A HISTORY OF CHITOKOLOKI MISSION HOSPITAL IN ZAMBEZI DISTRICT OF THE NORTH-WESTERN PROVINCE OF ZAMBIA, 1914-2014

BY

OGGY KELVIN MUOMBO

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LUSAKA

DECLARATION

I, **Muombo Oggy Kelvin**, do hereby declare that this dissertation represents my own work, and that it has not previously been submitted for a degree at this or any other University.

SIGNED……

DATE……

APPROVAL

This dissertation of **Muombo Oggy Kelvin** is approved as fulfilling the partial requirements for the award of the degree of Master of Arts in History by the University of Zambia.

Examiner 1: …….. Signature: …… Date: ……..

Examiner 2: …….. Signature: …… Date: ……

Examiner 3: …… Signature: …… Date: …….

Chairperson

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ABSTRACT

The central theme of this study is to reconstruct the history of Chitokoloki Mission Hospital in Zambezi District of the North-Western Province and determine its significance in the history of mission hospitals in Zambia. While the Zambian medical history has tended to focus on the role of Western medicine in the health of Africans to the exclusion of the institutions where medicine was administered, this study sought to contribute to the appreciation of the history of missionary medical institutions in Zambia. When Chitokoloki Mission was established in 1914, the hospital started as a dispensary constructed to meet the healthcare needs of the local people but later on became the pinnacle of medical services in Zambezi District and the peripherals. The study argues that the Mission's agenda, from its inception, was to use the hospital as a tool for converting Africans to Christianity. However, this proved ineffective due to Africans resistance to completely obliterate cultural herbal remedy practices. It was further established that contrary to the academic conspiracy and common trend by a section of scholars who portrayed Africans as mere recipients of mission medical activities, this study contended that Africans played a crucial role in the development of the hospital. For instance, Africans worked as dressers (untrained nurses), orderlies, post office managers, clinical officers, transporters and some even took high ranking administrative positions. Socially, the hospital impacted on the lives of the people of Zambezi District and beyond through the treatment of various ailments. The study also established that Africans continued taking traditional therapies even within the confines of the hospital despite warnings from medical personnel. Furthermore, the study established that the Mission's challenges, among many others were the age-old conflict between the scientific practice of medicine and the cultural beliefs in herbal remedies, loss of human resource due to accidents, poor communication and road network and overcrowding of patients in the hospital wards. The study concluded that the development and sustenance of Chitokoloki Mission Hospital was an outcome of cooperation among stakeholders such as the local people, Brethren, Faith-Based Organisations and successive Zambian governments. The long-standing contest between traditional therapies and Western medicine at Chitokoloki could be understood from the context that Africans were not willing to abandon their cultural healing practices despite the missionaries' hegemonic influence.

DEDICATION

To my two late grandparents, Thomas Musonda Silupumbwe (*Shikulu Bevery*) and Br. Raymond Chalata (*former Catholic Church Brother, Sacred Heart Family*), MTSRIP. In 1996, Grandpa Musonda did not only envision but also foretold that one day I would walk on the corridors of the University of Zambia. I was in Grade five then and I hardly comprehended what he meant not until the writing up of this dissertation. To *Shikulu* Chalata, for invigorating and rediscovering my academic potentials while in Kabwe. To my parents, James Sichivula Muombo and Agnes Nalupumbwe, for their benevolence and remarkable sacrifice.

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alone for I feared to be on a canoe with you especially that I knew I could hardly swim. During the interview period the Zambezi River water levels were at the peak. In addition, some people in the villages suspected you to have been engaged in an unholy alliance with me in order to champion ritual killings. I am hugely indebted for your sacrifice and efforts.

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TABLE OF CONTENTS

LIST OF ABBREVIATIONS AND ACRONYMS

ACCTS	Answering Christ's Call to Serve
AIDS	Acquired Immune Deficiency Syndrome
ALA	African Local Authority
ART	Antiretroviral Therapy
BTS	Balovale Transport Services
CDE	Certified Diabetes Educator
CHAZ	Churches Health Association of Zambia
CMAZ	Christian Medical Association of Zambia
CMML	Christian Missions in Many Lands
EHT	Environmental Health Technician
EOS	Echoes of Service
ER	Emergency Room
FBO	Faith Based Organisations
GRZ	Government of the Republic of Zambia
HIV	Human Immunodeficiency Virus
ICU	Intensive Care Unit
LRA	Leprosy Relief Association
MoH	Ministry of Health
MMN	Medical Missionary News
MP	Member of Parliament
MS	Medical Stores

NAZ	National Archives of Zambia
OBG	Obstetrics and Gynaecology
OPD	Out-Patient Department
RN	Registered Nurses
SAP	Structural Adjustment Programme
SDA	Seventh Day Adventist
STIs	Sexually Transmitted Infections
UK	United Kingdom
UNIP	United National Independence Party
USA	United States of America
WHO	World Health Organisation
Z.E.N	Zambian Enrolled Nurse
ZESCO	Zambia Electricity Supply Corporation

LIST OF FIGURES

LIST OF TABLES

Map 1: Location of Chitokoloki Mission Hospital

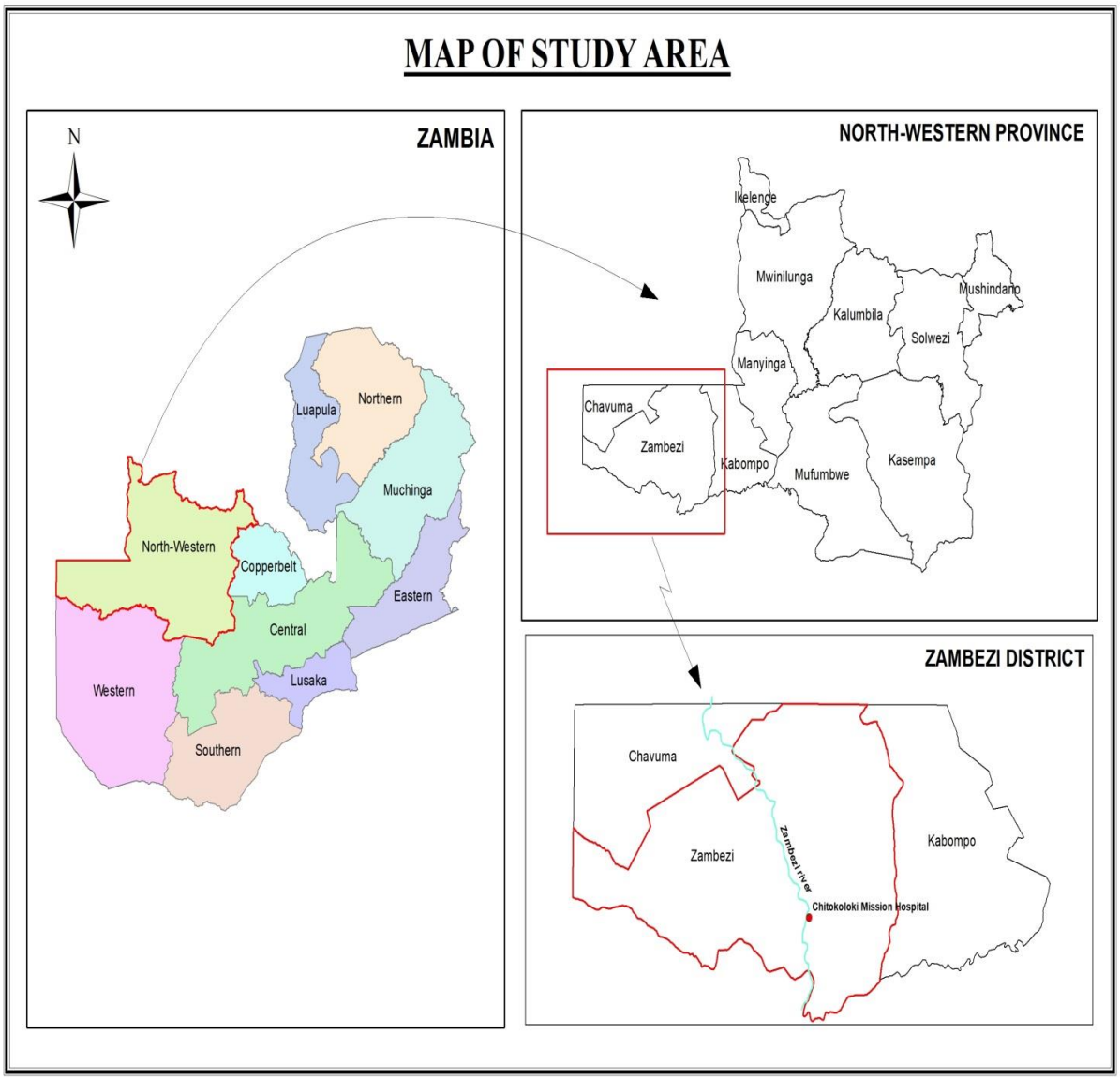

Figure I: Chitokoloki Mission Hospital Signage

Source: Photo taken during the research period (17.01.2019).

CHAPTER ONE

INTRODUCTION

1.1 Introduction and Historical Background

The discourse on the missionary enterprise in Central Africa has received overwhelming attention from academics. However, missionary medical institutions such as Chitokoloki Mission Hospital, which is under the auspices of the Christian Missions in Many Lands (CMML), have received little scholarly attention. Chitokoloki Mission of the Plymouth Brethren is a lay body that seceded from the Anglican Church.[1] The mission was established among the people of Zambezi District in the North-Western Province of Zambia as an offshoot of Kalene Mission in Mwinilunga. This study, therefore, attempts to investigate the historical development of Chitokoloki Mission Hospital and determine its significance in the history of mission hospitals in Zambia.

The genesis of missionary stations in Central Africa was as a result of the work of early European missionaries. Missionary-explorers such as Dr David Livingstone whose journeys across the African continent invigorated extra-ordinary interest among Western missionaries, explorers and traders, came to Africa on a civilising mission.[2] As observed by A.J. Wills, "David Livingstone more than any other man, was responsible for arousing public conscience and bringing a vast array of facts into the open."[3] This assertion resonates with the view of Kovina Mutenda, who in his study, contends that it was Livingstone who dug the trenches in which others would lay the foundation of the work of God in these lands of Africa.[4] It is against this background that after Livingstone's death in 1883, various missionary societies responded to his challenge to bring Christianity and 'civilisation' to the people of Central Africa. One such missionary society was the CMML that entered what was then known as Northern Rhodesia in 1898. The CMML influence was more recorded in Luapula and North-Western Provinces than in any other provinces of Zambia.[5]

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[1] Lewis H. Gann, *The Birth of Plural Society: The Development of Northern Rhodesia under the British South African Company, 1894-1914* (London: Manchester University Press, 1958), p.20.
[2] Ado K. Tiberondwa, *Missionary Teachers as agents of Colonialism: a Study of their Activities in Uganda, 1877-1895* (Lusaka: Kenneth Kaunda Foundation, 1978), p.29.
[3] A.J. Wills, *An Introduction of the History of Central Africa,* 3rd Edition (London: Oxford University Press, 1973), p, 82.
[4] Kovina L.K. Mutenda, *A History of the Christian Brethren (Christian Missions in Many Lands-CMML) in Zambia* (London: Yeomans Press, 2002), p.24.
[5] Mutenda, *A History of the Christian Brethren,* p.8.

