MISSIONARIES, THE STATE AND LEPROSY IN ZAMBIA,

1893 - 1964

BY

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DECLARATION

- I, Brenda Mbaita Liwoyo, declare that this dissertation:
- (a) Represents my own work;
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APPROVAL

This dissertation of Brenda Mbaita Liwoyo is approved fulfilling the partial requirements for the award of the degree of Master of Arts in History by the University of Zambia.

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ABSTRACT

The main purpose of the study was to present a history of leprosy in pre and colonial Zambia (1893 – 1964). Leprosy was a widespread disease whose victims were highly stigmatised, socially discriminated against and isolated. The study focused on approaches by missionaries and government towards its It also established and examined attitudes towards the disease and its eco mic effects on both the victims and their communities.

Research data for the study was obtained from the University of Zambia Library, the National Archives of Zambia and the University of Zambia Medical Library. In addition oral interviews were conducted at Liteta and Chikankata Leprosy Centres as well as the Ministry of Health.

The study established that African attitudes towards leprosy and lepers and interpretations of leprosy varied from one region of the continent to the other and that even within some regions attitudes tended to vary. The study also presented evidence to show that there was gender inequalities in accessing treatment and that women were more severely affected both emotionally and physically. The study further established that despite the stigma associated with leprosy and the impact it had on the victims, the state and missionaries institutionalised leprosy and rehabilitated the lepers to become self reliant after they left the leprosy settlements. The study brought out a number of myths and taboos associated with the disease which could have been difficult to access and without which leprosy would continue to remain little understood. In doing this study, the researcher, hoped it would contribute to medical historiography in Zambia.

DEDICATION

To my late father Robert Kalyangu Liwoyo

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CHAPTER ONE: INTRODUCTION

Introduction and Historical Background

This chapter provides background information on leprosy and works dealing with the disease. The chapter is intended to put the study in a broad context of leprosy. Leprosy is a disease of the nervous system caused by a bacillus identified in 73 by Armaur Hansen.¹ It is caused by a rod-shaped bacterium micro – organism that chiefly affects the skin, eyes, the nerves, the throat and the mucus membranes of the nose and can be transmitted from one person to the other.² Leprosy generally develops slowly in the body and as such it is not likely to reveal itself for many years. The period of latency can be from six to twenty years and the incubation period takes about one and half to three years. Iliffe, however, suggests that most infection probably occurs childhood, but manifests itself during adolescence and young adulthood stages.³ The debate on the incubation period and the time of infection and onset of the disease however, remained a contentious issue through the 1960s and 1970s.⁴ Different investigators have attempted to measure the incubation period, the minimum period being a few weeks among infants,⁵

and the maximum period being as long as 30 years.⁶ The average incubation period has been estimated to be between 3 to 5 years.⁷

The disease's first manifestations are usually neurological such as enlargement of some nerves. The patient may suffer paralysis of hand and muscles.⁸ Since the bacillus damages some nerves the disease leads to loss of sensation, especially in the hands and feet.⁹ If unchecked, leprosy can cause severe disfiguration or deformation of the face and mutilation of fingers and toes.¹⁰ The disease is rarely fatal but usually it merely weakens resistance to other diseases. Usually most lepers died of neglect.

Since leprosy is not a highly contagious disease a person with a strong immune system may not get infected by it. Its spread depends on the number of victims in a community and the frequency of contact between the infected and the uninfected persons.¹¹ Dr Mannasseh Phiri the Chief Services Officer at the Centre for Infectious Diseases Research Centre in Zambia (CIDRZ) also stated that the risk of infection depended largely on the closeness of contact between infected and uninfected persons.¹² Rees et al also acknowledged that transmission was by prolonged intimate skin contact.¹³

Before the development of dapsone and rifampicin in the 1940s, there was no cure for leprosy.¹⁴ It was not until an Indian scientist Shantaram Yawalker and his colleagues formulated a combined therapy that mitigates bacillus resistance that a cure was found.¹⁵ Treatment remained so highly effective in most countries and that patients were no longer infectious after receiving the first monthly dose.¹⁶

Leprosy has been a common and dreaded disease suffered by many people throughout the history of mankind. Numerous Leprosariums sprang up in the Middle Ages so that in the early thirteenth century it was estimated that there were 19 000 across Europe.¹⁷ Leprosy had probably altered its form since the Middle Ages, European doctors, for example, could not distinguish it from other skin diseases such as jiggers and yaws.¹⁸ In early Medieval France a ritual would be performed by a priest to indicate that even if one was affected by leprosy they would be reborn in God.¹⁹ The New Testament offered the hope of the healing miracles, through which a leper was shown as the chosen one by God for salvation.²⁰

Colonial African victims were fortunate in that by the time colonial Medical Departments were tackling the disease 'expert' opinion was firmly ready to control it. ²¹ Although, during the pre-colonial period, missionary doctors and nurses had faith in their Christian beliefs that God would one day answer their prayers and give them a cure for the disease.²²

Leprosy, in many societies, was associated with social evils.²³ Where such beliefs were deep rooted, victims of the disease were forced to hide their condition and discouraged from seeking treatment, a strategy that afforded them an opportunity to avoid discrimination.²⁴ Lack of awareness and information about leprosy led people to falsely believe that the disease was highly contagious and incurable, leading to discriminating its victims.²⁵

The World Health Organisation (WHO) estimated in 1963 that there were about two to three million persons permanently disabled because of leprosy. India had the largest number of victims, Brazil was second and Myanmar third. Madagascar, Mozambique, Nepal, Democratic Republic of the Congo and Tanzania also had the highest prevalence of leprosy.²⁶

Lepers were seen to exist between life and death; they were still alive, yet man chose or were forced to ritually separate themselves from normal existence.²⁷ In Africa, with the exception of the Old Kingdom of Egypt where mummified did not show that leprosy existed, most Africans suffered from the disease.²⁸ Ethiopia's disease environment supported leprosy, necessitating the establishment of a research facility in 1960, which trained medical personnel in the treatment of the disease.²⁹ The disease was common in the nineteenth century West Africa.³⁰ It was also endemic in the Upper Nile and along the shores of Lake Malawi.³¹

In Zambia the colonial government only came to realise how widespread leprosy was in the country during the sleeping sickness epidemic of 1906 - 1908 in Luapula and Northern Provinces, yet the disease had been endemic in the Zambezi Flood Plains earlier.³² Many British African colonies only realised the seriousness of the disease when the Colonial Office established in 1923 the British Empire Leprosy Relief Association (BELRA), to combat the disease. The Association began tackling the disease in 1946.³³ During the 1940s in Africa, doctors devoted more attention to leprosy than any other endemic disease.³⁴ In Zambia, the disease was associated with poverty. In Luapula for instance the disease was concentrated among the rural poor people.³⁵ Perhaps this was so, not necessarily because of poverty, but because the disease was associated with humid and hot areas. John A. K. Brown arrived at the conclusion that the prevalence of leprosy depended on the large concentration of people in one area, arguing that the prevalence of the disease in high rainfall areas or along lakes or river valleys was normal because such areas attracted large human settlements. ³⁶ Brown's observation may explain why in Zambia leprosy was common in the riverine and lakeshore areas such as the Luapula, North Western and Western Provinces.³⁷

On the other hand, Megan Vaughan attributed such high prevalence of the disease in the Western Province to people in the area being dirty and promiscuous. She further attributed the prevalence of leprosy among the Lala and the Bisa of Central and Northern Provinces to promiscuity.³⁸ Vaughan's argument that leprosy was associated with promiscuity may have been influenced by some clinical that linked the spread of the disease to conjugal relationships.³⁹ Vaughan argues the same about the people of Eastern Province of Uganda adding that the disease was very common because people there were very ignorant and dirty.⁴⁰ There was no evidence found to support Vaughan's argument but the study established that certain environments attracted a lot of people hence, the high prevalence of the disease.

The champions of the fight against leprosy in colonial Zambia were missionaries. These men and sometimes women of God built huge leper settlements to control and manage the spread of the disease. The pioneers were the London Missionary Society who established the first ever leper colony in the country in 1893 at Kawimbe among the Mambwe in Northern Province.⁴¹ Other settlements such as Mbereshi were established in the Luapula Valley in 1949. By 1964, there were thirty-two leper settlements in the country. Other settlements established in 1909 were Chikuni in Monze run by the Jesuits, Luampa in Kaoma by the South African General Missions and Mukinge in Kasempa in 1910 and 1950, respectively. On the other hand the Christian Missions in Many Lands established Chitokoloki and Nyamona in Zambezi district in 1928 and 1952, respectively. They also established Loloma in 1932 in Kabompo district. In 1952 Kaleni Hills settlement was opened in Mwinilunga as well as Kabulamema settlement in 1954. St. Francis was established in 1955 by the White Fathers in Solwezi. The Missionaries of Africa established Minga in 1949 and Nyanje in 1956 in Petauke. In 1949, they also opened Chilubi Island settlement in Northern Province.

The Seventh Day Adventists established Mwami in 1934 in Chipata, Liumba and Yuka in Kalabo in 1936 and 1955, respectively. In 1946 and 1950 the Dutch Reformed Church established Nsadzu and Madzimoyo in Chipata. The Capuchin Fathers in 1956 established Mangango settlement in Kaoma, and in 1958 they opened Santa Maria in Lukulu and Sichili in Sesheke respectively. While the Franciscan Fathers in 1948 established St. Theresa in Luanshya, the Universities' Mission to Central Africa established Fiwila settlement in Mkushi in 1956. In 1954, the Salvation Army established Chikankata settlement and finally in 1958 Paris Evangelical Missionary Society opened Senanga settlement.

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The government on the other hand established Luapula settlement in 1945. Lukupa and Shiwa Ng'andu were opened in 1952 in Northern Province. Siwa was established in 1952 while Lukalanya was opened in 1959 in Mongu. In addition, in 1959 Sesheke settlement was established in Western Province and Liteta in 1962 in Central Province.⁴² All the leprosy settlements have since been closed and now government policy is that all general hospitals should have a leprosy department with a specialist to handle all the leprosy cases in the area, since the disease is not as common now.

Statement of the Problem

Leprosy caused concern among missionaries operating in Zambia and the colonial government. Consequently, huge amounts of money and a lot of effort from both institutions were spent on controlling the spread of the disease. But the historiography of Zambia is devoid of a discourse on the disease. The problem with which this study concerned itself was to understand leprosy in relation to its occurrence, missionary efforts and government efforts in its prevention and possibly, eradication.

Objectives of the Study

This study examined the impact of leprosy on its victims and the attitudes of the uninfected communities towards leprosy victims. The study also investigated the economic impact of the disease on its victims, their communities, and finally, the study examined missionaries and government approach to the prevalence of the disease.

Rationale

The study was justified on the grounds that so far in Zambia there was no historical study on leprosy and yet as a disease it impacted socially and economically on its sufferers.

Literature Review

From the survey of literature on the history of disease and biomedicine in Zambia, it was apparent that not so much scholarly work had been written on this branch of history. The scanty literature available dealt with general history of disease and western medicine in the context of colonialism. Nothing had been written on a particular disease. Samundengu discussed the role and impact of western medicine in North Western Province during the colonial period. Samundengu devoted a chapter on patterns of disease and indigenous people's response to them, but did not discuss anything on leprosy despite the fact that the ailment was common in North Western Province, the area of her study.⁴³ However, there are works dealing with the history of disease but not on Zambia. Harting and Patterson edited a collection of articles that discussed a wide range of the disease environment in Africa. Leprosy was mentioned in one sentence in one of the articles, but the collection was useful to this study because the articles explained the role of disease and medicine in African history.⁴⁴

Mushingeh discussed and examined the history of disease and medicine in Botswana.⁴⁵ His concerns focused on the patterns of disease and responses thereto, either indigenous or modern from pre-colonial through colonial Botswana. Mushingeh discussed leprosy and the Tswana indigenous remedies to the disease. Although Allison discussed the disease environment in Australia and not in Zambia, his work is important to our study because he highlighted the significance of genetics, immunity and the environment's susceptibility to leprosy.⁴⁶ On the copper mines of Zambia, Malcolm briefly discussed leprosy as one of the diseases brought on the Roan Antelope mines in Luanshya by migrant workers drifting into the mines from rural areas.⁴⁷ This work was important to our study because it helped us understand how the disease was found in certain environments.

In his book, *The African Poor*, Iliffe devoted a chapter to leprosy that discussed the establishment of the first leper colony in Zambia by the London Missionary Society among the Mambwe in 1893⁴⁸ and the creation of British Empire Leprosy Relief Association (BELRA) in 1923.⁴⁹ Iliffe narrated an account of how the South African government isolated lepers at Robin Island in the effort to combat the disease. He also discussed the skills the leprosy victims received while they were in isolation.⁵⁰ This work was important to our study because he discussed issues of the institutionalisation of leprosy a theme we have discussed in our study. While Vaughan, especially in her chapter on leprosy, discussed the prevalence of the disease among some groups of people in her attempt to discuss how missionaries tried to control the spread of the disease by establishing leper settlements.⁵¹

Gelfand gave an account of the role missionaries played in Zimbabwe to combat the spread of leprosy. He discussed compulsory isolation of lepers instituted by the colonial government as a control measure against the spread of the disease.⁵² Dory also discussed

missionary work among leprosy victims in colonial Malawi. He discussed how the missionaries cared for the lepers that were severely deformed and were neglected by their relatives. ⁵³ Mairin discussed the strategies missionaries applied to fight leprosy in Zambia and the drugs such as dapsone that were used to inject patients.⁵⁴ In his study, Ntinda discussed the effects of missionary medical work at Mbereshi'. This work was very important to our study as it discussed one of the themes covered in the study.¹ This information was important to our study because it also discussed the role missionaries played in the fight against leprosy.

Siamwiza, in the context of famine explained how lepers suffered in times of famine and how the community responded to their needs during those hard times pointing out that victims of leprosy were on the margins of their own communities.⁵⁶ This work was of great value to our study, as it highlighted African attitudes towards leprosy and its victims.

Colson said the Ila and the Tonga never rejected the lepers.⁵⁷ This was confirmed by Mr Moses Kalaula who said that his uncle Cheembe from chief Mweemba, who was a leper was not rejected in the village although while at Gwembe receiving treatment his two wives were married by other people (one by his elder brother).⁵⁸ Colson's work was very significant in explaining the diverse attitudes towards lepers and leprosy. Griffiths discussed how the Ushi and the related peoples of Mwata Kazembe lated severe leprous victims.⁵⁹ Pentz also discussed how leper victims were isolated in South Africa.⁶⁰ These works were very important because our study looked at how lepers were treated in Zambia.

Feeny gave an account of how the Australian government attempted o eradicate leprosy in that country.⁶¹ Irgens also helped us understand how leprosy was controlled in Norway. Although Irgens did not discuss anything to do with Zambia and leprosy, his work helped us understand how the disease was managed and controlled in other parts of the world.⁶² Mead discussed the social problems associated with leprosy and the rehabilitation of lepers.⁶³ He further discussed the BELRA's efforts to control leprosy and handle the social problems faced by the leprous persons throughout the world.

Insights into the medical aspects of leprosy were discussed by Brown,⁶⁴ Mostert⁶⁵ and Taube and Ellis.⁶⁶ Their articles provided us with medical perspective on the disease, which helped us understand in full the various aspects of the disease. Cap provided a geographical distribution of leprosy with an emphasis reasons why in Africa some areas experienced high prevalence of the disease. Cap suggested that there were some epidemiological conditions that were highly susceptible to leprosy.⁶⁷

Ponnighaus gave account of leprosy prevention in the Karonga district of Malawi through the use of vaccines.⁶⁸ Brand provided information on why some leprous persons tended to have severer deformities than others.⁶⁹ Pedley gave information on the transmission of leprosy.⁷⁰ Although Kalusa did not discuss leprosy in his work, he helped understand disease patterns in relation to ecology and environment he also discussed the strategies that were used to combat disease at Roan Antelope Mines on the Copperbelt.² These sources were useful to the study because they presented information on how leprosy was transmitted and managed.

From the review of literature above, it was evident that there was nothing specifically on leprosy in Zambia. It was hoped therefore, that this study would make a very big and important contribution to the knowledge of disease patterns and disease environment in Zambian historiography.

Methodology

Research for this dissertation was done at the University of Zambia Library, where primary and secondary sources were consulted. We also collected material from the National Archives of Zambia. At the Archives we consulted Departmental files, annual reports, district notebooks and tour reports. Oral interviews were also conducted with patients from both Liteta and Chikankata Leprosy Centres. Officials from the Ministry of Health were also interviewed.

Organization of the Study

This study was divided into six chapters. Chapter one was the introduction. Chapter two discussed how Africans perceived people with leprosy, what cause leprosy and how Africans tried to treat the disease. Chapter three discussed gender differentials in leprosy, and women and leprosy. Chapter four examined how missionaries tried to control and

treat leprosy, how they rehabilitated leprous persons nd how they worked together with the British Empire Leprosy Relief Association (BELRA). Chapter five examined the role the state played in the fight against leprosy, the rehabilitation of lepers and the BELRA's role in the fight against leprosy. Chapter six was the conclusion.

