated Women's clinics for the ante-natal and post-natal services at Mwembeladu Maternity Home. Other services were opened at the GHNS. Rahaleo Clinic, which was established at Ng'ambo in 1948, provided the ante-natal and post-natal health care services.¹⁰³ Midwives recorded births and they vaccinated children. In 1950, in a letter from the Registrar of Birth and Death to the Chief of Secretary (CS), the registrar instructed that midwives and other medical officers of health should inform his department of the number of new-born babies.¹⁰⁴ The ZMA provided also maternity services and skilled care in child birth to the women of the two islands. Lectures on personal hygiene, food, infant

⁹⁹ ZNA AB 2/53, 'Proposal for the Establishment of Native Training, 1935', Training of Natives for Zanzibar Native Medical Services.

¹⁰⁰ ZNA AB 2/53, 'From DMS to the Arab Association, 19 June, 1936', Training of Natives for Zanzibar Native Medical Services.

¹⁰¹ ZNA AB 2/53, 'Rural Dispensaries, 1936', Training of Natives for Zanzibar Native Medical Services.

¹⁰² ZNA AJ 3/32, 'Letter from Kasu and Sadik families, 1956', Complaint against Health Department.

¹⁰³ ZNA AB 2/1, Annual Report of the Medical Department 1954, p. 5.

¹⁰⁴ ZNA AJ 17/27, 'Letter from the Register to the CS, 26 October 1955', Registration of Births and Deaths.

feeding, care of sick child were provided in these ante-natal and post-natal centers. In 1942, domestic science and hygiene subjects were introduced in the girls' schools in Zanzibar. Nurses from the Maternity Home instructed them.¹⁰⁵ In 1957, a Mothers' clinic opened at Rahaleo for family planning matters.¹⁰⁶ By the late-1950s, the maternity services expanded. Many urban women attended at the Maternity and Child Welfare Clinics. The few trained midwives were not in a position to attend to all the women and children who attended in these clinics. In *Mwanga* of 27 August, 1958, the author had complained about long queues in the ante-natal clinics.¹⁰⁷

Zanzibari midwives thus played a significant role in mediating the services to women. Oral evidence shows that they allowed a combination of local customs and Western medical practices and health care. My informant Asha Mussa, a former school teacher believes that the incorporation of the local customs with modern Western birth techniques opened the way for the acceptance of child births at the hospitals.¹⁰⁸ Very interestingly, she further goes on to say that European midwives and nurses adopted local cultures too. They respected some of the indigenous norms. They treated carefully the navel cords which were believed by the Arab and African women to be the most central to the well-being of the children. Zanzibari midwives acted as the intermediate persons who interpreted these local customs to European midwives and nursing Sisters.¹⁰⁹ The presence of the African and Arab midwives in maternity wards, as Asha Saleh, a former school teacher explained to me, encouraged women to give birth at the Maternity Homes. They felt secure, she said, to be with the persons whom they trusted.¹¹⁰

¹⁰⁵ ZNA AJ 4/63, 'Domestic Science in Schools', Education and Welfare of Girls, 1930-1960.

¹⁰⁶ ZNA AJ 6/1, 'Mothers' Clinics, 1957', Family planning.

¹⁰⁷ ZNA AJ 3/32, 'Letter from the editor of *Mwanga* to the DMS, 27 August 1958', Complaint against Health Department

¹⁰⁸ Interview with Asha Mussa, Malindi, 20 June 2008.

¹⁰⁹ Interview with Asha Mussa, Malindi, 20 June 2008.

¹¹⁰ Interview with Asha Saleh, Mchambawima, 2 June 2008.

Hospital-based services by women for women became prominent in attracting local Zanzibari women to accept and attend such services. Women's medical services in Zanzibar Town had started in 1909, but it was only really in the late-1930s that the town's women responded positively to them. The first of these services was the 'Women Outpatients' services which was established in 1909 at the GHNS's compound. However, the attendance of women patients at the Government Hospital remained very low up to the mid-1930s. It was reported by Dr. Webb in the 1937 Annual Medical Report that by 1900, the medical services offered to the Women's Outpatients Department were used by Indian and Goan women, but very few Swahili women from affluent families and the wives of the local soldiers attended the services.¹¹¹ The Director of the Medical Services was comparing the attendance of women in the Government Hospital from the early twentieth century by showing that slow progress was made on the women's side.

The services expanded again in 1936 after the first 'Lady Doctor' was appointed to work in the Women's Outpatients Clinic, and at the Maternity and Child Welfare Clinic, in the Government Hospital for Natives and Subordinates in Zanzibar (GHNS). In 1937, the medical staff in these Women's clinics included: the Indian Women's Medical Assistant or Sub-Assistant Surgeon (SAS) in charge; a 'European' nursing sister who had a health visitor's qualification, a dispenser from South Africa, a Goan midwife, an assistant-in-training, a clerk and an African *ayah*. They dealt with 7,310 new cases and 45,306 attendances during the year. In Zanzibar, this rose from 22 percent of women's attendances in 1935 to 40 percent in 1936 when the clinic started and to 59 percent in 1937. In Pemba where there was no female doctor, therefore, the attendance was only 23 percent.¹¹² The efforts towards the expansion of women's medical services in the Government Hospital were praised by the Arab Association members. They wrote that "the appointment of a Lady medical officer is more praiseworthy, it dispel the belief in witchcraft and other local pedantries which were rooted in minds of women folk who use hundred of rupees in devil dance".¹¹³

¹¹¹ ZNA NW 4/1, Annual Report 1937, quoted from *Al-Falaq*, 18 August 1938, p. 2.

¹¹² ZNA NW 4/1, *Al-Falaq*, 'Lady Doctor', 18 August 1938, p. 1-2

¹¹³ ZNA AB 2/128, 'From the Arab Association to DMS, 16 March 1937', Medical Facilities Government Hospital Charges, pp. 1-2.

This comment represents one side of the view of the problem. For a long time, the town women ignored the Western medical services, as they saw them as being in opposition to their cultural norms. It was uncommon at that time for Muslim women to be under the care of a male other than the family members. The public life of the town during that time was 'genderized'. There were separate schools for girls and a separate space for women in many public areas and buildings. These cultural norms were, however, perpetuated by the male patriarchy, such as fathers, brothers and husbands in the families. It was objectionable for a female patient to be examined by male doctors. The colonial administrators were aware of the problem. The situation was eventually adjusted by the introduction of female staff to treat the town's women.

The appointment of a female Sub-Assistant Surgeon from India was approved by the colonial state in Zanzibar in 1936. By 1937, the SAS officers attended and were in charge of several clinics concerned with "women's diseases" and reproductive health in the town. These included the Ante-Natal Clinic, the Genital-Urinary Clinic, and the General Women's Clinic. As the workload in government medical services increased and as the numbers of female patients increased more female SAS officers were needed. Several applications were received by the government from India for the post but they were withdrawn during a time of political and economic friction which led to propaganda being circulated in India relating to the "clove controversy" between Zanzibar and India.¹¹⁴ In 1940, the administrative reports of the Department of Medicine and Sanitary in Zanzibar reported that the posts of female SAS were advertised again in four leading newspapers in India such as: *The Times of India*, Bombay, *The Madras Mail*, Madras, *The Statesman*, Calcutta and *The Pioneer*, Allahabad. Also, the advertisement was forwarded to the Principal, Women's Christian Medical College, at Ludhiana.¹¹⁵ However, the posts were to remain vacant until after the Second World War.

¹¹⁴ ZNA AB 2/44, 'Recruitment of Indian Sub Assistant Surgeons', Sub Assistant Surgeons. In 1934, the British colonial state in Zanzibar had passed 'the Clove Exporters Decree' in which the Clove Growers Association, under the monopoly of the colonial state in Zanzibar became a sole exporter of cloves. This demoralized the Indian clove merchant's whose survival besides retail business depended on clove exportation to India. For more information on clove controversy in Zanzibar between the 1930s and 1940s refer to Mlahagwa and Temu, "The Decline of the Landlords, 1873-1963", pp.158-9.

¹¹⁵ ZNA AB 2/44, 'Employment of Female Sub Assistant Surgeons', Sub Assistant Surgeons.

Reforms in Leprosaria, 1930-1950

Major reforms in the treatment and provision of facilities for people suffering from leprosy in Zanzibar began in 1930. At that stage, leprosy was still considered to be an infectious disease, and the 1931 Amendment 'Decree on Leprosy' helped to change both popular and medical attitudes to the disease. The Decree also required family members to report leper patients in their families to the authorities. In terms of the Decree, the "head of family shall report cases to Medical Officer of Health, District Commissioner or any Medical practitioner. Medical Officer of Health has power to discharge them from hospital".¹¹⁶ This was the first time that leprosy control regulations had given such authority to medical doctors rather than the colonial administrators. Leprosy asylums now became Infectious Disease hospitals. This was the period subsequent to the Third International Leprosy Congress held in Strasbourg in 1923, where the failure of segregation policies had been acknowledged. Dr. Victor Heiser and Dr. Isador Dyer, two well-known American doctors working in India, had recommended the introduction of leprosy clinics to deal with the disease.¹¹⁷ As Rod Edmond shows, this conclusion was arrived at from the experience of many people working in the field, including British medical doctors on islands and working in leper colonies away from the metropole, and the debate between the hereditarians (against segregation) and the contagionists (in favour of segregation) had swung back and forth for quite some time.¹¹⁸

In order to understand the seriousness of the disease in Zanzibar, the first leprosy survey was conducted in Unguja and Pemba Island in 1930. A British leprologist, Dr. Robert Cochrane, was commissioned by the British Empire Leprosy Relief Association (BERLA) to do the survey. He examined school children and prisoners and visited the Poor House at Welezo and the UMCA Mission out-patient dispensary at Mkunazini and the Funzi Leprosium. He had also visited the Government farm in Zanzibar to look at the cultivation

¹¹⁶ ZNA AJ 11/2, 'Leprosy Decree', Leprosy Decree Rules, Directions, Re Under, Repealing.

¹¹⁷ Zachary Gussow, *Leprosy, Racism, and Public Health: Social Policy in Chronic Disease Control*, (Boulder: Westview Press, 1989), p. 151.

¹¹⁸ Rod Edmond, *Leprosy and Empire: A Medical and Cultural History* (Cambridge Social and Cultural Histories, 2006), pp. 77 and 80.

of *hydnocarpus anthelmintica*, the oil from which had been used as a cure for leprosy since 1922. Cochrane suggested the cultivation, instead, of *hydnocarpus wightiana*, the oil of which was more efficacious in treating leprosy than that from *hydnocarpus anthelmintica*. In response to Cochrane's suggestion, planting of *hydnocarpus wightiana* began in 1930 in Unguja, at Kitumba, Miwani, Kitope and Nyanjale. In Pemba, they were planted at Kiyuyu, Makondeni, Mpona, Tundaua and Fufuni.¹¹⁹ The 1930s was a decade in which hydnocarpus oil derived from *Hydnocarpus Wightiana* and *Hydnocarpus Anthelmintica* "was to become the core of British treatment of leprosy in India". Moreover, the International Leprosy Congress, which was held in Cairo in 1938, recommended world-wide use of hydnocarpus oil for treating leprosy.¹²⁰

Cochrane concluded his survey with the observation that "leprosy is not extremely prevalent in the islands, and therefore it should be a comparatively easy matter to bring it under control", adding that "I think that there is little doubt that there are certain fairly heavy foci of leprosy, and that in the greater part of the territory the incidence of the disease is not very high. If then these foci could be traced, it should not be difficult to discover the early case [patients]". He also declared himself to be "of the opinion therefore that both in Zanzibar and Pemba leprosy is not a serious problem, and that if the foci [the place] could be discovered the disease could be controlled in a comparatively short time."¹²¹ However, Cochrane's proposal was not implemented due to the lack of funds.

In 1931, another leprosy survey was conducted in Zanzibar, this time by Dr. E. Muir of BELRA. Muir, who had worked in the Calcutta School of Tropical Medicine in the 1920s, established that there were very few people suffering from leprosy in Zanzibar in general and in Zanzibar Town in particular.¹²² Muir had also done similar research in Northern Rhodesia,

¹¹⁹ ZNA BA 2/17, Annual Report of the Agricultural Department for the Year 1930, p. 7.

¹²⁰ Jane Buckingham, *Leprosy in Colonial South India Medicine and Confinement* (Houndmills, Basingstoke, Hampshire and New York: Palgrave Publishers, 2002), p. 94.

¹²¹ ZNA AJ 11/14, 'Report on Leprosy in Zanzibar by Dr. Cochrane, BELRA', Leper Settlement Funzi Reports, elements of Treatment of Leprosy: Re. (1930).

where the disease was widespread in comparison to Zanzibar. According to Megan Vaughan, the best explanation that Muir had given of the leprosy problem in the region was that the disease incidence was associated with eating and 'sanitary habits' and with the breakdown of 'tribal discipline' through social change and modernization.¹²³ As we have seen, the association of diseases with eating and sanitary habits was a common theme among European traders, geographers and medical doctors throughout nineteenth century in Zanzibar.

In 1934, Dr. T. B Welch, also commissioned by BELRA, conducted yet another leprosy survey in Zanzibar. Welch inspected all schools in Zanzibar and Pemba and apparently found no trace of leprosy among school children,¹²⁴ though according to John Iliffe medical experts expressed the view that leprosy was more visible in adulthood than in childhood. Leprosy was seldom a disease of young children and as Iliffe has observed "leprosy generally develops slowly in the body. Although most infection probably occurs in children, the disease often first becomes apparent in adolescents or young adults".¹²⁵ While Welch concluded that leprosy was not extensive in Zanzibar, the actual incidence of leprosy amongst Zanzibari children thus might have been higher than the surveys indicated.

Interestingly, archival sources indicate that in 1934 many people in Pemba Island protested against the survey being performed on their children. Dr. S.W. Lee, the Director of Medical Services reported how the success of the survey was endangered "by propaganda that people will be segregated".¹²⁶ The community apparently decided to protest against the survey work fearing segregation in isolation camps. Generally, lepers' resistance to isolation camps was

¹²² ZNA AB 2/335, 'Treatment of Leprosy', BERLA: Treatment of Leprosy Report of Mr. Oldrieve on Leprosy Work in the Zanzibar Protectorate; See also: ZNA AB 2/347, Leprosy Research Visit by Dr. E. Muir, 1931.

¹²³ Megan Vaughan, *Curing their Ills, Colonial Power and African Illness* (London: Polity Press, 1991), pp. 81 and 82.

¹²⁴ ZNA AJ 11/12, 'Report on Leprosy in Zanzibar', Funzi Leper Settlement, Epidemic On; ZNA AJ 11/7, Leprosy Survey of the Protectorate Organization, Policy, 1934.

¹²⁵ John Iliffe, *The African Poor, A History* (Cambridge: Cambridge University Press, 1987), p. 214.

¹²⁶ ZNA AJ 11/2, 'Memorandum concerning failure to report cases of leprosy', Leprosy Decree Rules, Directions, Re Under, Repealing, 1934.

common in many colonies in Africa. An example of leper revolts can be seen in Basutoland in 1914, where lepers at Butsabelo settlement decided to revolt since there was no hope of cure at the camp.¹²⁷ In Mali, lepers rebelled at Bamako Leprosarium in 1945 when patient rations were reduced. According to Eric Silla, however the reasons for this protest were not because of enforced segregation but were because European staff at the Leprosarium regarded free food as a privilege whereas the patients saw it as their right.¹²⁸

From 1934, there was a dramatic shift in policy towards sufferers of leprosy, and it was decided that isolation was no longer necessary or desirable. In Zanzibar, a decree passed in 1934 insisted on voluntary measures to eliminate the disease, repealing the 1926 decree. According to John Iliffe, Western medical expertise during the interwar period came to recognize that segregation did not cure leprosy.¹²⁹ Also, as Rod Edmond shows, “although the failure of segregation to affect the spread of leprosy made no difference to the policy of isolating its victims it made more urgent the need for a cure”.¹³⁰ The abolition of compulsory segregation thus became important. It was reported in the *Tropical Diseases Bulletin* in August 1934 that:

Leprosy should be treated through the abolition of compulsory segregation in favour of voluntary segregation; partly because compulsory segregation leads to the concealment of cases in their early and most effective stages and partly because it is becoming increasingly realized that better results in effecting cures are obtained by the latter method.¹³¹

This policy was also adopted in French colonies in Africa. In French Equatorial colonies, for instance, the adoption was being advocated in a number of local dispensaries of the modern methods of treating cases in their early stage, and had started by the 1930s.¹³² In 1930, the

¹²⁷ Iliffe, *The African Poor*, p. 217.

¹²⁸ Eric Silla, *People Are Not the Same, Leprosy and Identity in Twentieth-Century Mali* (James Currey: Oxford, 1998), p. 129.

¹²⁹ Iliffe, *The African Poor*, p. 80.

¹³⁰ Edmond, *Leprosy and Empire*, p. 154.