With the conviction of the missionaries that they had the mandate to act as emissaries who would bring light into 'darkness' and who would replace 'heathenism' with the Gospel of Christ, building mission hospitals by the CMML just like other missionaries, was not only an act of benevolence but a ploy to convert Africans to Christianity. Walima T. Kalusa describes this scenario in his study as a "gospel of the syringe or medical evangelisation".[6]

However, the historical beginnings of Chitokoloki Mission are to be found in the exploratory work of Fredrick Stanley Arnot, who was the first missionary after Livingstone to work in pre-colonial Zambia. Mutumba Mainga recorded that Arnot left Lealui in Bulozi in 1884 to seek medical attention and to escape a brewing rebellion against Lewanika. Arnot's story belongs perhaps more to Angola and Garengaze area in Zaire than to Northern Rhodesia.[7] On the way back to Northern Rhodesia, the route took him over the height of land between the watersheds of the Zambezi and the Congo, where he found the source of the Zambezi River in 1884. Arnot identified Kalene Hills as a particularly suitable place for a mission station. Moreover as the hill stood at 1,500 metres above sea level, it would offer a sanctuary from malaria-carrying mosquitoes. Kalusa recorded that in 1905, the surgeon missionary Walter Fisher visited Mwinilunga, where he met Chief Ikelenge.[8] In 1906 Fisher, who had accompanied Arnot on a later visit to Africa in 1889, moved to the hill, which he renamed Kalene (a contraction of "Ikelenge"), where a CMML medical mission still stands today.[9] However, Arnot's stay was short-lived due to illness and he eventually died on 15 May 1914 in Johannesburg, South Africa.[10]

More remarkable, however, was the work of the Plymouth Christian Brethren in the Balovale (Zambezi) District in North-Western Province of Zambia. Alma Turnbull recorded that:

Mr T. Lambert and George Suckling, who had been at Kalene Hill had a tedious trip from Johannesburg to Sesheke. They then began a nearly month-long journey up the river into the North Western-Province. Paddling over 400 kilometres by canoe, they

[6] Walima T. Kalusa, 'Language, Medical Auxiliaries, and the Re-interpretation of Missionary Medicine, in Colonial Mwinilunga, Zambia, 1922-1951', *Journal of Eastern African Studies,* Vol.1, No.2, (2007), pp. 57 – 78.
[7] Mutumba Mainga, Political *Evolution and State Formation in Pre-colonial Zambia (*London: Longman Group Ltd., 1973), p.22. *See also* Ian Burness, *From Glasgow to Garenganze: Frederick Stanley Arnot and Nineteenth-Century African Mission* (London: Opal Trust and Echoes International, 2017), pp. 119-135.
[8] Walima T. Kalusa, 'Disease and the Remarking of missionary medicine in colonial Northwestern Zambia: A Case Study of Mwinilunga District, 1902-1964', Ph.D. Thesis, Johns Hopkins University, 2003, p. 16.
[9] Iva Pesa, 'Serving in the Beloved Stripe: A Century of Missionary Activity in Mwinilunga District, Zambia', *Brethren Historical Review*, Vol. 6, (n.d), pp. 74-90.
[10] Burness, From Glasgow to Garenganze: Frederick Stanley Arnot and Nineteenth-Century African Mission, p. 283.

eventually arrived at the juncture [confluence] of the great Zambezi and Kabompo Rivers, where Mr Arnot had built a small house two and half years prior. Mr Suckling continued on, eventually located a suitable site 40 kilometres further north.[11]

It was here, after visiting the Lunda Chief Ishindi, that the Plymouth Brethren established a missionary camp in early 1914 and named it Chitokoloki Mission Station. In the Lunda language, the word *Chitokoloki* means "a place of bright shining or sparkling waters."[12] It is worth mentioning that Suckling ran Chitokoloki Mission from 1914 until his death in 1951. Once the Mission was well established, a dispensary was constructed not only as a response to diseases but also as a means of African conversion to Christianity.[13]

However, the development of Chitokoloki Mission was not a mono-effort by the CMML missionaries but involved support from Faith-Based Organisations (FBOs) and the Central Government. Some of these FBOs were the Medical Missionary News (MMN), Accepting Christ's Call to Serve (ACCTS) based in Canada, Medical Stores (MS), and Echoes of Service International, found in the United Kingdom (UK). Others were Christian Medical Association of Zambia (CMAZ) and Churches Health Association of Zambia (CHAZ).

With regard to the provision of healthcare services, Chitokoloki Mission Hospital played a significant role in combating communicable and non-communicable diseases such as leprosy, Tuberculosis, measles, and HIV/AIDS. However, the provision of medical care by Chitokoloki Mission Hospital had its own challenges. For example, in its early days, the Mission lacked adequate infrastructure, medical equipment and trained human resource. Other challenges included the impact of the Second World War, poor transport and communication, and ecological problems associated with the location of Chitokoloki Mission Hospital.[14]

It is against this background that this study focuses on reconstructing the history of Chitokoloki Mission Hospital, assess its social impact on the people of Zambezi District as well as examine its challenges in the provision of health care from 1914 to 2014.

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[11] Alma Turnbull, *Chitokoloki: Celebrating a Century of the Lord's Work in Northwestern Zambia* (Canada: Gospel Folio Press, 2014), p. 19

[12]. Turnbull, Chitokoloki, 19.

[13] Turnbull, *Chitokoloki*, p. 28.

[14] Ian Burness, Former Surgeon at Chitokoloki from 1979 to 198, based in UK. Personal communication through the e-mail, 15 July, 2019 and Interview with Hannah, Chitokoloki Mission Hospital, 17 January, 2019.

1.2 Statement of the Problem

While themes such as the contribution of Christian Missionaries to African education, and Western medicine in both colonial and post-colonial Zambia have attracted a great deal of scholarly attention, the history and role of missionary medical institutions has been neglected. This is all the more surprising, especially when considered in the light of the fact that missionary hospitals played a role in colonial and post-colonial Zambia, particularly in the rural areas where, initially, government hospitals and clinics were either very few or non-existent. The study of medical institutions is a relatively neglected theme in Zambian history and Chitokoloki Mission Hospital is not an exception.

1.3 Objectives of the study

This study, sought to reconstruct the history of Chitokoloki Mission Hospital and determine its significance in the history of mission hospitals in Zambia. However, the specific objectives were to;

1. explore the historical development of Chitokoloki Mission Hospital from 1914 to 2014,

2. assess the social impact of Chitokoloki Mission Hospital on the people of Zambezi District, and

3. examine the challenges faced by Chitokoloki Mission Hospital in the provision of healthcare.

1.4 Rationale

The rationale for undertaking this study is that the theme on the history of medical institutions and their social impact has been neglected. Hence, this study may help in sharpening and broadening scholars' understanding of the history and role of missionary medical institutions in Zambia, an area which has received little attention from historians. The year 1914 was chosen as a starting point because it marked the commencement of CMML activities at Chitokoloki. The study ends at 2014 as that year significantly marked a hundred years of missionary's existence at Chitokoloki. It is also hoped that the study will stimulate further research interest on the subject.

1.5 Literature Review

Mention must be made from the onset that a significant amount of the existing literature on both colonial and post-colonial Zambian medical history has tended to focus on the importance of western medicine without the inclusion of institutions within which it was administered. But even more challenging, is that the literature that was consulted concerning Chitokoloki Mission Hospital clearly indicated that little work has been done concerning the history of the institution. The scanty literature available briefly discussed the establishment of Chitokoloki Mission and its historical development. Even so, there is a conspiracy of silence on the history of missionary medical operations and the social impact of the institution by the early writers. Nevertheless, there is substantial literature on medical evangelism elsewhere which was invaluable to the study.

In attempting to understand the historical development of mission hospitals, Barbra Wall, Tom Gormley and J.S Galbraith's submissions, in their different accounts, explain how some medical services developed at a global level. For example, Wall commented that the evolution of hospitals in the Western world from mere charitable guesthouses to centres of scientific excellence had been influenced by a number of social and cultural developments.[15] On the other hand, Gormley noted that the original facilities for the ill were most likely temples dedicated to "healing gods"[16] while Galbraith argues against such background and indicates that some medical centres began as small as six-bed roomed structures, which would later play a key role in expanding the medical culture.[17] Drawing insights from such accounts, it is tenable to argue that there was no mono-form in which missionary hospitals were established, for each had its unique way. Chitokoloki Mission Hospital, a case in point had its own challenges that needed to be subjected to scholarly analysis.

Some significant literature reveals that one of the impediments early missionaries grappled with in the establishment and dispensing of Western medicine to the local people was to do with traditional beliefs. Karen S. Adams' arguments, for example, were essential to the present study as they provided insights on certain traditional aspects and how they affected the running of some medical institutions. She comments that child birth was traditionally institutionalised as a social event that specifically demanded the participation of women.

[15] Barbra Mann Wall, *History of Hospitals* (New York: Routiledge, 2003), p. 15.
[16] Tom Gormley, 'The History of Hospitals and Wards,' *Health Care Design*, Vol.10, No.3 (March 2010), pp. 50-54.
[17] J.S. Galbraith , ' A History of public Hospital in the United States,' National Association of Public Hospitals and Health Systems, Vol.20, No.1 (2006), pp. 7-10.

Instead of regarding child birth as a natural occurrence, Adams observed that they began to call it an illness, a "disease" which by definition required the attention of physicians and surgeons.[18]

The study undertaken by David Patterson showed that disease has been a significant factor throughout African history, and that attempts to control endemic and epidemic afflictions, this scholar argues, have been an important aspect of change in the twentieth Century. Unfortunately, historians have rarely paid more than cursory attention to issues involving human health and if this remains unattended to, the medical history may lose its significance. Patterson further mentioned that there is some mention of disease in many pre-colonial studies, especially those of the "trade and politics" variety, but comment is usually directed towards the effects of tropical diseases on Europeans rather than the impact of local and induced diseases on African populations.[19]

The insights on the state of most of the mission hospitals in Africa were to be found in the works of Philip B. Wood. He bemoaned the manner in which medical care was getting more expensive and how mission agencies were cutting back their medical ministries. However, Wood was quick to point out that mission hospitals were carrying a larger share of national medical programmes.[20] It is for this reason that Wood's work, in spite of not being directly linked to Chitokoloki Mission, helped us to understand some challenges faced by the Hospital.