Conclusion

The chapter presented the background to the study, highlighting its essence enshrined in the problem it set out to address. The chapter further outlined the objectives, rationale as well as the strategies employed in collecting data and executing the entire project. In addition relevant works by other scholars were explored in the literature review.

The chapter also discussed the causes of leprosy, its incubation period and how it mutilated the fingers and toes. It further discussed how the disease was associated with evil leading to its victims being shunned in their communities and how the cure developed.

CHAPTER TWO: LEPROSY AND LEPERS: ATTITUDES, INTERPRETATIONS AND TREATMENT

Introduction

This chapter examined some Zambian attitudes towards leprosy and lepers and interpretations of leprosy. The chapter discussed traditional therapies aimed at attempts to treat the disease. The chapter argued that leprosy was a dreaded disease and lepers as victims were also dreaded and marginalised. Some African societies took a fatalistic stance towards the disease and left the victims to die on their own. The chapter was divided in three sections. Section one discussed local attitudes towards lepers and leprosy. Section two discussed traditional and local society's interpretations of the disease. Section three examined traditional attempts to treat the disease.

African Attitudes towards Lepers and Leprosy

Leprosy was a medical challenge and the stigma attached to it remained a challenge in both endemic and non-endemic countries. Most Zambian ethnic groups viewed leprosy as a punishment for committing a social taboo and all those infected with leprosy were seen as unclean.³ In Africa, attitudes and interpretations towards leprosy and lepers varied from one area to the other. In extreme cases, leprosy victims were marginalised by society and were socially isolated. Where such stigma existed, the lepers referred to themselves as 'the living dead'.⁴ In most African societies, a leper was perceived as a 'living dead' because all those infected were considered as dead people and at death were not accorded a decent burial.⁵ Fear and prejudice regarding leprosy and its victims remained ingrained in the minds of many. In many African societies, leprosy was sociated with the idea of guilt, rejection and isolation. These concepts were largely influenced by African religious beliefs and local traditions, which gave leprosy its identity.⁶

Leprosy was unique in its medical characteristics. This was reflected in the community's attitudes towards the lepers. The foul smell, chronic ulcers, deformities and crippling that followed led to the repulsive response and in some societies, expulsion of the patients from the community. Leprosy was not only associated with physical deformities but also with disintegration of its victims' dignity and distortion of the patient's personality. This was mainly the consequence of a complexity of attitudes and behaviour by the community towards leprosy victims' and the victims' reaction towards these behaviours.⁷

The disease terrified many people not only because its ims' end was inevitable, but even more because their end would be long in coming. Iliffe observed that leprosy was rarely a killer disease in itself; all it did was main to break down its victims' resistance to other diseases.⁸ A leper in this case would suffer for many years and for many years he or she would remain at the mercy of his or her community, where he or she had to totally depend on his or her relatives for livelihood.

The mutilation that the disease caused to the body, in addition to the rejection and exclusion from the mainstream society its victims suffered, made leprosy a highly dreaded ailment.⁹ In Ethiopia for example, leprosy was apparently thought to be hereditary in certain families, and these families could not intermarry.¹⁰ Among the Thonga of Mozambique, lepers moved freely and lived within their community, but with some minimum restrictions. When they attended beer parties, they were required to bring their own cups, while every other invited guest received a cup from a village headman to use during the party.¹¹ The Ethiopian humane attitude towards lepers which allowed them to live with lepers freely differed sharply from some Nigerian attitudes. Among the Yoruba, for example, leprosy sufferers were expelled ruthlessly from their towns or villages and forced to form their own villages elsewhere.¹² The abandoned victims eventually died of depression, neglect and hunger. No leper met with sympathy from a healthy person. Only the well to do were tolerated in the village as long as the disease was not noticeable.¹³ This fact is confirmed by Iliffe who states that Nigeria and its environs had one of the greatest concentrations of leprosy in the world and some communities abandoned and left the victims of the disease in great misery in the bush.¹⁴

In some cases, leprosy victims were left alone in a hut outside the villages where they lived in destitution. No one went to where lepers lived and kept their distance when talking to them, for fear of catching the disease. In extreme cases, some victims

were even killed,¹⁵ but the Igbo of Nigeria treated the lepers moderately and humanely because they believed the disease was hereditary and caused by offended gods.¹⁶ Despite these variations, whenever a marriage was to take place among the Igbo, the bride and the groom were thoroughly checked before the marriage was sanctioned.

Rejection and isolation of lepers was also common among the Baganda of Uganda where lepers lived alone because their relatives rejected them. Those who contracted leprosy while away from home and working somewhere else chose to live in solitude and not to return to their homes where they would be rejected.¹⁷ In South Africa and Lesotho, leprosy victims were separated and cut off from their latives, and often from their husbands, wives and children. Ms Elly Siamayuwa of Liteta Leprosy Centre narrated how the only man who was in the settlement then was separated from his wife and children when he became infected with leprosy in 1960 and became blind. She further stated that since the man came back in 1965 none of his relatives or children had ever come to see him. He had however, remarried in the settlement.¹⁸ Ms Siamayuwa further stated that her relatives built her a small hut outside the village where she lived for fear that she would contaminate the village. She lived in hut until 1957 when the government discovered her and took her to Liteta where she was still living on the day of the interview.¹⁹ On the other hand, in Southern Sudan and Ghana, where leprosy was very common, a survey in the 1930s showed that even the most infectious cases of leprosy mixed freely with other people. This attitude due to the people's belief in these areas that leprosy was not infectious. Much of tolerance towards the disease, however, went with elaborate precautions when eating and when burying a leper.²⁰

Rejection and segregation of lepers was probably more mmon than acceptance and accommodation in African societies. According to Mr Nakando Pumulo the Principal Medical Superintendent at Liteta Hospital, a leper was discharged from the settlement in 1963, and when he went back to his home village in Feira (now called Luangwa), he was met with hostility and rejection. His relatives could not help him be reintegrated in society; he opted to return to the settlement where he died in 1988.²¹ This could probably be due to the fact that looking after lepers was burdensome and also that lepers were economically and socially of little value to the society.

In Zambia, as was the case elsewhere in many other parts of Africa, leprosy was a dreaded disease and its victims suffered not only a lot of rejection and social exclusion, but also scorn from some members of the communities in which they lived. In Western Province the lepers were expelled from villages along with their families and usually retired into the bush, where they later died without getting a decent burial. Sekeletu, the Kololo chief who had leprosy executed many people who suspected had bewitched him. However, he went to hide himself from his people on the other side of the Zambezi River.²² Sekeletu's going into hiding from his people, being an aristocrat, showed stigmatising effects of the disease. Further, among the Lozi, lepers were restricted to an area where they would not threaten the purity of the royal court.²³ In Luapula, lepers in the advanced stage of the disease were isolated from the rest of the community, but the chief had the obligation to provide food for the lepers who could not produce their own food.²⁴ An example of this situation was in the Lunda Kingdom of Kazembe, where

lepers were strictly isolated.²⁵ In several remote regions of Zambia, early missionaries found leprosy sufferers abandoned to die. The *African Affairs Annual Report for the Year 1955* reported that at Kalene Hills in Mwinilunga District, North Western Province there was a little colony of old women who were a mixture of leprosy victims and those accused of witchcraft which was established by the Christian Missions in Many Lands missionaries.²⁶

The Legislative Council Debates Fourth Session of the Ninth Council 10 November- 21 December 1951 stated that in Livingstone prisoners with leprosy were kept in the leper section of the African hospital.²⁷ Later, in 1946 the government established a special leper settlement near the prison for leprous prisoners. In 1952 the settlement had six prisoners suffering from leprosy.²⁸ That development relieved the African Hospital of the need to make provisions for these lepers.

These attitudes Zambians had towards leprosy victims probably depended n the various interpretations that were made about the causes of the disease. Some Zambian ethnic groups considered leprosy as resulting from a misfortune of some kind. The Lunda of the North - Western Province believed that leprosy, like any other disease, was caused by a breach of ritual, usually the transgression of one of the *Mukanda* boy's circumcision rite taboos.²⁹ This belief was probably as a result of the confidentiality with which the *Mukanda* institution ought to be guarded. Ethnic groups such as the Luvale, Lunda, Luchazi, Mbunda and the Chokwe guarded the institution's rituals and secrets very jealously and as such used the fear of leprosy as a way to maintain the privileged secrets

of the *Mukanda* institution. The Luvale for example, believed that a leprous woman acquired the disease by passing through the former site of a circumcision camp and stepping on the medicine which men used to protect the camp. Stepping on cindered foreskins and the urine of circumcision apprentices was believed to cause the disease.³⁰

The IIa of Namwala in Southern Province associated leprosy causation with eating rotten fish.³¹ This was probably due to the fact that fish was very prominent in their diet and ordinarily no one was expected to eat fish that had gone bad. The IIa seemed to have had no idea of leprosy being infectious and as such they did not take any steps towards segregation of lepers.³² But they banned victims from marrying and prohibited them from sexual intercourse until the sufferer was cured.³³ Their kin, the Tonga treated the lepers in almost a similar manner. Elizabeth Colson served that a husband was obliged to live with his wife even if she was leprous, although wives tended to desert their leprous husbands.³⁴ This was probably because their husbands became too incapacitated to support them economically.

Probably the most miserable part of a leprous person's life was how he or she was treated in the community. Some societies had soft and sympathetic attitudes towards lepers, yet others did not. In most cases, the leprosy victims themselves were indifferent to the disease. In some cases, the victim's first realisation of their leprous condition gave way to self-hatred and to embittered resignation. They found it difficult to believe and accept that the disease was really leprosy.³⁵ Sometimes, the victims were so terrified that they hid themselves until signs of advancing disease made their appearance. In some

cases, they had apparent dejection and such indifference that they called themselves 'the dead'.³⁶

We may also state here that, the way leprous persons were treated depended on their status and political power in society. Probably, the commoners were the most shunned by the society than the aristocrats. Among the Kololo of South Africa and later Western Zambia and the Lungu of Northern Zambia, for instance, if the leprosy sufferers belonged to the aristocracy, they remained respected and were treated well. The cases of chief Sekeletu of the Kololo and chief Chinakila of the Lungu people to illustrate this point. Despite his leprous condition, Sekeletu remained the ruler of the Lozi kingdom until his death.³⁷ When the District Commissioner for Arbercon, now Mbala contemplated removing from office chief Chinakila because of his blind and leprous condition, Tafuna, the senior chief of the Lungu, objected, arguing that the chief could not be removed from power while he was still alive.³⁸ In addition, Mr Pumulo Nakando revealed that one of the former patients from Liteta Leprosy Centre who lived in Chibombo was accepted back in his community and his wi waited for him up to the time he was discharged and still lived with him.³⁹ In contrast, some communities in Luapula and Northern Provinces neglected lepers, especially during times of natural calamities such as famine and draught when lepers were put on the margins of their own communities because of their physical condition. In Kasama district in Northern Province of Zambia, lepers were left in the bush until they died.⁴⁰

Interpretations of Leprosy

Africans had different interpretations of the causes of leprosy. Most people believed that acquiring leprosy was a divine punishment for immoral behaviour especially when it was believed that the disease was obtained through an act of sexual contact with a prostitute.⁴¹ In this case, any person that was a victim of leprosy was considered as and such behaviour was not tolerated in society, hence, shunning any person with leprosy. Consequently, people had cultural and social perceptions which were negative about the disease. For example, Mr Chabota Moonga of Chikankata Leprosy Centre indicated that his relatives abandoned him in the settlement where he had been since he was diagnosed with the disease in 1969.⁴²

Many groups in Eastern Province believed that eating food cooked by a woman who had a miscarriage could cause leprosy.⁴³ Brody argued that leprosy was seen as a punishment from God and that a leper in that case ought to be seen as someone who had sinned.⁴⁴ This argument was supported by Vaughan who stated that victims of the disease were thus victims of their own misfortunes and misconduct in society.⁴⁵

After the introduction of leper settlements in the country, the Federal Government had a problem of patients who had been under treatment for years and were cured. It is stated that the leprosy patients who had been healed had no friends and their relatives shunned them, so they clung to the settlements, which had been their comfortable home for many years during treatment.⁴⁶ The situation was presumably because the leprosy patients who had been cured could not go back to their relatives with the physical deformities they had.

Furthermore, the leprosariums faced a similar problem, where it had to look after the badly crippled victims who were unable to look after themselves.⁴⁷ These were patients who did not require any special treatment other than food and a home. This evidence would seem to suggest that these interpretations and attitudes people had against leprosy made these victims not to return to their homes even after they were healed.

African Leprosy Therapies

Traditional leprosy therapies were widely known among a number of Zambian ethnic groups and played a very major role in attempts to treat the disease. Even in modern times, herbal and other types of traditional medicines had been used to treat various ailments in Zambia and other parts of the world. Western medicines in some cases were resorted to when traditional medicines failed to bring relief to a patient.

The treatment of diseases among Zambians depended on their cultural beliefs of what caused the disease and they also believed that they were vulnerable to natural and supernatural attacks such as forces of evil, sorcery, spirits and gods.⁴⁸ Traditional doctors looked at the treatment of disease and definition of therapeutic truth as illustrated in the different conceptions of medicines especially with regard to what the medicine consisted of in its confines and its applicability. They had a wider conception of medicine that embodied the whole range of their social thought and afflictions of the people.⁴⁹

Among the Tswana people of Botswana, treatment of the disease depended on the cosmological sphere surrounding the patient. There was the concept of the disease as

punishment. This concept referred to acts such as transgressing the taboos associated with sexual relations and childbirth, and the resulting illnesses were considered to be their logical consequences.⁵⁰

Although leprosy remained one of the most problematic iseases to cure in Zambia, society did not helplessly watch the victims being devoured by the disease. Various traditional medicines were used to try and cure the disease. Nwude and Ebong, for example, noted that in some societies even psychotherapy - treating illness by discussing the problem with the patient and therapeutic occultism - treating illness using magical powers were used as strategies of leprosy treatment in many parts of the world.⁵¹

It is important to note here that western medicine never supplanted African medicine. People sought medical treatment from either traditional healers or the missionaries as they saw fit, depending on the prevailing conditions and the nature of the disease.⁵² The majority of the people that were exposed to the leprosy infection never developed symptoms for some time, while others developed them slowly. This forced many of the victims to rely on traditional medicine for a cure of disease. This reliance on traditional medicines complicated the patient's decision to seek modern medical help.

In Luapula Province among the Ushi people for example, to treat the symptoms of leprosy, ashes were pasted on the skin to remove a skin rash, patients were to avoid eating certain foods, and were required to inhale smoke from burning herbs. If these, remedies failed, patients sought help from spiritual gods.⁵³

Herbal medicines, however, played the most important role in the treatment of leprosy. For 2,500 years, India used *Chaulmoogra* oil from the hyduocarpus tree as an indigenous remedy to leprosy and in 1853 European doctors adopted the herb.⁵⁴ However, they came to believe, at the end of the First World War that the oil could not cure leprosy. Nevertheless, the oil dominated the treatment of the disease until the advent of sulphones.⁵⁵

A number of plants were used in an attempt to cure leprosy in Zambia. The pods of *Musekese* (Brysonima chrysophylla) and the barks or roots of the *Muhonono* (Bursera uniflorus) trees were a popular cure for leprosy in Barotseland.⁵⁶ In the case of the *Musekese*, pods would be crushed, soaked in water and the decoction was taken orally and rubbed on the skin. The *Muhonono* (Scoparia dulcis) bark and roots were boiled and the decoction was taken orally. Similarly, the roots and bark of the *Mukusi* (Elephantopus elatus) tree were mixed with those of the *Muzauli* (Passiflora incarnate) tree, soaked and the decoction was taken orally to cure leprosy.⁵⁷

In North-Western Province, both the Lunda and Luvale attempted to cure leprosy using local herbs. The Luvale used the *Munjongolo* (Diospros batocana) roots. The scrapings from the roots were mixed with some unspecified amount of fat and were applied on cuts made into leprous spots.⁵⁸ In the case of the Lunda, leprosy was treated in the context of how it was thought to have been acquired. A male adult leper who was believed to have broken one of the *Mukanda* rituals or a female leper who was believed to have walked on

the former site of a circumcision camp, needed to collect a number of herbal medicines in order to be cured. Such persons were advised to go to a former circumcision camp to get a root from any one of the trees at the site of the camp. Thereafter, such persons were required to go to a streamside to get a branch of *Mbumba ya Chula* (Landolpia rubescens) tree. Both the roots and leaves of the *Mbumba ya Chula* tree were scrapped and the scraps were mixed with oil and the decoction was rubbed on the patient's body.⁵⁹

The Ila of Southern Province applied a number of herbal medicines in the treatment of leprosy. The roots of the *mufumba* (Rubia Cardifolia) tree were scrapped and a decoction made from it and was used to wash the leprous body. A decoction that was made from a *mutundu* (Stereosper Mum Kunthianum) tree was also taken orally. The root of the *Mululwe* (Plumbago Zeylanica) tree was also used. Deep incisions were made in the root, which were soaked in water. The decoction was taken orally and was also used as lotion.⁶⁰ In the Eastern Province, the roots of the *Musolo* (Himatanthus succuba) were used. The roots were burnt and the ash was sprinkled on the leprous sores.⁶¹

These remedies were not successful in curing the disease, at the close and the turn of the nineteenth century and twentieth century respectively, new methods of curing the disease in Zambia were developed and lepers were once more given hope of at least a near normal life.⁶²

Conclusion

This chapter discussed African's attitudes towards leprosy, lepers and therapies. This encompassed interpretations as well as an examination of indigenous methods of treating the disease. The picture that emerged showed that Africans marginalised leprosy victims considering them as unclean. Also highlighted were the impressions that leprosy was a highly dreaded disease because of the mutilation and ulcers it caused to the body.