¹³¹ BERLA, *Tropical Disease Bulletin*, 1934, p. 16.

colonial government in Mali created the 'Service de la L pre', which involved the establishment of leprosy clinics. Many leprosy sufferers responded well to the treatment offered at the clinics and attendance of lepers at these clinics rose steeply.¹³³

In 1934, a property of the Catholic Mission and other lands belonging to Omar Said at the north of Welezo were acquired by the government for the establishment of 'a model leper village'.¹³⁴ Land was also acquired at Makondeni in the south of Pemba Island for the establishment of a leper village in Pemba. These were designed to cater for fifty patients. In 1935, Sir Leonard Rogers, who became a leprosy advisor in the Colonial Office in London, approved implementation of these new reforms at Welezo and Makondeni.¹³⁵ Zanzibar abolished compulsory segregation in 1936. As a result, Funzi was closed and Makondeni became a new leper settlement in Pemba.¹³⁶ After 1936, when scientific investigations began to expand in colonial Africa, missionaries ceased to be involved in medical treatment of lepers in Zanzibar. Dr. W. Leslie Webb reported that "model villages have been established at Welezo and Makondeni. Each settlement has its own hospital, dispensary, store, market, shop and club. Each club has its own gramophone". In 1938, at Welezo, the permanent buildings consisted of a treatment centre and hospital wards.¹³⁷

Also by 1934, in order to reduce the number of leprosy cases in Zanzibar, the government decided to deport lepers and TB patients back home to the mainland. Many of the lepers from the mainland protested, however, against their deportation. Most of these lepers and

¹³² BERLA, *Tropical Disease Bulletin*, 1934, p. 16.

¹³³ Silla, *People Are Not the Same*, pp. 104-105.

¹³⁴ ZNA AJ 11/18, 'Memorandum regarding acquisition of land at Welezo for new Settlement', Leper Settlement - Funzi Proposal to Close, 1934.

¹³⁵ ZNA AB 2/346, 'Correspondence regarding the abolition of compulsory segregation', General Policy Regarding Lepers, 1934-37.

¹³⁶ ZNA AJ 11/2, 'Memo by Dr. W. L. Webb, DMS, on the history of Leprosy settlement on Zanzibar and Pemba', Leprosy Decree Rules, Directions, Re Under, Repealing, 1934; A. E. M. Anderson-Morshead, *The History of the Universities' Mission to Central Africa, 1933-1957* (London: Westminster, 1962), p. 16.

¹³⁷ ZNA AJ 11/2, 'Memo by Dr. W. L. Webb, DMS, on the history of Leprosy settlement on Zanzibar and Pemba', Leprosy Decree Rules, Directions, Re Under, Repealing; ZNA AB 2/347, Leprosy Research Visit by Dr. E. Muir, 1934.

TB patients had migrated to Zanzibar as labourers to pick cloves or were employed in the commercial areas in the town. Dr. Webb reported in 1934 that, a leper, Shaaban Juma, on behalf of himself and five other lepers at Welezo asked that the poor and lepers not be repatriated to the mainland, since, he claimed, “they lived peacefully with the locals”. Also, lepers from the mainland who were confined at Welezo insisted on remaining at this leprosarium since, they said, their parents on the mainland were dead and they had no relatives to take care of them.¹³⁸ These people were desperate and had very few alternatives.

In 1935, the medical doctor in charge of Welezo Hospital reported that lepers lived “a comfortable life”. By that time, there were 53 lepers at Welezo. They lived in mud and thatch huts scattered throughout their cultivated fields. Daily rations were given to the patients along with small monthly allowances of £10 per year per patient in addition to free land, house, attendance and drugs. They supplemented their rations with the produce of their cultivation. The settlement was under the supervision of a Medical Officer assisted by a Sub-Assistant Surgeon. In addition to the use of hydnocarpus injections, emphasis was also put on the treatment of malaria and ankylostomiasis, which were sources of malnutrition.¹³⁹ Hydnocarpus injections lost their popularity in the late 1930s, there being disagreement among scientists on how effective it was. It seems that the medical services at Welezo Lepers Hospital were efficient in comparison to those at a similar institution in Malawi, since, in 1943, the Director of Medical Services at Zomba Leper Hospital in Nyasaland wrote to Dr. J. Earl, the Director of Medical Services between 1943-47 in Zanzibar asking how to improve the lepers’ treatment. By that time, in Nyasaland, there were six settlements under the missionaries. The Nyasaland government supplied free anti-leprotic drugs.¹⁴⁰

After the Second World War, more funds were provided by the colonial government in Zanzibar. These changes occurred following the introduction of the ‘Ten Years

¹³⁸ ZNA AB 2/339, ‘Letters from Patients requesting not to be repatriated to their former homes’, Leper Settlement at Welezo; See also: ZNA AJ 17/15, Repatriation of Paupers, Lepers, Patients etc to Mainland from Hospital or Welezo, (1943-53).

¹³⁹ ZNA AB 2/347, ‘Report on Leprosy in Zanzibar’, Leprosy Research Visit by Dr. E. Muir, 1934.

¹⁴⁰ ZNA AJ 11/47b, ‘Request to Nyasaland for Information regarding leprosy work’, Welezo Leper Settlement, 1943.

Development Plan', 1946-1955, to manage the islands' development. Funds were also allocated for the maintenance of Leper Hospital at Welezo and Makondeni. In 1948, for example, £3,206 was allocated to maintain Welezo Leper Hospital. This sum was greater than that provided by the colonial government in Uganda.¹⁴¹ These funds spearheaded the further extension of medical services for the treatment of leprosy. Modern and sophisticated drugs such as sulphone for the treatment of leprosy were introduced in Zanzibar aftermath the Second World War.

Many changes were introduced in leprosy treatment in Zanzibar after the Second World War. In 1949, hydro-chaulmoogra started to be used in Zanzibar.¹⁴² The use of diamino-diphenyl sulphone (DDS) or sulphone drugs for the treatment of leprosy had started in 1940 in England but in many French West African colonies hydro-chaulmoogra or suspensions of DDS in chaulmoogra ether continued to be in use until the mid-1950s. This was because the Director of Mobile Health Services in Mali felt that Africans were incapable of taking sulphone pills according to the requisite doses and intervals. He insisted that sulphone suspension had to be administered by injection for satisfactory treatment.¹⁴³ In 1951, the World Health Organization (WHO) called for the abandonment of chaulmoogra. It recommended mass treatment campaigns with DDS.

Sulfide drugs were introduced for the treatment of leprosy in Zanzibar in the early-1950s. In 1951, sulphone treatment was introduced at Welezo and Makondeni leper settlements. It was reported that the Medical Officers at Welezo took precautions to make sure that sulphone drugs worked properly. The majority of leper patients at Welezo were anaemic, because of hookworm, and efforts were made to eliminate hookworms from leper patients before the application of sulphone drugs.¹⁴⁴ Sulphone was also effective in reducing nodules. To some

¹⁴¹ ZNA AB 2/343a, 'Walezo Staff, Maintenance of Poor by the R.C. Mission at Welezo, 1946-56.

¹⁴² ZNA AJ 11/2, 'Provisional notes of new drug-Hydrochaulmoogreol', Leprosy Decree Rules, Directions, Re Under, Repealing, 1934. This can also be compared with doctors' concern with Africans and anti-retroviral drugs in the treatment of HIV/AIDS today.

¹⁴³ Silla, *People Are Not the Same*, pp. 109-111.

¹⁴⁴ ZNA AB 2/1, Medical and Sanitary Report 1951, p. 10.

extent, the drugs helped to reduce the stigmatization of leper patients by their community since they controlled permanent handicaps and “the offensive open sores which had commonly caused shame and social isolation in the past”.¹⁴⁵ Many lepers in the urban areas who voluntarily admitted themselves to the Clinic at Welezo did so because of the effectiveness of the sulphone drugs.¹⁴⁶ In 1956, discharges from Welezo Leprosaria exceeded admissions for the first time. Treatments were also established in village clinics.

People in Zanzibar became increasingly cooperative in the government’s effort to control leprosy after the Second World War. Information for the control of the disease was provided by the Zanzibar government. Brochures on health matters were circulated in community centres that were established in urban and rural areas after 1945. The increase introduction from 1940 of health education in many government schools raised levels of health awareness. Radio was also used to disseminate health information. In the 1940s, brochures were distributed in urban and rural areas on how to eliminate diseases such as malaria and hookworm infection, and how to get rid of houseflies. Filmstrips on the importance of attending maternity clinics and how to raise health children were transmitted through mobile cinemas. Information on hookworm and on how to protect against the disease was displayed on display boards in many community centres.¹⁴⁷ Local leaders increasingly reported to the medical authorities whenever they found leprosy patients in their locality.

In 1945, M. Suleiman, a villager at Kiwambamvua reported to the *Mudir* at Mangapwani in North Unguja that a leper patient, N. Mohamed had returned to their vicinity. The said person had been infected his partner, T. Msengesi. The atmosphere among the neighbours at Kiwambamvua was reported to be unhappy. They were even afraid to draw water from the same well as Mohamed and Msengesi or buy things from the same shop.¹⁴⁸ In another example from the colonial records, we read how in 1946, the *Sheba* at Pitanazako, North

¹⁴⁵ Silla, *People Are Not the Same*, p. 156.

¹⁴⁶ ZNA AB 2/1, Medical and Sanitary Report 1951, p. 10.

¹⁴⁷ ZNA AJ 8/3, ‘Hygiene’, Hygiene Subjects and Health Education.

¹⁴⁸ ZNA AJ 11/47a, ‘List of lepers and their home village’, Welezo Leper Settlement, 1930-1960.

Unguja reported to the medical officers the presence of lepers in his locality. In the Haji family at Pitanazako, three family members were suffering from leprosy. Two brothers, Jongo and Juma, had nodular leprosy of a fairly advanced nature. Sunna, a daughter of Jongo had patches on the face, which was the initial symptom of the disease though not in all cases. Jongo and Juma were then transferred to Welezo to receive treatment. Since Sunna's problem was not so advanced, she was admitted to Mkokotoni hospital, nearby, which was used by all the villagers in North Unguja.

In 1950, T. Ameir, *Sheha* of Muongoni reported to the *Mudir* of Unguja South that one H. Pandu was suffering from leprosy. Ameir requested that the medical officers remove Pandu from the village since the villagers were unhappy with his presence. In 1954, two recovered lepers, Tani and his wife Siti, were discharged from Welezo. They avoided returning to their former village feared further stigmatization. They had nowhere to go so they approached Juma Moladia, the owner of a plot of land near Welezo Hospital to build a hut.¹⁴⁹ This was the time before the introduction of effective sulphone drugs for curing leprosy. Yet despite the effectiveness from the early-1950s of sulphone drugs, stigmatization of lepers was not completely eradicated in Zanzibar. People were still afraid of the disease. At recent time, people who are suffering leprosy are not stigmatized any more. They are living at homes together with their families. According to Dr. Sira Ubwa Mamboya, a manager of the Zanzibar Tuberculosis and Leprosy Programme (ZTLP), today the number of people who are suffering Hansen's disease is very low, though she did not provide an exact figure.¹⁵⁰

After the Second World War, special clinics for leprosy treatment were attached to the government hospitals in East Africa. These clinics spearheaded the medical development and control of leprosy. In Tanganyika, for example, there were 19 leprosy hospitals and 13 satellite leprosy hospitals in 1959.¹⁵¹ With the expansion of biomedical facilities in urban Zanzibar, the attitude of the town's population towards Western medicine became

¹⁴⁹ ZNA AJ 11/47a, 'List of lepers and their home village', Welezo Leper Settlement, 1930-1960.

¹⁵⁰ Issa Yussuf, 'TB, leprosy patients ditch hospitals for traditional healers', *The Guardian*, 31 October 2006, p. 5.

¹⁵¹ ZNA BC 26/2, *Tanganyika Report on Health Services 1959* (Dar es Salaam: Government Printer, 1960), p. 7.

increasingly favourable, creating a good climate for the extension of leprosy treatment. The urban residents were anxious however that, since old lepers were under the care of missionaries at the Poor House, stricter measures should be adopted to ensure that lepers were treated according to Muslim religious customs. In 1946, *Mwongozi* had reported that the Muslim community in urban Zanzibar wanted those who died as lepers at Welezo Poor House to be returned to their families to be buried according to Islamic custom. They also proposed that those who had no families be buried by *Shehas*, under special funds for the Poor. In reply, the District Commissioner pointed out that quite a number of the inmates at Welezo Poor House had arrived in such a moribund condition that they were incapable on admission of giving names and addresses of relatives, adding that “at Welezo, Muslim lepers were buried according to their customs and there is only one Comorian with some knowledge of religious matters”.¹⁵²

In one more BERLA study of leprosy in Zanzibar in 1951, Dr. Ross Iness, the Inter-territorial Leprologist, conducted a survey in Unguja and Pemba in which 32,689 people were examined: 10,786 in Unguja and 21,903 in Pemba. The survey showed that only about four percent of population in Zanzibar suffered from leprosy, a lower percentage than in other parts of East Africa. In Kenya and Uganda the percentage was between ten and seventeen percent. The leprosy infection rate was found to be 3.9 per mile for Zanzibar and 5.5 per mile for Pemba. These rates were considered lower than those in Kenya, Tanganyika and Uganda.¹⁵³ According to the survey, the majority of cases in the islands were mild or early cases. Iness reported further that, a good number of the cases seen in Unguja and Pemba had come over from the mainland of Africa.¹⁵⁴ Again, it was confirmed by these medical doctors that leprosy was not very extensive in the islands and in the urban areas. Most of the people suffering from leprosy in Zanzibar were migrants from the mainland of Tanganyika and Kenya who arrived in Zanzibar as seasonal labourers to pick cloves.

¹⁵² ZNA AB 2/343b, ‘Welezo Staff’, Maintenance of Poor by the R.C. Mission at Welezo.

¹⁵³ ZNA BA 7/33, Medical and Sanitary Report for the Year ended 31st December, 1951.

¹⁵⁴ ZNA AB 2/ 348, ‘Summary of Report on Leprosy in Zanzibar’, Leprosy Campaign, 1951-1956.

Iness also visited the Welezo Leprosy Hospital, where he found 54 leprosy patients, of whom 45 were males and 9 were females. Among them, 5 male lepers were categorized as Arabs, 49 were categorized as Africans, (of which 40 were males and nine were females). Iness identified the cases as “23 lepromatous, 15 tuberculoid, 13 uncharacteristic and 3 burnt-out”.¹⁵⁵ In colonial Mali and in West Africa, the tuberculoid form was most common. Tuberculoid leprosy resulted in people with well-developed immunity. There were very few lepromatous cases. In the lepromatous form weaker immunity had allowed bacilli to multiply and spread through the blood to all parts of the body. The lepromatous form was more contagious and a source of transmission.¹⁵⁶ However there is no indication of reasons for the higher percentage of the lepromatous form in Zanzibar. It could be suggested that poverty had led to the higher percentage of the lepromatous hence a weaker immunity.

Zanzibar was reported to be a model location for leprosy research in Africa following the successful work carried out in the control of the disease. This view was expressed in the BERLA Executive Committee following a visit in 1951 by BERLA’s research team, which consisted of two doctors, four nurses and four lay workers. It had been reported that in Zanzibar Town with 20,000 people, at risk, 2,000 males were examined of which four were found with the disease. This was 2.0 crude rate per thousand and 1.5 corrected rate per thousand.¹⁵⁷

At the international level, the 1950s and 1960s marked the introduction of a worldwide mass campaign to end leprosy, led by Raoul Follereau (1903-1977), a French journalist.¹⁵⁸ By 1960

¹⁵⁵ ZNA AJ 11/59, ‘Classification of Leprosy at Welezo’, Treatment of Leprosy, 1950-1960.

¹⁵⁶ Silla, *People Are Not the Same*, pp. 20-21

¹⁵⁷ ZNA AB 2/348, ‘Correspondence regarding East African Leprosy Survey’, Leprosy Campaign, 1951-56.

¹⁵⁸ Vaughan, *Curing their Ills*, p. 93. In 1936, Follereau started anti-leprosy campaigns in Africa. In the following ten years he travelled the world many times, holding 1200 conferences which allowed him to support the building of Adzopé in Ivory Coast, the town of the leprosy affected persons. But he still felt that some thing more should be done. He wanted them to be free from the segregation imprisoning them, and from the stigma of the disease. So he went to visit them, he embraced them, he became friends with them, to promote the idea that leprosy-affected persons are human beings, as for centuries they had been considered just deformed beings to be isolated, by the whole world. www.alfi.it/english/gen/follereau/follereau.htm#biography. Accessed on 8 October 2008.

the number of patients attended to in leprosy hospitals rose once more as patients were attracted by the success promised by sulphone drugs. The number of inmates at Welezo remained fairly constant from that time and many of the patients were living at the Poor House.¹⁵⁹

The Care of Mental Patients, 1930-1960

As already noted, after the Second World War, the British colonial government in Zanzibar began to pour in money to finance economic and social developments, including the health sector. The Zanzibar Development Department was established in 1945 to spearhead these developments, instituting the 'Ten Years Development Plan' to coordinate the process. The First 'Ten Years Development Plan', which covered the period from 1946-1955, concentrated on the upliftment of the living standards of Africans. The programme was formulated by Eric Dutton, the Chief Secretary of the State in Zanzibar. The construction of the Mental Hospital was also funded at this time, through the 1946-1955 Programme of Social and Economic Development.¹⁶⁰ The construction of the Hospital was completed in 1948. According to G. Myers, the area in which the hospital was located, and Holmwood Mental Hospital itself, (later Kidongo-Chekundu Mental Hospital), was named after Frederick Holmwood, an Assistant British Political Agent in the early-1870s and an anti-slavery crusader, who died in Zanzibar in the late nineteenth century.¹⁶¹ The Health Department took over administration of the Mental Hospital from the Police and Prisons Department in 1947.¹⁶²

¹⁵⁹ ZNA BA 7/39, Health Department Annual Report, 1960, p. 28.

¹⁶⁰ ZNA AB 2/369, 'From British Resident the CS, 19 May, 1945', Accommodation and Treatment of Mental Patients, 1940-1960; ZNA AB 2/155, 'The Construction of the Mental Hospital', Mental Hospital, 1947-1963.

¹⁶¹ Garth Myers, 'Intellectual of Empire: Eric Dutton and Hegemony in British Africa', *Annals of the Association of American Geographers*, 88, 1 (March, 1998), pp. 1-27, p. 16.