Colonial Zimbabwe, too, was not devoid of missionary medical evangelism. In this regard, the study by C.J. Zvobgo on medical missions in colonial Zimbabwe was of help to the present study. While examining some major mission hospitals, Zvobgo observed that at some of these institutions where a trained doctor was not available, some missionaries practised as amateur doctors.[21] Zvobgo further emphasised that the acceptance of Western medicine by Africans in colonial Zimbabwe did not mean that they had lost faith in their traditional doctors but that in the treatment of certain illnesses, Western medical technology proved

[18] Karen L. Smith Adams, 'From 'The Help of Grave and Modest Women' to 'The Care of Men of Sense': the Transition from Female Midwifery to Male Obstetrics in Early Modern England.' M.A. Dissertation, Portland State University, 1988, p.11.
[19] David K. Patterson, 'Disease and Medicine in African History: A Bibliographical Essay', *History in Africa*, Vol. 1 (1974), pp. 141-148. https://www.jstor.org/stable/3171766, Accessed: 14-12-2018, 05:13
[20] Philip B. Wood, 'Mission Hospitals in Africa: What's Their Future?' http:/missio Nexus.org (retrieved on 10.12. 2018).
[21] C. J. Zvobgo, 'Medical Missions: A neglected theme in Zimbabwe's History, 1893-1957', *Zambezia* Vol. *X*II, No. *ii,* (1986), pp. 110-118.

superior to traditional remedies.[22] The study was invariable because it helped us in carrying out an investigation on whether the missionaries continued undermining African traditional therapies at Chitokoloki Mission Hospital or not.

The reasons behind the acceptance by some Africans of western medicine and their response, were to be found in the works of Alex McKay. He firstly commented that female medical missionaries tended to take a particular interest in women's health issues, not least maternity and childcare, an area neglected under colonial government. He further argues that it appears in Eritrea, as in other parts of Africa that mission medicine was preferred to local therapy in a pragmatic, and selective way based on principles of effectiveness, cheapness and a relatively easier availability of missionary medical treatments.[23] This work helped us investigate what motivated the people to seek medical services at Chitokoloki Mission Hospital.

Missionary hospitals, just like government sponsored ones, were not immune to challenges though it would be a total historical fallacy to conclude that all hospitals had common challenges. For example, the work by Dan Kaseje and that of Peter Delobelle[24] illustrate some of the challenges that Kenya and South Africa grappled with in terms of health service delivery. Kaseje submitted that high levels of maternal and child mortality and low rates of immunisation were symptomatic of the great neglect of Africa's rural communities. However, these services according to Kaseje were complimented with financial assistance from bilateral and multilateral donors.[25] The financing of medical facilities as revealed by Kaseje, was not an easy undertaking but most missionaries offered free medical services to the local people. There was, therefore, need to establish the financing aspect to the development of missionary medical work at Chitokoloki.

Africans from time immemorial had ways and means in which various diseases were treated and could not accept Western medical therapies easily as alleged by some European inclined scholars. E. Dory's discussions, for example, showed how sceptical Africans were in accepting the missionary medicine, except the lepers who in most cases were completely abandoned by their relatives.[26] Dory's work was cardinal to our study because it provided us

[22] Zvobgo, Medical Missions, pp. 109-118.
[23]Alex McKay, 'Towards a History of Medical Missions', *An international Journal for the History of Medicine and Related Sciences*', Vol.51, No. 4 (Oct 1 2007),pp. 547-551.
[24] Peter Delobelle, *The Health System in South Africa: Historical Perspectives and Current Challenges* (Brussels: Institution of Tropical Medicine, 2013), p. 7.
[25] Dan Kaseje, 'Health Care in Africa; Challenges, Opportunities and an emerging model for improvement', Paper Presented at the Woodrow Wilson International Centre for Scholars on Nov. 2 2006, p.4.
[26] E. Dory, *Leper Country* (London: Fredrick Miller, 1963), p. 44.

with a basis to inquire on how the local people responded to Western medication at Chitokoloki Mission Hospital especially during the time a leprosarium was introduced.

It must be borne in the mind of a medical historian that there have been various scholarly controversies on missionary medics in Central Africa. For instance, the views of Lewis Gann and Peter Duignan,[27] were that the Christian medics projected themselves as bearers of superior systems of healing and civilisation who wished that Africans would be converted to missionary medicine, to Christianity and perhaps to the Western way of life.[28] On the whole, they argue that Western medicine was superior to African healing remedies. Further, the study by Lewis Gann partially mentioned the missionary works and unapologetically commented that "the Plymouth Brethren were organising yet another assault on pagan Africans, using the West Coast for their base."[29] Such western inclined assertions have the potential of undermining the Africans agency of which this work sought to address.

It is against such assertions above that it is little wonder, then, that Walter Rodney and Ado Tiberondwa[30], have in separate accounts, accused missionaries of having done very little and merely acted as the harbingers of colonialism under which capitalism thrived. For example, these scholars describe the mission based healers as agents of imperial power, who played a pivotal role in emasculating African therapeutic systems and reinforcing colonial hegemony.[31] However, their views have not been short of scholarly critique.

On the other hand, a mould of academicians such as Walima T. Kalusa, have placed an African as an active actor in history rather than a mere recipient of missionary or colonial imposition.[32] In conformity with the expectations and demands of the post-colonial regime in Zambia for, example, Kalusa argues that:

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[27] Lewis H. Gann, *A History of Northern Rhodesia: Early Days to 1953* (London: Chatto and Windus, 1964), p.48.
[28] L.H. Gann and P. Duignan, *Burden of Empire: An Appraisal of Western Colonialism in Africa South of the Sahara* (Stanford: Hoover Institution Press, 1967), p.283.
[29] L.H. Gann, *A History of Northern Rhodesia*, p.48.
[30] Walter Rodney, *How Europe Underdeveloped Africa* (London: Bogle-L'Ouverture Publications, 1973, p.57; and Ado K. Tiberondwa, *Missionary Teachers as Agents of Colonialism*, p.24.
[31] Walima T. Kalusa, 'Language, Medical Auxiliaries, and the Re-interpretation of Missionary Medicine in Colonial Mwinilunga, Zambia, 1922-51 ', Journal of Eastern African Studies, Vol. 1, No.1 (2007), pp. 57 – 78.
[32] Kalusa, 'Language, Medical Auxiliaries, and the Re-interpretation of Missionary Medicine in Colonial Mwinilunga, Zambia, 1922-51 ', *Journal of Eastern African Studies*, Vol. 1, No.1 (2007), pp. 57 – 78.

Catholic medics reconfigured their medical discourse and practice. Consequently their medicine lost its hegemonic pretentions and became an agency through which the newly independent Zambian State implemented its public health reform.[33]

In another study, Kalusa argued that far from being an alien imposition, missionary medicine in Africa emerged out of its interaction with and came to fit into local medical system that missionaries paradoxically wanted to obliterate.[34] The fact that the latter study was based at Kalene Mission Hospital under the CMML largely provided a platform to discuss some of the diseases which were treated by the missionaries at Chitokoloki Mission Hospital since its inception.

Another study that dealt with medical evangelism was that of Paul Landau, which examined surgical evangelism of the London Missionary Society among the Tswana people of Botswana. He argues that missionaries' therapeutic practices served as a tool for evangelism.[35] Similarly, Chitokoloki Mission Hospital was established on the premise of accelerating the evangelistic mission. However, the development of such an institution has to be explored exhaustively by assessing the social impact on the people and examine its social challenges.

When dealing with the establishment of mission hospitals, the aspect and importance of periodisation cannot be overemphasised for this, too, has some historical controversies. That is why M. Hokkanen in his study, pointed out that medicine was a significant part of Malawian mission field and that as such, the Presbyterian Missions and the English Anglican Universities' all established dispensaries and hospitals long before the colonial administration became seriously involved in medicine.[36] Although Hokkanen's study focuses on nurses and knowledge transfer, its contribution was integral to this study for it demonstrated how European nurses were critically important for the establishment and operation of permanent mission hospitals.

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[33] Walima T. Kalusa, 'From the agency of Cultural Destruction to Agency of Public Health; Transformation of Catholic Missionary Medicine in Post-Colonial Eastern Zambia, 1964-1982 ', *Social Science and Mission*, Vol. 27.No.2 (2014)

[34] Walima T. Kalusa, 'Disease and the Remarking of Missionary Medicine in Colonial North-western Zambia, p. ii.

[35] Paul S. Landau, 'Explaining Surgical Evangelism in Colonial Southern Africa: Teeth, Pain and Faith', *The Journal of African History*, Vol. 37, No. 2 (1996), pp. 261-281.

[36] M. Hokkanen, 'Missions, Nurses and Knowledge Transfer: The Case of Early Colonial Malawi.' In E. Fleischmann, S. Grypma, M. Marten, and I. Okkenhaug (Eds.), *Transnational and Historical Perspectives on Global Health, Welfare and Humanitarianism* (Kristiansand: Portal Academic, 2013), pp. 110-136.

The study on the history and role of nurses in hospitals has been done by other medical scholars. The findings by Shula Marks, for example, indicated that nursing also played a central role in the development of health services in South African hospitals. For most South Africans, Marks argues that direct contact with Western biomedical services was and is mediated through nurses more often than doctors. Other revelations were that for unskilled Afrikaner nurses entering the profession during the inter-war period, professionalism and standards arguments were used to prevent their subordinations to more experienced black nurses.[37] This work invaluably helped this study in establishing challenges that workers faced at Chitokoloki Mission Hospital.

There have been various reasons advanced by scholars pertaining to Western medication. Barbara McPake's and Cathrine Valentine's[38] findings helped the present study in such a way that they availed information concerning other reasons why certain medicals were provided either by the missionaries or colonial government in Africa. For example, McPake argued that government hospitals in Sub-Saharan Africa were developed in the first place to meet the needs of colonial administrators and other European settlers. Rural areas were largely the domain of the religious missions with respect to health care.[39] This view resonates with that of Walter Rodney who stated that 'the viciousness of the colonial system with respect to the provision of social services was most dramatically brought about in the case of economic activities which made huge profits and notably in the mining industry.'[40] This helped the study to investigate why the CMML established Chitokoloki Mission Hospital in the rural area of Zambezi District.

The study undertaken by Mark Harrison and Biswana Pati helped us to further understand some reasons why missionaries opened medical institutions. Harrison indicates that there were two tendencies in the literature. The first is concerned with the questions of the colonial legacy in public health, and whether or not the British made much progress in this regard. Opinions on this matter have differed widely, from claims that public health flourished only under British agency to claims that successive administrations sought merely to protect the

[37] Randall Packard (Reviewer), 'A History of Nursing in South Africa by Shula Marks, ' *Journal Of African History,* Vol. 37, No. 2 (1996), pp. 324-326.
[38] Catherine Janet Valentine, 'Settler Visions of Health: Health Care Provision in the Central African Federation, 1953-1963", Ph.D. Theses, Portland State University, 2017.p, 31.
[39] Barbara McPake, 'Hospital Policy in Sub-Saharan Africa and Post-Colonial Development Impasse', *Social History of Medicine*, Vol.22, No. 2(1 August 2009), pp. 341–360.
[40] Walter Rodney, *How Europe Underdeveloped Africa* (Dar-Es-Salaam: London and Tanzania Publishing House, 1973), p.324.

health of the colonial enclaves.[41] What motivated the missionary to establish a mission hospital at Chitokoloki was investigated.

Taking hospitals as a microscope of society, Clement Masakure, in his study observed that challenges that faced Southern Rhodesia were reflected within clinical spaces. He noted that during the 1970s and early 1980s, hospitals became an important site of struggles that were also being fought in the political arena. Taking the case of Bindura Hospital where wards for the whites were closed due to shortages of white nurses and the continued defence of the policy that restricted African nurses from nursing white patients was a reminder of authorities' determination to limit racial contacts in hospitals.[42] Although Masakure's study focused on Zimbabwe during the struggle for independence, it helped us to understand how cultural differentiation might have undermined medical operations at Chitokoloki.