However, whereas some societies dreaded leprosy and lepers, others tolerated it and its victims, albeit with strict measures on how to handle the lepers. In fact, there was generalised stigmatisation of lepers across societies, yet, leprosy victims who had high status in some societies continued to enjoy the respect they commanded even after they contracted the disease.

Different societies attributed leprosy to various causes, which determined how the lepers were treated in particular societies. African societies attempted to cure leprosy using traditional medicines depending on what was believed to have caused the disease. These remedies did not, however, cure leprosy but only gave the patient temporary psychological relief.

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CHAPTER THREE: GENDER AND LEPROSY

Introduction

This chapter discussed gender and leprosy in the context of differentials as well as economic impact of leprosy on its victims. The chapter pointed out that there were gender differentials in accessing health services because of women's economic status in society and that these differentials included detection of the onset and development of the symptoms of the disease, deformities and treatment of the disease. In the economic context of the disease, the chapter primarily focused on the impact of the disease on both the household and the individuals. The chapter was divided into three sections with section one examining gender differentials in leprosy detection and treatment. Section two discussed women and leprosy in the context of women's roles at home and their economic standing in society. Then part three discussed the gender dynamics of the wide variety of social, cultural and economic variables attributed by social structures to men and women.⁶³

Gender Differentials in Leprosy

Gender differentials in leprosy were serious concerns throughout colonial Zambia among the missionaries especially because the sufferers of the disease were highly stigmatised. There were gender differentials in the rates of leprosy detection, deformities and even treatment.⁶⁴ Women especially married ones, took longer to receive treatment and usually reported for diagnosis late because they depended on their husbands for information on the disease and they had to look after their families instead of going for treatment. Furthermore, living in a male dominated society where women's socio –

economic stand is dependent on the men, they depended on their husbands for permission to leave home and at times transport money to go for treatment. Evidence showed that there were significant differences in the frequency an types of deformities among each sex. In India for example evidence revealed that the incidence of deformities in females was more than twice as much as in males.⁶⁵ This was as a result of some women delaying in seeking medical attention because of their unwillingness to disrupt household duties or their inability to find other care takers for their children while they were away for treatment.66 In addition, women tended to be the main health providers for their families and as such suffered the greatest impact of the disease. This caused some women to run away from the leprosy settlements where they were receiving treatment. The Indian scenario was not unique to that country. In 1948 a woman with 'highly infectious leprosy' deserted Minga settlement in the Eastern province. When she was 'recaptured' and taken back to the settlement for continued treatment, her reason for not wanting to remain at the treatment centre was that she was worried about her children back home.⁶⁷

Gender related differences in exposure to leprosy were biological as well as sociocultural. Differences in exposure to leprosy were influenced by occupation and the socioeconomic status of the victim. It is an established fact that men and women experienced different health risks stemming from their social roles and expectations. Whereas women had different exposure to leprosy and infection, leprosy probably had a different impact on women in sociocultural and economic ways.⁶⁸ The disease had a more adverse impact on women largely because of their physiological state. Evidence suggests that women developed stronger and more possibly effective immune reactions against leprosy than men.⁶⁹ This was probably because of women's work, which restricted them to the household. This gender restriction possibly reduced their risk of infection and gave a false picture of resistance to the disease. Yet another dimension could be that because women stayed indoors most of the time, their medical problems remained undetected for a very long time. This meant that by the time their conditions were detected their deformities had become more severe.

The anatomical differences between men and women meant that the ailment demanded a different treatment approach in women. Women reacted differently depending on the state they were in at the time of drug admission. The effects of pregnancy and lactation had a diverse impact on leprosy. Pregnant patients had diminished and unstable immune response to the disease.⁷⁰ This made their leprosy condition more severe than that of the men.

Women and leprosy

Leprosy in women was a complex health challenge because of women's physiology such as hormonal changes, childbearing and lactation as well as their disadvantaged socioeconomic status. In cultures where women were expected to be submissive to men and economically dependent on men, this social-economic dependency disadvantaged and delayed the process of diagnosis and treatment of leprosy in them.⁷¹ The men in this case determined when a woman should go for diagnosis and treatment. Women experienced greater social challenges than their men counterparts. Leprous women were more stigmatised in their communities than the men. Upon realising that they had contracted the disease, most women went into self-seclusion to avoid public exposure. Often they hid their hands and arms from the public and did not even visit their relatives and friends for fear of being shunned. Self stigmatisation was greater among women than men. They refrained from all social activities they were involved in before they became infect6ed.⁷² Women being mothers, stigma played a very dehumanizing role in their lives. Although, both men and women were affected in terms of their social life, women suffered more isolation and rejection from society. Women victims of leprosy were not allowed to prepare and cook food which was to be consumed by other family members to avoid contaminating the food with the bacteria which caused the disease. ⁷³ Such isolation from domestic roles developed among women a self-image of being a less valued member of the family.

Where pregnant women were exposed to the infection, they were very likely to get it.⁷⁴ This was probably because their immune systems were low at that time. This statement does not contradict the point made earlier that women less exposed to leprosy because their household roles largely confined them indoors most of the time.

Leprosy was so dehumanizing that in some extreme cases Taiwan for example, the chairs where a leprosy victim sat were washed immediately she left for fear of contaminating the house.⁷⁵ A case of this kind had not been recorded any where in Zambia, but the extreme case in Taiwan gave us a picture of how leprosy and lepers were perceived in some societies. Consequently, women leprosy victims opted for treatment in

the leprosy settlements as the best alternative to their social isolation and the stigma which they received in their societies.

The introduction of leprosy settlements was not a blessing to the women lepers, although they found them as the best alternative. Most women admitted to the settlements worried about their absence from home which they felt threatened their marital relationships and they also worried about their children left behind in the villages.⁷⁶ In addition to the foregoing, the women who gave birth while living in the leprosy settlements, had their babies taken away to be cared for by either their relatives, taken to missionaries or given to foster parents in an effort to prevent them from being infected.⁷⁷ These babies remained separated from their biological mothers for many years to prevent them from being infected by their mothers. This separation went with a lot of emotional torment, which most mothers found difficult to cope with.⁷⁸

Even when women were cured, they had various degrees of physical impairments and disabilities in their hands and limbs which at times made it difficult for them to perform some household chores.⁷⁹ Even if they were completely cured from leprosy these women were never free of leprosy related emotions. One major reason for this was the physical changes that occurred to their faces, hands, rs and feet. These changes interfered with their daily routines and socialisation.⁸⁰

Because of these conditions most women preferred to remain in the settlements even after being cured because living there gave them emotional comfort. The settlements atmosphere provided them with moral support to gain self confidence and self respect.⁸¹ The women that returned to their communities after they were healed were, usually so cautious of their condition that they used separate bowls, plates, cups and other utensils for eating from those used by other family members.⁸²

By 1961, the country had twenty-four leprosy settlements, of which seven were government run and seventeen run by missionaries. In all, 1.2% of the adult population or 0.6% of the country's population of about 700 000 suffered from Leprosy. About 2, 164 leprosy patients were under treatment.⁸³

In some settlements, particularly those under the control of missionaries, gender relations associated with sex were hardly tolerated. The Seventh Day Adventists and the Reformed Church at Mwami, Yuka and Magomero respectively expelled from their settlements patients who had sexual relationships when they were still receiving treatment. But missionaries of Christian Missions in Many Lands in Chitokoloki, Kaleni Hill and Kabulamema allowed the victims to 'marry' while in the settlements after they had been healed and discharged if they could not go back to rejoin their families.⁸⁴

Despite the fact that missionaries provided their female patients with emotional peace at leprosy settlements, it was argued that they increased social stigma in that the creation of leprosy centres gave an impression that leprosy was very infectious, thus, creating fear and stigma towards leprosy and finally rejection by the public.⁸⁵

Leprosy could disturb sexual intimacy and strain family social relationships causing marital stresses. Doctor Edwin Mwandila Ministry of Health in Lusaka said that the disease did not impede sexual relationships, but acted as a barrier to other manifestations of affection such as kissing and caressing or fondling. Women experienced decreased interest in sex, either because of their own lack of interest or because of self-rejection.⁸⁶ The women's refusal to fulfil their sexual roles often led men to seek sexual satisfaction elsewhere. This deepened women's feelings of rejection, lowered self-esteem and generated their fear of being abandoned, which in fact often occurred. Women held self-stigmatising attitudes, giving rise to serious problems in their everyday lives, including hostility and the neglect of themselves or their families.⁸⁷

On the other hand women discharged from leprosy centres could not be accepted back by their husbands because in certain societies, any one with leprosy was unclean and could not have sexual intercourse with his or her partner. uninfected women would have sex with their infected husbands. In cases where the men could not provide sex to their uninfected wives, these got sex from other men. In this regard, Ms Pezo Sachilombo of Chawama compound in Lusaka narrated of how her infected grandfather went to have sex with a woman who was also infected in the next village because he could not have it with his uninfected wife. She further stated that her grandmother would complain of how her husband could not fondle her or play with beads in her waist and even how he could not manage to touch certain parts to arouse her before having sex.⁸⁸

For the husbands of infected women, leprosy was not a reason for the cessation of sexual relations, but for the separation of personal items as a protective measure against contracting the disease. The biggest problem the men suffered when they were infected with leprosy was the alterations to the testicles (which grew smaller) and the hormones

which at times led to the reduction of sexual activity and fertility. At certain times infected men failed to have an erection as a result of pain or oedema in the testicle areas. Sexual malfunction constituted a greater problem to younger patients, as 'the gender identity demanded their active sexual activities'. An inability to have sexual intercourse for the male partner raised the question of fidelity and often caused distrust among affected couples.⁸⁹

Mr Musonda Chalwe of Matero in Lusaka also felt that having sex with a woman with leprosy could not be exciting because there would be no proper fondling where one has no fingers and or toes. He said that leprosy was the worst disease imaginable in the world and it would not be very sexy to have sex with a woman with leprosy because one would be worrying that as she traced her finger down his body the finger might fall off.⁹⁰

Nevertheless Dr Leonard Mutale of the University Teaching Hospital in Lusaka observed that there was nothing wrong with having sex with an infected partner as long as the man could manage to have an erection, whether or not he was able to make the woman ready for sex. In most cases, this left the woman unsatisfied.⁹¹

On the other hand Ms Annie Mbulo, a midwife at Bauleni clinic in Lusaka, revealed that she would be very uncomfortable to deliver a woman who has leprosy because she feared that the blood and other body fluids discharged during delivery could be contaminated with the disease and might infect her.⁹² Meanwhile Irene Katongo, another midwife at Chilenje clinic in Lusaka said that helping a leper deliver is just like helping any other woman deliver, although she confessed that if the leprosy was not healed, she would not be too willing to help with the delivery.⁹³

All these opinions tended to confirm that leprosy indeed had an impact on the sexual life of leprous persons.

The Economic Impact of Leprosy

Leper settlements were not only sanctuaries for healing and emotional restoration, they also taught patients some skills for their economic independence upon being healed and discharged. Leprosy victims were marginally educated and most of them were not educated at all (this was used in purely western sense of education). Victims in employment at the time of infection and diagnosis were usually discharged from their jobs as was the case in the Gwembe Valley. These were mostly men as there were almost no women in employment during the colonial era.⁹⁴

Leprosy affected its victims in many ways. Apart from the stigma brought on its victims, the patients were also affected economically. We already established that when natural calamities befell a given community, lepers were affected most. During the 1908 famine in the Gwembe Valley for example, two out of four recorded deaths were of lepers.⁹⁵ Isolated the incident might be, it suggested the degree of vulnerability of leprosy victims to adverse economic conditions.⁹⁶

Siamwiza stated that during the 1912 famine and probably the 1908-1909 famine as well, in Luapula and Northern Provinces, lepers were the chief sufferers and among the dead the lepers dominated because they could not fend for themselves.⁹⁷ He further

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stated that it was believed that among those who died, as reported in Luapula and some sections of Northern Province during the 1908-1909 and 1912 famine were a number of lepers.⁹⁸ According to Loretti and Garbellini this suggested that reduction in food intake during famines gave way to more infections that exposed lepers to other diseases which eventually killed them.⁹⁹

`In addition, leprosy affected its victims' households omically. Men could not perform the economic activities such as fishing, hunting, smelting and weaving which helped them earn a living and fend for their families before they were afflicted with leprosy.¹⁰⁰ This was evident in the fact that lepers in the Gwembe Valley that were placed in various leprosy villages, refused to live there citing the fact that they were unable to plough, or perform any economic activities to sustain themselves.¹⁰¹ This suggested that those who were leprosy victims, after getting deformed physically, could not fend for themselves and their families.

On the mines of the Copperbelt most men diagnosed with leprosy were dismissed and sent back to their villages. But victims of other diseases such as tuberculosis, asthma, and syphilis were treated and retained in their work place.¹⁰² In cases where men were involved in food production and lost their ability to do so due to leprosy, some were forced to go on the streets to beg. This was evident in Luanshya.¹⁰³ In 1940, the government came to their rescue by exempting all registered leprosy patients from paying tax.¹⁰⁴

About 7, 000 lepers were identified and exempted from paying tax. This development negatively affected government revenue.¹⁰⁵ The government also spent a lot of money on both the treatment and upkeep of leprosy victims. In 1951 the government established a leprosy settlement in Kawambwa, Luapula Province an isolated place which meant that the cost of sending patients for treatment was expensive.¹⁰⁶ Equally expensive was the cost of transportation of food, drugs, and other supplies. At certain times of the year when roads were so impassable, an airlift of essential supplies had to be arranged.¹⁰⁷

Management of leprosy was very costly, for instance, on 15 April, 1962, a Royal Rhodesian Air Force plane delivered urgently needed foodstuffs, drugs and fuel to the flood marooned lepers settled at Kawambwa in Luapula and the government spent £97.¹⁰⁸ This was in view of devastating floods in Luapula province that completely cut off the town. Consequently, the government had to spend a lot of money on the management of leprosy throughout the territory. This even made the idea of the main settlement to be in Luapula not workable.¹⁰⁹

One other factor that made leprosy management expensive was the dependency syndrome; patients felt it was the responsibility and obligation of the government to sustain and maintain their welfare. In 1954 patients at the Luapula Settlement complained to the Principal Medical Officer in Lusaka that they were being deprived of blankets and uniforms and that they were not given enough meat and were fed on rotten fish.¹¹⁰

Conclusion

This chapter has discussed Gender and Leprosy. It has shown that there were gender differentials in the leprosy detection, deformities and even the treatment. It has further illustrated that women became severely deformed because they sought treatment late mostly because of their social roles and the economic standing in most societies. The chapter has also showed that men who were infected with leprosy had some alterations in their testicles and hormones and at times failed to have an erection or have sex because the penis would be swollen and painful. However, medical personnel confirmed that there was nothing wrong having sex with an infected partner. The chapter has further shown that leprosy made its victims poor and very vulnerable in their communities that they became victims whenever natural calamities befell them. It has further highlighted that leprosy made the government spend a lot of money its management making it the most expensive disease to control.

CHAPTER FOUR: MISSIONARIES AND STATE INTERVENTION IN LEPROSY CONTROL, 1893-1964

Introduction

This chapter discussed the role missionaries and the state played in the attempt to control leprosy and to try and rehabilitate lepers. The chapter also examined the relationship between missionaries and the British Empire Leprosy Relief Association (BELRA), later the Leprosy Relief Association (LEPRA). The chapter demonstrated and discussed attempts that missionaries and the government made to control leprosy. It also discussed the government's contribution and support to missionary effort in the fight against the disease and the rehabilitation of lepers. The chapter was divided into six sections. Section one discussed the missionaries' leprosy control strategies. The focus was on missionaries' attempt to control the spread of the disease by creating leper colonies and settlements so that leprous persons could be prevented from interacting with persons free of the disease. The second section explained how missionaries rehabilitated leprous persons. The section explained the way lepers were perceived by society and missionaries' attempts to restore their dignity.

Section three outlined the government's role in the control of the disease and part four discussed the transfer of the leprosy headquarters from Luapula to Central Province in 1962. The fifth section discussed the role of BELRA in leprosy control and treatment. The last section discussed the rehabilitation and treatment of lepers by the State. The

chapter had discussed the role played by the missionaries and the state in trying to combat the impact of leprosy on the infected persons and their families and communities.