¹⁶² ZNA AJ 29/234, 'Report of the Mental Hospital, 1948', Mental Patients Decree.

Furthermore, in 1947 the 'Mental Patients Decree' was passed, coming into force in 1948. The Decree repealed the 1917 Decree which had empowered the British Resident in Zanzibar to establish asylums at such places "as he [thought] fit". The Lunacy Decree of 1917 had provided for the establishment of Lunatic Asylum at the Central Prison.¹⁶³ Also in 1947, a decree was passed placing the Mental Hospital under the Medical Officers. It was reported in a letter from the Director of Medical Department to the Chief Secretary that the decree "follows closely the pattern of law in regard to Mental Treatment Act in force in England".¹⁶⁴ In 1930, the Mental Treatment Act had been enacted, which was "intended to encourage voluntary treatment and to promote psychiatry as a curative rather than a custodial discipline". Clinical treatments for mentally ill people were, on paper at least, becoming more advanced.¹⁶⁵

The Mental Hospital accommodated 106 male mental patients and 53 female mental patients.¹⁶⁶ In 1949, fees were introduced. The 1947 Mental Patients Decree had allowed private paying patients to be admitted into Mental Hospital.¹⁶⁷ Patients who were unable to pay were treated at no cost to themselves. Those who were able to pay were charged four-and-half shillings per day. A single separate room cost 6 shillings. In 1949, the diet was the same for paying and non-paying patients.¹⁶⁸ These changes in mental health care were broadly representative of the new emphasis that followed the International Congress on Mental Health held in Cuba in 1948, which had pressed for better care of mental patients worldwide.¹⁶⁹

¹⁶³ ZNA AJ 29/234, 'From CS to the MOH, 3 June 1948', Mental Patients Decree.

¹⁶⁴ ZNA AJ 29/234, 'From DMS to CS, 4 August 1948', Mental Patients Decree.

¹⁶⁵ Jock McCulloch, *Colonial Psychiatry and the African Mind* (Cambridge: Cambridge University Press, 1995), p. 9.

¹⁶⁶ ZNA AJ 12/24, 'From DMS to CS, 15 March, 1948', New Mental Hospital.

¹⁶⁷ ZNA AB 2/365, 'Mental Patients Decree No. 9 of 1947', Mental Patients Decree No. 9 of 1947.

¹⁶⁸ ZNA AJ 29/234, 'From the Superintended Mental Hospital to DMS', Mental Patients Decree.

¹⁶⁹ ZNA AB 2/84, International Congress on Mental Health, 1948-1951.

Also in 1947, a qualified psychiatrist was appointed to manage the hospital. Mr. C. Baty, who had formerly worked as superintendent at the Mental Hospital in Kampala, Uganda, was appointed to the post. In 1948, Mr. Baty started to train the attendants for the new Mental Hospital.¹⁷⁰ At the same time, Medical Officers were appointed to work in the Mental Hospital under the 1947 Mental Patients Decree.¹⁷¹ The first Medical Officer (MO) was Dr. D. K. Young. Later, Zanzibari doctors were appointed: Dr. Awadh and Dr. Said Mahfoudh Bingurnah became MOs in 1956 and 1958 respectively.

A 'Mental Hospital Visitors Board' was introduced in 1948. Among the Board members were the Resident Magistrate and the Matron of the Government Hospital.¹⁷² In 1948, the Kidongo-Chekundu Mental Hospital was praised for its improved services. Visiting on 12 November 1949, T. K. Lloyd, Permanent Under-Secretary in the Colonial Office, wrote in the Zanzibar Mental Hospital Visitor's Book, "I congratulate the Psychiatrist and his Staff on the cleanliness and good order throughout the Hospital". M. H. J. Seddon, also of the Colonial Office, who visited the Mental Hospital in 1950, commented that "this hospital is great credit to the Mental Service of Zanzibar, and deserves to be recognized as a model for similar institutions elsewhere". Another Colonial Office representative, Wilson-Race, noted in 1951 that the hospital is "cleanest and most impressive mental institution I have seen".¹⁷³ A nursing sister from Uganda who visited the hospital in the mid-1950s wrote in the Visitors Book that it was "A beautiful mental hospital of perfect design. I am sure the patients are most comfortable in their bright airy wards. Cleanliness and varied diet are credit to all concerned".¹⁷⁴ In 1955, Holmwood Hospital was seen as a model for other institutions in tropical colonies. Details of its planning and staffing arrangements were specifically requested by administrators in Borneo, Malay and Basutoland and by the Secretary of the

¹⁷⁰ ZNA AB 2/155, 'Appointed of Superintended', Mental Hospital, 1947-1963.

¹⁷¹ ZNA AB 2/366, 'Medical Officer of Health, Mental Hospital', Mental Patients Decree No. 9 of 1947.

¹⁷² ZNA AJ 29/234, 'Visitors' Book', Mental Patients Decree, 1947.

¹⁷³ ZNA AJ 29/234, 'Visitors' Book', Mental Patients Decree.

¹⁷⁴ ZNA AJ 29/234, 'Visitors' Book', Mental Patients Decree.

Colonies. There were four wards for female and male mental patients and two separate wards for epileptics.¹⁷⁵

The 'Mental Patients Decree' of 1947 had ruled that the "Magistrate under the advice of Medical Officer would permit discharge of mental patient to be under the care of relations or friends".¹⁷⁶ One of the mental patients admitted was Shomari, a former mason who lived at Rahaleo, Ng'ambo. He was sent to the Kidongo-Chekundu Mental Hospital (KMH) by his wife binti Abdalla in 1947. Dr Young recorded that Shomari, a 50 year old man of unsound mind, was suffering paranoid schizophrenia. He had delusions of persecution and auditory hallucinations.¹⁷⁷ Records suggest that the relationship between the Mental Hospital authorities and the families of the patients seems to have been still good since some family members sent their mental patient relatives to the hospital. More significantly, they also readily agreed to take care of them after they were discharged.

There was also the case of Mzee, a Comorian who had arrived in Zanzibar with his wife Sabina, 'an Africana of Cape Town' in 1934. Mzee was admitted to KMH in 1947. On the day of his admission, he had gone to the Sultan's Palace and insisted on seeing the Sultan. He was apprehended by the Sultan's guards and sent to the Police Station and then to the KMH. In 1952, when he had recovered, his mother Nyahira and brother Said of Dembeni Comoro were ready to take care of him.¹⁷⁸ In 1949, Khimji, an Ismaili of Kiponda, Stone Town sent his brother Gulamal, who was 29 years old, to the Mental Hospital. Gulamal became insane in 1947. He became violent and assaulted his brother with a crowbar. In 1950, Dr. Galen, the psychiatrist reported that Gulamal suffered delusions of a fleeting nature and was depressed.¹⁷⁹ In 1951, M. Mgeni, who became mentally ill, was admitted for

¹⁷⁵ Interview with Said Humoud, a psychiatric nurse at Kidongo-Chekundu Hospital on 4 July 2008.

¹⁷⁶ ZNA AB 2/365, 'Mental Patients Decree No. 9 of 1947', Mental Patients Decree No. 9 of 1947.

¹⁷⁷ Patient File No. 2 of 1947 reserved at the Kidongo-Chekundu Mental Hospital (KMH). Accessed on 4 July 2008.

¹⁷⁸ Patient File No. 3 of 1947 reserved at the KMH. Accessed on 4 July 2008.

¹⁷⁹ Patient File No. 3 of 1949 reserved at the KMH. Accessed on 4 July 2008.

one month at the Holmwood Mental Hospital. His relatives had requested his release to their care when his health had improved.¹⁸⁰

Records also show that sometimes family members cooperated with police in escorting the violent mentally ill patient to the Mental Hospital. In 1952, two mental patients were sent to the Mental Hospital for throwing sticks at people and another for trying to harm his relatives by assaulting them. These mentally ill patients sometimes went about naked in public. One Sharif made an application to the Mental Hospital authority saying that his maternal aunt, Kazija was of unsound mind and was incapable of managing herself.¹⁸¹ Families could also petition to have patients released into their care. One example is from 1953, when the mother of Juneja had asked the Mental Hospital authority to release her son to be under her care.

The British Resident in Zanzibar had to decide on critical mental cases, especially those which involved murder. He had to say on advice from the medical doctor and psychiatrist whether the person needed to be confined in prison or in the Mental Hospital. Following the promulgation of the 'Mental Patient Decree of 1947', the British Resident ordered the submission of a medical report on a detained person's mental and physical condition at the expiry of the first and second years of confinement. For instance, in 1951, the Resident had to consider the case of Mkanda, who was found guilty of murder but insane. The Resident directed that Mkanda be kept under observation by two Medical Officers for one month. The Resident had to decide whether the insane person was to be confined in the Central Prison or in the Mental Hospital. Also, there was a case of Mtwana who was charged with arson and assault.¹⁸² Also, in 1957, the British Resident, Henry Steven Potter ordered that one Salum be confined as an accused person of unsound mind in the Mental Hospital.¹⁸³

¹⁸⁰ ZNA AJ 12/45, 'Mental Health of M. Mgeni', Mental Patients Miscellaneous Correspondences, 1947-58.

¹⁸¹ ZNA AJ 12/45, 'Mental Health of Kazija', Mental Patients Miscellaneous Correspondences, 1947-58.

¹⁸² ZNA AJ 12/45, 'Mental Health of Mkanda', Mental Patients Miscellaneous Correspondences, 1947-58.

¹⁸³ ZNA AJ 29/234, 'From the British Residence to the Superintendent, Mental Hospital, 5 July, 1957', Mental Patients Decree, 1947.

Police officers in Zanzibar continued to apprehend violent mental patients who “roamed in the streets”. They then sent them to the Mental Hospital. In the 1950s, the MO intervened and requested the police officers not to detain these suspects until Medical Officers had established that they were insane, saying that “we should not send any person to the hospital unless we have a complete report of his character and lunacy” and that he “was not going to accept any person in future under similar circumstances”. This was noted by the MO in 1956, when Abdalla Mohamed was seen chasing people with a knife at Mlandege and was assumed to be a mental patient. The Inspector of Police replied that “if a patient had been in Mental Hospital previously that was sufficient reason for assuming that his subsequent actions betraying continuing”.¹⁸⁴

In the 1950s, as noted above, family members became more willing to send their mentally ill patients to Kidongo-Chekundu Mental Hospital. The ‘Mental Patient Decree of 1947’ had ruled that there was to be no more ‘incarceration’. Instead, it insisted on treatment for the patients. More modern treatments were introduced after the Second World War. For instance, and as many historians of psychiatry have noted, a real revolution in psychiatric medicine came with greater availability of hypnotic and sedative drugs. From 1954, Electroplexy (electro-convulsive therapy) became routinely used. It was applied to the patient under relatives’ consent. Chlorpromazine began to be used in 1957; it was useful in the “treatment of psychomotor excitement as it quiets and dampens psychic and motor activity”.¹⁸⁵ At Ingutsheni Mental Hospital in Southern Rhodesia, chlorpromazine was introduced at the same time as in Zanzibar. The use of these drugs “created alternatives to confinement at Ingutsheni Mental Hospital, the expansion of out-patient treatment, and more rapid discharge rates”.¹⁸⁶ It might be argued that family members were attracted by better treatments and therapies. On the other hand, many historians are deeply critical of the extensive use of electro-convulsive and drug therapies in African asylums (as elsewhere).

¹⁸⁴ ZNA AJ 29/234, ‘From MO to the Commissioner of Police’, Mental Patients Decree, 1947.

¹⁸⁵ ZNA AB 12/45, ‘Electroplexy’, Mental Patient Miscellaneous Correspondences, 1947-1960.

¹⁸⁶ Lynette Jackson, *Surfacing Up, Psychiatry and Social Order in Colonial Zimbabwe, 1908-1968* (Ithaca and London: Cornell University Press, 2005), pp. 20 and 156-157.

Lynette Jackson, for instance, claims that “It is tempting to believe that ECT was treated by the authorities as a way to make spaces in the perpetually overcrowded psychiatric wards through the rapid discharge of those temporarily improved after treatment”.¹⁸⁷

In this period, too, local Zanzibaris began to be trained in Mental Nursing. In 1961, Mr. K. B. Jadav had studied in England. On completion of his studies, he became an in-charge nurse at Kidongo-Chekundu Mental Hospital. He later became a Superintendent. Another student, Abdullah M. Sharif, studied in England for the Certificate of Registered Mental Nurse in 1962. He specialized in Mental Health, later trained for State Registered Nurse (S.R.N.) and took a one year administrative course at the Royal College of Nursing with Zanzibar government sponsorship.¹⁸⁸ This was the beginning of the permanent involvement of Western-trained local mental health professionals in mental health care in Zanzibar. Biomedicine, including psychiatry, was by that time an important element of a modern and nationalist agenda, and the next section leads us to a brief discussion of the new relationship between medicine and politics in Zanzibar.

‘Zama za Siasa’, 1951-1963

In Zanzibar, it is widely accepted that the ‘zama za siasa’, a new political era started from the mid-1950s. By that period, political parties had been formed in many African countries to organize political nationalist movements. The Mau Mau movement in Kenya in 1955 and Egyptian and Ghanaian independence in 1953 and 1957 respectively inspired other colonized African countries to protest against colonial domination. In colonial Zanzibar, nationalist movements expanded after the ‘Anthrax Riot’ of 1951. The protest involved the rural peasants of Kiembe-Samaki in Unguja West who were objecting to the government stock inoculation project and land alienation. A. Babu argues that “this uprising first shattered the colonialists’ self confidence, marked the beginning of mass organization and

¹⁸⁷ Jackson, *Surfacing Up*, p. 175.

¹⁸⁸ ZNA AJ 15/165, ‘Training of nurses abroad’, Training in Nursing.

ushered in the era of 'party politics'. More importantly, it initiated the revolutionary petty bourgeoisie which made Zanzibar's political experience so unique in East Africa".¹⁸⁹

Hostility between the government in Zanzibar and the Kiembe-Samaki people had begun in 1944. At that time, over 200 acres of land had been acquired by the government to build cattle dips as there was with an outbreak of rinderpest disease; 8,857 cattle were inoculated, and eight had died after being inoculated. In 1949, as more cattle died of the disease, the people of Kiembe-Samaki intensified their opposition to the dipping, and tension became acute when the government required a portion of *Wakf* land, where a mosque stood, for the extension of the Kisauni Aerodrome.¹⁹⁰ According to some Muslim leaders, *Wakf* land cannot be used for anything other than the intended purpose.

The 1951 'Cattle or Anthrax Riot' broke out when the Kiembe-Samaki peasants again protested against dipping. The riot started when the villagers marched to the Central Prison to rescue their fellow peasants who had been jailed because they were said to have breached the '1944 Inoculation Decree' which required them to dip their cattle. What is very significant for the present study is that before this disturbance there had been a political outcry against the state's apparent neglect of people's health in favour of the health of stock animals. One placard protested that "Government made 3 deeps [dips] for cattle treatment, while only one dispensary for men [sic. in Fumba Peninsula] which is the best to have; healthy cattle or healthy men?".¹⁹¹ These peasants were supported by the port workers who struck in 1948 in urban Zanzibar. During the 'Cattle Riot' people in other rural areas from Makunduchi, Muyuni, Unguja Ukuu and Tunguu also indicated their readiness to support the peasants.¹⁹²

¹⁸⁹ Babu, 'The 1964 Revolution: Lumpen or Vanguard?', p. 221.

¹⁹⁰ ZNA BA 106/21, Report on the Civil Disturbances in Zanzibar on July 30th 1951, pp. 3, 4 and 5.

¹⁹¹ ZNA BA 106/21, Report on the Civil Disturbances in Zanzibar on July 30th 1951, p. 7.

¹⁹² Abdulrahman A. Juma, Cattle Riot (Vita vya Ng'ombe), A Case Study of Peasant Rising, Zanzibar 30 July 1951 (B. A Dissertation, University of Dar es Salaam, 1982), p. 19.

Against this backdrop, protest movements in rural Zanzibar also expanded to include Ross Innes's 1951 leprosy survey in Unguja and Pemba. He launched his survey in urban areas in early July. At 9:00 a.m. on 26 July 1951, survey work got under way at Jongowe in the south of Tumbatu Island, a small islet north-west of Unguja Island. Dr. Innes and his survey team together with the *Mudir* (the District Commissioner) set sail to reach Kichangani harbour in central Tumbatu around 12 noon. At Kichangani, a hostile mob of about 300 young men confronted the survey team. People about to be examined were assaulted with sticks, and the work was brought to an immediate halt, with some injured cases. Next day, the same situation occurred at Nungwi and Kigunda villages in the further North of Unguja Island; at Kigunda about 300 men joined in the protest. At Nungwi, people gathered outside the *Sheha's* house. They had sticks in their hand and they were ready to attack anyone who might collaborate with the survey team.¹⁹³ The crowds were motivated by the strong current, at that time, of anti-government politics, with the anti-leprosy survey strike following immediately on the 'Anthrax Riot'.

In 1954, rural peasants of Unguja formed their first political party, the 'Nationalist Party of the Sultan's Subjects' (NPSS). In the following year, the party changed its name to the Zanzibar Nationalist Party (ZNP) when the radical Arab Association members joined with the peasants. Meanwhile, in 1957, the Afro-Shirazi Party (ASP) was created out of the merger of the African Association and the Shirazi Association.¹⁹⁴ Mostly through the medium of their newspapers, and as already described, these political parties played an important role in the demand for better medical facilities. In addition, these political parties - with assistance from communist and socialist countries - organized scholarships in a number of different fields of study, include medicine. In the 1960s, these political parties went a step further, providing health services to complement the government medical services.