The work by Andrew C. Mushingeh was also of benefit to our study because he reconstructed the patterns of diseases and local responses to diseases by individual medical providers and missionaries in Botswana. He further noted that the Tswana accepted Western medicine enthusiastically from the time it was introduced. However, Western medicine never supplanted traditional medicine and the influential role of traditional healers referred to as the *Ngaka* was not undermined.[43] Although Mushingeh's work focused on the history of disease and medicine in Botswana, it provided us with valuable information in understanding the nature of diseases that were treated by missionary medics at Chitokoloki Mission Hospital in Zambia.

Chitokoloki Mission, in some account, is considered to have been one of the largest leprosy centres in colonial and post-colonial Zambia. Similarly, the study by Beverly McInnes on Chikankata Mission Hospital in Mazabuka District of Zambia provided us with some insights. She argued that the mission hospital served as a centre of healing for Southern province as a whole. In those very early days, a number of doctors came and gave 12 months of service to Chikankata Hospital in order to improve health service delivery. McInnes also briefly stated some challenges that Chikankata Leprosy Centre faced, including a shortage of

[41] Mark Harrison, Biswana Pati (Eds.), *Social History of Health and Medicine in Colonial India* (London: Routiledge, 2009), p.1.
[42] Clement Masakure, 'On the Frontline of Caring: A History of African Nurses in Colonial and Postcolonial Zimbabwe: 1940s -1996.' PhD, Thesis, The University of Minnesota, 2012, p. 144.
[43] Andrew, C. S. Mushingeh , ' A History of Disease and Medicine in Botswana 1820-1945', Ph. D. Thesis, Cambridge University, 1984, p,305.

accommodation.[44] Her work provided us with useful insights into the missions' medical service delivery and their challenges especially in the pursuit to mitigate the scourge of leprosy.

There would be no missionary hospital that would succeed in its operations without the contribution of the local people in that area. The medical work done by Godfrey Kumwenda justifies this view. He argued that the medical training at Chilonga Mission Hospital was intended to instil into trainees the basic principles of treatment of common and surgical conditions in patients.[45] He further stated that during the medical training, Catholic Missionaries also introduced students to treating a number of diseases such as malaria, dysentery, bilharzia, tropical ulcers, scurvy and others.[46] Kumwenda's arguments were important to our study for it availed the information in the understanding of Africans' contributions in medical institutions.

In attempting to examine the extent of the impact of the First and Second World Wars on the running of missionary hospitals, conclusions by Hugo Hinfelaar and Chewe Chabatama were useful to this study. For example, Hinfelaar demonstrated how the two World Wars subsequently affected Catholics' missionary work as many Africans were recruited as porters. He further added that family life was disrupted while others were conscripted in the army.[47] Chabatama's work showed how Chitokoloki Mission Station experienced difficulties in procuring food during the First World War period. As a result, the station relied on African food supplies and embarked on farming. During evangelism, this scholar argues, Africans were encouraged to grow food crops like wheat, rice, fruits and groundnuts which they (missionaries) needed for consumption.[48] Chabatama's work helped this study to further investigate other challenges faced by the mission hospital during the Second World War.

The role and impact of Western medicine in North-Western Province of Zambia is to be found in Lilian Samundengu's study. She argued that the Western medical work in North-

[44] Beverly McInnes, *Flag Across the Zambezi: A History of the Salvation Army in the Zambia and Malawi Territory 1922-1997* (Lusaka: The Salvation Army, 1997), p. 92.
[45] Godfrey K. Kumwenda, 'The Role and Conditions of Service of African Medical Auxiliaries in Catholic Mission Health Institutions in Zambia: A Case Study of Chilonga Mission Hospital in Mpika District, 1905-1973', M.A, Dissertation, University of Zambia, 2015, p. 42.
[46] Kumwenda, 'The Role and Conditions of Service of African Medical Auxiliaries in Catholic Mission Health Institutions in Zambia, p. 44.
[47] Hugo F.Hinfelaar, *Missionaries in Africa: History of the Catholic Church in Zambia*, (Lusaka: Book World Publishers, 2004), pp. 82-83.
[48] C. M. Chabatama, 'The Colonial State, The Mission and Peasant Farming in North-Western Province of Zambia: A Case Study of Zambezi District, 1907-1964', M.A. Dissertation, University of Zambia, 1990, p. 28.

Western Province was born out of missionary work and that medical ministry was only used as a weapon to obtain access to the local people whom they sought to convert.[49] Although Samundengu's study took a macro approach and mentioned Chitokoloki Mission Hospital in passing as a leprosarium, her work was invaluable to our study because it provided useful insights into other diseases apart from leprosy that were treated by missionary medics.

It was almost impossible to reconstruct the history of Chitokoloki Mission Hospital in exclusion to the role it played in leprosy treatment. In this regard, the study undertaken by Brenda Liwoyo became relevant to this study. She noted that leprosy was a wide-spread disease whose victims were highly stigmatised, socially discriminated against and isolated. Her study focused on approaches by missionaries and governments towards the scourge. Liwoyo recorded that a number of leper settlements were established after the Second World War in Northern Rhodesia. For example, by 1957, there were more than twenty-four missionary-run leper settlements in Zambia. In 1928 and 1950, the CMML established Chitokoloki and Nyamong'a Settlements, respectively, in Zambezi District which was then known as Balovale.[50] Liwoyo's work helped to broaden our understanding of how leprosy and other diseases were treated at the hospital.

There is a link in terms of historical background between Kalene and Chitokoloki Missions. Iva Pesa's and Sarah Ponzer's works in different accounts highlight how Kalene Hill Mission in Mwinilunga was established in 1906 under Walter Fisher, a Brethren missionary.[51] For example, Pesa indicated that during the past century, not only had the Mission spread geographically to other parts of what is today, Mwinilunga District but it had also diversified its enterprises by establishing numerous hospitals, clinics, schools, an orphanage, farming, and trading centres as well as a witch village for women driven out of their villages as suspected witches.[52] This was in the quest to establish closer contact with those whom they wished to convert. Some of the offshoots of Kalene Mission were Chitokoloki, Loloma in Manyinga, Chavuma, Dipalata and Kabulamema among others[53]. Although Pesa's study was

[49] Lilian Samundengu, 'The Role and Impact of Western medicine in the North-Western Province of Zambia 1900-1963', M.A, Dissertation, University of Zambia, 1992, p. 90.
[50] Mbaita B. Liwoyo, 'Missionary, the State and Leprosy in Zambia, 1893-1964', M.A, Dissertation, University of Zambia, 2011, p.79.
[51] Sarah Ponzer, 'Disease, Wild Beasts, and Wilder Men: The Plymouth Brethren Medical Mission to Ikelenge, Northern Rhodesia', *Conspectus Borealis*, Vol. 2, No. 1, (2017), pp.1-36.
[52] Iva Pesa, 'Serving in the Beloved Stripe: A Century of Missionary Activity in Mwinilunga District, Zambia', *Brethren Historical Review*, Vol. 6, pp. 74-90.
[53] Turnbull, *Chitokoloki*, p. 41.

based on Kalene Hill Mission Hospital, it shaped our understanding of the establishment of various activities at the Mission in order to sustain the medical operations of the hospital.

The history of Chitokoloki Mission Hospital is to be understood from the context of the missionary work and the role played by the Christian Brethren (CMML) especially in the North-Western part of Zambia. Kovina Mutenda's work significantly informed this study as he traced the early history of Chitokoloki Mission and pointed out that it was Suckling who built a hospital, leper colony and two boarding schools.[54] Mutenda's work did not address the medical operations of Chitokoloki Mission Hospital as his study largely focussed on the history and general missionary work of the Christian Brethren in Zambia as a whole.

Ian Burness, in an effort to show the missionary work of F.S. Arnot, indicated how George Suckling left the Zambezi-Kabompo confluence to search for a new location where plans to start work among the Lunda people would be fulfilled. Burness commented that the site that Suckling discovered and chose to develop became known as Chitokoloki. It lay about 40 kilometres north of the Zambezi-Kabompo confluence, on the east bank of the Zambezi River, and to the present-day mission work continues there.[55] The brief background by Burness helped the study to understand the establishment of the Chitokoloki Mission.

One of the studies that was fundamentally significant and more specific on Chitokoloki Mission was one done by Alma Turnbull. She briefly pointed out some missionary works at Chitokoloki Mission that have been done. In her preliminaries, she hoped in sincerity that the story would be the "voice" of the missionaries.[56] In addition, she admitted that "to cover all the accomplishments and discouragements of the 100-year history of Chitokoloki would be an overwhelming task. So it should be stated that this work is illustrative and not exhaustive!"[57] Her written submission invigorated this study to further explore the medical work at Chitokoloki Mission Hospital.

Since Turnbull's study, to a large extent, focussed on merely highlighting Western missionaries' activities at Chitokoloki Mission, there was an ardent and scholarly urgency to get the voice and the roles played by the Africans as well. Turnbull's study concentrated very much on missions' work in general. Therefore, she did not extensively cover the provision of

[54] Mutenda, *A History of the Christian Brethren (CMML) in Zambia*, p.55.
[55] Ian Burness, From Glasgow to Garenganze: Frederick Stanley Arnot and Nineteenth-Century African Mission (London: Opal Trust and Echoes International, 2017), p. 282.
[56] Turnbull, *Chitokoloki*, p. 10.
[57] Turnbull, *Chitokoloki*, pp.10-11.

medical services. Besides, the texts and photos in Turnbull's study demonstrated Western dominance and portrayed Africans as mere recipients of missionaries' activities. Furthermore, the methodology used was ahistorical as archival and other credible sources were not consulted. However, the brief background of the mission hospital recorded, provided insights on how to proceed with this study.

1.6 Methodology

Both primary and secondary sources were used in crafting the history of Chitokoloki Mission Hospital. For example, primary and secondary data emanated from archival, oral interviews and library sources. First, the research thrived on collecting published and unpublished materials such as books, theses, dissertations and journal articles in the University of Zambia Main Library.

The National Archives of Zambia (N.A.Z) 'the memory of the nation' provided primary data collection concerning Chitokoloki Mission Hospital. It was at N.A.Z where unpublished primary documents such as Chitokoloki Notebooks, District Tour Reports and Annual Reports for the Ministry of Health were obtained. Files such as CMML; Chitokoloki Leprosy Settlement and Baluvale's Medical Officer's Reports which had specific information on leprosy and other diseases from N.A.Z, were consulted.

Chitokoloki Mission Hospital in Zambezi District was visited and data from the administrative documents such as Chitokoloki Annual Reports, note books and correspondence were collected. However, some data especially during the federal period (1953-1963), was not available as it was reported that the Mission's storage facility accidentally got burnt and nothing was salvaged.

Finally, I collected data by conducting personal oral interviews with people at Chitokoloki who had knowledge of the Mission Hospital. The key informants were serving doctors and nurses, general workers, patients, village headmen and some ordinary people around the area. Some, who were interviewed via a phone, were retired medical personnel, both locally based and abroad. These provided first-hand information concerning the operation of Chitokoloki Mission Hospital. However, I was unable to go and interview Senior Chief Ishindi because of the financial constraint on my part. Others flattery refused to be interviewed as they wanted to be paid money in exchange with the information they have. Responses from the interviewees were recorded and written down in the course of the interview. Some

interviewees could not speak English and since I am not proficient in speaking either Luvale or Lunda languages, I had to rely on Sakuwuunda Jonathan as an interpreter and did a superb job.