Zondi defended missionaries against the accusation by Comaroff that they deliberately used 'their medical services to make and remake the African society in the image of the west and in the interest of the European imperialism'. Such a view, Zondi observed, missed one fundamental point that 'missionaries did not deliberately make a decision to give medical care in the first place, nor were they drawn into it merely by imperialistic interest'. Instead he argues that missionary 'philanthropic feelings' were induced by demand for some medical intervention against disease in Africa.¹¹¹

In Zambia, missionaries introduced western medicine whose potency attracted Africans to missionaries. Malaria which was 'almost synonymous' with Africa was one of the chronic diseases which associated Africans with missionary medical work.¹¹² Perhaps because leprosy was difficult to cure then, it drew Africans even closer to missionaries than did malaria. Missionaries cared for lepers and government officials commended them for the care of lepers.

Missionaries and Leprosy, 1893-1964

Malaria notwithstanding, missionaries had to deal with leprosy which became a major disease of concern in Zambia during the period between 1893 and 1964. As we have shown lepers were shunned and kept away from the public eye. 1912 the Tswana chiefs for example acknowledged that the disease had long been known in their country, yet the colonial administration knew little about its prevalence because its victims were hidden from the general public.¹¹³ This is true of the Zambian story about leprosy. What was happening in Botswana was similar to what was happening in Zambia among the Lunda of Kazembe in Zambia. This reflected the fact that the African chiefs were aware of the disease but could do little to help the victims. However, the disease needed to be controlled so that the rate of infection could be reduced. Missionary thinking saw 'confinement' as the best method to control the spread of the disease. Confining leprous persons in one place made drug administration easy and systematic.

Initially, most lepers were treated as out-patients, an approach that was less satisfactory and yielded little success. Long distances between villages and treatment centres contributed to many patients discontinuing their medications. The confinement policy was good because it facilitated easy administration of drugs to the victims and monitoring of their diet since lepers required an adequate and balanced diet.¹¹⁴

In 1893 the London Missionary Society established the first ever leprosy settlement in the country at Kawimbe. The London Missionary Society was followed by the Jesuits who established a leper colony in 1909 at Chikuni in Monze District in Southern Province. In 1910 the South African General Missions established Luampa Settlement in Kaoma Dstrict in Western Province. Perhaps other settlements would have been established elsewhere in the country, but the outbreak of the First World War in 1914 directed government efforts away from the control of the disease. The War demanded a lot of resources, including monetary ones. Kawimbe and Chikuni Settlements survived largely because they were supported by the mission societies abroad.

The missionary directed fight against leprosy was resumed after the war ended. A number of leper settlements were established after the war. By 1957 there were more than twenty-four missionary-run leper settlements in Zambia. In 1928 and 1950 the Christian Missions in Many Lands established Chitokoloki and Nyamona Settlements in Zambezi District which was then known as Baluvale. The missionary society also opened Loloma Settlement in Kabompo District in 1932. Kaleni Hill in Mwinilunga was also established in 1952.

The South Africa General Missions joined in the fight against the disease in 1950 when they established Mukinge Leprosy Settlement in Kasempa and so did the Missionaries of Africa, popularly known as White Fathers, who in 1955 opened the St. Francis Mission Leprosy Settlement in Solwezi District.

In 1934 the Seventh Day Adventists established Mwami Settlement in Chipata District and were joined in1946 and 1950 in the fight against the disease by the Dutch Reformed Church which opened Nsadzu in Chipata District and Madzimoyo in Petauke District respectively and in 1954 they opened Magomero in Petauke.¹¹⁵ The Missionaries of Africa also established Minga and Nyanje treatment centres in 1949 and 1956 respectively in Petauke District. In the Western Province, leper settlements were in the hands of the Seventh Day Adventists and the Capuchin Fathers and to a lesser extent the Paris Evangelical Missionary Society. In 1936 and 1955 the Adventists opened Liumba Hill and Yuka Settlements respectively in Kalabo District. In 1956 the Capuchins established in 1956 Mangango Settlement in Kaoma District, in 1958 Santa Maria in Lukulu District and in 1958 Sichili in Sesheke District.

In 1948 the Franciscan Fathers established St. Theresa Leprosy Centre in Luanshya while the Universities' Mission to Central Africa also established Fiwila settlement in Mkushi in 1952. The Missionaries of Africa established Kasaba Settlement at Chilubi Island in the Northern Province in 1949. The Salvation Army serviced the Southern Province beginning in 1954 when they opened Chikankata Leprosy in Mazabuka.¹¹⁶ Leprosy settlement was established in 1958 in Senanga by the Paris Evangelical Missionary Society.¹¹⁷ Missionary concern over leprosy was part of their evangelisation process. Lepers were actually some of their first converts to Christianity.

The above narrative about the geographical location and distribution of leprosy settlements in Zambia indicated the widespread nature of the disease in the country. Further it explained the effort and zeal the missionaries put up against fighting the disease.

Missionary Societies treated and cared for lepers because the relatives and societies of infected people shunned them. The early lead by missionaries in caring for and in treating lepers reduced the number of leprosy victims in the country.

Chitokoloki, the main leprosy settlement in the North Western Province, registered a steady decline in leprosy cases. In 1948, Dr. Worsfold registered a decline in the number

of patients or victims.¹¹⁸ In 1951 there were 2,131 known cases of leprosy in the country.¹¹⁹ In 1964 the number dropped to only 880 persons.¹²⁰

Leprosy Relief Association

After 1923 Missionary initiated leprosy control and possible eradication was supplemented by the British Empire Leprosy Relief Association (BELRA), later the Leprosy Relief Association (LEPRA). The Association was created with a heavy responsibility of fighting leprosy in the British Empire. The Association did not establish its own leprosy hospitals or settlements. Instead it operated in the framework of the already existing missionary institutions dealing with leprosy control. In 1927 the Association worked closely with the Seventh Day Adventists to establish Mwami hospital in the Eastern Province of Zambia.¹²¹ Encouraged by the good work the hospital was doing in the area to control the disease in 1934 the Association provided funds to facilitate the Adventists' establishment of a leprosarium at Mwami.¹²²

In 1939 the Association requested the service of Dr. E. Muir who was a leprosy specialist in Europe to survey the prevalence of the disease in Zambia and to make suggestions on how to deal with the disease.¹²³ Dr. Muir was accompanied during his tour of duty by some missionaries who were involved in leprosy work. Dr. Muir's report indicated that there was need to improve on the staffing levels, there was need for more trained staff to deal with the increasing numbers of patients that required treatment and also recommended that more leprosy settlements be established to carter for all leprosy patients throughout the country. The survey further revealed that a number of people affected by leprosy were not accessing treatment, thus, recommending that all chiefs should report all leprosy cases in their chiefdoms to the government.¹²⁴

Missionary societies running leprosy settlements were encouraged by Leprosy Relief Association to apply for either financial or personnel assistance.¹²⁵ The Association provided financial help and also seconded nurses and leprosy control workers to institutions that were involved in leprosy work. In addition to paying salaries to seconded personnel, the Association also provided free medicines to such missionary-run settlements.¹²⁶

In 1958, the government grant to Chitokoloki Leprosy Settlement in North Western Province was reduced from £90 to £60 per year, a move that threatened the settlement with closure. The reduction of the grant was due to running costs that had become expensive for the government because of the large number of patients as there were 217 who were receiving treatment in the settlement that year. The looming closure worried some people in government circles. Colonel Sir Stewart Gore-Browne, then Minister of Health was perhaps the most concerned. Gore-Browne argued that Chitokoloki should not be closed down because of its commendable work in leprosy control in the province. He sourced funds from the Leprosy Relief Association and the settlement continued operating.¹²⁷

Rehabilitating Lepers, 1930 to 1964

One of the important reasons for confinement of leprous persons in settlements was to rehabilitate them, to ensure they were able to sustain themselves after being cured of the The idea of rehabilitation of lepers became a post-First World War predisease. occupation of whoever was involved in leprosy control. The post-First World War economic depression was a precursor of this idea. After the war in 1919 missionary societies involved in leprosy treatment and control began to realise that the victims of the disease, especially the incapacitated needed to fend for themselves instead of relying for sustenance on assisting institutions.¹²⁸ To achieve this approach, leper colonies were established on the lines of African village setting; a village headman was appointed to settle disputes that arose in the settlement. Chitokoloki settlement was established on this condition, the Lunda Native Authority provided land for the settlement.¹²⁹ In 1953 Chitokoloki had six villages where patients were taught despite their handicapped state, to grow their own food. They even reared cattle that provided them with beef and milk and hides. The Department of Agriculture also became interested in teaching lepers some agricultural techniques. The London Missionary Society at Kawimbe Leper Settlement in the Northern Province used 'able' lepers to dig fishponds,¹³⁰ an approach that provided a self-supporting strategy so as to make them live in as near normal social conditions as possible.¹³¹

Lepers sometimes worked in villages near settlements for food and other necessities. They also worked within the colonies as part of their rehabilitation. In the settlements they repaired leaking roofs for houses. They also cleaned their surroundings at a salary.¹³² At Chitokoloki under Mr Mawhinney's supervision, (an occupational therapist) lepers built and repaired buildings. All bricklayers and builders at this settlement were lepers trained there to acquire these skills and they reached a high standard of efficiency. In addition to bricklaying, carpentry work was also done by the lepers. Doors, door frames and window frames were made there, so were blacksmith items such as knives, axes, hoes and other foundry items that were required in the settlement.¹³³ Lepers were also taught some skills in agriculture. They cultivated big fields of cassava, the area's staple food crop.

Lepers with some skill or profession were encouraged to practice and explore opportunities. Timothy Nosiku, a leper at Chitokoloki was a teacher before he fell victim to the disease. He persuaded the missionaries to set up a school at the settlement so that children of lepers could be given instructions in western education. Nosiku himself was 'employed' to teach at the school.¹³⁴ In 1964, Peter Matoka, then Minister of Health observed that lepers spent all their days on some sort of therapy, sewing clothes, knitting jerseys, socks and other things to demonstrate that they were after all not helpless beings.¹³⁵

In 1950, the Government welcomed and appreciated missionaries' work in leprosy treatment and the rehabilitation of lepers. The 1950 *African Affairs Annual Report* observed that the 'care, skill and encouragement, which the missionaries bestowed on their patients was beyond praise.'¹³⁶ Ms Else Baker, of the London Missionary Society and also a believer in occupational therapy, was individually commended for the steering work at the Kawimbe Leper Settlement.¹³⁷ In 1954 Dr. de Kock, of the Dutch Reformed

Church at Nsadzu, also received government praise for her efforts towards the rehabilitation of lepers. Dr. de Kock was the pioneer of occupational therapy among lepers at Nsadzu. Inmates were provided with skills in tailoring and carpentry. She believed that upon return to their 'ordinary' life lepers could be employed and earn money or living without much hardship.¹³⁸

In 1938, the South African General Mission also embarked on occupational therapy to rehabilitate the lepers in their Luampa Leprosy Settlement, in Kaoma District in Western Province. The lepers grew cassava and assorted vegetables for their consumption and for sell to the surrounding communities. At Luampa both male and female patients were given instructions in sewing and knitting.¹³⁹ Mrs. Watson pioneered the rehabilitation project in the settlement for its self sustenance. In 1950 she received a commendation from the District Commissioner for the tremendous work in occupational therapy among lepers at Luampa Settlement. In 1939 Lukupa settlement was established in Kasama near the Lukupa River with the sole purpose of providing agricultural produce for lepers under the supervision of the Provincial Agricultural Officer.¹⁴⁰ The settlement was one of the most successful ventures. It probably succeeded because it was run on village lines whereby patients received unprepared food which they prepared themselves for consumption. In 1951, the settlement's herd of cattle was able to supply milk to the patients and even composite manure for their gardens.¹⁴¹ In the context of improved methods of agriculture the staff of the Agriculture Department gave 'much valuable advice and instruction' to patients who were capable of working 'in the well-laid out

gardens'.¹⁴² To supplement missionaries' efforts in the area, the BELRA upon request provided money to purchase materials used in occupational therapy projects.¹⁴³

Missionaries involved in leprosy control and treatment also imparted moral education among lepers. Missionaries operating leper settlements in the country demanded that their patients behaved morally upright and adhered to he rules such as not committing adultery while they were in the settlements. As part of moral education adultery was punishable and was not tolerated in the settlements. Peach of the Seventh Day Adventist Church at Mwami pointed out that at least about ten patients were dismissed from the settlement every year for committing adultery with other lepers in the settlement.¹⁴⁴

State and Leprosy Control 1940-1964

The British South African Company, which ruled Zambia between 1890 and 1924 and the Colonial Office Administration from 1924 to 1964 were aware of the prevalence of leprosy in Northern Rhodesia, but, despite the missionaries taking a lead in the control of the disease no serious attention was put in place by the Company and Crown government until 1940. However, the British South African Company Administration began to fight against leprosy in 1914. This early attempt to fight the disease was the initiative of the District Commissioner for Gwembe who was appalled by the high prevalence of the disease in the district.¹⁴⁵ The Commissioner's objective was to remove leprous persons from their villages and group them in one central place, a strategy he believed would arrest or minimize the spread of the disease. His concerns about the disease marked the beginning of a deliberate government attempt to control the malady and also to create

leper settlements not only in the Gwembe Valley, but in the country as a whole. This idea pre-occupied many a government official in parts of the country where the infection was prevalent, but it was not until after the end of the First World War that serious government involvement in the control of the disease was established.³⁶ The heavy war demand on available resources compelled the Company administration to suspend antileprosy campaign in the country. The war ended in 1918, but government's anti-leprosy campaign remained almost non-existent. Logistical problems seem to have stalled the campaign. It was difficult for the government to carry out anti-leprosy work on account of the great distances between localities, which were not easy to access because of lack of good road networks. These geographical limitations delayed even the government's efforts to supplement missionary effort against the disease.³⁷ The District Commissioner for Gwembe District recognized the prevalence of leprosy in his district and pioneered a control programme against the ailment, but the demands of the 1914 – 1918 war intervened and the campaign was put aside.

The treatment of leprosy and its effective control in the district did not begin immediately after the war. Government involvement in leprosy control only began in 1921, but not in the Gwembe District. Instead what came to be the first deliberate government involvement in leprosy control and treatment occurred in Luapula. In 1921 the London Missionary Society established a leper settlement in Luapula.³⁸ In 1940 the settlement became the government headquarters of the Leprosy Control Scheme in the country. Beginning in 1943 the government jointly ran the settlement with the London Missionary Society. In 1945 the government took over the running of the settlement.³⁹ Unlike missionaries whose involvement in the control of the malady hinged on Christian moral values, the government's concerns had to do with fiscal needs of the country. The more the number of lepers the less revenue the government would collect because lepers were exempted from paying tax.

In 1945 Dr. Bell, then Acting Director, Medical Services, indicated the government's willingness to work with the London Missionary Society in running settlement and eventually in taking over the running of the colony. Probably the Society would have opted to receive government grant or subsidies to run the settlement instead of going into partnership, but it was in a dilemma; the land on which the settlement was built was not a Native Reserve land, but for the Crown. Therefore, lease could not be granted to the Society. In running the settlement, the government undertook to meet all capital and recurrent costs and to pay the Missionary Nursing Sister.⁴⁰ The complete takeover of Luapula Leprosy Settlement in 1945 did not mean that the government was not interested in supporting missionary leprosy work. As headquarters, it was just necessary that it became a wholly government centre.

In 1954, Dr. Worsfold, the Medical Officer-in-Charge of Chitokoloki Leprosy Settlement, informed the government of the destruction of the settlement by a fire and of the sinking of the vehicle in the Zambezi River that carried drugs and appealed for urgent assistance. The Director of Medical Services quickly responded to the request.⁴¹ The government supplied the settlement with blankets for patients.⁴² Serious government involvement in the fight against leprosy began in the early 1950s. During the early 1950s, a number of leprosy settlements were established in the country.

In 1951 the government embarked on prisons programme to identify and isolate leprous prisoners. In the same year, lepers in the Livingstone prison were isolated from the rest of the prisoners and formed their own 'detention camp' where they received treatment.⁴³ In 1957 inmates suffering from leprosy from Bwana Mkubwa prison were transferred to Luapula Settlement where they continued with their prisoner status while receiving treatment.⁴⁴

In 1952 the Lukupa and Shiwa Ng'andu Settlements were established in the Northern Province to cater for the increased number of leprosy cases. The establishment of these settlements was intended to supplement missionary work.⁴⁵ It was also in 1952 that the government seriously became involved in leprosy work in the Eastern Province. There in addition to the establishment of leprosy treatment centres, an outpatient treatment scheme was launched.⁴⁶ After 1954 the government opened up a number of outpatient centres also in almost all hospitals and dispensaries throughout the country.⁴⁷

The government also established a leper settlement in the Western Province in 1952 on a pilot basis at Siwa prison farm site in Mongu.⁴⁸ The Mongu prison became the first ever government leper village in the Province with sixty-two patients. Later, in 1958, the government established yet another settlement in Mongu at Lewanika Hospital with fifty patients. This was a short-lived settlement because it was situated in the middle of the township.⁴⁹ In 1959, an alternative site was established at Lukalanya, on the outskirts of Mongu and the settlement had a hundred and thirteen leprosy patients.⁵⁰ In the same year, the government established yet another settlement in Sesheke as part of its continued fight against the disease.