¹⁹³ ZNA AB 2/348, 'Memorandum regarding leprosy survey at Tumbatu Island', Leprosy Campaign 1951-1956.

¹⁹⁴ Babu, 'The 1964 Revolution: Lumpen or Vanguard?', p. 225.

After the 1957 General Election with the majority wins for the ASP, which was supported mainly by the Africans in Zanzibar, political and ethnic tensions began to intensify. Most of the African squatters were evicted and their plants were uprooted from the Oman Arab plantations. The Arabs were the majority supporters of the Zanzibar Nationalist Party. Tension increased in the 1961 June Election when fighting broke out between ZNP and ASP members. About 68 people were injured and 8 were killed.¹⁹⁵ It was then that the ZNP opened its dispensary - the ZNP Welfare Dispensary - at Darajani in Zanzibar Town. It was opened at the height of political conflict in Zanzibar with many party members having been injured in the political turmoil. ZNP executive members declared that the dispensary was intended for poor persons in the town, and would treat all patients - for free if necessary - regardless of political party.¹⁹⁶ But no ASP members were ready to avail themselves of these services in the prevailing climate of political friction. During and after the riot, the ASP established their own first-aid services at Miembeni in their party headquarters. More repercussions could be seen after the 1964 Zanzibar Revolution with a mass exodus of Zanzibari doctors, mainly of Arab descent, to Europe, America and Middle East. They were replaced by Chinese and German doctors. Importantly, after 1964 many young male and female Zanzibaris were sent to East Germany, Cuba, China, Hungary, Romania and Russia for medical training.¹⁹⁷

As already mentioned, by the mid-1950s communist and socialist countries such as Russia, China, East Germany, Cuba, Hungary, Poland, Czechoslovakia and Romania were contributing morally and materially to nationalist struggles in many colonized African and Asian countries. Scholarships to study various fields including medicine were provided to the colonized countries, including Zanzibar. The aim was to assist these countries to be self-sufficient in doctors after independence.

¹⁹⁵ ZNA AK 3/105, Disturbance of June, 1961 and Revolution of 12 January 1964. See also: Zanzibar Government, 'Report of a Commission of Inquiry into Disturbance in Zanzibar during June' (London: Her Majesty's Stationery Office, 1961), p. 21.

¹⁹⁶ ZNA AJ 15/313, 'Darajani Dispensary', Establishment of the New Dispensary by the ZNP in their Headquarter at Darajani, 1961.

¹⁹⁷ Interview with Dr. Kaumbwa on 28 January 2008 at Al- Rahma Hospital, Kilimani.

Zanzibari connections with socialist countries were backed through individual initiatives and by political parties. The ASP channelled their applications through the ‘Zanzibar Association of Dar es Salaam’. This Association was inaugurated in 1960 to organize politically the Zanzibaris who were living in Dar es Salaam. The Association was under the leadership of Ali Mwinyi Tambwe and Abdalla Mwinyi. The other active members were Hussein Zingaro, Ashraf Himidi and Fatma Hassan. Sihaba Ismail was active in the association for a short period while she was living in Dar es Salaam in the early-1960s.¹⁹⁸ These scholarships were particularly helpful to the Zanzibari-Africans, the majority of whom had had little opportunity of receiving higher education. A. Babu, one among the leading politicians in Zanzibar nationalist activities, and who became a Secretary of ZNP and a founder of the UMMA Party in 1963, developed his own contacts with China and Cuba from the early-1960s. He established *Zanews*, a newspaper which was financed by the China News Agency. Babu also organized a number of scholarships for his party members.¹⁹⁹

One Zanzibari who received such assistance was Bi Sihaba Ismail Farhani, an ASP activist.²⁰⁰ She was born in 1936 at Mwembeladu Maternity Home of African parents.²⁰¹ Under the care of her adopted mother, Bi Zawana Ali bin Salim, an Arab from the Busaidi clan, Bi Sihaba managed to complete her primary education at Forodhani Girl’s School which she attended from 1943 to 1949.²⁰² She continued her secondary education privately through correspondence courses up to grade 12 in the mid-1950s. She joined the African Association and later the Afro-Shirazi Party in 1957. By the late-1950s, Bi Sihaba had become very active in the political life of Zanzibar. As mentioned previously, she became an active ASP member

¹⁹⁸ See also Minael-Hosanna O. Mdundo, *Masimulizi ya Sbeikh Thabit Kombo Jecha* (Dar es salaam: Dar es salaam University Press, 1996), p. 90; Interview with Bi Sihaba Ismail on 19 September 2007 at Kikwajuni.

¹⁹⁹ Anthony Clayton, *The Zanzibar Revolution and Its Aftermath* (Hurst: London, 1981) p. 45n.

²⁰⁰ I would like to thank Bi Sihaba for giving me her precious time during my field work in September and November, 2007 in Zanzibar.

²⁰¹ Interview with Bi Sihaba Ismail on 19 September 2007 at Kikwajuni.

²⁰² Forodhani Girls’ School was the first school for girls in Zanzibar following the inauguration of government female education in 1927. At that time, it was mainly Arab girls who enrolled at the school. A class for African girls was started in 1930 and a hostel for girls from rural areas was started in 1932. In 1933, a pupil-teacher training class was inaugurated to train female teachers.

in Dar es Salaam where she worked briefly at the early-1960s. She became involved in the work of the Zanzibar Association at that time.

Between 1960 and 1962, while working as Registration clerk at the ASP headquarters in Mlandege, Bi Sihaba managed to qualify for a scholarship to Hungary. She enrolled at Budapest University for a Diploma in General Nursing a few months before Zanzibar's independence from the British on 10 December 1963. In Photo 6.3 below, Bi Sihaba is in the middle front with the other Hungarian nursing students. In 1966, she returned to Zanzibar, where she worked at the V. I. Lenin Hospital.²⁰³ She was posted to a number of rural health dispensaries before retiring in 1983. She then became fully involved in politics and held various political positions.

Photo 6.3: Bi Sihaba and her fellow Hungarian nursing students, 1965



Source: Courtesy of Bi Sihaba.

²⁰³ The former Karimjee Jivanjee Hospital was named V. I. Lenin Hospital after the 1964 Zanzibar Revolution. In the 1980s, after the fall of Soviet Union, the name was changed again to Mnazi Mmoja Hospital.

There were, indeed, a number of Zanzibari Africans who received scholarships in medical fields. One was the late Dr. Mahmoud Hassan, who studied medicine in Romania from 1963 to 1969.²⁰⁴ Dr. Mwanapili Mahmoud received her medical training at Volgograd State Medical University in Russia from 1963 to 1969 and specialized in gynaecologist. She received a scholarship and was also assisted by her grandmother, Bi Mwanaidi Dai, an active woman politician and one of the leading members of the ASP women's wing and the Tanzania Women Association (UWI).²⁰⁵ These doctors returned to Zanzibar afterwards and worked in the government hospitals.

ASP, ZNP and ZPPP representatives openly challenged the medical authorities on inadequacies in the health service. Legislative Council (LEGCO) sessions were used as a platform to air views on these defects and make suggestions for improvement of health and medical services. Council members urged the colonial authorities to improve health facilities and condemned them for allowing medical services to be operated on racial lines. Another issue that bothered the urban population was the alleged carelessness of medical officers during night shifts. This was brought up by Saleh Saadalla, an ASP representative. In 1961 Hon. Saleh Saadalla asked:

Is the Government conscious of the fact that some of the medical officers in the HKJ Hospital have tendencies of keeping themselves away from the hospital compound during the time of their night duties without leaving any message to indicate where they go and can be called in case of an emergence call?²⁰⁶

This caused problems for patients who required urgent attention.

²⁰⁴ Interview with Bi Mtoro Hussein Jumbe, the wife of the late Dr. Mahmoud, at Michenzani on 12 December 2007.

²⁰⁵ Interview with Dr. Mwanapili Mahmoud, at Marie Stopes Clinic at Kilimani on 20 January 2008.

²⁰⁶ ZNA AJ 12/49, 'Legislative Council Questions', Health and Local Affairs, Legislative Council Questions, 1961-63.

Conclusion: Medicine and Power

From the late nineteenth century up to the late colonial period, the work of extending biomedical facilities in colonial Zanzibar, and to the urban population, was a combined effort on the part of the German and British colonial states, individual philanthropists, ethnic communities, and the Zanzibari urban elite, especially Indians and Omanis. The chapter has shown that a special effort was made by individuals and community leaders to promote biomedical practices.

Involvement of the urban community in driving medical development had begun in the late nineteenth century. The Indian community who formed the merchant class had financed the establishment of private dispensaries to serve their own community members. Though racism had of course existed in relations between the rich and the poor within the same community, Indian medical philanthropists nonetheless extended medical facilities to non-Indians. For instance, Indian philanthropists funded the extension of biomedical services and the construction of hospitals and dispensaries in colonial urban Zanzibar. Tayabali Karimjee contributed to the building of hospitals in Unguja and Pemba. In the 1930s, he became a member of Legislative Council, where his constructive ideas about developments in medical and health fields were very influential. In addition, the Health Board, the Hospital Visiting Committee, and the Patients' Welfare Committee were formed to spearhead medical developments. Members of these committees were drawn from the Arab, Indian, Goan, Comorian communities. After the Second World War, there were also representatives from the African community in these committees.

Despite increasing attention to health matters by both the colonial state and nationalist-inspired Zanzibaris and despite the increasing number of patients and the extension of biomedical facilities in colonial Zanzibar, malnutrition continued to affect the health of the town population.²⁰⁷ Several efforts were made to eradicate the problem of ankylostomiasis in Zanzibar and from 1957, there was assistance from the World Health Organization (WHO) and the United Nations International Children Economic Fund (UNICEF) in combating

²⁰⁷ ZNA BA 7/39, Annual Report of the Health Department for the Year 1960, p. 19.

malaria, but anaemia became a major problem. What exacerbated the situation was the fact that most of the African population - who constituted 70 percent of the town population - remained poor up to the end of colonial rule, in comparison with the Arabs, Indians, and Comorians. Although poor Africans were mostly given free access to government hospitals, dispensaries and clinics, their economic power was restricted. Lack of quality education and access to well-paid jobs aggravated their problems. Despite the extension of biomedical facilities in colonial Zanzibar Town, the British policy of compartmentalising people according to their race antagonized local people engendered mistrust of the government's intentions in the provision of biomedical services. By the early 1960s, the provision of biomedicine shifted from being an aspect of colonial power to becoming a community power.

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CONCLUSION

The introduction of Western medical practices in urban Zanzibar began in the early nineteenth century in response to political and economic changes ushered by interaction with the modern, world economic system. Zanzibar and the other East African coastal communities had been linked in trading activities with Muslim states for centuries. From the early-1800s, these trade contacts expanded to incorporate European and American traders. It is not clear from the sources how much pre-1800 trade activities affected the lives of people in Zanzibar. What is clear, however, is that the development of an internationally-linked capitalist economy had important ramifications for the health of the urban population in Zanzibar.

Zanzibar Town attracted a large number of immigrants from Asia, Europe and the East African coast and interior and as far as Central Africa. European and American traders and sailors brought syphilis, which was spread to inland communities through the trade which extended from Bagamoyo and Kilwa into the interior. Slaves from around the Lake Malawi region, central Tanganyika, and Eastern Zaïre also arrived and settled in the town in great numbers, bringing with them new pathogens. Because of poor sanitation and poor diet, slaves and the urban poor were the people most at risk from yaws. Malaria and elephantiasis spread with the expansion of the town. The clearing of bush for construction of new houses and huts disturbed *Anopheles* and *Culex* mosquitoes that carried malaria and filariasis. As urban settlement approached the Creek, this became a source of dysentery and diarrhoea-causing agents.

The annual wave of migration from Arabia and India brought cholera, smallpox and dengue fever. Large numbers of urban dwellers perished in epidemics of these infectious diseases. New types of virulent smallpox were introduced to Zanzibar, which led to a severe mortality in urban areas. Cholera was disseminated in Zanzibar through incoming trade vessels and dhows from Arabia and India throughout the nineteenth century. Like smallpox, it claimed hundreds of lives in Zanzibar Town. Also, dengue fever, conveyed to Zanzibar from India, erupted in Zanzibar Town in the mid-1800s and killed many urban dwellers. Dengue fever,

cholera and smallpox were brought by dhows which travelled along the western Indian Ocean during monsoon periods.

A history of health and mortality of dhow passengers while crossing along the Indian Ocean area needs a special attention from future scholars. This is an emerging theme in the Indian Ocean historiography which is now paying special attention to the interconnections between continents formed through these dhows: my work in this thesis is part of this newly compiled history. My thesis shows that the long term maritime relationship not only led to the transfer of goods and the exchange of diseases but also the transfer of colonial conceptions as well as personnel from India. From the time the British took over the control of Zanzibar after the abolition of slave trade, the British Indians played an increasingly important role in the philanthropic life of urban Zanzibar. Indian apothecaries, Sub-Assistant Surgeons, and dispensers pioneered the medical services that were later to be occupied by locally born Zanzibaris. David Arnold's book, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* has been of the utmost importance.

Since at least as far back as the beginning of the nineteenth century there had been continuous importation of new medical practices to Zanzibar by both European and Indian apothecaries, combining medical knowledge and therapeutic techniques that were common in Europe with other medical knowledge and skills acquired by Europeans as they expanded into new areas of the world beyond Europe itself. The early spread of Western medicine in Zanzibar was in the service of the British consular officials and missionaries who were at the centre of the colonial project. The Omani rulers also introduced public health facilities to secure health of the people. There was thus a linkage between health and power in Zanzibar. Beginning in 1870, British consulate physicians, along with medical doctors and nurses employed in French and British mission stations, extended their services in Zanzibar to African liberated slaves, Omani Arabs and Indian merchants. The former slaves and their descendants, who constituted the majority of the populace, continued meanwhile to use the herbs and other African therapeutic methods with which they were familiar. Before 1900, Muslim and Hindu town dwellers in Zanzibar, as was the case in many Asian and African colonies, mostly rejected the medical services provided by European physicians and doctors,

preferring their own local therapeutic practices which combined Islamic, Ayurvedic and African medicine.

The French Catholic missionaries and the Universities' Mission for Central Africa, which began proselytising among urban Muslims and Hindus in Zanzibar from 1881, saw the provision of medical services as a way to attract converts – an effort in which they were largely unsuccessful, since most of the urban population rejected conversion and also declined to attend these hospitals and dispensaries. The Christian medical missionary factor not extended, but its changing goals and partnerships with colonial powers, British mainly, but also German, forms an original contribution of this work. Anglicans and Catholics up to the mid-twentieth century operated medical services at their mission stations. They also operated philanthropic facilities to poor people in conjunction with the government.

Medicine was important at the seat of colonial power when the British took control of Zanzibar in the 1890s. British medical operation in nineteenth century urban Zanzibar was however characterized by the lack of sufficient medical personnel and funds. Indeed, and as I have mentioned earlier medical personnel from India and few from other European countries supplemented these works. It was only in the late-1800s that British medical colonization was extended with the appointment of Sir Patrick Manson as a medical advisor to the Colonial Office and with the establishment of Schools of Tropical Medicine in the metropole. From the early twentieth century, British doctors and nurses were employed to work in the colonial Government hospitals, but up to the end of colonial period, their numbers were only few. Zanzibari doctors, nurses and dispensers were employed to work in hospitals and dispensaries after the First World War.

The provision of Western medicine by the state was started in 1897. Changing colonial interests on the part of Britain affected the scope of both curative medicine and public health in its preventive and later promotive programmes. The separation of environmental hygiene and hospital care led to the employment of distinctive personnel and manifestations of power. To that extent, this dissertation might well have started in the later 1890s as the British took firmer control of the affairs of the Zanzibar Sultanate, but they did so with the

co-operation of local elites. In 1897, for instances, the British built first Military Hospital with funds donated by Sewa Haji, an Indian philanthropist.

Western medical practices were introduced by the colonial power from the late nineteenth century to combat various diseases. The earliest beneficiaries were European and African soldiers, prisoners, the mentally ill, and those who suffered from leprosy. They were all connected to the state in one way or other, or threatened the wellbeing of white settlers or its labour supply. The armed forces benefited greatly from the provision of medical facilities, as was common in many colonies in Africa and elsewhere. Many Europeans had died of malaria and other tropical diseases and the health of the local soldiers was important to the state for conquest or control. Over the next few decades, Europeans selectively introduced medical institutions and practices to the wider population.

Prisoners were another group of townspeople to receive medical care at the Government Hospital. From the mid-1800s, liberal politicians in Western Europe had criticized the state for neglecting the health of prisoners, setting in motion a series of legal reforms affecting prisons. Even so, the situation in Zanzibar did not improve much, if at all, and in the early decades of the twentieth century the health of African inmates in the Kilimani Central Prison was extremely poor. They suffered from scurvy and beriberi due to a lack of potassium and other essential vitamins in their diet. There was an attempt to improve their health through a more balanced diet, but until the late colonial period African prisoners continued to suffer unfavourably because of the poor and racially discriminatory medical facilities provided by the British.

From 1897, biomedical services were also extended to people suffering from leprosy. In part, it was the feared threat to African labourers that motivated European colonialists to provide medicine to lepers. Europeans also feared that they would themselves contract the disease since they continued to believe that leprosy was highly contagious. The health of mentally ill people was given priority by the colonial government in urban Zanzibar from 1898. They were confined to the Old Barracks near the British Military Hospital. The first Lunatic Asylum was built at the Kilimani Central Prison compound in 1909 and only housed African

patients. Mental institutions in Zanzibar were established to confine the mentally ill. The families sent them to the asylums. The government took responsibilities over wandering lunatics. Families could also choose to send a mentally ill relative to the Government Asylum when he or she became violent. Thus their care and control became the responsibility of the government.