The internet was another important source used in order to access some online materials such as books, dissertations, theses, journal articles and news related to the topic of study. Had it not been for the internet, e-mails that were exchanged with various former workers and other individuals would not have been accessible.

1.7 Organisation of the Study

The study is divided into five chapters. Chapter One is the Introduction. Chapter Two is an analysis of the historical development of Chitokoloki Mission Hospital from 1914 to 2014. Chapter Three assesses the social impact of Chitokoloki Mission Hospital on the people of Zambezi District. The Fourth chapter examines the challenges faced by Chitokoloki Mission Hospital in the provision of health care. The final chapter is the Conclusion of the study.

CHAPTER TWO

THE HISTORICAL DEVELOPMENT OF CHITOKOLOKI MISSION HOSPITAL, 1914 - 2014

2.1 Introduction

This chapter explores the historical development of Chitokoloki Mission Hospital. It demonstrates how the hospital was established on the east bank of the Zambezi River in the North-Western Province of Zambia. It also shows that Chitokoloki Mission was one of the earliest mission centres built in the region by the Christian Missions in Many Lands (CMML).[1] The hospital is situated 40 kilometres south of the Zambezi District among the Lunda and some Luvale speaking people. For over a century, the Mission provided the residents of the district with extensive medical services.[2] The reason for the mission's existence was mainly to meet the spiritual and physical needs of the people.

The chapter also highlights the establishment and expansion of Chitokoloki Mission Hospital and demonstrates how Frederick Stanley Arnot, George Robert Suckling and Rodgers. T. Lambert moved from Kalene Hospital as itinerant missionaries. Later on, the missionaries founded Chitokoloki Mission on the eve of the First World War in 1914. The chapter also focuses on the expansion of the hospital in terms of infrastructure development, human resource, finance and machinery in colonial and post-colonial Zambia. The role played by local Africans in the establishment and operations of the hospital will also be elaborated. For example, some Africans worked as dressers (untrained nurses), office orderlies, post office managers, clinical officers, and drivers while some took high ranked administrative positions. The contributions by various expatriate medical personnel at Chitokoloki Mission Hospital are also highlighted.

In terms of financing the medical services at Chitokoloki Mission Hospital, the chapter illustrates how different faith-based organisations, individuals, and successive governments supported the hospital. The combination of such financial assistance made the mission hospital to move from a grass-thatched mission dispensary to what would be an excellent missionary hospital with diverse operations.

[1] Interview with Kangungu Ephraim, Member of CMML, Mufumbwe District, North-Western, Zambia on 25 January, 2019.
[2] Interview with Gordon Hanna, Chitokoloki Mission Chief Administrator, Zambezi, 16 January, 2019.

2.2 Establishment

The history of Chitokoloki Mission can be traced to over a century ago. By late 1913, Fredrick Arnot had done pioneer evangelism in some parts of Central Africa. While at Kalene Hill Mission Hospital in Mwinilunga, Arnot desired to establish another mission in the upper Zambezi region. To him, that was an area yet to be reached with the gospel.[3] This was also to be found in Eva Pesa's study who indicated that the CMML in Mwinilunga wanted to spread geographically to other parts.[4] On the eve of 1914, Arnot, in the company of Rodgers Lambert and George Suckling, moved from Johannesburg to Sesheke until they reached the Balovale. They eventually arrived at the confluence of the Zambezi and Kabompo Rivers. At this point, the entourage located a place where Arnot had built a small house two and half years prior. Arnot, in one of his memoirs recorded that:

> The little house that I built two years and a half ago seemed to be exactly as we left it; nothing had given way, and only few drops came through the roof after a heavy rain the first night….On the 12th Mr Suckling left to seek a suitable site for a station among the Balunda.[5]

Historically, the confluence of Zambezi and Kabompo Rivers was an initial area where the Mission was supposed to be established but it was discovered that the area was a sanctuary of mosquitoes that caused malaria. Therefore, Suckling continued on and eventually located a suitable site 40 kilometres further north.[6] Since Arnot was caring for Rodgers, whose foot sustained an injury in a gun short accident, he was unable to accompany Suckling on that exploratory trip. However, after Rodgers recovered, they joined Suckling at the new settlement.[7]

Contrary to the popular view held by some writers like Turnbull, that the early missionaries left the Zambezi-Kabompo River junction due to a low valley deemed to be a sanctuary for mosquitoes, Edwin Nkanza, one of the informants dismissed that version. It was stated rather,

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[3] Alma Turnbull, *Chitokoloki: Celebrating a Century of the Lord's Work in Northwestern Zambia* (Canada: Gospel Folio Press, 2014), p.13.
[4] Iva Pesa, 'Serving in the Beloved Stripe: A Century of Missionary Activity in Mwinilunga District, Zambia', *Brethren Historical Review*, Vol. 6, (n.d), pp. 74-90.
[5] F.S. Arnot, *Missionary Travels in Central Africa*, p.149.
[6] Alma Turnbull, *Chitokoloki: Celebrating a Century of the Lord's Work in Northwestern Zambia* (Canada: Gospel Folio Press, 2014), p. 14.
[7] Ian Burness, *From Glasgow to Garenganze*: *Frederick Stanley Arnot and Nineteenth-Century African Mission* (London: Opal Trust and Echoes International), p.282.

that the missionaries wanted a high flat land that could provide a beautiful site of the Zambezi River worth gazing at during leisure as well as provide them with a comfortable citadel.[8]

Suckling established a missionary camp in early 1914 and named it Chitokoloki. In the local 'Lunda language', the word *Chitokoloki* means "a place of bright shining" or "sparkling waters."[9] This seemed to resonate with the Nkanza's assertion that the missionaries wanted to have a good view of the Zambezi River, especially at sunset. Just like Dr. Walter Fisher used unprecedented and revolutionary social tactics to incorporate local culture into his medical and personal life at Kalene Mission Hospital, George Suckling replicated the same ideology by giving the hospital a local name.[10] Little wonder then that over a century later, many of the residents around Chitokoloki Mission continued to hold fond memories of Suckling. For instance, a number of people from the older generations commonly referred to the mission as "*Njochi*" for George. The people around the area would say "*tunakuya ku Chipatela cha Njochi nakukeng´a kukeewa*". This literally meant that they were going to George Suckling Mission Hospital to seek healing.[11] To some local people, Chitokoloki and George Suckling were synonymous and could be used interchangeably.

There is also another conflicting view on how the name Chitokoloki came about. Willie Chinyama Kafwale stated that "the mission was founded in a former village of *Chitoma* where the name Chitokoloki came from."[12] Since Suckling did not want to side with any of the local languages, he decided to name the mission as *Chitokoloki* which was neither Lunda nor Luvale. Otherwise it would be *Chitokoloka* or *Chitoma* in Lunda and Luvale, respectively.[13] Even so, others still maintained that the missionaries' inability to pronounce the Lunda word *Chitokoloka* resulted in them calling it *Chitokoloki* which is used to this day.

In order to settle the foregoing debate, it was stated that the early missionaries named the settlement using a local language, Lunda, as *Chitokoloki*. A missionary, Gordon Hanna explained that the name Chitokoloki was evangelistic in nature. Hence, the early missionaries

[8] Interview with Edwin Nkanza, Chitokoloki, Zambezi District, North-Western, Zambia, 18 January 2019.
[9] Interview with Kafwale Chinyama, Head teacher at Chitokoloki Primary School, Zambezi, 20 March, 2019.
[10] Sarah Ponzer, 'Disease, Wild Beasts, and Wilder Men: The Plymouth Brethren Medical Mission to Ikelenge, Northern Rhodesia', *Conspectus Borealis*, Vol. 2, No. 1, (2017), pp.1-36.
[11] Interview with Katota David, Assistant Hospital Administrator, Chitokoloki Mission, Zambezi District, North-Western, Zambia, 21 January, 2019.
[12] Interview with Willie Chinyama Kafwale, Chitokoloki, Zambezi District, Zambia, 20 January, 2019. Kafwale was born in 1963, August 16th in Chitokoloki, Current Head teacher at Chitokoloki.
[13] Interview with Kafwale, Chitokoloki, Zambezi, 20 January, 2019.

metaphorically used the local language to explain their agenda to the people in the area. He stressed that:

> As the sun reflected from the water of the Zambezi River, likewise the light of a Christian love shines forth from the mission station and is reflected to the villages and settlements nearby. Sunlight is essential in our day-to-today living; for illumination, for growth, for comfort, and power![14]

It was stated that Suckling was pleased with the site he had found for the new mission and that Arnot believed that no better centre could be found for hospital work than that, an indication of what Chitokoloki would become in the future. While Arnot wrote, "I felt the place being a perfect haven of rest", this did not last as his long-diseased spleen finally ruptured on 25 January 1914.[15] He was taken to South Africa where within two months he died. The story of his life and death, told and retold, inspired several generations of Brethren to come to Africa.[16] Lambert also died from blackwater fever in 1916, just before the Mission could develop. The death of the two missionaries has been described in some sections as martyrs who illustrated Christian valour. Likewise, Suckling's decision to carry on, despite the death of the two comrades seemed to reveal his determination and tenacity in evangelising Africans especially in Balovale.[17] It is from this background that Chitokoloki Mission was founded in 1914 and became firmly established during the colonial period and has lasted to present times.

Western medical work in the North-Western Province of Zambia, in the words of Lillian Samundengu, was born out of missionary work and that medical ministry was only used as an agenda to obtain access to the local people, whom they sought to convert.[18] Chitokoloki Mission Hospital was established to emulate what had happened at Kalene Mission, where a missionary hospital was established for the local people.[19] Burness stated that "some basic

[14] Interview with Gordon Hannah, Chitokoloki Mission Hospital, Zambezi, Zambia, 16 January, 2019.
[15] Ian Burness, *From Glasgow to Garenganze*, p. 282.
[16] Ernest Baker, *Arnot, A night of Africa: A Stirring account of the life of intrepid explorer, a zealous Missionary and a night –errant in the best sense of the term, retold for young people* (London: Seeley, Service & Co., 1925), pp. 314- 326.
[17] Echoes of Service, *Suckling*, See the *Echoes of Service* manuscripts [hereafter EOS] in the Christian Brethren Archive, John Ryland's University Library of Manchester, for correspondence related to missionary activities at Chitokoloki Mission, 15 January, 1914.
[18] Lillian Samundengu, 'The Role and Impact of Western Medicine in North-Western Province of Zambia 1900-1963', M.A, Dissertation, University of Zambia, 1992, p.90.
[19] Iva Pesa, 'Serving in the Beloved Stripe: A Century of Missionary Activity in Mwinilunga District, Zambia', *Brethren Historical Review*, Vol. 6, (2007), pp. 74-90.

medical work at Chitokoloki started around 1920 by Ada Hilton, a nurse and midwife..."[20] This corresponded to Mutenda's findings who noted that Ada Hilton, a nurse and Thomas Hansen were some of the medical missionaries who arrived and served at Chitokoloki around 1920.[21]

In terms of the development of Chitokoloki Mission Hospital, reasonable medical work was reported to have commenced around late 1920s, and later on leprosy work became the main stimulant to the growth of medical work. William Orr, a missionary writing from Chitokoloki in 1929, reported that he was supervising the care of 6 in-patients, while treating 30 to 40 out-patients daily.[22] However, how treating of leprosy patients were treated during the colonial period that earned Chitokoloki a profound name in the province. For this reason, it was sometimes referred to as a "leprosy hospital."[23]

Chitokoloki soon received attention from the colonial government which began to send and support leprosy specialists. For instance, Dr James Worsfold, a missionary doctor from New Zealand went there in 1947.[24] He was asked by the Government of Northern Rhodesia to set up a facility for the management of leprosy, which was widespread over the whole Zambezi area. According to Burness, "Worsfold did an extensive survey of the leprosy incidence in a widespread area on both sides of the Zambezi, and visited almost all the villages."[25] Thus, the initial thrust of the medical facility was leprosy diagnosis and management that helped to put the mission hospital on an unprecedented medical trajectory.