Between 1945 and 1962, the government administered its leprosy settlements scattered around the country with Luapula as its headquarters for leprosy control. The headquarters was, however, moved to Liteta in the Central Province in 1962 for easy management and administration.

From Luapula Province to Central Province, 1962-1964

The Luapula Leprosy Settlement was, in all respects a success story as the headquarters of the leprosy control strategy in the country, but in 1962, the government decided to strip it of its status and shifted the headquaters to Liteta in the Central Province. Luapula was an isolated place hence, costly to send some cases for treatment from other remote parts of the country. In addition, due to poor road infrastructure to the province, essential drugs and foodstuffs had to be flown to the settlement at great expense. In April 1962, drugs, fuel and foodstuffs were airlifted from Ndola by a plane.⁵¹ In 1962, the government appointed a Leprologist who immediately following his appointment persuaded the government to move the headquarters to Liteta in the Central Province for easy management of leprosy.⁵² Luapula remained only a regional centre to serve patients from the outlying areas. Liteta became the leprosy specialist treatment centre. Sir Roy Welesky then Federal Prime Minister officially opened it on April 20, 1963.

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The newly appointed Leprologist conducted extensive provincial, district and mission station tours to assist medical officers at mission settlements and government units in determining the extent of leprosy and in assessing individual cases of patients of the disease. The consultant bemoaned serious lack of modern facilities in the country to diagnose and treat the disease.⁵³ It was not a cheap undertaking to realize this goal for all leprosy colonies in the country. He, with this realization in mind, decided to equip the headquarters first as a referral centre where complicated cases from other parts of the country could be sent. Liteta was therefore first to be equipped with modern medical and surgical facilities and an operating theatre.⁵⁴ The Settlement also became a Leprosy Research Centre. Medical Officers and Orderlies were sent from Liteta on a conducted tour of areas in which the government and missionaries had not yet established the existence of the disease. It was through such tours that high incidences of the disease were identified in some parts of Central and Eastern Provinces and in the Luangwa Valley.⁵⁵ Throughout the colonial period, the government subsidised missionary effort in the care and treatment of lepers and in the running of their institutions.⁵⁶

BELRA/LEPRA and Leprosy Control, 1945-1964

In 1945, the Government received assistance from Leprosy Relief Association (LEPRA) in the fight against leprosy.⁵⁷ The Association, prior to Zambia becoming independent, did commendable work in fighting leprosy in some Commonwealth countries. Malawi and Nigeria recorded success stories against the disease because of the assistance provided by the Association. In Nigeria the Association even established a leprosy-

training centre that trained medical personnel from Commonwealth countries in Africa in leprosy control. In Malawi and Zambia the Association was responsible for the rehabilitation and treatment of lepers through reconstructive surgery.⁵⁸

In Zambia the Association provided drugs and specialist officers and workers not only to Liteta, but also to other leprosy centres in the country. In 1964, in collaboration with Peace Corps, the Ford Foundation and other organisations, the Association helped the country in its leprosy control work.⁵⁹ Mr. Canon Young the organisation's representative came to Zambia in that year to set up a full-fledged Leprosy Research Centre at Liteta. Liteta and also Fiwila mission benefited greatly from the organisation's financial and material help.⁶⁰ The Leprosy Relief Association also helped in determining the prevalence of disease in the country by sponsoring leprosy surveys.⁶¹ Prior to the Association's strategy, leprosy cases were vaguely known because they were based largely on tax exemption registers, a rather highly unreliable way of determining the number of the victims of the disease in the country.⁶² The tax exemption method was inadequate because some lepers who were driven out of villages could not be captured in the survey.

Treatment and Rehabilitation of Lepers, 1945-1964

Dapson suspension and *Chaulmoogra* oil remained the commonest and popular first drugs of choice in the treatment of leprosy until after 1956.⁶³ A new drug was introduced in 1958. At the International Congress for the Treatment of Leprosy, in Italy, leprologists agreed, including Dr. J. Smyly of Zambia, that *Diaminopheny Sulphone* be used as a new drug in the treatment of the disease. The drug was especially

recommended for the treatment of institutionalised patients, because it was in tablet form, and had to be supervised and monitored.⁶⁴

Lepers, in addition to receiving treatment, needed rehabilitation so as to help them manage themselves even after they had left the settlements. On establishing leprosy settlements, the government was guided by the good rehabilitation process of lepers in missionary run institutions. In government settlements, rehabilitation of lepers was therefore given a top priority. The government directed that all leprosy settlements should be self-sufficient in food. The Department of Agriculture was tasked to visit such settlements in order to teach able patients modern farming methods. In many centres patients were, as a result able to produce their own food. The Luapula Settlement and the Lukupa Centres in Northern Province were able, through this strategy, to grow their own food crops. In 1957, the Provincial Agricultural Officer for the Northern Province pointed out that the Lukupa Settlement was one of his success stories in the province.⁶⁵ The settlement reared cattle, while the Luapula Settlement obtained fish from its own fish ponds and even had a surplus to sell. Because of the rehabilitation strategy, lepers at the Lukalanya colony in Mongu built their own houses, in addition to cultivating cassava that greatly helped in sustaining the settlement.

It was not only economic and sustainability but the government also fostered social rehabilitation among lepers in their settlements. In 1952, at Lukupa, Senior Chief Mwamba of the Bemba, in conjunction with the government officials of the area, appointed two leprous headmen to be in charge of the settlement which was organised on

village lines.⁶⁶ The two headmen were tasked to settle disputes among lepers resident in the settlement. These village headmen acted as checks against those lepers who tried to behave in a manner contrary to tribal norms and values. Social rehabilitation of leprous persons in government settlements were largely in cases where matrimonial sexual relations had broken down because a partner had leprosy. Such a person was allowed to marry within the settlement. This was only in cases where it had been proved beyond reasonable doubt that such a person had been abandoned by a spouse.⁶⁷ This was different from what obtained in South Africa, where conjugal intercourse between lepers was discouraged until they were completely healed.⁶⁸

As a moral obligation the government established within leprosy settlements education facilities for children whose parents were sick with the disease. When the Liteta Leprosy Settlement was established, a school was opened to cater for such children. In 1964, the settlement school had over sixty children.⁶⁹

Conclusion

This chapter discussed the way the missionaries and the government responded to the problem of leprosy. It explained how missionaries used biomedicine and embraced lepers through the establishment of settlements in the process of making the administration of medicines easy and preventing the spread of the disease.

The chapter also demonstrated the relationship between the missionaries, the state and jointly worked together to cure and prevent leprosy. The chapter narrated the process of rehabilitating lepers, so that after leaving the settlements, they could be useful in their communities. Missionary and Government intervention in leprosy control had an impact on the infected people, their families and the communities where they lived. Firstly the lepers that were shunned were accommodated, given care and taught some skills that were to be very useful in their lives. Secondly, the ies were relieved of the burden of looking after a leprous person.

END NOTES

- ¹ S.N. Brody, *The Disease of the Soul: Leprosy in the Medieval Literature*, (London: Cornell University Press, 1974), 3.
- ² J. Iliffe, *The African Poor: A History*, (Cambridge: Cambridge University Press, 1982), 214.
- ³ Iliffe, *The African Poor*, 215.
- ⁴ H.V.R. Mostert, 'The Early Diagnosis of Leprosy', *The Central African Journal for Medicine*, 16, 10, (1970), 235.
- ⁵ A.J.K. Brown, 'Leprosy and Childhood', *The Central African Journal for Medicine*, 2, 5, (1956), 173.
- ⁶ Brown, 'Leprosy and Childhood' 175.
- ⁷ H. Kaur and W. Van Brakel, 'Rehabilitation of Leprosy affected People-a study on leprosy-affected beggars', *Leprosy Review*, 73, 4, (2002), 347.
- ⁸ Brody, *The Disease of the Soul*, 5.
- ⁹ Brody, *The Disease of the Soul*, 27.
- ¹⁰ M. Vaughan, *Curing their Ills: Colonial African Power and African Illness*, (Cambridge: Polity Press, 1991), 79.
- ¹¹ Brody, *The Disease of the Soul*, 24.
- ¹² M. Phiri, M.D. Chief Service Officer, Centre for Infectious Diseases Research in Zambia. Counting House, Thabo Mbeki Road. Lusaka. 18 March,2011.
- ¹³ J.K. Rees, J.M. Pearson, and M.F. Waters, 'Experimental and Clinical Studies on Rifampicin in the Treatment of Leprosy', *Leprosy Review*, 42, 5, (1970), 90.
- ¹⁴ Rees, et al, 'Experimental and Clinical Studies on Rifampicin in the Treatment of Leprosy', 91.
- ¹⁵ Rees, et al, 'Experimental and Clinical Studies on Rifampicin in the Treatment of Leprosy', 91.
- ¹⁶ Brody, *The Disease of the Soul*, 12.
- ¹⁷ W. Levis, 'Leprosy Rising', *Catholic Encyclopedia*, (New York: Robert Appleton Company, 1913), 25.

- ¹⁸ Rees, et al, 'Experimental and Clinical Studies on Rifampicin in the Treatment of Leprosy', 90.
- ¹⁹ Brody, *The Disease of the Soul*, 12.
- ²⁰ Vaughan, *Curing Their Ills*, 80.
- ²¹ Vaughan, *Curing Their Ills*, 82.
- ²² V.W. Turner, 'Lunda Medicines and Treatment of Diseases', in *The Occasional Papers of the Rhodes-Livingstone Museum*, (Manchester: Manchester University Press, 1974), 665.
- ²³ Vaughan, Curing Their Ills, 84.
- ²⁴ M. Gelfand, A Service to the Sick: A History of Health Services for Africans in Southern Rhodesia 1890-1953, (Salisbury: Mambo Press, 1976), 36.
- ²⁵ World Health Organisation (WHO), 'Leprosy Disabilities: Magnitude the Problem', *Weekly Epidemiological Record*, 70, 38, (1995), 269.
- ²⁶ WHO, 'Leprosy Disabilities, 270.
- ²⁷ S. Rawcliff, 'Learning to Love Lepers', *Leprosy Review*, 38, 4, (1975), 237.
- ²⁸ J. Iliffe, *Africans: The History of a Continent*, (Cambridge: Cambridge University Press, 1995), 12.
- ²⁹ Iliffe, Africans, 58.
- ³⁰ Iliffe, Africans, 62
- ³¹ Iliffe, *Africans*, 113.
- ³² B.S. Siamwiza, 'A History of Famine in Zambia, c. 1825-1949', (Ph D. Thesis, University of Cambridge, 1998), 120.
- ³³ Iliffe, *The African Poor*, 216.
- ³⁴ Iliffe, *The African Poor*, 239.
- ³⁵ Iliffe, *The African Poor*, 110.
- ³⁶ K. Brown, 'Factors Influencing the Transmission of Leprosy', *The Central African Journal of Medicine*, 6, 6, (1960), 271.

- ³⁷ Northern Rhodesia, Legislative Council Debates: 14th Session of the 6th Council, 13 24 January 1940, (Lusaka: Government Printers, 1940), 170.
- ³⁸ Vaughan, *Curing Their Ills*, 81.
- ³⁹ M.E. Duncan, 'Leprosy and Procreation A Historical Review of Social and Clinical Aspects', *Leprosy Review*, 56, 3, (1985), 156.
- ⁴⁰ Vaughan, *Curing Their Ills*, 26.
- ⁴¹ Iliffe, *The African Poor*, 26.
- ⁴² Northern Rhodesia Government, Department of Health, *Annual Reports for the Year* 1963, (Lusaka: Government Printers, 1964), 172.
- ⁴³ L. Samundengu, 'The Role and Impact of Western Medicine in the North Western Province of Zambia', MA. (History), Dissertation, University of Zambia, 1992.
- ⁴⁴ G.W. Hartwig and K.D. Patterson, (eds), *Disease in African History: An Introductory Survey and Case Studies*, (Durham: Duke University Press, 1978), 136.
- ⁴⁵ A.C.S. Mushingeh, 'A History of Disease and Medicine in Botswana, 1820 1945', (Ph D. Thesis, University of Cambridge, 1982), 128.
- ⁴⁶ A.C. Allison, 'Interactions of Genetic Predisposition Immunity and Environmental factors Susceptibility to Disease', in Stanely,N.F. and Alpers, N.P. (eds), *Man Made Lakes and Human Health*, (London: John Murray, Albemarle Street, 1973), 78.
- ⁴⁷ W. Malcom, *African Highway: The Battle of Health in Central Africa*, (London: John Murray, Albemarle Street, 1974), 64.
- ⁴⁸ Iliffe, *The African Poor*, 214.
- ⁴⁹ Iliffe, *The African Poor*, 216.
- ⁵⁰ Iliffe, *Africans*, 117.
- ⁵¹ Vaughan, *Curing Their Ills*, 79.
- ⁵² Gelfand, A Service to the Sick, 36 Gelfand, A Service to the Sick, 36
- ⁵³ E. Dory, *Leper Country*, (London: Frederick Muller, 1963), 59.
- ⁵⁴ O. Mairin, 'One Hundred Villages: A Study of Churches Medical Work in Zambia Today', (Lusaka: University of Zambia Press, 1976), 36.

- ¹ D.S.S. Ntinda, The Impact of London Missionary Society Medical Work at Mbereshi, 1900-1963' MA Dissertation, University of Zambia, 1990.
- ⁵⁶ B.S. Siamwiza, 'A History of Famine in Zambia', 120 124.
- ⁵⁷ E. Colson, *Marriage and Family among the Plateau Tonga of Norther Rhodesia*, (Manchester: Manchester University Press, 1984), 69.
- ⁵⁸ M. Kalaula, Interview, Chalimbana, 10 April, 2011.
- ⁵⁹ P.G. Griffiths, Leprosy in the Luapula Valley, Zambia', *Leprosy Review*, 36, 2, (1965), 59 67.
- ⁶⁰ L. Pentz, 'Leprosy Control in South Africa', *Leprosy Review*, 41, 2, (1970), 15 16.
- ⁶¹ P. Feeny, *The Fight Against Leprosy*, (London: Cornell University Press, 1964), 134.
- ⁶² L.M Irgens, 'Epidemiological Aspects and Implications of the Disappearance of Leprosy from Norway: Some Factors Contributing to the Decline', *Leprosy Review*, 52, 1, (1981), 147 – 169.
- ⁶³ T.W. Mead. 'The British Leprosy Association Report', *Leprosy Review*, 45, 1, (March. 1974), 5.
- ⁶⁴ Brown, 'Leprosy and Childhood', 147 169.
- ⁶⁵ Mostert, 'The Early Diagnosis of Leprosy', 234 238.
- ⁶⁶ E. Taube and D.P.B. Ellis, 'An Unusual Case of Leprosy with Pathological Features Common to Lucio's Phenomenon', *The Central African Journal of Medicine*, 17, 6, (1970), 119 – 122.
- ⁶⁷ J.A.Cap, 'The Epidemiological Situation in Africa', *Leprosy Review*.52, 1, (1981), 57.
- ⁶⁸ J.M. Ponninghaus, 'The Karonga Leprosy Prevention Tria with BCG', *Leprosy Review*, 57, 2, (December, 1986), 285 292.
- ⁶⁹ P.N. Brand, 'Temperature Variation with Leprosy Deformity', *International Journal of Leprosy*, 27, 1, (1959), 89 104.
- ⁷⁰ J.C. Pedley, 'The Nasal Mucus in Leprosy', *Leprosy Review*, 44, 33, (1973), 13 22.
- ² W.T. Kalusa, Aspects of African Health in the Mining Industry in Colonial Zambia: A Case Study of Roan Antelope Mine, 1920-1964, MA Dissertation (History), University of Zambia, 1993.

ENDNOTES

- ³ V. Turner, 'Lunda Medicine and Treatment of Disease', in *The Occasional papers* of the Rhodes- Livingstone Museum. (Manchester: Manchester University Press, 1974), 654.
- ⁴ National Archives of Zambia (NAZ), NR7/187, Chitokoloki Leprosy Settlement, 1952-1958: Letter from 'Dead bodies' to Director of Medical Services, 19th January, 1953.
- ⁵ M. Vaughan, *Curing Their Ill: Colonial Power and African Illness*, (Cambridge: Polity Press, 1985), P.81.
- ⁴ Haidar Abu Ahmad Mohamed, 'Leprosy the Muslim Attitude', *Leprosy Review*, 56, 1, (1985), 17.
- ⁵ Mohamed, `Leprosy the Muslim Attitude,' 19.
- ⁸ J. Illife, *The African Poor, a History* (Cambridge; Cambridge University Press, 1982), 124.
- ⁹ LEPRA, Editorial 'Consequences of Leprosy and Social Economic Rehabilitation', *Leprosy Review*, 71 (2000), 417.
- ¹⁰ M. Beckingham and E. Huntingford, *Prester John: Catholic Encyclopedia*, Vol.2, 514, (1926), 113.
- ¹¹ M.B.D.Dixey, 'Leprosy Work in the Gold Coast', *Leprosy Review*, 1, 2, (April, 1930), 29.
- ¹² F.T.G.Mayer, 'The Distribution of Leprosy in Nigeria w special reference to the aetiological factors on which it depends', *West African Medical Journal*, 4, (1930-1), 13.
- ¹³ F.T.Davey, 'Uzuakoli Leper Colony', *Leprosy Review*, 8, (1937), 158
- ¹⁴ Iliffe, *The African Poor*, 215.
- ¹⁵ Iliffe, *The African Poor*, 216.
- ¹⁶ Illife, *The African Poor*, 91.
- ¹⁷ Illife, *The African Poor*, 253.