After the inauguration of a state education system in 1907, the colonial government began to provide medical care for schoolchildren. It may be argued that there was a degree of self-interest because school children were considered to be future labourers. In many colonies in Africa, African elites who received their primary education in government and missionary schools were employed as teachers, dispensers, and nurses in government and missionary social services. School medical services became important for the health of local students in Zanzibar. Instructions were also given to students on how to protect themselves against diseases. Distribution of quinine tablets became common from 1913. Films on the symptoms and causes of diseases which were caused by hookworm, mosquitoes and flies were screened. While health education films and other measures to educate children were undoubtedly necessary, they did not get to the root cause of the problem, which is that ill health was mostly caused by endemic poverty.

The development of transportation networks in the late nineteenth century led to increased movement for merchandise and people. There was an allied increase in the importation of new pathogens. Wars of conquest, the establishment of infrastructures, and migration of people from rural to urban areas and from one region to another, all hastened the spread of diseases. Bubonic plague which erupted in India in 1896 reached other Indian Ocean ports early in 1897. In East Africa, in 1898, the plague struck the port of Mombasa via Indian indentured labourers. With fears that the entire population of East Africa, including British officials, could be wiped out, a Quarantine Station was established in Zanzibar Town in 1899. This was the first preventive measure involving the whole East African British Protectorate. The Quarantine Station was built with local funds, as were most other colonial social services. Its establishment shows that colonial medical practices were not merely curative but that funds were also used for preventative measures to contain epidemics. The

1897 Venice Convention demanded the application of strict measures to stop the spread of epidemics from one port to another. In Zanzibar, Port Health Officers were required to check people and goods in order to prevent the spread of diseases. Shipping vessels which docked at Zanzibar Port were checked.

Bubonic plague hit Zanzibar Town in 1905. Its outbreak had less to do with the inefficiency of public health facilities and measures than with the development of the colonial economy which led to the free movement of people and merchandise. The plague bacilli arrived in Zanzibar with infected rats from India on ships carrying rice. The plague epidemic led to the promulgation of Public Health laws to control the spread of the disease. These laws put the lives of town inhabitants increasingly under the control of the colonial government. Anti-plague control measures were introduced because it was feared that commercial and administrative life in Zanzibar Town would be paralyzed. All movements of persons were checked to ensure that no more epidemics occurred in Zanzibar. As was discussed in Chapter Three, these harsh disease control measures came to constitute a serious imposition on the population. People were also vaccinated against their will in the name of public health. As this study shows, the inhabitants of urban Zanzibar became resentful when their religious and cultural norms were disregarded or violated. However, they showed greater tolerance of public health measures when their community leaders intervened. While the success of the anti-plague campaigns in Zanzibar is linked to the state's efforts to stop the epidemic, the role played by community and religious leaders was also important to the control of diseases. Community leaders convinced their members and followers of the importance of complying with precautionary health measures. The use of force alone would not have been enough get people to employ biomedical services; persuasive methods were equally important.

The establishment of the Infectious Diseases Hospital in Zanzibar Town in 1899 by the Zanzibar colonial government was prompted by increased incidences of infectious and contagious diseases. In the early years of colonial rule, smallpox continued to ravage Zanzibar. It was often associated with Indian and Arab immigrants from Yemen and Oman. After 1900, the arrival of migrant labourers from the mainland of Tanganyika to work on

government and private plantations as weeders and pickers of cloves also led to an outbreak of smallpox. Again, as this dissertation has shown, a new round of public health measures was introduced.

Shortly before the end of the nineteenth century immunization was introduced by the colonial government and medical staff of the UMCA mission. The UMCA began its campaign among Christians living on the mission and schoolchildren. The French Catholics provided immunization facilities to African converts as well as others who showed up at their dispensaries. Immunization against smallpox continued in the early twentieth century with the establishment of a government-run education system. The establishment of the Maternity and Children's Clinic in 1936 brought more urban children to the immunization services. Nevertheless, people continued to fall victim to smallpox in Zanzibar owing to the continuing influx of immigrants and wage labourers. The intervention of the World Health Organization (WHO) in carrying out anti-smallpox campaigns from the 1950s finally led to the elimination of the disease in the 1970s.

This study has been especially interested in popular receptions of medical services and public health measures in Zanzibar Town. More has yet to be done to draw out the evidence for a full discussion, but the work accomplished has for the first time located the issues and thrusts in terms of the institutional facilities and sanitary injunctions that were instituted and changed through time, just as the social composition and consciousness of inhabitants of Stone Town and Ng'ambo also changed.

A key argument of this dissertation is that Western medicine in Zanzibar was mainly extended through local agencies. The introduction of Western medicine was contested and more widely accepted only with the involvement of locals. There were different categories of elites who contributed to the extension of Western medical and public health services. Ismaili Indian merchants were foremost among them. In the 1880s and 1890s, Tharia Topan, a wealthy local Ismaili merchant, played a major role in the expansion and popularization of Western-style medical services in Zanzibar. He constructed the 'Jubilee Hospital' which was intended for the use of the Zanzibari Africans, Indians and Arabs. His

death in 1891 was a setback for the extension of Western medical services for locals. In 1894, Sewa Haji, a Bohora merchant, funded the construction of the first government hospital, which was mainly used to treat local soldiers and their families. In 1955, another Bohora merchant, Tayabali Karimjee Jivanjee donated money for the extension of the Government Hospital for “Natives” and “Subordinates” in Zanzibar Town. He also donated money to build a Tuberculosis Ward at Dole and extension the Zenubhai Hospital at Wete, Pemba.

Although the establishment of biomedical institutions by Indian medical philanthropists may be viewed by some as an attempt to gain political influence and favour, these facilities played an important role in improving public health in urban Zanzibar. The contributions of Topan Sewa Haji and the Karimjee Jivanjee family towards the construction of hospitals have been noted for the first time in this dissertation and their motivations and rationale requires further scholarly attention. The provision of funds by wealthy Indians to extend medical services, whatever their motivation certainly challenges the idea that Western medical services in Africa were introduced by imperialists and colonialists alone. Moreover, it is also important to note that extreme racism or absolutist ambitions never made headway in Zanzibar, where the racially stratified social and political order never permitted the imposition of regulatory power and extremes of racial privilege obtaining in twentieth century South Africa or the Belgian Congo, for example.

The 1930s mark an important turning point in the provision of Western medical services as more Indian and Oman Arab elites played an increasingly active role in the extension of medical services. Community and religious leaders encouraged their members to make use of the medical services. This made ordinary people more aware of the facilities and the importance of using them. The formation of the Legislative Council in 1927 was important in spearheading the participation of community leaders in pressing the government to upgrade the services. Council sessions became a platform for airing demands for the extension of medical services. Community representatives were selected to sit on the medical, health and sanitary Boards. Others became members of the Zanzibar Town Council and Planning Boards. Until 1945, however, the demands of Africans continued to be ignored

since there were no representatives from their community. Private newspapers launched by wealthy individual merchants, political parties and local elites pressurized the government to improve facilities. The onset of the Second World War in 1939 led to a deterioration of public health facilities because medical officers and resources were directed towards war zone areas, and newspapers were used effectively to question poor efficiencies in medical institutions.

Patriarchal leaders and religious institutions played a crucial role in facilitating the acceptance and expansion of medical facilities in urban areas. They realized how important it was to adopt this medicine. In Muslim-dominated Zanzibar, male elites encouraged their female family members to accept Western medical facilities. They went further and trained their sons and daughters in Egypt and in England in medical fields. Muslim *Wakf* funds were used to establish medical institutions. Two medical institutions which were funded through *Wakf* properties were the School Clinic, which was established in 1913 for the urban school children, and the Mwembeladu Maternity Home, which was constructed in 1923 for the health and welfare of women and children in Zanzibar. After 1945, other patriarchs followed this trend. They persuaded their daughters to be trained as nurses and some even allowed their wives to be employed in government services as midwives. By 1960, Zanzibar had a relatively large number of female nurses, doctors, midwives and orderlies. The contribution made by the local Zanzibaris in the popularization of Western medicine was distinctive in terms of the history of Eastern Africa. The attitude of Zanzibaris changed over the decades and by the time of independence the suspicion of the early period had been replaced by widespread acceptance.

The Medical Department made a significant move when it introduced female doctors and nurses from 1936. This led to urban women utilising medical services in greater numbers and the importance of this sector increasing. These female medical personnel were appointed to work in the Women's Outpatients Clinic, in the Genital and Urinary Clinic and in the Maternity and Child Welfare Clinic. By 1963, over seventy percent of women in urban areas used the women's medical facilities. Much of this increase was due to word of mouth. Neighborhood ties among women were common. They also met at various social gatherings

and in these settings informed each others about these medical facilities. Moreover, the increase in the number of women who attended these medical facilities may be linked with women-based community activities and social groups which sprouted in urban Zanzibar from the 1930s. The Ladies Club was inaugurated by Indian and Arab elites in 1948. Its members visited school girls in urban Zanzibar and spoke to them on issues related to safe motherhood and child rearing. The Zanzibar Women's Institute, which was founded by female school teachers in mid-1950, informed urban and rural women about maternal health and marital relationships. They also organized Mothers and Child health campaigns as well as baby shows where they demonstrated how to prepare nutritious food for pregnant women and new born babies.

This dissertation has also shown that cultural brokers influenced the extension of medical services. Significantly more local townspeople became interested in biomedicine when local Zanzibari doctors were employed to provide of such medical services. These doctors were familiar to the people and were themselves familiar with local cultural practices. Unlike European doctors, they also spoke the local language. People therefore had more confidence to them. From 1929, the Zanzibar government sponsored Zanzibari-born Arabs, Indians and Africans to attend at Makerere College for medical training. These students were trained in the medical field as a cheaper substitute for male Indian Sub-Assistant Surgeons (SAS) who, British administrators claimed, showed little consideration for local people in Zanzibar Town, though the female SAS were encouraged to work in Zanzibar for the entire colonial period. By the 1960s, Zanzibar had fifteen trained medical doctors. The popularity of Western medicine also increased when local nurses and midwives were recruited in medical institutions. The local nurses' services had extended from 1950 when the School of Nursing was established in that year. By the end of colonial period, there were thirteen qualified nurses who were trained outside Zanzibar.

The formation of political parties had started in Zanzibar by the mid-1950s. Generally, the involvement of political parties in opening biomedical services in Zanzibar Town was influence by middle-class nationalists and other working class people. African accommodation to the opening of biomedical services was due to the popularity of Western

medicine in town during that period as well as the question of ethnicity and political frictions have been explained previously. Members of the ASP and ZNP saw the need of opening their own health facilities so that members could use these facilities. Health services became a political agenda during this period. During the political campaigns, the Afro-Shirazi Party launched the 'ASP Manifesto' which had as a specific aim the improvement of medical facilities for all people in Zanzibar after independence, and more particular in rural areas where facilities were very inadequate. After the 1964 Revolution, the new government carried on the relationship with the socialist and communist countries that assisted in the expansion of medical services.

Western medicine succeeded in containing many diseases in urban Zanzibar. By the end of colonial period, yaws, venereal diseases, smallpox and malaria were not a problem. Elephantiasis was slightly threatening due to the fact that *Culex* mosquitoes still bred in pit latrines that dominated most of the Ng'ambo houses. Although a significant number of health education programmes were introduced during colonial period to stop hookworm diseases in the urban area, many poor people were still affected by the diseases by 1963. Poor life condition could be associated with the presences of the disease. Western medicine reduced the fear of the disease but not the poverty in which it bred. Zanzibar was a free-malaria area during the early three years after the revolution. A number of malaria cases increased when Socialist Zanzibar closed its doors to Western experts. The WHO malaria officers withdrew from working in the islands. Malaria began to rise again to reach at 7 percent in 1968. Zanzibar decided to ask for the WHO assistances once more in 1978. WHO recommended that the United States Agency for International Development (USAID) should be consulted in respect to funding. The Zanzibar government contributed some amount of money to enable the USAID anti-malaria programmes to succeed.

By the time of the Zanzibar Revolution of 1964, which overthrew the Omani Sultanate in Zanzibar, Western-based medical practices were firmly established as a therapeutic option with the majority of Zanzibaris. The announcement on 4 April 1964 by A. A. Karume (1964-1972), the first President of Zanzibar, of free medical services at all government hospitals and dispensaries was further motivation for Zanzibaris to embrace these services. The early

years of the revolutionary period also witnessed the importation of doctors, nurses and medical specialists from socialist and communist countries. The German Democratic Republic (GDR) assisted in the construction of clinics in urban and in rural areas, along with a training school for nurses. Male and female Zanzibaris were sent to the GDR for further medical training. Romania was another country that provided training in medical fields. The Soviet Union, too, had a considerable influence on the provision of medical services. The former Hassanali Karimjee Jivanjee Hospital was renamed the V. I. Lenin Hospital, after Vladimir Ilyich Lenin (1870-1924), the first head of the Russian Soviet Socialist Republic, to show Zanzibar's appreciation for Soviet assistance. The Chinese contribution to medical services in Zanzibar after the Revolution was substantial. Amongst other things they introduced a small manufacturing unit for simple drugs. Primary Health Care units, oriented to meet the needs of the community with appropriate and cost-effective care, were extended in the rural areas of Unguja and Pemba where medical services were most urgently needed, with a chain of small free rural medical centres, one for every six square miles.

Despite the enormous changes wrought by the Revolution, there were important continuities that future works might explore further. Zanzibar Town, for instance, continued to be a setting in which new personnel and ideas were accommodated by a Ministry of Health which had had a set of policies in place from the time of independence in the previous year. Indeed, the findings of this dissertation challenge any histories which might propose an uncomplicated relationship between disease, health, medicine and state power in Zanzibar. By the close of my period of study, in the early-1960s, one can say that the provision of biomedicine and public health had in some real sense shifted from being a dimension of colonial power to becoming a community power.

BIBLIOGRAPHY

A. ARCHIVAL PRIMARY SOURCES

1. Zanzibar National Archives (ZNA)

1.1 Correspondence, Secretariats and Annual Reports

AA1: Foreign Office Correspondence (FO), London with British Consuls, Zanzibar 1838-1890

AA 1/6, AA 1/20, AA 1/24, AA 1/34, AA 1/39, AA 1/45 - AA 1/49, AA 1/52, AA 1/57, AA 1/61, AA 1/63 - AA 1/65, AA 1/73.

AA 2: General Correspondence, 1837-1890

AA 2/4.

AA 3: Bombay Correspondence, 1840-1884

AA 3/18 - AA 3/19.

AA 12: Miscellanea, 1837-1914

AA 12/29.

AB 2: Secretariat: Medical Department, 1900-1964

AB 2/1, AB 2/9, AB 2/25, AB 2/37, AB 2/44, AB 2/53

AB 2/62 - AB 2/63, AB 2/84, AB 2/155 - AB 2/158, AB 2/163, AB 2/242, AB 2/333 - AB 2/335, AB 2/339, AB 2/341, AB 2/343, AB 2/346 - AB 2/348, AB 2/258 - AB 2/259, AB 2/264, AB 2/361 - AB 2/366, AB 2/369.

AB 22: Secretariat: Miscellaneous Record on Religion, 1912-1958

AB 22/58.

AB 31: Secretariat: Culture, Ancient History, Antiquities, Arts and Monuments, 1909-1962

AB 31/20.

AB 39: Secretariat: Municipal Council (Housing), 1911-1964

AB 39/26, AB 39/203.

AB 86: Personal File Series, 1919-1964

AB 86/63, AB 86/71.

AC1: Foreign Office Correspondence, 1891-1913

AC 1/3, AC 1/5, AC 1/22, AC 1/33, AC 1/36, AC 1/50, AC 1/63, AC 1/70, AC 1/81, AC 1/91-93, AC 1/109, AC 1/112, AC 1/120, AC 1/142, AC 1/147.

AC 11: Correspondence with British East Africa Protectorate, 1895-1908

AC 11/10.

AE 1: Secretariat: Township

AE 1/389.

AE 5: Secretariat: Town Planning and Municipality, 1936-1963

AE 5/2.

AE 16: Agreement of Employment Series

AE 16/3.

AJ: Reports and Secretariat: Medical Department

AJ 1 (A Series)

AJ 1/14, AJ 1/37, AJ 1/39.

AJ 2 (B Series)

AJ 2/3, AJ 2/13.

AJ 3 (C Series)

AJ 3/20, AJ 3/36.

AJ 4 (D Series)

AJ 4/70.

AJ 5 (E Series)

AJ 5/322.

AJ 8 (H Series)

AJ 8/3, AJ 8/7, AJ 8/21.

AJ 9 (I Series)

AJ 9/11.

AJ 11 (L Series)

AJ 11/2, AJ 11/7, AJ 11/12, AJ 11/14, AJ 11/18, AJ 11/47, AJ 11/59.

AJ 12 (M Series)

AJ 12/13, AJ 12/24, AJ 12/45, AJ 12/49, AJ 12/64.

AJ 15 (P Series)

AJ 15/134, AJ 15/141, AJ 15/165, AJ 15/232, AJ 15/237, AJ 15/313, AJ 15/379.

AJ 16 (Q Series)

AJ 16/5, AJ 16/11.

AJ 17 (R Series)

AJ 17/15.

AJ 18 (S Series)

AJ18/14, AJ18/28.

AJ 19 (T Series)

AJ 19/10, AJ 19/31.

AJ 20 (U Series)

AJ 20/6.

AJ 22 (W Series)

AJ 22/21.

AJ 25 (Z Series)

AJ 25/5, AJ 25/8.