In the medical study undertaken by Zvobgo concerning missionaries in Zimbabwe, he noted that "Christian missionaries established medical missions because they regarded the ministry of healing as an integral part of the Christian witness and because they viewed medical missions as an important evangelistic agency."[26] Similarly the opening of the hospital at Chitokoloki Mission was not only to meet the medical needs of the local people but it was in the sincere hope by the missionaries that while people visited the medical facility for physical

[20] Ian Burness, personal communication through an e-mail, on 12 June, 2019.
[21] Kovina L.K. Mutenda, *A History of the Christian Brethren (Christian Missions in Many Lands-CMML) in Zambia* (London: Yeomans Press, 2002), p. 5.
[22] News in EOS, 5 October, 1930.https://archiveshub.jisc.ac.uk/data/gb133-eos/eos/3 accessed on 10 March, 2019.
[23] Phone Interview with David Sefu, Kabompo District, North-Western, Zambia, on 25 January, 2019. David Sefu was born in 1940 at Chitokoloki Mission Hospital and began work at the hospital in August 1957.
[24] National Archives of Zambia [Hereafter N.A.Z.], MH1/03/72, Health Department, Annual Report, 19 January, 1948.
[25] Burness, personal communication through an email, UK, 12 June, 2019.
[26] C. J. Zvobgo, 'Medical Missions: A neglected theme in Zimbabwe's History, 1893-1957', *Zambezia* Vol. *X*II, No. *ii*, (1986), pp. 110-118.

help, they would also be helped to receive the gospel of Jesus Christ. Dr Worsfold once stated that medicine acted as a "magnet" in drawing the people to the mission.[27] He concluded that more people were going to the hospital than to the church, which suggested that the missionaries at Chitokoloki treated the hospital as a centre of evangelisation. Hence, the gospel of the syringe by the missionaries, as referred to by Walima T. Kalusa[28] took a similar form at Chitokoloki Mission Hospital. So, it was common that every patient was given a clear presentation of the gospel as a daily ministry.

However, it was noted that much as the missionaries had the mandate to preach the gospel, the effectiveness of medical evangelism was doubtful. This was because most of the people (about 65 %) who visited the hospital, according to the administrators' submission, were those from outside the Chitokoloki community and not necessarily CMML members. It is, therefore, tenable to argue that most of the people who visited Chitokoloki Mission Hospital only visited the institution for medical help and the gospel was a by-the-way phenomenon. So, this method of the gospel of the "western medical tablets" at Chitokoloki did not work effectively. This argument is buttressed by Dr Worsfold who admitted in one of the letters that:

> On the spiritual side, it is a sad but undeniable fact that those who live within easy reach of us and hear the gospel frequently as they gather daily in large numbers in the Out-patient Hall are the least responsive for it. The few conversions that we know of during this past year have been amongst those who come long distances for operations.[29]

Furthermore, the villages surrounding Chitokoloki had experienced the mushrooming of many other churches such as the Seventh Day Adventist (SDA), the Catholic, New Apostolic and some other evangelical ministries, whose members strategically wanted to be nearby the hospital for medication. This implied that many people who received medication at the hospital might not have been necessarily CMML adherents. It was noted that all patients who went to Chitokoloki Mission Hospital were treated without considering their tribe or church

[27] Turnbull, *Chitokoloki*, p. 24.
[28] Walima T. Kalusa, 'Language, Medical Auxiliaries, and the Re-interpretation of Missionary Medicine, in Colonial Mwinilunga, Zambia, 1922-1951', *Journal of Eastern African Studies,* Vol.1, No.2, (2007), pp. 57 – 78.
[29] Letter written by Worsfold to Trustee of Trusts (Global Connections in Mission, New Zealand) (n.d) 1948. Received through the e-mail from Sefton Marshall, Operation Director. 7 May, 2019.

affiliation. Medical care was available to all who needed it.[30] However, some patients who came from distant places reached an extent of carrying their relatives' or neighbours' CMML church uniform or membership card in order to win the required sympathy from either a *ndotolu* (doctor) or a *chindeli* (nurse); despite this not being a requirement according to the hospital regulations.[31] Further, some went to settle at Chitokoloki for economic gain. For instance, small businesses were established near the hospital in order to target the workers and the patients' relatives as the main customers.[32] In view of the above, it can be argued that medical evangelism was not the best method by which the missionaries at Chitokoloki converted Africans to the gospel instead it was just a social service.

2.3 Infrastructure Development

In attempting to understand the historical development of mission hospitals, Barbra Wall, Tom Gormley and J.S. Galbraith's submissions, in their different accounts, explain how some medical services developed at a global level. Wall, for example, commented that the evolution of hospitals in the Western world from mere charitable guesthouses to centres of scientific excellence has been influenced by a number of social and cultural developments.[33] On the other hand, Gormley noted that the original health facilities for the ill were most likely temples dedicated to "healing gods".[34] Galbraith argued that some medical centres began as small as six-bed roomed houses that later played a key role in expanding the medical culture.[35] Gelfand also noted that medical missions took two or three decades to become efficient institutions from the time of their establishment.[36] Although it can be universally accepted that most of the hospitals had poor infrastructure in their early years of establishment, it must be mentioned that various hospitals took a unique and microcosm form. Chitokoloki Mission Hospital was not an exception.

In the colonial period, for example, Chitokoloki Mission Hospital did not have proper infrastructure except a small room that supported basic health care. In fact, it was referred to as a dispensary by early missionaries. Charles Kabwita confirmed that before independence,

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[30] Personal Communication with Dr. Ian Burness based in U.K, 12 June, 2019.
[31] Interview with Somili Tom, Chitokoloki, Zambezi, 15 January, 2019.
[32] Interview with Somili, Chitokoloki, Zambezi, 15 January, 2019.
[33] Barbra Mann Wall, *History of Hospitals* (New York: Routiledge, 2003), p. 15.
[34] Tom Gormley, 'The History of Hospitals and Wards,' *Health Care Design*, Vol.10, No.3 (March 2010), pp. 50-54.
[35] J.S. Galbraith, 'A History of public Hospital in the United States,' *National Association of Public Hospitals and Health Systems*, Vol.20, No.1 (2006), pp. 7-10.
[36] M. Gelfand, *Christian Doctors and Nurses. The History of Medical Missions in South Africa* (Sandston: East Avenue Athol, 1984), p.43.

the hospital was just a small room, currently used as a guest room for chiefs whenever they went for medication. The room was not only made out of mad and poles but also had a grass thatched roof.[37]

It is worth noting that Chitokoloki Mission Hospital experienced a little infrastructure development in the late 1940s during the administration of Dr Worsfold. Ian Burness pointed out that when Dr Worsfold joined Chitokoloki in 1947, he immediately embarked on developing the hospital. He was the one who spearheaded the building of what would later be referred to as the "old hospital." Initially it was reported that Dr Worsfold conducted surgeries under a mango tree in the yard before an operating theatre was built.[38] Despite the precarious conditions in terms of infrastructure, as alluded to earlier, Chitokoloki Mission Hospital continued to provide the health services. In the 1940s, the colonial government rendered financial aid to build some infrastructure especially at the leper settlement.

The efficacy of the early mission hospitals largely hinged on a number of factors. Among others was the availability of hospital departments as well as medical personnel. The scenario at Chitokoloki Mission Hospital was that by 1948, some hospital departments such as the Maternity Ward had already been established. This was also contained in one of the tour reports by the District Medical Officer that read in part:

> The general dispensary was inspected and found a new Maternity Ward in use. As stated previously, this building is ideal and well-constructed, with warm and cold running water.[39]

This was also highlighted in another report that at the beginning of 1948, Chitokoloki Mission Hospital was composed of a male ward, a female ward, a labour-room and an operating-theatre. In addition, the dispensary comprised an out-patient hall, a microscopist's room, an office, a kitchen, a carpenters' shop and a store room.[40] This clearly demonstrated that there was an improvement in infrastructural development during the 1940s compared to the former decades.

[37] Interview with Charles Kabwita, Chitokoloki, Zambezi, Zambia, 16 January, 2019.
[38] Burness, personal communication, e-mail, UK, 12 June, 2019.
[39] N.A.Z., MH1/02/064, Christian Mission in Many Lands; Chitokoloki Leprosy Settlement: General. Tour Report No. 1, 25 February, 1948.
[40] N.A.Z., MH1/03/38, Christian Mission in Many Lands; Chitokoloki Leprosy Settlement, Annual Report, 6 March, 1948.

The genesis of the Northern Rhodesia Government's direct involvement at Chitokoloki Mission Hospital resulted into the establishment of a Leprosarium. However, leprosy had been treated at Chitokoloki since 1920.[41] Later, in 1942, the Government removed the lepers at Balovale to Chitokoloki and pledged to provide housing and maintenance for them if the missionaries accepted. It was against this background that the Chitokoloki Leper Settlement began operating. In 1945, therefore, the Government confirmed its acceptance of 100% financial responsibility. The Government's intentions were to make Chitokoloki Mission Hospital a regional leprosarium for the province.[42]

The Leper Settlement which became a major concern by the Northern Rhodesian Government, in terms of infrastructure, began in 1949. According to the Tour Report dated 3 February 1949, it was discovered that a number of buildings which were recommended were all underway. For example, one of the orderlies' and the doctor's houses, an office and a laboratory were nearing completion.[43]

In 1964, when Zambia attained independence, Chitokoloki Mission celebrated its golden jubilee of existence. Nevertheless, there was not much to celebrate about in terms of infrastructure development except at the Leper Settlement, where some houses had been already built. It was not until the 1970s, that the hospital had far much improved infrastructure ascribed to the financial help from the Government. The Annual Report by a visiting leprologist noted that:

> Chitokoloki Leprosy Settlement has high standard housing for patients as well as laboratory facilities and physiotherapy. The Mission Hospital should, therefore, be regarded as the Central Leprosy Settlement in this part of the North-Western Province.[44]

It was in the same period that the main and new section of the hospital named *Kariba* was built and officially opened on 15 July 1973.[45] Patients who needed the most critical and post-operation care were admitted into the new building. The new hospital comprised four large wards, three operating rooms, an X-ray and ultra-sound department. Others were sterilizing and instrument rooms, eye and dental clinic, emergence room, six-bed Intensive Care Unit

[41] N.A.Z., MH1/02/064, Christian Mission in Many Lands; Chitokoloki Leprosy Settlement, 3 February, 1951.
[42] N.A.Z., MH1/O2/064, Christian Mission in Many Lands; Chitokoloki Leprosy Settlement, 3 February, 1951.
[43] N.A.Z.,MH1/O2/064, Christian Mission in Many Lands; Chitokoloki Leprosy Settlement: General. 7 February, 1949.
[44] N.A.Z., MH1/03/143, Leprologist Tour Reports, Leprosy Specialist Tour Report, 18 August, 1970.
[45] Interview with Kabwita, Chitokoloki Mission Hospital, 16 January, 2019.