- ¹⁸ Elly Siamayuwa, Interview, Liteta Leprosy Centre, Chibombo, 9 April, 2011.
- ¹⁹ Siamayuwa, Interview, Liteta Leprosy Centre, Chibombo, 9 Aprill, 2011.
- ²⁰ Dixey, 'Leprosy work in the Gold Cost', 27.
- ²¹ Pumulo Nakando, Interview, Liteta Hospital, Chibombo, 9 April, 2011.
- ²² G. Martelli, *Livingstone's River: The Story of the Zambezi Expedition 1858-1864*, (London Chatto and Windus, 1970), 145.
- ²³ Iliffe, *The African Poor*, 90.
- P. G. Griffiths, 'Leprosy in Luapula Valley, Zambia', *Leprosy Review*, 11, (1974), 22.
- ²⁵ NAZ, MH1/2/02, Kawambwa District Note Book, 1945.
- ²⁶ Northern Rhodesia Government, *African Affairs Annual Report for the Year 1955*, (Lusaka: Government Printer, 1956), 18.
- ²⁷ Northern Rhodesia, Legislative Council Debates Fourth Session of the Ninth Council 10 November- 21 December1951, (Lusaka: Government printer, 1952), column 143.
- ²⁸ Northern Rhodesia, Legislative Council Debates Fourth Session of the Ninth Council 10 November- 21 December 1951, (Lusaka Government Printer, 1952), column 145.
- ²⁹ Turner, 'Lunda Medicine and the Treatment of Disease', 654.
- ³⁰ Turner, 'Lunda Medicine and the Treatment of Disease', 661.
- ³¹ E. N. Smith and M. Dale, *The Ila Speaking People of Northern Rhodesia*, vol.1 (London: Macmillan, 1920), 234.
- ³² Smith and Dale, *The Ila Speaking People*, 232.
- ³³ Smith and Dale, *The Ila Speaking People*, 232.
- ³⁴ E. Colson, *Marriage and Family among the Plateau Tonga of Northern Rhodesia*, (Manchester: Manchester University Press, 1975), 110.
- ³⁵ B. Moiser, 'Leprosy in Southern Rhodesia', *Leprosy Review*, (1938), 124.

36	NAZ, MH1/3/38, Christian Missions in Many Lands, Chitokoloki Leper Settlement, A letter to the Director of Medical Services, Lusaka, 1951.
37	Martelli, Livingstone's River: The Story of the Zambezi Expediti n 1858-1864, 146.
38	NAZ, KTN1/1 Vol 1, Abercorn District Notebook, 1853-1963, 166.
39	Pumulo Nakando, Interview, Liteta Hospital, Chibombo, 9 April, 2011.
40	B. S. Siamwiza, 'A History of Famine in Zambia, c. 1825-1949', (Ph D Thesis, University of Cambridge, 1998), 139.
41	W. Brown, 'Can Social Marketing Approaches Change Community Attitudes towards Leprosy?' <i>Leprosy Review</i> , 77, (2006), 90.
42	C. Moonga, Interview, Chikankata Leprosy Settlement. Chikankata, 16 March, 2011.
43	E. Dory, Leper Country, (London: Fredrick Muller, 1963), 53.
44	S. N. Brody, The <i>Disease of the Soul: Leprosy in Medieval Literature</i> , (London: Cornell University Press, 1974), 22.
45	Vaughan, Curing their Ills, 161.
46	Federation of Rhodesia and Nyasaland, <i>Annual Report on the Public Health of the Federation of Rhodesia and Nyasaland for the Year 1958</i> , (Salisbury: Government Printer, 1959), 13.
47	Annual Report on the Public Health of the Federation of Rhodesia and Nyasaland for the Year 1958, 15.
48	A.C.S. Mushingeh, 'A History of Disease and Medicine in Botswana, 1820 – 1945', (PhD Thesis, University of Cambridge, 1982 – 1982), 51.
49	Mushingeh, 'A History of Disease and Medicine in Botswana, 1820 – 1945', 75.
50	Mushingeh, 'A History of Disease and Medicine in Botswana, 1820 – 1945', 80.

- ⁵¹ N. Nwude and O. O. Ebong, 'Some Plants Used in the Treatment of Leprosy in Africa', *Leprosy Review*, 51, 1, (1980), 12.
- ⁵² Illife, *The African Poor*, 219.

- ⁵³ Northern Rhodesia, Western Province African Affairs Annual Report for the Year 1948, (Lusaka: Government Printer, 1949), 15.
- ⁵⁴ Nwude and Ebong, 'Some Plants Used in the Treatment of Leprosy in Africa', 12.
- ⁵⁵ Illife, *The African Poor*, 219
- ⁵⁶ Turner, 'Lunda Medicine and the Treatment of Disease, 4.
- ⁵⁷ Nwude and Ebong, 'Some Plants Used in the Treatment of Leprosy in Africa', 12.
- ⁵⁸ Nwude and Ebong, 'Some Plants Used in the Treatment of Leprosy in Africa', 12.
- ⁵⁹ W. Gilges, 'Some African Poison plants and medicines of Northern Rhodesia' in *The Occasional Paper of the Rhodes-Livingstone Museum*, (Manchester: Manchester University Press, 1974), 410.
- ⁶⁰ V. W. Turner, 'Treatment of Specific Diseases', in *The Occasional Paper of the Rhodes-Livingstone Museum*, (Manchester: Manchester University Press1974), 661.
- ⁶¹ Smith and Dale, *The Ila-Speaking people of Northern Rhodesia*, 234.
- ⁶² Gilgies, 'Some African Poison Medicines of Northern Rhodesia', 410.
- ⁶³ Amanda Le Grand, 'Gender and health', *Leprosy Review*, 68, 3, (September 1997), 201 212.
- ⁶⁴ Grand, 'Gender and Health', 205.
- ⁶⁵ C.E.E., Vlassoff, 'Gender Inequalities of Health in the Third World', *Social Science Medicine*, 37, (1994), 1237.
- ⁶⁶ Vlassoff, 'Gender inequalities of Health in the Third World', *Social Science Medicine*, (1993), 37, 1250.
- ⁶⁷ E. M. Rathgeber, C. E. E. Vlassoff, 'Gender and Tropical Diseases: a new, research focus,' *Social Science Medicine*, 37, (1993), 513.
- ⁶⁸ Grand, 'Gender and Health', 205
- ⁶⁹ Grand, 'Gender and Health', 206.

- ⁷⁰ NAZ, MHI/02/087 Lock 366, 1952-1958, Fort Jameson Dutch Reformed Church Mission Nsadzu Leprosy Settlement, P.M.O's Tour Report made on 23 June, 1954
- ⁷¹ C. Shieh, A. Morrison, and W. Van Brakel, 'From Contagious to Chronic: a life course experience with leprosy in Taiwanese women', *Leprosy Review*, 77, (2000), 101.
- ⁷² E S. Peters and A. L. Eshiet, 'Male-Female (sex) differences in leprosy patients in South East Nigeria: females present late for diagnosis and treatment and have higher rates of deformity', *Leprosy Review*, 73, (2002), 262.
- ⁷³ Grand, 'Gender and Health', 206.
- H. Kaur and V. Ramesh, 'Social Problems of Women Leprosy Patients' *Leprosy Review*, 65, (1994, 362
- ⁷⁵ Shieh, Morrison and Van Brakel, 'From Contagious to Chronic', 106.
- ⁷⁶ S. Rao., V. Garole, S. Walawalkar, S. Khot and N. Karandikar, 'Gender differentials in the Social Impact of Leprosy', *Leprosy Review*, 67, (1996),191.
- J. Scott, 'The Psychosocial needs of Leprosy Patients', *Leprosy Review*, 71, (2000), 486.
- ⁷⁸ Peters and Eshiet, 'Male-Female (sex) differences in Leprosy Patients', 263.
- ⁷⁹ Chen Shumin, et al, 'Role o leprosy villages and leprosaria in Shandong Province, People's Republic of China: Past, Present and Future', *Leprosy Review*, 74, (2003), 223.
- ⁸⁰ Haidar Abu Ahmed Mohamed, 'Leprosy the Muslim attitude', *Leprosy Review*, 56, 1, (March 1985), 20.
- ⁸¹ Mohamed, 'Leprosy the Muslim attitude', 20.
- ⁸² M.L. Heijinders, 'The Dynamics of stigma in leprosy', *International Journal of Leprosy*, 72, (2002), 438.
- ⁸³ Northern Rhodesia Government, *African Affairs Annual Report for the Year 1950*, (Lusaka: Government Printers 1951), 66.
- ⁸⁴ African Affairs Annual Report for the Year 1950, 66.
- ⁸⁵ N. B. Reddy, et al, 'Social aspects of leprosy: a case study in Zaria, Northern Nigeria', Leprosy Review, 56, 1, (March, 1985), 24.
- ⁸⁶ Edwin Mwandila, Interview, Director Department of Leprosy and TB control,

Ministry of Health, Lusaka, 7 June, 2011.

- ⁸⁷ Mwandila, Interview, Ministry of Health, Lusaka, 7 June, 2011.
- ⁸⁸ Pezo Sachilombo, Interview, Chawama Compound, Lusaka, 8 June, 2011.
- ⁸⁹ Mwandila, Interview, Ministry of Health, Lusaka, 7 June, 2011.
- ⁹⁰ Musonda Chalwe, Interview, Matero Compound, Lusaka, 8 June, 2011.
- ⁹¹ Leonard Mutale, Interview, Medical Doctor, University Teaching Hospital, 9 June 2011.
- ⁹² Annie Mbulo, Interview, Midwife, Bauleni Clinic, Lusaka, 9 June, 2011.
- ⁹³ Irene Katongo, Interview, Midwife, Chilenje Clinic, Lusaka, 9 June, 2011.
- ⁹⁴ NAZ, KTE 3/1/1. Gwembe Monthly Report for November, 1908 1 December, 1908.
- ⁹⁵ B. S. Siamwiza, 'A History of Famine in Zambia, c 1825-1949', (PhD Dissertation, University of Cambridge, 1998),138.
- ⁹⁶ Siamwiza, 'A History of Famine in Zambia', 140.
- ⁹⁷ Siamwiza, 'A History of Famine in Zambia', 140.
- ⁹⁸ Siamwiza, 'A History of Famine in Zambia', 141.

104

- ⁹⁹ A. Loretti and D. Garbellini, 'Leprosy in the Cape Verde Islands', *Leprosy Review*, 52, 4, (December, 1981), 338.
- ¹⁰⁰ NAZ, KDB6/2/1, Gwembe Annual Report for the Year ending 31 March, 1920.
- ¹⁰¹ NAZ, KDB6/2/1, Gwembe Annual Report for the Year ending 31 March, 1915.
- ¹⁰² Northern Rhodesia, Legislative Council Debates: fourth session of the sixth Council (Resumed), 1 13 June, 1940, (Lusaka: Government Printer, 1940), 9.
- ¹⁰³ Northern Rhodesia, *Legislative Council Debates: fourth session of the sixth Council, 13 – 24 January, 1940,* (Government Printer, 1940), 170.
 - Legislative Council Debates: fourth session of the sixth session Council, 13 24 January, 1940, 171.

105	Federation of Rhodesia and Nyasaland, Annual Report on the Public Health of the Federation of Rhodesia and Nyasaland for the Year 1962, (Salisbury: Government Printer, 1963), 17.
106	Federation of Rhodesia and Nyasaland, Annual Report on the Public Health of the Federation of Rhodesia and Nyasaland for the Year 1962, 17.
107	Federation of Rhodesia and Nyasaland, Annual Report on the Public Health of the Federation of Rhodesia and Nyasaland for the Year 1962, 17.
108	L. H. Gann, 'Royal Rhodesian Air Force Delivered Food to Flood-marooned lepers', The Central African Journal of Medicine, vol.9,7, (1963), 17.
109	M. Vaughan, <i>Curing their Ills: Colonial Power and African Illness</i> , (Cambridge: Polity Press, 1991), 87.
110	Northern Rhodesia, Hansard Number 3, Official Verbation Report of the Debates of the First Session (Resumed) of the First Legislative Assembly 9 July -27 August, 1964, (Lusaka: Government Printer, 1964), Column 401.
111	W.S. Zondi, 'African Demand and Missionary Responses': The Emergence of Missionaries as Healers in Kwazulu Natal, 1835-1930', Paper presented at Westminister College, Cambridge, 1998, 1.
	M. Gelfand, Rivers of Death in Africa: An Inaugral Lecture given in the versity College of Rhodesia and Nyasaland on 10 October 1963, (London: Oxford University Press, 1964), 3.
113	Mushingeh, 'A History of Disease and Medicine in Botswana', 270.
114	W. ShepardWilson and P.A.S. Evans, 'Leprosy', <i>The Central African Journal of Medicine</i> , 8,1, (1962), 25.
115 1950	Northern Rhodesia Government, <i>African Affairs Annual Report For the Year</i> 0, (Lusaka: Government Printer, 1951), 38.
116	Northern Rhodesia Government, African Affairs Annual Report for the Year 1951, (Lusaka: Government Printer, 1953), 33.
117	African Affairs Annual Report for the Year, 1950, 38.
118	Northern Rhodesia, North Western Annual Report for the Year 1955, (Lusaka: Government Printer, 1956),18.

- ¹¹⁹ African Affairs Annual Report for the Year 1951, 89.
- ¹²⁰ Zambia, Hansard No:4, Official Verbatim Report for the Debates of the Second Session (Resumed) of the First National Assembly 13th July 22nd September, 1965, (Lusaka: Government Printer, 1965), 594.
- ¹²¹ P.G. Peach, 'Mwami Mission of the Seventh Day Adventists', *The Central African Journal of Medicine*, *3*, *4*, (1957), p. 145.
- ¹²² Peach, 'Mwami Mission of Seventh Day Adventists', 145.
- ¹²³ NAZ, MHI/7/3, BELRA, letter from the Director of Medical Services to the Secretary of BELRA, 1937.

¹²⁴ NAZ, MHI/4/17, Leprosy Reports and Correspondence, Dr. E. Muir's Report, 1939.

- ¹²⁵ NAZ, MHI/2/24, Leprosy General, Letter from Mr. A. Burns of BELRA to Sir E. Hone, Governor of Northern Rhodesia, 1 February, 1960.
- ¹²⁶ NAZ, MHI/7/3, BELRA, Letter from Mr. W. Peel, Chairman BELRA to Chief Secretary, Lusaka, 25 September, 1937.
- ¹²⁷ Iliffe, *The African Poor, A History*, 50.
- ¹²⁸ Northern Rhodesia, Legislative Council Debates 4th Session of the 8th Council, 15th November 1947 to 14th January, 1948, (Lusaka: Government Printer, 1948), Article 821-822.
- ¹²⁹ Northern Rhodesia Government, *North Western Province, Annual Report for the Year 1953*, (Lusaka: Government Printer, 1954), 25.
- ¹³⁰ North Western Province, Annual Report for the Year 1953, 38.
- ¹³¹ North Western Province, Annual Report for the Year 1953, 88.
- ¹³² NAZ, MHI/3/38, 1949 1951, Northern Rhodesia, Summary of figures, *Chitokoloki Annual Report for 1950*.
- ¹³³ NAZ, MHI/3/38, 1949 1951, Northern Rhodesia, Summary of figures, *Chitokoloki Annual Report for 1950*.
- ¹³⁴ NAZ, MHI/3/38, 1949 1951, Northern Rhodesia, Summary of figures,

Chitokoloki Annual Report for 1950.

- ¹³⁵ Zambia, Hansard No. 4, Official Verbatim Report of the Debates of the Second Session (Resumed) of the First National Assembly 13th July – 22 September, 1965, 594.
- ¹³⁶ African Affairs Annual Report for the Year 1950, 38.
- ¹³⁷ African Affairs Annual Report for the year 1950, 38.
- ¹³⁸ NAZ, MHI/02/087, Fort Jameson, Dutch Reformed Church, Nsadzu Leprosy Settlement, 1952 – 1958, 23 June 1954.
- ¹³⁹ Northern Rhodesia Government, *African Affairs Annual Report for the Year 1952*, (Lusaka: Government Printer, 1953), 95.
- ¹⁴⁰ Northern Rhodesia, Legislative Council Debates: 4^{th} Session of the 6^{th} Council (Resumed) $1 13^{th}$ June, 1940, (Lusaka: Government Printers, 1940), 9.
- ¹⁴¹ Northern Rhodesia, Legislative Council Debates: 4th Session of the 6th Council 13th 24th January 1940, (Lusaka: Government Printer, 1940), 170.
- ¹⁴² Federation of Rhodesia and Nyasaland, *Annual Report on the Public Health of the Federation of Rhodesia and Nyasaland for the Year 1962*, (Salisbury: Government Printer, 1964), 17.
- ¹⁴³ African Affairs Annual Report for the Year 1950, 89.
- ¹⁴⁴ NAZ, MHI/02/109 Seventh Day Adventists Mwami Leprosy Settlement, Fort Jameson, Letter from the Provincial Medical Officer, E ince, to Director of Medical Services, Lusaka.
- ¹⁴⁵ NAZ, KDB6/2/1, *Gwembe District Annual Report for the Year ending 31 March*, 1914.
- ³⁶ African Affairs Annual Report for the Year 1952, 95.
- ³⁷ African Affairs Annual Report for the Year 1952, 100.
- ³⁸ NAZ, MHI/7/3, Letter from Dr. P. S. Bell to Acting Director, Medical Services, 22 August, 1945.