AJ 27 (Medical Department, Staffs)

AJ 27/47, AJ 27/51.

AJ 28 (Health Department)

AJ 28/7, AJ 28/42.

AJ 29 (Town Sanitation and Rules)

AJ 29/234, AJ 29/243, AJ 29/258.

Provincial Administration (AK)

AK 3 (C Series: Civil Servants, Census, Circulars and Public Services, 1932-1978)

AK 3/105.

AK 13 (M Series: Reports, Marriage and Divorce, Meetings and Monuments, 1934-1977)

AK13/49.

AO 1 (P Series: Royal Family, Staff, Appointment, Overseas Policies, Zanzibarisation and other Departments, 1922-1975)

AO 1/288: Health Department (General).

Arches (ARC)

ARC 1, ARC 1/30.

BA Annual Reports

BA 2: Department of Agriculture

BA 2/17.

BA 7: Annual Reports Medical and Sanitary, 1913-1960

BA 7/1 - BA 7/7, BA 7/11, BA 7/14 - BA 7/16, BA 7/22, BA 7/27, BA 7/33, BA 7/38 - BA 7/40, BA 7/46, BA 7/49.

BA 14: Zanzibar Decrees

BA 14/38.

BA 47: Department of Police

BA 47/1 - BA 47/7.

BA 49: Department of Prison

BA 49/3 - BA 49/5.

BA 83: Annual Reports Zanzibar Government, 1902-1945

BA 83/1 - BA 83/5.

BC: Official Publications, Tanganyika

BC 25: Reports from Medical Department

BC 25/1.

BC 26: Reports from Health Department

BC 26/2.

CA: Private Papers

CA 1: Spurrier Papers

CA 1/2.

CA 4: Sir John Gray Papers

CA 4/1/4 - CA 4/1/6.

CB 1: Universities' Mission to Central Africa Records (UMCA)

CB 1/5 - CB 1/9.

HC: H. H Courts Records

HC 14/1 - HC 14/5.

HD: Records from Wakf Commission

HD 10/6.

1.2 Published Reports

Batson, E. *The Social Survey of Zanzibar Protectorate* (Cape Town: University of Cape Town Press, 21 vols., 1961).

Spurrer, A. Report for the Outbreak of Bubonic Plague, Zanzibar, September – November, 1905 (Zanzibar: Government Press, 1905).

Pim, Sir A. Report of the Commission Appointed by the Secretary of State for the Colonies to Consider and Report on the Financial Position and Policy of the Zanzibar Government in Relation to Its Economic Resources (Zanzibar: Government Printing Office, 1932).

Sinclair, J. Zanzibar Government, a Report on the Protectorate, 1911-1923 (Zanzibar: Government Printing Office, 1923).

Zanzibar Government, A Handbook of Zanzibar 1912 (Zanzibar: Government Press, 1912).

Zanzibar Government, Zanzibar Protectorate Annual Report 1913 (Zanzibar: Government Press, 1913).

Zanzibar Government, *Survey of the Town* (Zanzibar: Zanzibar Government Printer, 1960).

Zanzibar Government, Report on the Civil Disturbances in Zanzibar on July 30th 1951 (Zanzibar: Government Press, 1951).

Zanzibar Government, Report of a Commission of Inquiry into Disturbance in Zanzibar During June, 1961 (London: Her Majesty's Stationery Office, 1961).

Zanzibar Blue Books, 1900 -1914.

1.3 Newspapers (NW)

The Zanzibar Official Gazette (BA 104)

BA 104/2 - BA 104/14.

NW 14: Samachar

NW 14/1 - NW 14/6, NW 14/19, NW 14/23.

NW 14: Zanzibar Voice

NW 23/2 - NW 23/5.

NW 12: *Mwongozi*

NW 12/1 - NW 12/10.

The Guardian, 31 October, 2006.

2. KIDONGO-CHEKUNDU MENTAL HOSPITAL (KMH)

Patient File No. 2 – 3 (1947) Patient File No. 3 (1949).

3. PUBLIC RECORD OFFICE, KEW (PRO)

PRO FO 2/912, PRO FO 2/433, PRO FO 107/106.

4. RHODES HOUSE LIBRARY, OXFORD (RHL)

UMCA A 1 III – XIV.

UMCA A 3.

UMCA A 4 I.

UMCA SF Series 43.

UMCA Tin Chest B 11.

**5. ORCHARD LEARNING RESOURCES CENTRE (OSRC)
(UNIVERSITY OF BIRMINGHAM)**

UMCA Journals

African Tidings, 1895 - 1931.

Central Africa, 1884 - 1937.

B. PUBLISHED PRIMARY SOURCES

Burton, R. *Zanzibar: City, Island and Coast* (London: Tinsley Brothers, vols. 1 & 2, 1872).

Christie, J. 'Slavery in Zanzibar as it is', in H. Fraser, B. Tozer and J. Christies, *The East African Slave Trade* (London: Harrison, 1871).

Christie, J. *Cholera Epidemics in East Africa* (London: Macmillan, 1876).

Courmont, R. *Notre-Dame des Anges our Un Hopital a Zanzibar* (Lyon: Imprimerie E. Paris, 1886).

Hines, J. *Days Gone By Being Some Account of Past Years Chiefly in Central Africa* (London: John Murray, 1924).

New, C. *Life Wanderings and Labours in Eastern Africa, with an Account of the First Successful Ascent of the Equatorial Snow Mountain Kilimanjaro; and Remarks upon East African Slavery* (London: Hodder and Stoughton, Second Edition, 1874).

Newman, H. *Banani: The Transition from Slavery to Freedom in Zanzibar and Pemba* (New York: Negro Universities Press, 1898).

Osgood, J. *Notes of Travel or Recollections of Majunga, Zanzibar, Muscat, Aden, Mocha, and other Eastern Ports* (Salem: George Creamer, 1854).

Ross, R. *Mosquito Brigades and How to Organize them* (London: George Philip and Son, Liverpool: Philip, Son and Nephew, 1902).

Ross, R. *The Prevention of Malaria* (London: John Murray, 1910).

Ruete, E. *Memoirs of An Arabian Princess from Zanzibar* (Princeton: Markus Wiener Publisher, 1996).

Ruschenberger, W. *Narrative of A Voyage Round the World, During the Years 1835, 1836, and 1837; including A Narrative of an Embassy to the Sultan of Muscat and the King of Siam* (London: Bentley, vols. 1 & 2, 1838).

Russell, (Mrs.) C. *General Rigby, Zanzibar and the Slave Trade with Journals, Dispatches, etc* (London: George Allen & Unwin Ltd, 1935).

Smee, T. and Hardy, L. *Voyage to the Eastern Shores of Africa* (London, 1811).

Stirling, L. *Bush Doctors: Being Letters from Dr. Leader Stirling* (London: Parrett and Neves, 1947).

Sullivan, G. *Dhow Chasing in Zanzibar Water, Slave Catching in the Indian Ocean* (London Gilbert and Rivington, Printers, St. John's Square, 1871).

Youngusband, E. *Glimpses of East Africa and Zanzibar* (London: John Long Limited, 1908).

C. PUBLISHED SECONDARY SOURCES

Abdalla, I. 'Diffusion of Islamic Medicine into Hausaland', in S. Feierman, and J. Janzen (eds.), *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992).

Alexander, J. *Bubonic Plague in Early Modern Russia, Public Health and Urban Disaster* (Oxford: Oxford University Press, 2003).

Alpers, E. *Ivory and Slaves in East and Central Africa* (London: Heinemann, 1975).

Alpers, E. Campbell, G. and Salman, M. (eds). *Slavery and Resistance in Africa and Asia* (London: Routledge, 2005).

Amiji, H. 'Some Notes on Religious Dissent in Nineteenth-Century East Africa', *African Historical Studies*, IV, 3 (1971).

Anderson, D. and Johnson, D. 'The Frontiers of Prophecy Healing, the Cosmos and Islam on the East African Coast in the Nineteenth Century', in David Anderson and Douglas Johnson (eds.), *Revealing Prophets, Prophecy in Eastern African History* (London: James Currey, 1995).

Anderson, W. 'Race and Acclimatization in Colonial Medicine, Immunities of Empire: Race, Disease, and the New Tropical Medicine, 1900-1920', *Bulletin of History of Medicine*, 70, 1 (1996).

Anderson-Morshead, A. *The History of the Universities' Mission to Central Africa, 1933-1957* (London: Westminster, 1962).

April, D. *Mercantile Adventurers: The World of East African Asians 1750-1985* (New Delhi: New Age International (P) Limited, Publishers, 1996).

Arnold, D. 'Touching the Body: Perspectives on the Indian Plague, 1896-1900', in R. Guha (ed.), *Subaltern Studies*, V (New Delhi: Oxford University Press India, 1987).

Arnold, D. 'Introduction: Disease, Medicine and Empire', in D. Arnold (ed.), *Imperial Medicine and Indigenous Societies* (Manchester and New York: Manchester University Press, 1988).

Arnold, D. (ed.), *Imperial Medicine and Indigenous Societies* (Manchester and New York: Manchester University Press, 1988).

Arnold, D. *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth Century in India* (California: California University Press, 1993).

Arnold, D. 'Public Health and Public Power: Medicine and Hegemony in Colonial India', in D. Engels and S. Marks (eds.), *Contesting Colonial Hegemony, State and Society in Africa and India* (German Historical Institute and the British Academic Press: London, 1994).

Arnold, D. 'Crisis and Contradiction in India's Public Health', in D. Porter (ed.), *The History of Public Health and Modern State* (Amsterdam- Atlanta: Rodopi B. V., 1994).

Arnold, D. *The Problem of Nature, Environment, Culture and European Expansion* (Oxford: Blackwell Publishers, 1996).

Arnold, D. 'The Place of 'the Tropics' in Western Medical Ideas since 1750', *Tropical Medicine and International Health*, 2, 4 (1997).

Arnold, D. 'An Ancient Race Outworn', Malaria and Race in Colonial India, 1860-1930', in W. Ernst and B. Harris (eds.), *Race, Science and Medicine, 1700-1960* (London and New York: Routledge, 1999).

Arnold, D. *Science, Technology and Medicine in Colonial India, The New Cambridge History of India* (Cambridge: Cambridge University Press, 2000).

Babu, A. 'The 1964 Zanzibar Revolution: Lumpen or Vanguard?', in A. Sheriff and E. Ferguson (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991).

Bader, Z. 'The Contradictions of Merchant Capital, 1840-1939', in A. Sheriff and E. Ferguson (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991).

Bang, A. *Sufis and Scholars of the Sea Family Networks in East Africa, 1860-1925* (London: Routledge, 2003).

Battle, S. 'The Old Dispensary: An Apogee of Zanzibari Architecture', in A. Sheriff (ed.), *The History and Conservation of Zanzibar Stone Town* (London: James Currey, 1995).

Bashford, A. *Imperial Hygiene A Critical History of Colonialism, Nationalism and Public Health* (Palgrave Macmillan, 2004).

Bayoumi, A. *The History of Sudan Health Services* (Nairobi: Kenya Literature Bureau, 1979).

Beachey, R. *A History of East Africa, 1592- 1902* (London and New York: I. B. Tauri & Company, 1996).

Beck, A. 'Problems of British Medical Administration in East Africa between 1900 and 1930', *Bulletin of the History of Medicine*, XXXVI (1962).

Beck, A. *History of the British Medical Administration of East Africa, 1900-1950* (Cambridge: Harvard University Press, 1970).

Beck, A. 'Medicine and Society in Tanganyika, 1890-1930: A Historical Inquiry'. *Transactions of the American Philosophical Society*, 67, 3 (1977).

Beck, A. *Medicine, Tradition and Development in Kenya and Tanzania, 1920-1970* (Massachusetts: Crossroads Press, 1981).

Becker, A. A New Sultan Succeeds to the Throne in Zanzibar: Our Special Audience with Him, *Tanganyika Notes and Records*, 61 (1963) [1911].

Bell, L. *Mental and Social Disorder in Sub-Saharan Africa: The Case of Sierra Leone, 1787-1990*. New York, Westport and London: Greenwood Press, 1991.

Benedict, C. *Bubonic Plague in Nineteenth-Century China* (Stanford, California: Stanford University Press, 1996).

Bennett, N (ed.), 'From Zanzibar to Ujiji, the Journal of Arthur Dodgshun, 1877-1879' (African Studies Center, Boston University, 1969).

Bennett, N. 'France and Zanzibar, 1844 to the 1860s', *International Journal of African Historical Studies*, 6, 4 (1973).

Bennett, N. *A History of the Arab State of Zanzibar* (London: Methuen & Co Ltd, 1978).

BERLA, 'Leprosy in Africa', *Tropical Diseases Bulletin* (August, 1934).

Bey, R. *The Awakening of Modern Egypt* (London & Toronto: Longmans, Green & Company, 1946).

Bharati, A. *The Asians in East Africa* (Chicago: Nelson- Hall Coy. Publisher, 1972).

Bissell, W. 'Conservation and the Colonial Past, Urban Planning, Space and Power in Zanzibar', in D. Anderson and R. Rathbone (eds.), *Africa's Urban Past* (London: Heinemann, 2000).

Brock, T. *Robert Koch A Life in Medicine and Bacteriology* (Madison: Science Tech Publishers, 1988).

Bruchhausen, W. "'Practising Hygiene and Fighting the Natives' Diseases", Public and Child Health in German East Africa and Tanganyika Territory, 1900-1960', *Dynamis*, 23 (2003).

Bruchhausen, W. 'The Seat of Healing Power and Destruction, Intrusion into the Human Body in Eastern Africa's Medicine', *Wurzburg Medizinhist Mitt*, 24 (2005).

Buckingham, J. *Leprosy in Colonial South India Medicine and Confinement* (Houndmills, Basingstoke, Hampshire and New York: Palgrave Publishers, 2002).

Burton, A. 'The White Woman's Burden British Feminists and "The Indian Woman" 1865-1915', in N. Chaudhuri and M. Strobel (ed.), *Western Women and Imperialism, Complicity and Resistance* (Bloomington and Indianapolis: Indiana University Press, 1992).

Bynum, W. *Science and the Practice of Medicine in the Nineteenth Century* (New York: Cambridge University Press, 1994).

Callahan, B. "'Veni, VD, Vici?': Reassessing the Ila Syphilis Epidemic', *Journal of South African History*, 23, 3 (1997).

Cartwright, F. *Disease and History* (London: Hart-Davis, 1972).

Cartwright, F. *A Social History of Medicine* (London and New York: Longman, 1977).

Catanach, I. 'Plague and the Tensions of Empire: India 1896-1918', in D. Arnold (ed.), *Imperial Medicine and Indigenous Society* (Manchester: Manchester University Press, 1988).

Cave, B. 'The End of Slavery in Zanzibar and British East Africa', *Journal of African Society*, 9, 33 (October, 1909).

Cell, J. Anglo-Indian Medical Theory and the Origins of Segregation in West Africa, *The American Historical Review*, 91, 2 (April 1986).

Chandavarkar, R. 'Plague Panic and Epidemic Politics in India, 1896-1914', in Terence Ranger and Paul Slack (eds.), *Epidemics and Ideas: Essays on the Historical Perception of Pestilence* (Cambridge: Cambridge University Press, 1992).

Chaudhuri, N. and Strobel, M. (ed.), *Western Women and Imperialism, Complicity and Resistance* (Bloomington and Indianapolis: Indiana University Press, 1992).

Clayton, A. *The Zanzibar Revolution and Its Aftermath* (London: Hurst and Company, 1981).

Clyde, D. *History of the Medical Services of Tanganyika* (Dar es Salaam: Government Press, 1962).

Clyde, D. *Malaria in Tanzania* (London: Oxford University Press, 1967).

Comaroff, J. 'The Diseased Heart of Africa, Medicine, Colonialism, and the Black Body', in S. Lindenbaum and M. Lock (eds.), *Knowledge, Power, and Practice, The Anthropology of Medicine and Everyday Life* (Berkeley, Los Angeles, Oxford: University of California Press 1993).

Comaroff, J. and Comaroff, J. *Of Revelation and Revolution, The Dialectics of Modernity on a South African Frontier* (Chicago and London: The University of Chicago Press, vols. 1 & 2, 1991).

Cooper, F. *From Slaves to Squatters, Plantation Labor and Agriculture in Zanzibar and Coastal Kenya, 1890-1925* (New Haven and London: Yale University Press, 1980).

Cooper, F. 'From Free Labour to Family Allowances: Labour and African Society in Colonial Discourse', *American Ethnologist*, 16, 4 (1989).

Cooper, F. and Stoler, A. (eds.), *Tensions of Empire Colonial Cultures in a Bourgeois World* (Berkeley, Los Angeles and London: University of California Press, 1997).

Coupland, R. *The Exploitation of East Africa 1856-1890* (London: Faber & Faber Ltd., 1939).

Crofton, R. *Zanzibar Affairs 1914- 1933* (London: Francis Edwards Ltd., 1953).

Crozier, A. 'The Colonial Medical Officer and Colonial Identity: Kenya, Uganda and Tanzania before World War Two' (Published PhD dissertation, University College London, 2005).

Cunningham, A. and Andrews, B. 'Introduction', in Andrew Cunningham and Birdie Andrews, (eds.), *Western Medicine as Contested Knowledge* (Manchester and New York: Manchester University Press, 1997).

Curtin, P. 'The White Man's Grave: Image and Reality', *Journal of the British Studies*, 1, 1 (1961).

Curtin, P. 'Medical Knowledge and Urban Planning in Colonial Tropical Africa' In S. Feierman, and J. Janzen, (eds.). *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992)

Curtin, P. *Death by Migration, Europe's Encounter with the Tropical World in the Nineteenth Century* (Cambridge: Cambridge University Press, 1995).