(ICU) ward, maternity department, kitchen, laundry, and a reception area. In addition, a new operating theatre was built in 1979 and added to the existing infrastructure.[46]

Initially, Chitokoloki Mission Hospital had one section until in the early 1970s when it had two. The first section was known as the "Old Hospital" probably because of the old infrastructure and was originally the main hospital when the medical work started. This section was headed by Charles Kabwita who succeeded a man named Samuling'a.[47] Later, the local people named the section as *Kabwita* in honour of his long service. Since then, the people in Chitokoloki community referred to the oldest hospital as "Kabwita Hospital."[48] At the old hospital, there were a total of 88 beds in the wards, a laboratory, out-patient screening areas and offices.

At Chitokoloki Mission Hospital, the patients and their relatives were fed free of charge until they went back to their homes. Like in many other hospitals, food was not adequate. In order to ensure food security at the Hospital, there was a famous room called *Chisheti*, a Lunda name which means food storage. During the colonial period, a certain room near *Chisheti* used to be a theatre and X-ray room. Later on, patients were taken to another room known as *Kasesi*; a Lunda name given in recognition of Chief Ishima's palace. This was used to accommodate patients who underwent surgical operations.[49] It should be pointed out that local names, by and large, dominated in the medical discourse for identification of rooms, storage and departments at Chitokoloki Mission Hospital.

At the other section built by Dr Worsfold, operations continued but with basic infrastructure. Therefore, the old facility was mainly used for accommodation of patients and their relatives that were from distant places. The section where patients' relatives were accommodated was called *Nyachipopa*, named after the first chief where Chitokoloki was established. The old hospital also continued to function with a laboratory and an operating theatre.

In the 1980s, Chitokoloki Mission Hospital experienced little of infrastructural development. The Annual Report of 1986, for example, showed that a physiotherapy and pharmacy rooms were relocated and a dispensing window installed at the new hospital. In addition, a new mortuary and a waiting shelter were built.[50] The renovation of the old dental rooms of the

[46] Interview with Gordon Hanna, Chitokoloki, 16 January, 2019.
[47] Interview with Kabwita Charles, Chitokoloki, Zambezi, 16 January, 2019.
[48] Interview with Maggie Kabisu, Chitokoloki, Zambezi, 17 January, 2019.
[49] Interview with Charles Kabwita, Chitokoloki, Zambezi, 16 January, 2019
[50] Annual Report, Chitokoloki Mission Hospital, 1986.

medical centre, up-grading of 11 staff houses, remodelling of antenatal clinic area and construction of a former laboratory to a teaching room were the changes introduced in 1987.[51] It was at the new hospital where the analysis of all types of specimen from the general hospital was carried out. This was so because of the few developments made at the new hospital.

As Chitokoloki Mission Hospital was developing, there was need to improve the accommodation for the staff. For that reason, the Mission upgraded two staff and patients' houses at the Leprosarium and an out-patient accommodation area at the old hospital in 1988.[52] According to the Hospital's Annual Report of 1990, the only new development recorded was the renovations that continued at the old hospital section.[53] The report demonstrated that the development of infrastructure was not intensified during that period from 1990 to 1995. This was so because there was little need then, as the work load did not demand immediate infrastructure development.

Around 1996, Chitokoloki Mission Hospital witnessed a reduction in funding by the Government. This, consequently, led to a halt of projects. This reduced funding from the Zambian economic point of view was as a result of austerity measures put in place following the introduction of the Structural Adjustment Programme (SAP) in 1991. The 1996 Chitokoloki Mission Hospital's Annual Report also indicated that the projects undertaken throughout the year were restricted due to lack of personnel to supervise the projects and also the unavailability of funds. It was only the painting of hospital wards and the continuous maintenance works at the old hospital that was recorded.[54] Therefore, it could be argued that the economic crisis that Zambia underwent during that period did not exclude the mission hospitals as well.

In the 2000s, Chitokoloki Mission Hospital experienced some developmental projects compared to the previous decades. For example, in 2006, several projects were completed. These includes, among others, the construction and fitting of a complete ICU room, building of a new ophthalmic and a dental room.[55] The situation in 2011 was that five new staff houses and the establishment of a storage area behind the new hospital were completed besides other

[51] Annual Report, Chitokoloki Mission Hospital, 1887.
[52] Annual Report, Chitokoloki Mission Hospital, 1988.
[53] Annual Report, Chitokoloki Mission Hospital, 1990.
[54] Annual Report, Chitokoloki Mission Hospital, 1996.
[55] Annual Report, Chitokoloki Hospital, 2007.

installations at the new hospital.[56] However, it was noted that between 2012 and 2014 only basic additions were made in terms of infrastructure development.

At the old hospital, there was a laboratory and an HIV/AIDS clinic, several wards and offices. Apart from that, there was a separate 110-bed leprosy and TB area with its own staff.[57] This illustrated that Chitokoloki Mission Hospital had most of the medical departments in operation at the time of the centenary celebration in 2014.

Figure II: Part of Chitokoloki Old Hospital

Source: Photo taken during the research (21.01.2019).

Generally, by 2014, Chitokoloki Mission Hospital was a full-fledged hospital by all standards. It had about 200-bed space capacity that served a patient population of about 1500. The hospital facility included four large wards and three smaller ones which included a 25-bed paediatrics ward and a 25-bed obstetrics and gynaecology ward. There was also a seven-

[56] Annual Report, Chitokoloki Mission Hospital, 2011.
[57] Interview, Katota, 21 January , 2019.

bed ICU and an emergency room among others. Another block housed three operating theatres, an X-ray Department, an eye and a dental clinic.[58]

Figure III: One of the Theatre Rooms at Kariba Section.

Source: Chitokoloki Mission Hospital Website page. https://www.chitokoloki.com.Acessed on 25 January, 2019.

2.4 Financing of Chitokoloki Mission Hospital

In order for a mission medical institution like Chitokoloki to provide the expected medical services, there was need for consistent financial backing and sound cash flow. To that effect, Turnbull acknowledged the efforts made by some organisations overseas, in terms of financial aid, but the context and details were missing. However, from the early days of establishment, Chitokoloki Mission Hospital had been financially aided by various church organisations from the missionaries' countries of origin. The colonial and post-colonial governments also provided grants to the medical ministry especially when the Mission

[58] Interview with Hanna, Chitokoloki Mission Hospital, 17 March, 2019.

Hospital became one of the leprosarium centres in the country. The efforts by the colonial government were evidenced in one of the letters to Suckling that read in part:

> …the grant of (£600) due from 1947 has been approved and the transport on drugs (£8.11.5) is accepted. Furthermore, capital grants-in-aid for 1948 are at present under consideration.[59]

It was as a result of such political will by the colonial state in terms of grants that some early buildings at Chitokoloki Mission Hospital were constructed. However, the Northern Rhodesian Government concentrated and put more emphasis on the Leper Settlement for it was a matter of national concern. At times, whenever the hospital management made a request of any kind, it was presumably considered to be for a Leper Settlement. For example, the Provincial Medical Officer commented on one of the requests that, "the furniture and equipment for the doctor's office is presumably for the leper settlement."[60] Initially, Dr Worsfold lived in a hut but later the government included a £300 in the 1949 capital expenditure as an estimated amount for the doctor's house.[61]

On 15 June, 1948, Suckling, in one of the letters made a financial request if it would be possible for the grant for the maintenance of the Leprosy Settlement to be paid just before the end of that month so that it needed not to be delayed in the Accountant General's office but be available right at the beginning of the new quarter.[62] This was in the quest to speed up the developmental projects at the leprosarium centre.

2.4.1 Mission Agencies

At Chitokoloki Mission Hospital, several missionary organisations from inception continued to render financial support regularly and consistently. This is contrary to the popular assertion by some medical scholars that medical care was getting more expensive and so many mission agencies were cutting back their medical ministries.[63] Some of these Faith Based Organisations (FBOs) were the Medical Missionary News (MMN), Accepting Christ's Call to Serve (ACCTS) based in Canada, Medical Stores (MS), and Echoes of Service

[59] N.A.Z., MH1/02/064, Christian Mission in Many Lands; Chitokoloki Leprosy Settlement: General. Letter to G. R. Suckling by A.T. Howell, Director of Medical Service, 8 March, 1948.
[60] N.A.Z.,MH1/02/064, Christian Mission in Many Lands; Chitokoloki Leprosy Settlement: General, 5 May 1948. See also MH1/2/77, Salvation Army Chikankata, 1951-1955 Tour Report, 22 April, 1948.
[61] N.A.Z., Letter to Suckling by Howell, 27 April, 1948.
[62] N.A.Z.,MH1/02/064, Christian Mission in Many Lands; Chitokoloki Leprosy Settlement: General. Letter by G. R. Suckling to A.T. Howell, 15 June, 1948.
[63] Philip B. Wood, 'Mission Hospitals in Africa: What's Their Future?' https://missioNexus.org (retrieved on 10.12. 2018).

International found in the United Kingdom (UK). Others were Christian Medical Association of Zambia (CMAZ) and Churches Health Association of Zambia (CHAZ).

In terms of financial aid, most of the expatriate missionaries at Chitokoloki were sponsored by their home-based churches and Mission Service Agencies. Most of the projects, the missionaries' cost of living and other living expenses were taken care of by various FBOs. Burness, for example, reported that:

> Gifts in kind were provided through goods, drugs and equipment sent in containers to Zambia and our service agency gave financial gifts which could be used for capital costs, staff payments or for the purchase of equipment at the hospital. We were comparatively well-funded in those days.[64]

The above submission resonated with Chitokoloki Mission Hospital's Annual Report of 1986 which indicated that all expatriate staff gave their service and time voluntarily to the hospital. Grants that were received on their behalf were deposited direct into the hospital account.[65] However, the expatriate's wages were not disclosed or indicated in any of the archival sources. However, because of the consistency in the financial assistance by missionary agencies, Chitokoloki Mission Hospital outclassed many other mission hospitals and some government sponsored ones in terms of machinery and medical delivery.