- ³⁹ NAZ, MHI/7/3, Letter from Dr. P.S. Bell to Acting Director, Medical Services, 22 August, 1945.
- ⁴⁰ NAZ, MHI/7/3, Letter from Dr. P.S. Bell to Acting Director, Medical Services, 22 August, 1945.
- ⁴¹ Northern Rhodesia Government, *African Affairs Annual Report for the Year 1954*, (Lusaka: Government Printer, 1955), 109.
- ⁴² African Affairs Annual Report for the Year 1954, 88.
- ⁴³ Northern Rhodesia Government, *African Affairs Annual Report for the Year 1959*, (Lusaka: Government Printers, 1960), 89.
- ⁴⁴ NAZ, MHI/02/124, 124, Letter from Dr. H. Jocelyne Smyly Leprologist Luapula Settlement to Dr. Webster, Director of Medical Services, Lusaka. 18 January, 1958.
- ⁴⁵ Northern Rhodesia Government, *African Affairs Annual Report for the Year 1955*, (Lusaka: Government Printers, 1956), 72.
- ⁴⁶ African Affairs Annual Report for the Year 1955, 72.
- ⁴⁷ African Affairs Annual Report for the Year 1955, 72.
- ⁴⁸ African Affairs Annual Report for the Year 1955, 88.
- ⁴⁹ African Affairs Annual Report for the Year 1955, 88.
- ⁵⁰ African Affairs Annual Report for the Year 1955, 89.
- ⁵¹ W. Shepard, H. Wilson and P.A.S. Evans, 'Leprosy', *Central African Journal of Medicine*, 8, 1962, 102.
- ⁵² Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1962, (Salisbury: Government Printer, 1963), 17.
- ⁵³ Annual Report on Public Health of the Federation of Rh sia and Nyasaland for the Year 1962, 17.
- ⁵⁴ L.H. Gann, 'The Opening of Liteta Leprosarium' Central African Journal of Medicine, 9,7, (1963), 17.
- ⁵⁵ NAZ, MHI/2/124, Leprosy General, Liteta and Luapula Leprosy Settlements, A Letter from Dr. Harrison to the Director of Medical Services, Lusaka, 13 May 1960, 1959-1963.

- ⁵⁶ NAZ, MHI/2/124, Leprosy General, Liteta and Luapula Settlements.
- ⁵⁷ G. Boerrigter and J.M. Ponnighaus, 'Ten Years of Leprosy Control in Malawi', *Leprosy Review*, 57,3, (1986), 213.
- ⁵⁸ Boerrigter and Ponnighaus, 'Ten Years of Leprosy Contr in Malawi', 214.
- ⁵⁹ NAZ, MHI/2/140, Administration: Liteta Settlement, Letter from the Leprologist to the Chairman BELRA, 7 September, 1964.
- ⁶⁰ NAZ, MHI/2/140, Administration: Liteta Settlement, 1964.
- ⁶¹ NAZ, MHI/7/03, Dr. E. Muir's Report, 1939.
- ⁶² NAZ, MHI/2/02, Luapula Leprosy Settlement, General, 1957-1958.
- ⁶³ Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1958, 13.
- ⁶⁴ Northern Rhodesia Government, *African Affairs Annual Report for the Year 1955*, (Lusaka: Government Printers, 1956), 39.
- ⁶⁵ NAZ, MHI/2/02, Luapula Leprosy Settlement, General, Letter from the Leprologist Luapula to Director Medical Services, Lusaka, 3 November, 1957.
- ⁶⁶ Northern Rhodesia Government, *African Affairs Annual Reports for the Year* 1952, (Lusaka: Government Printers, 1953), 39.
- ⁶⁷ M.E. Duncan, 'Leprosy and Procreation a Historical Review of Social and Clinical Aspects', *Leprosy Review*, 56, 3, (1985), 156.
- ⁶⁸ Duncan, 'Leprosy and Procreation a Historical Review of Social and Clinical Aspects', 157.
- ⁶⁹ Gann, 'The Opening of Liteta Leprosarium', 288.

- ¹⁴⁶ Amanda Le Grand, 'Gender and health', *Leprosy Review*, 68, 3, (September 1997), 201 212.
- ¹⁴⁶ Grand, 'Gender and Health', 205.
- ¹⁴⁶ C.E.E., Vlassoff, 'Gender Inequalities of Health in the Third World', *Social Science Medicine*, 37, (1994), 1237.
- ¹⁴⁶ Vlassoff, 'Gender inequalities of Health in the Third World', *Social Science Medicine*, (1993), 37, 1250.
- ¹⁴⁶ E. M. Rathgeber, C. E. E. Vlassoff, 'Gender and Tropical Diseases: a new, research focus,' *Social Science Medicine*, 37, (1993), 513.
- ¹⁴⁶ Grand, 'Gender and Health', 205
- ¹⁴⁶ Grand, 'Gender and Health', 206.
- ¹⁴⁶ NAZ, MHI/02/087 Lock 366, 1952-1958, Fort Jameson Dutch Reformed Church Mission Nsadzu Leprosy Settlement, P.M.O's Tour Report made on 23 June, 1954
- ¹⁴⁶ C. Shieh, A. Morrison, and W. Van Brakel, 'From Contagious to Chronic: a life course experience with leprosy in Taiwanese women', *Leprosy Review*, 77, (2000), 101.
- ¹⁴⁶ E S. Peters and A. L. Eshiet, 'Male-Female (sex) differences in leprosy patients in South East Nigeria: females present late for diagnosis and treatment and have higher rates of deformity', *Leprosy Review*, 73, (2002), 262.
- ¹⁴⁶ Grand, 'Gender and Health', 206.
- ¹⁴⁶ H. Kaur and V. Ramesh, 'Social Problems of Women Leprosy Patients' *Leprosy Review*, 65, (1994, 362
- ¹⁴⁶ Shieh, Morrison and Van Brakel, 'From Contagious to Chronic', 106.
- ¹⁴⁶ S. Rao., V. Garole, S. Walawalkar, S. Khot and N. Karandikar, 'Gender differentials in the Social Impact of Leprosy', *Leprosy Review*, 67, (1996),191.
- ¹⁴⁶ J. Scott, 'The Psychosocial needs of Leprosy Patients', *Leprosy Review*, 71, (2000), 486.
- ¹⁴⁶ Peters and Eshiet, 'Male-Female (sex) differences in Leprosy Patients', 263.

146	Chen Shumin, et al, 'Role o leprosy villages and leprosaria in Shandong Province, People's Republic of China: Past, Present and Future', <i>Leprosy Review</i> , 74, (2003), 223.
146	Haidar Abu Ahmed Mohamed, 'Leprosy – the Muslim attitude', <i>Leprosy Review</i> , 56, 1, (March 1985), 20.
146	Mohamed, 'Leprosy – the Muslim attitude', 20.
146	M.L. Heijinders, 'The Dynamics of stigma in leprosy', International Journal of Leprosy, 72, (2002), 438.
146	Northern Rhodesia Government, African Affairs Annual Report for the Year 1950, (Lusaka: Government Printers 1951), 66.
146	African Affairs Annual Report for the Year 1950, 66.
146	N. B. B. Reddy, et al, 'Social aspects of leprosy: a case study in Zaria, Northern Nigeria', Leprosy Review, 56, 1, (March, 1985), 24.
146	Edwin Mwandila, Interview, Director Department of Leprosy and TB control, Ministry of Health, Lusaka, 7 June, 2011.
146	Mwandila, Interview, Ministry of Health, Lusaka, 7 June, 2011.
146	Pezo Sachilombo, Interview, Chawama Compound, Lusaka, 8 June, 2011.
146	Mwandila, Interview, Ministry of Health, Lusaka, 7 June, 2011.
146	Musonda Chalwe, Interview, Matero Compound, Lusaka, 8 June, 2011.
146	Leonard Mutale, Interview, Medical Doctor, University Teaching Hospital, 9 June 2011.
146	Annie Mbulo, Interview, Midwife, Bauleni Clinic, Lusaka, 9 June, 2011.
146	Irene Katongo, Interview, Midwife, Chilenje Clinic, Lusaka, 9 June, 2011.
146	NAZ, KTE 3/1/1. Gwembe Monthly Report for November, 1908 – 1 December, 1908.
146	B. S. Siamwiza, 'A History of Famine in Zambia, c 1825-1949', (PhD Dissertation, University of Cambridge, 1998),138.
146	Siamwiza, 'A History of Famine in Zambia', 140.
146	Siamwiza, 'A History of Famine in Zambia', 140.

146	Siamwiza, 'A History of Famine in Zambia', 141.
146	A. Loretti and D. Garbellini, 'Leprosy in the Cape Verde Islands', <i>Leprosy Review</i> , 52, 4, (December, 1981), 338.
146	NAZ, KDB6/2/1, Gwembe Annual Report for the Year ending 31 March, 1920.
146	NAZ, KDB6/2/1, Gwembe Annual Report for the Year ending 31 March, 1915.
146	Northern Rhodesia, Legislative Council Debates: fourth session of the sixth Council (Resumed), 1 – 13 June, 1940, (Lusaka: Government Printer, 1940), 9.
146	Northern Rhodesia, Legislative Council Debates: fourth session of the sixth Council, 13 – 24 January, 1940, (Government Printer, 1940), 170.
146	Legislative Council Debates: fourth session of the sixth session Council, 13 – 24 January, 1940, 171.
146	Federation of Rhodesia and Nyasaland, Annual Report on the Public Health of the Federation of Rhodesia and Nyasaland for the Year 1962, (Salisbury: Government Printer, 1963), 17.
146	Federation of Rhodesia and Nyasaland, Annual Report on the Public Health of the Federation of Rhodesia and Nyasaland for the Year 1962, 17.
146	Federation of Rhodesia and Nyasaland, Annual Report on the Public Health of the Federation of Rhodesia and Nyasaland for the Year 1962, 17.
146	L. H. Gann, 'Royal Rhodesian Air Force Delivered Food to Flood-marooned lepers', The Central African Journal of Medicine, vol.9,7, (1963), 17.
146	M. Vaughan, <i>Curing their Ills: Colonial Power and African Illness</i> , (Cambridge: Polity Press, 1991), 87.
146	Northern Rhodesia, Hansard Number 3, Official Verbation Report of the Debates of the First Session (Resumed) of the First Legislative Assembly 9 July -27 August, 1964, (Lusaka: Government Printer, 1964), Column 401.

CHAPTER FIVE: CONCLUSION

In this study we attempted to examine how Africans interpreted leprosy and also discussed African attitudes towards the disease and its victims. One issue that came out of the study was that leprosy was interpreted in various ways not only in colonial Zambia but in other African countries as well. Like the disease itself, lepers were also differently treated. The study showed, for example, that some societies tolerated lepers while others shunned them. In cases where lepers were not cared for, the impact was rather humiliating. In times of hardships such as food shortages, their position became very precarious. As such our concern was to show how the lepers were treated in their societies. It could be seen from the discussion in the second chapter that lepers were treated differently in their communities. Generally we observed that leprous persons in most societies were treated like outcasts because of the nature of the disease.

It would appear that leprosy was considered as a very disease because of the deformities that it caused on the affected people. We could also state that leprosy was a disease where its patients suffered neglect because of what Africans believed caused the disease. They also believed that the individual had a role to play in the infliction, especially through abrogating some social taboos.

The study showed how Africans tried to treat the disease using traditional herbs. Our examination of data revealed that African traditional did not heal leprosy but gave relief to the patient psychologically.

We argued that there were gender differentials in leprosy detection, deformities and even treatment. The evidence from our research illustrated women became more severely deformed than men when they were affected by leprosy. This was because women tried very hard to hide their condition when they were affected, firstly, because they did not want to leave their marital homes and secondly, because they did not want to leave their children to be looked after by other people when they were taken for treatment in the This was also probably because women were traditionally leprosy settlements. considered to be the homemakers who were to look after their families. In societies where lepers were shunned, women who had leprosy could not even be allowed to cook their families' food, let alone touch and cuddle their babies and play their motherly role. The study has further discussed that leprosy affected victims' sexual activities where affected men could not have an erection or could not have sexual intercourse because he penis could probably be swollen. It was further revea that partners that had leprosy were no longer as romantic as they used to be before the infliction because they could no longer kiss, fondle and caress each other.

Further, the study discussed how missionaries approached the disease. In this respect, the study showed how missionaries attempted not only to control and treat the disease, but also how they rehabilitated lepers by teaching them how to be self-sustaining both

economically and emotionally. The lepers, as a result of this missionary strategy, were able to grow their own crops, mend their clothes and even thatch the huts in which they lived. It could therefore be said that missionaries were the champions of these shunned men and women, firstly, because the vulnerable in every society would find solace in anyone who showed them compassion. Showing compassion was one method missionaries used to convert people to Christianity, as the first convert of the London Missionary Society was a leper and Dr. David Livingstone was a good friend of Sekeletu, the Kololo chief who was a leper. On the other hand, needed support from their mother churches back home where they came from. This help, could only be accessed if and when there were projects in Zambia that needed funding and the prevalence of leprosy in the country then made things for missionaries to embark on leprosy control. Examination of data showed that most of the leprosy settlements in the country were run and funded by missionaries. It should suffice to state that missionaries made a huge contribution and sacrifice towards leprosy control in this country. With the attitudes Africans had towards lepers and leprosy, missionaries embraced the victims to the point of caring for them when they were in the settlements.

In addition, the study showed that the role the Northern Rhodesia Government played in the control and treatment of leprosy was mainly that of supplementing missionary effort. It was evident from the study that most leprosy work was done by the missionaries.

From the analysis of data we showed, how many lepers were in missionary-run leprosy settlements by 1961. The study also showed that the government joined the fight against

the disease rather late, whereas the missionaries took an early lead in the fight against leprosy. The government also helped in giving grants the missionary-run settlements, making a great contribution to the control of leprosy in the country.

The joining of an international organization such as the British Empire Leprosy Relief Association (BELRA), later, Leprosy Relief Association (LEPRA) in the fight against the disease showed just how serious the situation was in the country. It further showed how committed the government was to the control and treatment of leprosy in the country.

BIBLIOGRAPHY

Primary Sources

Archival Sources

National Archives of Zambia (NAZ)

- KDB 6/2/1, Gwembe District Annual Report for the Year ending 31 March, 1914.
- KDB 6/2/1, Gwembe Annual Report for the Year ending 31 March, 1915.
- KDB 6/2/1, Gwembe Annual Report for the Year ending 31 March, 1920.
- KTE 3/1/1, Gwembe Monthly Report for November, 1908 1 December, 1908.
- KTN 1/1, Vol. 1, Abercon District Notebook, 1853 1963.
- MHI/2/02, Luapula Settlement, General, 1957 1958.
- MHI/2/02, Kawambwa District Notebook, 1945.
- MHI/2/02, Luapula Leprosy Settlement, General, Letter rom the Leprologist Luapula to Director Medical Services, Lusaka, 3 November, 1957.
- MHI/2/24, Leprosy General, Letter from Mr. A. Burns from BELRA to Sir E. Hone, Governor of Northern Rhodesia, 1 February, 1960.
- MHI/2/87, Fort Jameson, Dutch Reformed Church Mission Nsadzu Leprosy Settlement, 1953 1958.
- MHI/2/87, Fort Jameson, Dutch Reformed Church Misssion Nsadzu Leprosy Settlement, Letter to Miss Stoffberg from the Medical Inspector – Leprosy, 6 January, 1956.
- MHI/02/087, Lock 3166, 1952 1958, Fort Jameson Dutch Reformed Church Mission Nsadzu Leprosy Settlement, P.M.O's Tour Report made on 23 June, 1954.
- MHI/2/109, Fort Jameson Seventh Day Adventist Church, Mwami Leprosy Settlement, 1956 1958.