Curtin, P. Disease and Empire, *The Health of European Troops in the Conquest of Africa* (New York: Cambridge University Press, 1998).

Curtin, P. *The World and the West, The European Challenge and the Overseas Response in the Age of Empire* (Cambridge: Cambridge University Press, 2000).

Davey, G. and Newport, M. 'Podoconiosis', *Transaction of Royal Society for Tropical Medicine and Hygiene*, 101, 1 (2007).

Davin, A. 'Imperialism and Motherhood', in F. Cooper and A. Stoler (eds.), *Tensions of Empire Colonial Cultures in a Bourgeois World* (Berkeley, Los Angeles and London: University of California Press, 1997).

Dawson, M. 'The 1920s Anti-Yaws Campaigns and Colonial Medical Policy in Kenya', *International Journal of African Historical Studies*, 20, 3 (1987).

Dawson, M. 'Socio-economic Change and Disease: Smallpox in Colonial Kenya, 1880-1920', in S. Feierman, and J. Janzen (eds.), *The Social Basis of Health and Healing in Africa*. Berkeley: University of California Press, 1989).

Deacon, H. 'Insanity, Institutions and Society: The Case of the Robben Island Lunatic Asylum, 1846-1910', in R. Porter and D. Wright (eds.), *The Confinement of the Insane International Perspectives, 1800-1965* (Cambridge: Cambridge University Press, 2003).

Deacon, H., Phillips, H. and van Heyningen, E. *The Cape Doctor in the Nineteenth Century, A Social History* (Amsterdam, New York: Rodopi, 2004).

Delf, G. *Asians in East Africa* (Oxford: Oxford University Press, 1963).

Echenberg, M. *Black Death, White Medicine, Bubonic Plague and the Politics of Public Health in Colonial Senegal, 1914-1945* (Oxford: James Currey Ltd., 2002).

Dols, M. 'Insanity in Byzantine and Islamic Medicine', Symposium on Byzantine Medicine, *Dumbarton Oaks Paper* 38 (1984).

Dols, M. *Majnun: The Madman in Medieval Islamic Society*. Diana E. Immisch (ed.), Oxford: Clarendon Press, 1992).

Dumett, R. 'The Campaign against Malaria and the Expansion of Scientific Medical and Sanitary Services in British West Africa, 1898-1910', *African Historical Studies*, 1, 2 (1968).

Echenberg, M. *Black Death, White Medicine: Bubonic Plague and the Politics of Public Health in Colonial Senegal, 1914-1915* (London: Heinemann, 2002).

Edmond, R. *Leprosy and Empire, A Medical and Cultural History* (Cambridge, New York: Cambridge University Press, 2006).

Ernst, W. and Harris, B. (eds.), *Race, Science and Medicine, 1700-1960* (London and New York: Routledge, 1999).

Etherington, N (ed.), *Missions and Empire* (Oxford: Oxford University Press, 2007).

Evans, R. 'Epidemics and Revolution: Cholera in Nineteenth Century Europe', in T. Ranger and P. Slack (eds.), *Epidemics and Ideas Essays on the Historical Perception on Pestilence* (Cambridge: Cambridge University Press, 2001).

Fahmy, K. 'Women, Medicine, and Power in Nineteenth-Century Egypt', in L. Abu-Lughod (ed.), *Remaking Women Feminism and Modernity in the Middle East* (Princeton, New Jersey: Princeton University Press, 1998).

Fair, L. *Pastimes and Politics: Culture, Community, and Identity in Post- Abolition Urban Zanzibar, 1890-1945* (Oxford: James Currey, 2001).

Fair, L. 'Hollywood Hegemony? Hardly': Audience Preferences in Zanzibar, 1950s-1970s', *ZIFF Journal*, 1, 1 (2004).

Farley, J. *Bilharzia, A History of Imperial Tropical Medicine* (Cambridge: Cambridge University Press, 1991).

Feierman, S. *The Shambaa Kingdom, A History* (Madison: The University of Wisconsin Press, 1962).

Feierman, S. 'Struggles for Control: The Social Roots of Health and Healing in Modern Africa', *African Studies Review*, 28, 2-3 (1985).

Feierman S. and Janzen, J. (eds.), *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992).

Ferguson, E. 'The Political Economy of Health and Medicine in Colonial Tanganyika', in M. Kaniki (ed.), *Tanzania under Colonial Rule* (London: Longman, 1980).

Ferguson, E. 'The Formation of Colonial Economy, 1915-1945', in A. Sheriff and E. Ferguson (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991).

Foucault, M. *Madness and Civilization: A History of Insanity in the Age of Reason* (London: Tavistock, 1967).

Foucault, M. *The Birth of the Clinic: An Archaeology of Medical Perception* (London: Tavistock Publications, 1973)

Frankl, P. 'Siku ya Mwaka: New Year's Day in Swahili-land (with Special Reference from Mombasa)', *Journal of Religion in Africa*, XXIII, 2 (1993).

Freeman-Grenville, G. *The French at Kilwa Island* (Oxford: Clarendon Press, 1965).

Gallagher, N. *Medicine and Power in Tunisia, 1780- 1900* (Cambridge: Cambridge University Press, 1983).

Gallagher, N. *Egypt's Other Wars, Epidemics and the Politics of Public Health* (New York: Syracuse University Press, 1990).

Garssen, J. 'Policies and Practices in Pre- and Post-Independence Health Care: The Case of Zanzibar' (Demographic Report, Faculty of Spatial Sciences, University of Groningen, The Netherlands, 1993).

Gelfand, M. *The Sick African, A Clinical Study* (Cape Town: The Stewart Printing Company, 1944).

- Gelfand, M. *Christian Doctor and Nurse, The History of Medical Missions in South Africa from 1799-1976* (Sandton: Mariannahill Mission Press, 1984).
- Gilbert, E. *Dhows and the Colonial Economy of Zanzibar, 1860-1970* (Ohio: Ohio University Press, 2004).
- Giles, L. 'Possession Cults on the Swahili Coast: A Re- Examination of Theories of Marginality', *Africa: Journal of International African Institute*, 57, 2 (1987).
- Giles, L. 'Socio-cultural Change and Spirit Possession on the Swahili Coast of East Africa', *Anthropological Quarterly*, 36, 2 (1995).
- Glassman, J. 'Sorting out the Tribes: The Creation of Racial Identities in Colonial Zanzibar's Newspaper Wars', *Journal of African History*, 41, 3 (2000).
- Gray, J. 'Early Connections between the United States and East Africa', *Tanganyika Notes and Records*, 22 (1946).
- Gray, J. 'Nairuzi or New Year Celebration', *Tanganyika Notes and Records*, 41 (1955).
- Gray, J. *History of Zanzibar From the Middle Ages to 1856* (London: Methuen, 1962).
- Gregory, R. *India and East Africa A History of Race Relations within the British Empire 1890- 1939* (Oxford: Clarendon Press, 1971).
- Gregory, R. *The Rise and Fall of Philanthropy: Asian Contribution* (New Brunswick, NJ: Transaction Publishers, 1992).
- Griffiths, G. "Trained to Tell the Truth"; Missionaries, Converts, and Narration', in N. Etherington (ed.), *Missions and Empire* (Oxford: Oxford University Press, 2007).
- Hardy, A. 'Cholera, Quarantine and the English Preventive System', *Medical History*, 37 (1993).
- Hatty, S. and Hatty, J. *The Disordered Body: Epidemic Disease and Cultural Transformation* (New York: State University of New York Press, 1999).
- Hollingsworth, L. *Zanzibar under the Foreign Office 1890-1913* (London: Greenwood Press, 1975).
- Hadjivayanis, G. and Ferguson, E. 'The Development of a Colonial Working Class', in A. Sheriff, and E. Ferguson (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991).
- Gussow, Z. *Leprosy, Racism, and Public Health: Social Policy in Chronic Disease Control* (Boulder: Westview Press, 1989).

Hamlin, C. 'State Medicine in Great Britain', in D. Porter (ed.), *The History of Public Health and the Modern State* (Amsterdam: Rodopi, 1994).

Harrison, G. *Mosquitoes, Malaria and Man: A History of Hostilities since 1880* (London: John Murray, 1978).

Harrison, M. *Public Health in British India: Anglo- Indian Preventive Medicine, 1859- 1914* (Cambridge: Cambridge University Press, 1994).

Harrison, M. *Disease and the Modern World, 1500 to the Present Day* (Cambridge: Polity Press, 2004).

Hays, J. *The Burdens of Disease, Epidemics and Human Response in Western History* (New Brunswick and New Jersey: Rutgers University Press, 1998).

Headrick, D. *The Tools of Empire, Technology and European Imperialism in the Nineteenth Century* (Oxford, New York: Oxford University Press, 1981).

Herman, R. "Out of Sight, Out of Mind, Out of Power": Leprosy, Races and Colonization of Hawai'i, *Journal of Historical Geography*, 27, 3 (July 2001).

Hobhouse, H. *Seeds of Change: Six Plants that Transformed the World* (London: Pan, 2002).

Holden, P. 'Nursing Sisters in Nigeria, Uganda, Tanganyika' (Oxford Development Records Project Report 18, Rhodes House Library, Oxford, 1984).

Hollingsworth, L. *Zanzibar under the Foreign Office 1890-1913* (London: Macmillan & Co. Ltd, 1953).

Howard-Jones, N. 'Origins of International Health Work', *British Medical Journal*, 1 (1950).

Howard-Jones, N. 'Cholera Therapy in the Nineteenth Century', *Journal of the History of Medicine and Allied Sciences*, XXVII, 4 (October, 1972).

Ilfie, J. *The African Poor, A History* (Cambridge: Cambridge University Press, 1995).

Ilfie, J. *Africans: The History of a Continent* (Cambridge: Cambridge University Press, 1995).

Ilfie, J. *East African Doctors: A History of the Modern Profession* (Cambridge: Cambridge University Press, 1998) [Uganda: Fountain Publishers, 2002].

Issa, A. 'The Legacy of Qâdirî Scholars in Zanzibar', in R. Loimeir and R. Seesemann (eds.), *The Global Worlds of the Swabili, Interfaces of Islam, Identity and Space in 19th and 20th-Century East Africa* (Hamburg: Lit Verlag, 2006).

Issa, A. 'Dhows and Epidemics in Indian Ocean Ports', *ZIFF Journal*, 2 (2006).

- Jackson, L. *Surfacing Up, Psychiatry and Social Order in Colonial Zimbabwe, 1908-1968* (Ithaca and London: Cornell University Press, 2005).
- Jackson, R. 'Resistance to the German Invasion of the Tanganyikan Coast, 1888- 1891' in R. Rotberg and Ali Mazrui (eds.), *Protest and Power in Black Africa* (New York: Oxford University Press, 1970).
- Jain, S. 'Psychiatry and Confinement in India', in R. Porter and D. Wright (eds.), *The Confinement of the Insane, International Perspectives, 1800-1965* (Cambridge: Cambridge University Press, 2003).
- Janzen, J. *The Quest for Therapy in Lower Zaire* (Berkeley, Los Angeles, London: University of California Press, 1978).
- Janzen, J. 'Ideologies and Institutions in Precolonial Western Equatorial African Therapeutics', in S. Feierman and John Janzen (eds.), *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992).
- Jennings, M. 'This Mysterious and Intangible Enemy: Health and Disease amongst the Early UMCA Missionaries, 1860 – 1918', *Social History of Medicine*, 15, 1 (2002).
- Jennings, M. 'Chinese Medicine and Medical Pluralism in Dar es Salaam: Globalisation or Glocalisation?', *International Relations*, 19, 4 (2005).
- Jennings, M. 'A Matter of Vital Importance': The Place of the Medical Mission in Maternal and Child Healthcare in Tanganyika, 1919-1939', in D. Hardiman (ed.), *Healing Bodies, Saving Souls, Medical Missions in Asia and Africa* (Amsterdam: Rodopi, 2006).
- Jezewski, M. and Sotnik, P. *The Rehabilitation Service Provider as Cultural Broker: Providing Culturally Competent Services to Foreign Born Persons* (Buffalo, New York: Center for International Rehabilitation Research Information and Exchange, 2001).
- Jochelson, K. *The Colour of Diseases Syphilis and Racism in South Africa, 1880- 1950* (London: Palgrave, Macmillan, 2001).
- Kaniki, M. (ed.), *Tanzania under Colonial Rule* (London: Longman, 1980).
- Kindy, H. *Life and Politics in Mombasa* (Nairobi: East African Publishing House, 1972).
- Kollman, P. *The Evangelization of Slaves and Catholic Origins in Eastern Africa* (New York: Orbis Books, Maryknoll, 2005).
- Koponen, J. *People and Production in Late Pre-colonial Tanzania, History and Structure* (Gummerus Kirjapaino Oy Jyväskylä, 1988).

- Koponen, J. *Development for Exploitation, German Colonial Policies in Mainland Tanzania, 1884-1914* (Helsinki: Finnish Historical Society, 1994).
- Kumar, D. (ed.), *Disease and Medicine in India, A Historical Overview* (New Delhi: Tulika Books, 2001).
- La Verne, K. *Lives at Risk: Public Health in 19th Century Egypt* (Berkeley, Los Angeles and Oxford: University of California Press, 1990).
- Lehmann, H. *150 Jahre Berliner Mission* (Erlangen: Verlag derevangelisch-lutherischen Mission, 1974).
- Leslie A. 'A New Humanity American Missionaries', Ideals for Women in North India, 1870-1930', in N. Chaudhuri and M. Strobel (ed.), *Western Women and Imperialism, Complicity and Resistance* (Bloomington and Indianapolis: Indiana University Press, 1992).
- Livingstone, D. *The Last Journal of David Livingstone in Central Africa from 1865 to His Death*, H. Waller (ed.) (London: Murray, vols., 1 & 2, 1874).
- Lofchie, M. *Zanzibar: Background to Revolution* Princeton: Princeton University Press, 1965.
- Loudon I. (ed.), *Western Medicine Illustrated History* (Oxford, New York: Oxford University Press, 1997).
- Lyne, R. *Zanzibar in Contemporary Times: A Short History of the Southern East in the Nineteenth Century* (London: Hurst and Blackett Limited, 1905).
- Lyons, M. 'Sleeping Sickness Epidemics and Public Health in the Belgian Congo', in D. Arnold (ed.), *Imperial Medicine and Indigenous Societies* (Manchester and New York: Manchester University Press, 1988).
- Lyons, M. *The Colonial Disease: A Social History of Sleeping Sickness in Northern Zaire, 1900- 1940* (Cambridge: Cambridge University Press, 1992).
- Lyons, M. 'Public Health in Colonial Africa: The Belgian Congo', in D. Porter (ed.), *The History of Public Health and the Modern State* (Rodopi: Amsterdam and Atlanta, 1994).
- Lyons, M. 'The Power to Heal: African Medical Auxiliaries in Colonial Belgium Congo and Uganda', in D. Engels and S. Marks (eds.), *Contesting Colonial Hegemony, State and Society in Africa and India* (German Historical Institute and the British Academic Press: London, 1994).
- Macleod, R. 'Preface', in R. Macleod and M. Lewis (eds.), *Disease, Medicine and Empire: Perspectives on Western Medicine and the Experience of European Expansion* (London: Routledge, 1988).

Mangat, J. *A History of the Asians in East Africa, c. 1886 to 1945* (Oxford: Clarendon Press, 1969).

Mann, E. *Mikono ya Damu: "Hands of Blood", African Mercenaries and the Politics of Conflict in German East Africa, 1888-1904* (Frankfurt: Peter Land, 2002).

Mansfield-Aders, W. 'Insects Injurious to Man and Stock in Zanzibar', *Bulletin of Entomological Research*, VII (1917).

Mansfield-Aders, W. 'Notes on Malaria and Filariasis in the Zanzibar Protectorate', *Transactions of the Royal Society of Tropical Medicine and Hygiene*, XXI, 3 (November, 1927).

Marks, S. *Divided Sisterhood, Race, Class and Gender in the South African Nursing Profession* (Johannesburg: Witwatersrand University Press, 1994).

Mazrui, A. and Shariff, I. *The Swahili: Idiom and Identity of an African people* (Trenton: Africa World Press, 1994).

McCulloch, J. *Colonial Psychiatry and 'the African Mind'* (Cambridge: Cambridge University Press, 1995).

McKinnon, A. 'Of Oxford Bags and Twirling Canes: The State Popular Responses and Zulu Anti- Malaria Assistants in the Early Twentieth Century Zululand Malaria Campaigns', *Radical History Review*, 80 (2000).

Mdundo, M. *Masimulizi ya Sheikh Thabit Kombo Jecha* (Dar es Salaam: Dar es Salaam University Press, 1996).

Mlahagwa, J. and Temu, A. 'The Decline of the Landlords, 1873-1963', in A. Sheriff, and E. Ferguson (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991).

Mukherjee, S. 'Disciplining the Body? Health Care for Women and Children in Early Twentieth-Century Bengal', in D. Kumar (ed.), *Disease and Medicine in India, A Historical Overview* (New Delhi: Tulika Books, 2001).

Myers, G. 'A Stupendous Hammer: Colonial and Post -Colonial Reconstructions of Zanzibar's Other Side', *Urban Studies*, 32, 8 (1995).

Myers, G. 'Sticks and Stones: Colonialism and Zanzibari Housing', *Africa*, 67, 2 (1997).

Myers, G. 'Intellectual of Empire: Eric Dutton and Hegemony in British Africa', *Annals of the Association of American Geographers*, 88, 1 (March, 1998).

Myers, G. *Verandahs of Power: Colonialism and Space in Urban Africa* (Syracuse: Syracuse University Press, 2003).