- MHI/2/109, Fort Jameson Seventh Day Adeventists Mwami Leprosy Settlement, Letter from the Provincial Medical Officer, Eastern Province, to Director of Medical Services, Lusaka.
- MHI/02/124, Letter from Dr. H. Jocelyne Smyly Leprosy Leprologist Luapula Settlement to Dr. Webster, Director of Medical Services, Lusaka, 18 January, 1958.
- MHI/2/124, Luapula Leprosy Settlement, 1958 1965.
- MHI/2/124, Leprosy General, Liteta and Luapula Leprosy Settlements, a Letter from Dr. Harrison to the Director of Medical Services, Lusaka, 13 959 – 1963.
- MHI/2/124, Leprosy General, Liteta amd Luapula Settlements.
- MHI/2/140, Liteta Settlement Administration, 1962 1967.
- MHI/2/140 Administration: Liteta Settlement, 1964, Letter from the Leprologist to the Chairman BELRA.
- MHI/3/038, Tour Report: Christian Missions in Many Lands Chitokoloki Leprosy Settlement, 1949 1952.
- MHI/3/038, Christian Missions in Many Lands, Chitokoloki Leper Settlement, a Letter to the Director of Medical Services, Lusaka, 1951.
- MHI/3/38, 1949 1951, Northern Rhodesia, Summary of figures, Chitokoloki Annual Report for 1950.
- MHI/4/17, Leprosy Reports and Correspondence, Dr. E. Muir's Report, 1939.
- MHI/4/17, Leprosy General, 1939 1940.
- MHI/7/03, BELRA General, 1933 1961.
- MHI/7/03, BELRA Letter from the Director of Medical Services to the Secretary of BELRA, 1937.
- MHI/7/03, Letter from Mr. W. Peel, Chairman BELRA to chief Secretary, Lusaka, 25 September, 1937.
- MHI/7/03, Dr. E. Muir's Report, 1939.

- MHI/7/03, Letter from Dr. P.S. Bell, to Acting Director, Medical Services, 22 August, 1945.
- MHI/21/124, Annual Reports, Leprosy in General, Annual Report for the Year ending March, 1912.
- NR7/187, Chitokoloki Leprosy Settlement, 1952 1958: Letter from 'Dead bodies' to Director of Medical Services, 19 January, 1953.

Government Publications

- Northern Rhodesia, Legislative Council Debates: fourth Session of the Sixth Council (Resumed), 1 13 June, 1940. Lusaka: Government Printer, 1940.
- Northern Rhodesia, Legislative Council Debates: fourth Session of the Six Council 13 24 January, 1940. Lusaka: Government Printer, 1940.
- Northern Rhodesia, Legislative Council Debates: fourth Session of the Six Council 13 14 January, 1940. Lusaka: Government Printer, 1940.
- Northern Rhodesia, Legislative Council Debates: fourth Session of the six h Council (Resumed) 1 13 June, 1940. Lusaka: Government Printer, 1940.
- Northern Rhodesia, Legislative Council Debates: forth Session of the eigh h Council, 15 November, 1947 – 14 January, 194. Lusaka: Government Printer, 1948.
- Northern Rhodesia, Western Province African Affairs Annual Report for the Year 1948. Lusaka: Government Printer, 1949.
- Northern Rhodesia, African Affairs Annual Report for the Year 1950. Lusaka: Government Printer, 1951.
- Northern Rhodesia, African Affairs Annual Report for the Year 1951. Lusaka: Government Printer, 1952.
- Northern Rhodesia, Legislative Council Debates: fourth Session of the nin Council, 10 November – 21 December, 1951. Lusaka: Government printer, 1952.
- Northern Rhodesia, African Affairs Annual Report for the Year 1952. Lusaka: Government Printer, 1953.
- Northern Rhodesia, African Affairs Annual Report for the Year 1953. Lusaka: Government Printer, 1954.

- Northern Rhodesia, African Affairs Annual Report for the Year 1954. Lusaka: Government Printer, 1955.
- Northern Rhodesia, African Affairs Annual Report for the Year 1955. Lusaka: Government Printer, 1956.
- Northern Rhodesia, North Western Annual Report for the Year 1955. Lusaka: Government Printer, 1956.
- Northern Rhodesia, African Affairs Annual Report for the Year 1956. Lusaka: Government Printer, 1957.
- Northern Rhodesia, African Affairs, Annual Report for the Year 1959. Lusaka: Government Printer, 1960.
- Northern Rhodesia, African Affairs Annual Report for the Year 1960. Lusaka: Government Printer, 1961.
- Northern Rhodesia, *Department of Health, Annual Report for the Year 1963*. Lusaka: Government Printer, 1964.
- Northern Rhodesia, Hansard Number3, Official Verbatim Report of the Debates of the first Session (Resumed) of the First Legislative Assembly, 9 July 27 August, 1963. Lusaka: Government Printer, 1964.
- Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1954. Salisbury: Government Printer, 1955.
- Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1955. Salisbury: Government Printer, 1956.
- Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1956. Salisbury: Government Printer, 1957.
- Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1957. Salisbury: Government Printer, 1958.
- Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1958. Salisbury: Government Printer, 1959.

- Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasalnd for the Year 1959. Salisbury: Government Printer, 1960.
- Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1960, Salisbury: Government Printer, 1961.
- Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1961, Salisbury: Government Printer, 1962.
- Federation of Rhodesia and Nyasaland, Annual Report on Public Health of the Federation of Rhodesia and Nyasaland for the Year 1962, Salisbury: Government Printer, 1963.
- Zambia, Hansard Number 4, Official Verbation Report of the First National Assembly, 13 July – 22 September, 1965, Lusaka: Government Printer, 1965.

Oral Sources

Katongo, I., Midwife, Chilenje Clinic, Lusaka, 9 June, 2011.

- Mbulo, A., Midwife, Bauleni Clinic, Lusaka, 9 June, 20
- Mannasseh Phiri, M.D, Chief Service Officer, Centre for Infectious Diseases Research in Zambia (CIDRZ), Counting House Square, Thabo Mbeki Road, Lusaka. 18 March, 2011.
- Moonga C, Leprosy patient, Chikankata Leprosy Settlement. Chikankata, 16 March, 2011.
- Mutale, L., Medical Doctor, University Teaching Hospital, Lusaka, 9 June, 2011.
- Mwandila, E., Director, Department of Leprosy and TB Control, Ministry of Health, Ndeke House, Lusaka, 7 June, 2011.
- Nakando, P, Principal Medical Superintendent, Liteta Hospital, Chibombo, 8 April, 2011.
- Ngulube, A, Leprosy Patient, Liteta Leprosy Settlement, Chibombo, 8 April, 2011.

Siamayuwa E, Leprosy Patient, Liteta Leprosy Settlement. Chibombo, 8 April, 2011.

Secondary Sources

Books

- Brody, S.N. *The Disease of the Soul: Leprosy in the Medieval Literature*. London: Cornell University Press, 1974.
- Beckingham, L. and M. Huntingford, *Prester John, Vol. 2*. Vatican: Roman Catholic Manual, 1943.
- Colson E., Marriage and Family Among the Plateau Tonga of Northern Rhodesia. Manchester: Manchester University Press, 1975.
- Dory, E., Leper Country. London: Fredrick Miller, 1963.
- Feeny, P., The Fight Against Leprosy. London: Cornell University Press.
- Gann, L.H., A History of Northern Rhodesia: Early Days to 1953. London: Chatto and Windus, 1964.
- Gelfand, M., Service to the Sick: A History of the Heath Services for Africans in Southern Rhodesia 1890 – 1953. Salisbury: Mambo Press, 1976.
- Gelfand, M., Rivers of Death in Africa: An Inaugural Lecture given n the University College of Rhodesia and Nyasaland. London: Oxford University Press, 1964.
- Gilges, W., 'Some African Poison Plants and Medicines Northern Rhodesia' in *The* Occasional Papers of the Rhodes – Livingstone Museum. Manchester: Manchester University Press, 1974.
- Hartwig, R. and Patterson K.D., (eds), *Disease in African History: An Introductory Survey and Case Studies*. Durham: Duke University Press, 1978.
- Illife, J., The African Poor, A History. Cambridge: Cambridge University Press, 1982.
- Illife, J., *Africans: The History of the Continent*. Cambridge: Cambridge University Press, 1995.
- Levis, W., African Highway: The Battle of Health in Central Africa. London: Cornell University Press, 1973.

- Mairin, S., One Hundred Villages: A Study of Churches Medical Work in Zambia Today. Lusaka: University of Zambia Press, 1976.
- Malcom, W., 'Leprosy Rising' Catholic Encyclopedia, New York: Robert Appleton Company, 1913.
- Martelli, G., Livingstone's River: The Story of the Zambezi Expedition 1858 1864. London: Chatto and Windus, 1970.

McKelvey, J.J. Jr., Man Against Tsetse Struggle for Africa. London: Cornell University

Press, 1973.

- Smith, E.N. and Dale, M., *The Ila Speaking People of Northern Rhodesia, Vol.1*. London: Macmillan, 1920.
- Turner, V., 'Lunda Medicine and Treatment of Disease', in The Occasional Papers of the Rhodes – Livingstone Museum. Manchester: Manchester University Press, 1974.
- Vaughan, M., Curing Their Ills: Colonial African Power and African Illness. Cambridge: Polity Press, 1991.

Chapters in Books

- Allison, A.C., 'Interactions of Genetic Predisposition Acquired Immunity and Environmental factors Susceptibility to Disease', in Stanley, N.F. and Alpers N.P. (eds), *Man – Made Lakes and Human Health*. London: John Murray, Albemarle Street, 1973.
- Walker, N.E. 'Learning to be a Leper', in E.M. Elliot, L.H. Lewis and V. Sydney (eds), Social Contexts of Health, Illness and Patient Care. Cambridge: Cambridge University Press, 1981.

Articles

- Brand, P.N., 'Temperature Variation with Leprosy Deformity', *International Journal of Leprosy*, 27, 1, (1959), pp. 89 104.
- Brown, K., 'Factors Influencing the Transmission of Leprosy', *The Central African* Journal of Medicine, 6, 6, (1960), 269 275.

- Brown, A.J.K., 'Leprosy and Childhood', *The Central African Journal of Medicine*, 2, 5, (1956), 225 302.
- Brown, W., 'Can Social Marketing Approaches Change Community Attitudes Leprosy?' Leprosy *Review*, 77, (2006), 86 – 92.
- Boerrigter, G and Ponnighaus, J.M., 'Ten Years Leprosy Control in Malawi', *Leprosy Review*, 57, 3, (1986), 210 216.
- Cape, J.A 'The Epidemiological Situation in Africa', *Leprosy Review*, 52, 1, (1981), 52 59.
- Carcianiga, C. and S. Herselman, 'Leprosy and Anthropological Insights', *Leprosy Review*, 22, 1, (1999), 153 159.
- Clarke, E., 'Social Welfare and Mutual Aid in the Medieval Countryside', *The Journal of British Studies*, 33, 4, (1994), 390 397.
- Duncan, E.M 'Leprosy and Procreation a Historical Review of Social and Clinical Aspects', *Leprosy Review*, 56, 1, (1985), 156–159.
- Davey, F.T 'Uzuakoli Leper Colony', Leprosy Review, 8, 2, (1937), 156-160.
- Dixey, M.B.D., 'Leprosy Work in the Gold Coast', *Leprosy Review*, 1, 2, (April, 1930), 26-30.
- Etherington, N., 'Missionary Doctors and African Healers in Mid Victorian South Africa', South African Historical Journal, 19, (1987), 76 83.
- Editorial, 'Visit of Dr. Muir to Nyasaland, Union of South Africa, Basutoland and Nigeria', *Leprosy Review*, 11, (1940), 4 6.
- Editorial, 'Implementing Guidelines for Social Economic Rehabilitation', *Leprosy Review*, 71, 4, (2000), 420 – 421.
- Gann, L. H. 'The Opening of Liteta Leprosarium', *Central African Journal of Medicine*, 9, 7, (1963), 286 289.
- Gann, L. H. 'Royal Rhodesia Air Force Delivered Food Flood-marooned Lepers', *African Journal of Medicine*, 9, 7, (1963), 17 24.
- Griffiths, P. G. 'Leprosy in Luapula Valley, Zambia', Leprosy Review, 11, (1940), 23 28.
- Heijinders, M.L., 'The Dynamics of Stigma in Leprosy', International Journal of Leprosy, 72, (2002), 436 440.

- Irgens, L.M., 'Epidemiological Aspects and Implications of the Disappearance of Leprosy from Norway: Some Factors Contributing to the Decline', *Leprosy Review*, 52, 1, (1981), 147 169.
- Kaur, H. and W. Van Brakel, 'Rehabilitation of Leprosy Affected People a Study on Leprosy Affected Beggars', *Leprosy Review*, 73, 4, (2002), 345 352.
- LEPRA, Editorial, 'Consequences of Leprosy and Social Rehabilitation', *Leprosy Review*, 71, (2000), 415 417.
- Loretti, A. and Garbellini, D., 'Leprosy in the Cape Verde Islands', *Leprosy Review*, 52, 4, (December, 1981), 336 340.
- Mayer, F.T.G., 'The Distribution of Leprosy in Nigeria with Special Reference to the Ethological Factors on which it Depends', *West African Medical Journal*, 4, (1930 1931), 10 14.
- Mead, T.W., 'The British Leprosy Association Report', Leprosy Review, 45, 1, (March,

1974), 1 – 8.

Mohamed, H.A.A., 'The Classification of Leprosy', (A Historical Survey of the Problem with Comments on the Recent System Proposed at Madrid), *The Central African Journal of Medicine*, 17, 6, (1971), 18 – 25.

Moiser, B., 'Leprosy in South Rhodesia', *Leprosy Review*, 23, (1938), 110 – 117.

- Moster, H.V.R., 'The Early Diagnosis of Leprosy', *The Central African Journal of Medicine*, 16, 10, (1970), 234 – 238.
- Nalumango, M.M., 'Some Aspects of Health Services in Zambia', *The Central African* Journal of Medicine, 6, 5, (1989), 191 – 205.

- Nwude, N. and Ebong, O.O. 'Some Plants used in the Treatment of Leprosy in Africa', Leprosy Review, 51, 1, (1980), 11 – 18.
- Peach, P.G., 'Mwami Mission of the Seventh Day Adventist', *The Central African* Journal of Medicine, 3, 4, (1957), 140 – 147.

Pedley, 'The Nasal Mucus in Leprosy', Leprosy Review, 44, 33, (1973), 13-22.

- Peters, E.S. and Eshiet, A.L., 'Male Female (sex) differences in Leprosy Patients in South East Nigeria: Females Present late for Diagnosis and Treatment and Have Higher Rates of Deformity', *Leprosy* Review, 73, (2002), 261 – 266.
- Rao. S., Vlassoff, C., Khot, S., 'Gender Differentials in the Social Impact of Leprosy', *Leprosy Review*, 67, (1996), 190 – 196.
- Rathgeber, E.M. and Vlassoff, C.E.E., 'Gender and Tropical Diseases: a New Research Focus', *Social Science of Medicine*, 37, (1993), 512 – 515.
- Rawcliff, S. 'Learning to be a leper', *Leprosy Review*, 38, 4, (1975), 234 238.
- Reddy, N.B.B. and Rathgeber E.M., 'Social Aspects of Leprosy: A Case Study in Zaria, Northern Nigeria', *Leprosy Review*, 56, 1, (March, 1985), 22 – 26.
- Scott, J., 'The Psychosocial needs of Leprosy Patients', *Leprosy Review*, 71, 4, (2000), 486 491.
- Shieh, C., and Okojie E.W., 'From Contagious to Chronic: a Life Course Experience with Leprosy in Taiwanese Women', *Leprosy Review*, 77, 4, (2000), 101 – 106.

Shumin, C., Loretti, A., and Garbellin, D., 'Role of Leprosy Villages and Leprosaria in Shandong Province, People's Republic of China: Past, Present and Future', *Leprosy Review*, 74, (2003), 223 – 226.

- Taube, E. and Ellis, B.P.B., 'An Unusual Case of Leprosy with Pathological Features
 Common to Lucio's Phenomenon, '*The Central African Journal of Medicine*, 16, 6, (1971), 119 -122.
- Vlassoff, C.E.E., 'Gender Inequalities of Health in the Third World', *Social Science of Medicine*, 37, (1993), 1237 – 1250.
- Wilson, S.W. and Evans, P.A.S., 'Leprosy in Central Africa', '*The Central African Journal of Medicine*, 8, 1, (1962), 32 37.
- World Health Organisation (WHO), 'Leprosy Disabilities: Magnitude of the Problem', *Weekly Epidemiological Record*, 70, 38, (1995), 269.

Dissertations, Theses and Seminar Papers

Kalusa, W.T., Aspects of African Health in the Mining Industry in Colonial Zambia: A

Case Study of Roan Antelope Mine, 1920 – 1964, MA Dissertation,

University of Zambia, 1993.

Mushingeh, A.C.S., 'A History of Disease and Medicine in Botswana 1820 – 1845', PhD,

Thesis, University of Cambridge, 1992.

- Ntinda, D.S.S., 'The Impact of London Missionary Society Medical Work at Mbereshi, 1900 – 1963', MA Dissertation, University of Zambia, 1990.
- Samundengu, L., 'The Role and Impact of Western Medicine in the North Western Province of Zambia', MA Dissertation, University of Zambia, 1992.
- Siamwiza, B.S., 'A History of Famine in Zambia c. 1825 1949', PhD, Thesis, University of Cambridge, 1998.
- Zondi, W.S., 'African Demand and Missionary Response: The Emergence of Missionaries as Healers in Kwazulu Natal, 1825 – 1930. Paper presented at Westminister College, Cambridge, 1998.