- Nadkari, K. (ed.), *Indian Plants and Drugs with their Medical Properties and Uses* (Delhi: Asiatic Publishing House, 1998).
- Nestle, S. '(Ad)ministering Angels: Colonial Nursing and the Extension of Empire in Africa', *Journal of Medical Humanities*, 19, 4 (1998).
- Nisula, T. *Everyday Spirits and Medical Interventions, Ethnographic and Historical Notes on Therapeutic Conventions in Zanzibar Town* (Saarijarvi: Transactions of the Finnish Anthropological Society, NRO, XLIII, 1999).
- Noble, V. "'Health is much too important a subject to be left to doctors:": African Assistants Health Workers in Natal during the Early Twentieth Century', *Journal of Natal and Zulu History*, 24 & 25 (2006-2007).
- Nsekela, A. and Nhonoli, A. *The Development of Health Services in Mainland Tanzania* (Dar es Salaam: East African Literature Bureau, 1976).
- Olumwullah, O. A. *Dis-ease in the Colonial State Medicine, Society, and Social Change Among the AbaNyole of Western Kenya* (Westport, Connecticut, London: Greenwood Press, 2002).
- Packard, R. 'Maize, Cattle and Mosquitoes: The Political Economy of Malaria Epidemics in Colonial Swaziland', *Journal of African History*, 25 (1984).
- Packard, R. 'Industrialization, Rural Poverty, and Tuberculosis in South Africa, 1850-1950', in S. Feierman and J. Janzen (eds.), *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992).
- Packard, R. 'Post Colonial Medicine', in R. Cooter and J. Pickstone (eds.), *Medicine in the Twentieth Century* (Amsterdam: Harwood Academic Publishers, 2000).
- Parle, J. *States of Mind, Searching for Mental Health in Natal and Zululand, 1868-1918* (Scottville: University of KwaZulu-Natal Press, 2007).
- Patterson, K. *Health in Colonial Ghana: Disease, Medicine, and Socio-Economic Change, 1900-1955* (Massachusetts: Crossroads Press, 1981).
- Patience, K. *Zanzibar, The Bububu Railway* (Bahrain: Dar Akbar Al Khaleej Press, 2002).
- Pearce, F. *Zanzibar, The Island Metropolis of Eastern Africa* (London: T. Fisher Unwin, Ltd, 1920).
- Peard, J. *Race, Place and Medicine, The Idea of the Tropics in Nineteenth-Century Brazilian Medicine* (Durham: Duke University Press, 2000).
- Porter, D. (ed.), *The History of Public Health and the Modern State* (Amsterdam: Rodopi, 1994).

Porter, D. *Health, Civilization and the State, A History of Public Health from Ancient to Modern Times* (London and New York: Routledge, 1999).

Porter, R. *Disease, Medicine and Society in England 1550- 1860, Studies in Economic and Social History* (Macmillan Education, London, 1987).

Porter, R. *The Greatest Benefit to Mankind, A Medical History of Humanity* (New York: W. W. Norton & Co., Inc., 1998).

Porter, R. and Wright, D. (eds.), *The Confinement of the Insane International Perspectives, 1800-1965* (Cambridge: Cambridge University Press, 2003).

Pouwels, R. *Horn and Crescent Cultural Change and Traditional Islam on the East African Coast, 800-1900* (Cambridge: Cambridge University Press, 1987).

Prothero, R. *Migrants and Malaria* (London: Longman, 1965).

Ranger, T. 'The Ambiguities of Medical Mission in Southeastern Tanzania, 1900-1945', in S. Feierman and J. Janzen (eds.), *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992).

Reeves, N. 'Film Propaganda and Its Audience: The Example of Britain's Official Films during the First World War', *Journal of Contemporary History*, 18, 3 *Historian and Movies: The State of Art: Part I* (July, 1983).

Roberts, A. 'Africa on Film to 1940', *History in Africa*, 14 (1987).

Rosenberg, C. *Explaining Epidemics and Other Studies in the History of Medicine* (Cambridge: Cambridge University Press, 1992).

Rotberg, R. and Mazrui, A. (eds.), *Protest and Power in Black Africa* (New York: Oxford University Press, 1970).

Sadowsky, J. 'Confinement and Colonialism in Nigeria', in R. Porter and D. Wright (eds.), *The Confinement of the Insane, International Perspectives, 1800-1965* (Cambridge: Cambridge University Press, 2003).

Salim, A. *Swahili-Speaking Peoples of Kenya's Coast 1895-1965* (Nairobi: East African Publishing House, 1973).

Samanta, A. *Malarial Fever in Colonial Bengal, 1820-1939, Social History of an Epidemic* (Kolkata: Firma KLM Private Ltd., 2002).

Sheriff, A. *Slaves, Spices and Ivory in Zanzibar, Integration of an East African Commercial Empire into the World Economy, 1770- 1873* (London: James Currey, 1987).

Sheriff, A. 'Conclusion', in A. Sheriff and E. Ferguson (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991).

Sheriff, A and Ferguson, E. (eds.), *Zanzibar under Colonial Rule* (London: James Currey, Nairobi: Heinemann, Athens: Ohio University Press, 1991).

Sheriff, A. (ed.), *The History and Conservation of Zanzibar Stone Town* (London: James Currey, 1995).

Silla, E. *People Are Not the Same, Leprosy and Identity in Twentieth-Century Mali* (James Currey: Oxford, 1998).

Smith, D. 'Scientific Research Centers in Africa', *African Studies Bulletin*, 10, 3 (December, 1967).

Smyth, R. 'The Development of British Colonial Film Policy, 1927-1939, with Special Reference to East and Central Africa', *Journal of African History*, 20, 3 (1979).

Soghayroun, I. 'The Role of Traders and Muslim Scholars in the Spread of Islam and Muslim Culture in Zanzibar and East Africa', Paper Presented on the Symposium on Islamic Civilization in Southern Africa, University of Johannesburg, South Africa, 1-3 September, 2006.

Stirling, L. *Heroes of the Faith in Tanzania: Seven Witnesses from the Central African Mission, 1880-1993* (Ndanda-Peramiho: Benedict Publication, 1962).

Stirling, L. *Tanzanian Doctor* (London and Nairobi: Heinemann, 1977).

Stoecker, H. (ed.), *German Imperialism in Africa* (London: C. Hurst & Co., 1986).

Sundiata, I. 'Twentieth Century Reflections on Death in Zanzibar', *International Journal of African Historical Studies*, 20, 1 (1987).

Swanson, M. 'The Sanitation Syndrome: Bubonic Plague and Urban Native Policy in the Cape Colony, 1900-1909', *Journal of African History*, 18 (1977).

Swanson, M. 'The Sanitation Syndrome: Bubonic Plague and Urban Native Policy in the Cape Colony, 1900-1909', in W. Beinart and S. Dubow, *Segregation and Apartheid in Twentieth Century South Africa* (London: Routledge, 1995).

Tignor, R. W. *Arthur Lewis and the Birth of the Development Economics* (Princeton: Princeton University Press, 2005).

Tren, R. and Bate, R. *Malaria and the DDT* (Institute of Economic Affairs: London, 2001).

Trimingham, J. *The Influence of Islam upon Africa* (London: Longmans, Green & Co. Ltd, 1968).

- Turshen, M. *The Political Ecology of Disease in Tanzania* (New Brunswick: Rutgers University Press, 1984).
- Vatikiotis, P. *The History of Egypt from Muhammad Ali to Mubarak* (London: Butler and Towner, Third Edition, 1985).
- Vaughan, M. *Curing their Ills: Colonial Power and African Illness* (London: Polity Press, 1991).
- Vaughan, M. "Health and Hegemony: Representations of Disease and the Creation of the Colonial Subject in Nyasaland", in D. Engels and S. Marks (eds.), *Contesting Colonial Hegemony, State and Society in Africa and India* (German Historical Institute and the British Academic Press: London, 1994).
- Von Sicard, S. *The Lutheran Church on the Coast of Tanzania 1887-1914 with special reference to the Evangelical Lutheran Church in Tanzania, Synod of Uzaramo-Uluguru* (Uppsala: Almqvist & Wiksellsp, 1970).
- Waite, G. *A History of Traditional Medicine and Health Care in Pre-colonial East-Central Africa* (London: The Edwin Mellen Press, 1993).
- Waite, Gloria. 'Public Health Care in Pre-colonial East-Central Africa', in S. Feierman and J. Janzen (eds.), *The Social Basis of Health and Healing in Africa* (Berkeley, Los Angeles and Oxford: University of California Press, 1992).
- Warren, J. *Rickshaw Coolie, A People's History of Singapore, 1880-1940* (Singapore: Singapore University Press, 2003).
- Watts, S. *Epidemics and History: Disease, Power and Imperialism* (New Haven: Yale University Press, 1997).
- Watts, S. 'British Development Policies and Malaria in India 1897- 1929', *Past and Present*, 165 (November, 1999).
- Webb, J. *Humanity's Burden, A Global History of Malaria* (Cambridge, New York, Madrid, Cape Town, Singapore, São Paulo and Delhi: Cambridge University Press, 2009).
- Worboys, M. 'The Spread of Western Medicine', in I. Loudon (ed.), *Western Medicine Illustrated History* (Oxford, New York: Oxford University Press, 1997).
- Worboys, M. *Spreading Germs, Disease Theories and Medical Practice in Britain, 1865-1900* (Cambridge: Cambridge University Press, 2000).
- Wrigley, E. 'No Death Without Birth': The Implications of English Mortality in the Early Modern Period', *Problems and Methods in the History of Medicine* (New York: Croom Helm, 1987).

D. UNPUBLISHED SECONDARY SOURCES

Burns, C. Reproductive Labors: The Politics of Women's Health in South Africa from 1900 to 1960 (Unpublished PhD Dissertation, Northwestern University, 1995).

Harry, T. Anti- Malarial Campaigns and African Opposition in Natal and Zululand, 1928-1938 (B. A. Honours, History Department, University of Natal, Durban, 1993).

Hamdan, M. Zanzibar Newspapers, 1902 to 1974 (Diploma Thesis, Tanzania School of Journalism, 1981).

Harkema, R. The Town of Zanzibar in the Later Half of the Nineteenth Century and a number of Older Urban Settlements along the East African Coast (Unpublished PhD Thesis, University of Groningen, 1967).

Issa, A. A History of Women's Participation in the Struggles for the Independence of Zanzibar, 1951-1964 (Unpublished M. A. Thesis, University of Dar es Salaam, 2004).

Juma, A. Cattle Riot (Vita vya Ng'ombe), A Case Study of Peasant Rising, Zanzibar 30 July, 1951 (B. A Dissertation, University of Dar es Salaam, 1982).

Juma, A. The Early History of Zanzibar Town', Paper Presented at the Stone Town Conference 17- 19, July (1990) p. 2.

Kazi, I. Malaria in Bengal from 1860-1920: A Historical Study in a Colonial Setting (Unpublished PhD Dissertation, University of Michigan, 1986).

Khatib, R. Traditional Versus Modern Medical Practices in Zanzibar: A Case of Three Villages in Wete District, North Region- Pemba (Unpublished M.A Dissertation, University of Dar es Salaam, 1999).

Kieran, J. The Holy Ghost Fathers in East Africa, 1860 to 1914 (Unpublished PhD Dissertation, University of London, 1966).

Kim, C. Supernaturalism in Swahili Islam: With Special Reference to the Therapeutic Cults of Jinn Possession (Unpublished PhD. Dissertation, Faculty of the School of Intercultural Studies, Fuller Graduate School, 2001).

McGruder, J. Madness in Zanzibar: "Schizophrenia" in three families in the "developing" World (Unpublished PhD Dissertation, University of Washington, 1999).

Mkumbukwa, A. Socio-Economic Change and Malaria in Zanzibar, 1915- 2000 (Unpublished M. A. Dissertation, University of Dar es Salaam, 2006).

Myers, G. Reconstructing Ng'ambo: Town Planning and Development on the Other Side of Zanzibar (Unpublished PhD Dissertation, University College Los Angeles, California, 1993).

Noble, V. "People Wherever I Go Believe that I am a Doctor, but in Thinking that they Flatter Me ...": Black Community Health Intermediaries in South Africa, 1920-1959. Paper Presented at the History and African Studies Seminar (University of KwaZulu-Natal, Durban, 16 May, 2001).

Omary, H. Zanzibar Administrative History 1840 to the Post-Revolution Period (Unpublished M. A. Dissertation, University College, London, 1985).

Purpura, A. Knowledge and Agency: The Social Relation of Islamic Expertise in Zanzibar Town (Unpublished PhD Dissertation, The City University of New York, Graduate Faculty in Anthropology, 1997).

Semanne, C. Essai d'une Topographie Médicale sur l'Ile de Zanzibar (M. D. Thesis, University of Paris, 1864).

Sheik, N. This Most Perilous and Epidemical Disease' Plague Precautions and Public Politics in Natal, 1896-1903 (B. A. Honours Thesis, University of KwaZulu-Natal, 2004).

Waheed, N. Nature and Extent of the Indian Enterprise along the East African Coast and Subsequent Role in the Development of Kenya, 1840-1905 (Unpublished PhD Dissertation, St. John's University, New York, 1975).

E. INTERVIEWS

Ali Hussein, Rahaleo, 12 October, 2007.

Ali Juma, Kwahani, 27 July, 2007.

Asha Abdalla, Matarumbeta, 19 October, 2007.

Asha Hassan, Mbuyuni, 12 December, 2007.

Asha Juma, Mwembeladu, 5 December, 2006.

Asha Mussa, Malindi, 20 June, 2008.

Asha Saleh, Mchambawima, 2 June, 2008.

Asya Hemed, Vikokotoni, 12 April, 2005.

Asya Khamis, Kikwajuni, 18 December, 2007.

Bahiya Yussuf, Mchangani, 10 June, 2006.

Hassan Attas, (Dr.) Mchangani 2 January and 2 February, 2008.

Inaya Himid, Malindi, 13 July, 2005.

John Ramadhan, (Bishop), Mkunazini, 20 July, 2005.

Josephine Kaleza, Kwahani, 10 April, 2000.

Khalfan Said, Mwera, 1 August, 2007.

Khamisa Abdulla, Kikwajuni, 3 December, 2007.

Layla Ali, Mpendae, 20 June, 2006.

Mama Ima, Kikwajuni, 5 January 2008.
Mohammed Ali, Mwembeladu, 1 August, 2007.
Mohammed Kaumbwa, Kilimani, 8 October, 2007 and 28 January, 2008.
Mtoro Hussein, Michenzani, 12 December, 2007.
Mwanapili Mahmoud, (Dr.), Kilimani, 20 January, 2008.
N. Harilal, Vuga, 20 December, 2005.
Farouk Topan, (Prof.), Shangani, 16 August, 2008.
Rehema Juma, Rahaleo, 12 October, 2007.
Salama Ali, Michenzani, 12 March, 2005.
Said Humoud, Kidongo-Chekundu, 4 July, 2008.
Sihaba Ismail, Kikwajuni, 19 September and 2 November, 2007.
Simai Haji, Mwembeladu, 1 August, 2007.
Zainab Sharif, Mwembetanga, 11 July, 2007.
Zarina Yusuf, Mkunazini, 5 November, 2007.
Zuhura Salim, Malindi, 20 June, 2006.

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APPENDIX

INTERVIEW QUESTIONS

A. PERSONAL HISTORY

1. Where were you born?
2. Where did you grow up
3. Do you remember anything about your family history? Where were your parents born?
4. How about your schooling? When did you start attending school and when did you finish and in which school did you attend?
5. Do you have any tertiary education?

B. DISEASES, EPIDEMICS AND INDIGENOUS MEDICINES

1. Do you remember anything about diseases which were common in Zanzibar Town during the British colonial period?
2. Have you any experiences of epidemics that occurred before the independence of Zanzibar in Zanzibar Town?
3. Have you heard anything about diseases and epidemics that occurred many years back or when you were young?
4. Do you have any ideas about indigenous medicine which were in use in Zanzibar Town during the colonial period and for which diseases?
5. Do you have any knowledge concerning indigenous medicines which were in use by different communities in Zanzibar Town during the pre-colonial or colonial period?

C. WESTERN MEDICINE

1. What do you know about Western medical facilities in Zanzibar Town during the colonial period?
2. Which medical facilities were provided in Zanzibar Town during the colonial period?

3. Were these facilities provided equally or not to all the communities that were living in the Town?
4. Do you have any ideas about medical staffs in colonial Zanzibar Town?
5. Which diseases were mostly cured and which were not cured?
6. Did all the Town people have access to medical facilities during colonial period in Zanzibar Town?
7. What do you know about the Mental Hospital or the Maternity Hospital or the Infectious Diseases Hospital or the Leprosy Centre?
8. There were several specialized clinics in Zanzibar Town. What do you know about them?

D. PUBLIC HEALTH SERVICES

1. Which public health services were provided in Zanzibar Town during the colonial period?
2. Which services were more effective and which were not?
3. Which services were introduced earlier and which were introduced very late?
4. Did the Town's people accept or reject these facilities?
5. Were the Town's people attracted with health educational facilities such as cinemas or Town annual exhibition on diseases demonstration?

E. REJECTION AND ACCEPTANCE

1. When or at what period in time does you think the Town people began to attend at the hospitals in colonial Zanzibar Town?
2. When do you think the Town women began to give birth in hospital or were the all Town women gave birth in hospitals during colonial period?
3. Were there any strikes against medical and public health facilities which occurred in Zanzibar Town during the colonial period?
4. Were the all Town people attended in hospitals by the end of colonial period?

5. What is your general opinion concerning Western medicine and public health facilities in colonial Zanzibar Town? Were they beneficial or not as far health of the Town's people are concerned?

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