Chitokoloki Mission Hospital had survived financially, as earlier alluded to, through constant donations by various organisations, missionaries from overseas countries and Government grants. For example, in 1986, the hospital received a total donation of various assorted equipment amounting to K230, 828.50.[66] Among these were mattresses, containers, uniforms for hospital staff, kitchen equipment, cabinets for the theatre and many others. In general, the financial statement of income and expenditure report of 1986 showed that the total expenditure was K507, 294.59 of which the larger amount was donated by various missionary agencies.[67]

Chitokoloki Mission Hospital also received donations from the World Health Organisation (WHO). Some of the donations were HIV equipment which was set up in July, 1987 in the

[64] Burness, personal communication, UK, E-mail, 12 June, 2019.
[65] Annual Report, Chitokoloki Mission Hospital, 1986.
[66] Annual Report, Chitokoloki Mission Hospital, 1986.
[67] Annual Report, Chitokoloki Mission Hospital, 1986.

new laboratory suite. In October, several donations were also made by church organisations based in other countries. According to the Hospital's Annual Report of 1987, some of the items donated are shown in the table below:

Table 1: Donation by Church Organisations

Drugs	K 88, 020.00
Incubator with Phototherapy Unit	10, 800.0
Surgical Instruments	9, 200.00
Incubator	4,800.00
Wheelchairs (three)	4,500.00
Stationary Supplies	4, 600.00
Laboratory Balance	1, 5600.00
Scales	1, 440.00
Soap dispensers	1, 280.00
Apnea Monitor	1,200.00
Gluconometer	1, 200.00
Clipboards	800.00
Estimated Value	**K126, 400.00**

Source: Chitokoloki Mission Hospital, Annual Report, 1987.

The most critical aspect in many missionary hospitals was the availability of medicine. At Chitokoloki Mission Hospital, it was observed that there was a steady supply of medicine. These donations came from various missionaries based in the USA and Europe. For example, the hospital's 1988 Annual Report indicated that:

> Drugs and medical supplies donated in England came to an estimated value of K17, 550. Similar donations made in Canada amounted to K18,000. Not only that many other donations were done throughout the year and it would be impossible to list them.[68]

However, there was a reduction in the amount of the total value of goods donated in 1988. The total amount of estimated value was at K92,096 donated by church groups and missionary friends from overseas.[69] In the same year, the major achievement by Chitokoloki

[68] Annual Report, Chitokoloki Mission Hospital, 1988.
[69] Annual Report, Chitokoloki Mission Hospital, 1988

Mission Hospital was the purchase of a new 4-wheel-drive Isuzu vehicle for primary health care work. It was valued at US $10,600. Even then, a number of capital projects were completed in 1988. For example, the remodelling of the Out-patient Department was completed and the painting of the hospital buildings done.[70]

It is worthwhile to note that of all the missionary agencies, the MMN continued to be the largest missionary donor. For instance, the agency sent on a regular basis, large quantities of supplies that included food, medicine, clothes, and many other useful items for the hospital. In 1996, the MMN also assisted in the subsidy of medicines purchased from overseas for Chitokoloki.[71]

Another organisation that invaluably supported medical services was ACCTS. The hospital's 1996 report indicated that in 1994 and 1995, two surgical and medical supplies containers from Canada arrived. The kindness and interest by both individuals and churches overseas, according to Hanna, had greatly assisted in the provision of medical supplies and other goods for the benefit of the people in the area.[72] The hospital's Annual Report of 1996 showed that:

> ACCTS continued supplying the hospital with large quantities of medicine, food, and equipment. It also facilitated in the shipping of the supplies for the new energy project, converting the hospital to 24 hour power backed by solar panels and a large battery bank.[73]

The Christian Medical Association of Zambia (CMAZ), a local agency, also provided a large quantity of laboratory reagents along with other drugs and supplies at Chitokoloki Mission Hospital. Apart from that, several agencies such as MSC of Canada continued to send regular supplies of antibiotics and other essential medicine.[74] In the same year of 1996, a large donation of drugs was received from NOVAPHAM, a Canadian based organisation. This gesture substantially decreased the hospital's supposedly drug cost and made better treatment for the patients.[75]

Chitokoloki Mission Hospital also attracted individual interest and contributions towards the health service delivery. One such individual was Dr Elder Martin, based in Toronto, who sent

[70] Annual Report, Chitokoloki Mission Hospital, 1988.
[71] Annual Report, Chitokoloki Mission Hospital, 1996.
[72] Interview Hanna, Chitokoloki Mission Hospital, 16 January, 2019.
[73] Annual Report, Chitokoloki Mission Hospital, 2012.
[74] Annual Report, Chitokoloki Mission Hospital, 1996.
[75] Annual Report, Chitokoloki Mission Hospital, 1996.

parcels of medicines to the hospital. The gifts of drugs worth £7,500 were received from him in the course of 1996.[76] In the same year, the Echoes of Service International had financially impacted Chitokoloki Mission Hospital in many ways. It was stated by Burness that all the early workers at the hospital were served by the organisation.[77] In 1999, the MMN and ACCTS continued to be the largest suppliers and donors of goods. These agencies did so regularly. Hence, the MMN, ACCTS, EOS and many other missionary agencies, continued to be long term stakeholders of the medical ministry at Chitokoloki.

Chitokoloki Mission Hospital continued to receive much needed financial support and other donations in the 2000s. For example, the Financial Annual Report of 2007 indicated that towards the end of the year, a donation worth K234,530,129 was made to the hospital by a donor in the USA for a specific project related to the Leprosy Colony. Even so, by the end of the year, only K85,105,750 had been spent from the total amount received.[78] As in the previous years, Chitokoloki Mission Hospital received little in cash donations for the running costs of the hospital. The Mission was, however, equipped with quantities of medical supplies, food and other items donated from various organisations.

According to the 2011 Hospital Annual Report, similar trends of financial support from various charitable and missionary agencies continued. Nevertheless, there was a remarkable reduction in the cash flow as few cash donations were received for the running costs of the hospital. Apart from the long-time partners like Echoes of Service, MMN and ACCTS, there were also other organisations that offered support especially in the quest to fight malaria at Chitokoloki Mission Hospital. These were the Society for Family Health, the United Nations International Children's Emergency Fund (UNICEF) and the National Malaria Control Centre.[79]

At Chitokoloki Mission Hospital, there were divergent views on who sponsored the expatriate missionary medical personnel. Some missionaries maintained that their work was purely on voluntary basis and only lived by faith. This meant that they were not entitled to receiving monthly salaries. While others like Ian Burness, a former Chitokoloki Mission

[76] Annual Report, Chitokoloki Mission Hospital, 1996.
[77] Personal communication with Burness through an e-mail, 12 May, 2019.
[78] Annual Report, Chitokoloki Mission Hospital, 2007.
[79] Annual Report, Chitokoloki Mission Hospital, 2011.

Hospital Surgeon admitted that the financial part was not a problem to the expatriates as all was well cared for by their home based churches.[80]

According to the Echoes Trustees' Report and Financial Statement for the year ended 31 December 2013, the gifts which were already allocated for mission workers were transmitted directly to their accounts on a monthly basis. In addition, monthly allocations employing an index that took into account marital status, size of family and cost of living in their country of work were made to the mission workers.[81] The report further disclosed that Chitokoloki Mission Hospital was among the 50 largest grant-aided institutions in the world during the year. For example, the hospital received £16,296 and £30,243 grants in 2012 and 2013, respectively making the institution to be among the highest top 10 funded by the organisation.[82] This evidence resonated with the view by a section of some missionaries who admitted that Chitokoloki Mission Hospital was well financed.

2.4.2 Government Efforts

One of the critical social amenities under which various governments invested huge sums of money was the health sector. In most parts of Africa, governments showed concern and gave financial support towards the hospitals which were run by the missionaries. In 1928, for instance, the Government of Southern Rhodesia decided to give grants for the first time to missionary societies engaged in medical work among Africans.[83] In the same way during the colonial era, the Northern Rhodesian Government also made strides to support Chitokoloki Mission Hospital in the 1940s, especially when the place was officially declared a Leprosarium. Various building projects at the colony were financed by the colonial Government as it was shown earlier.

According to a survey undertaken by Wood on 42 mission hospitals in 15 Sub-Saharan countries during a conference in Kenya in 1990, only three governments (Zambia, Zimbabwe, and Swaziland) provided substantial help to mission hospitals.[84] Therefore, in the quest by successive Zambian Governments to ensure that the health sector reached at least the acceptable standard in rural areas, several strides were made in order to enhance the medical

[80] Interview with Dr Ian Burness, UK, personal communication, e-mail, 12 June, 2019.
[81] EOS, https://www.echoesofserviceApps.charitycommission.gov.uk/accounts/end56. Accessed on 10 July, 2019.
[82] EOS, Accessed on 10 July, 2019.
[83] Zvobgo, Medical Missions, pp. 109-118.
[84] Philip B. Wood, 'Mission Hospitals in Africa: What's Their Future?' http:/missio Nexus.org (retrieved on 10.12. 2018).

provisions. This included the mission hospitals in rural areas and Chitokoloki was not an exception. At Chitokoloki Mission Hospital, for example, the Zambian Government offered financial assistance to the hospital work and by 1968, the UNIP Government, through the Ministry of Health, supplied all drugs and instruments free of charge. The authorities also made possible the purchase of up-to-date laboratory equipment, as well as the 45, 000 litre water tower in 1968.[85] Kabwita further confirmed that:

> After independence, the Government of Zambia responded by showing concern towards the welfare of the people in the rural areas. For example, in the 1970s and 1980s, Chitokoloki Mission Hospital received a fair share by receiving some donations such as blankets, beddings and medicine.[86]

In the quest to improve health care in most of the rural areas, Government had continued working in partnership with the missionaries. To this effect, many workers who were initially employed by the missionaries and had qualifications were on government payroll. Hence the hospital continued receiving Government sponsored workers.[87] Not only that, Chitokoloki Mission Hospital as an institution, was an affiliate of the Churches Health Association of Zambia (CHAZ) and from time to time the hospital received both material and financial support from the Organisation. Other forms of support were that of sending of staff to the hospital and inspections to meet the required standards.[88]

Furthermore, according to the income and expenditure of August 1986, Chitokoloki Mission Hospital had a total grant amounting to K457,397.15 from the Ministry of Health of which K1,500.00 was capital grant. This represented a 0.33% of the total grant and enabled some projects to be completed. Among some of the projects was the relocation of the pharmacy from the "old hospital" to *Kariba* Hospital and the installation of a dispensing window.[89]

Another organisation that partnered with Chitokoloki Mission Hospital was the Christian Medical Association of Zambia (CMAZ). Burness indicated that out of these government grants channelled through CMAZ, the costs for most of the Zambian staff were covered.[90] Other donations by the Organisation in the Annual Report of 1999 reflected that:

[85] Annual Report, Chitokoloki Mission Hospital, 1968.
[86] Interview with Kabwita, Chitokoloki Mission Hospital, Zambezi, 16 January, 2019.
[87] Interview with Hanna, Chitokoloki Mission Hospital, 16 January, 2019.
[88] Interview with Hanna, Chitokoloki Mission Hospital, 16 January, 2019.
[89] Annual Report, Chitokoloki Mission Hospital, 1986.
[90] Ian Burness, personal communication, UK, e-mail, 20 June, 2019.

> We [Chitokoloki] appreciate the assistance of CMAZ, as it was through that office that we received donations of rabies vaccine, wheat flour, milk powder, butter oil as well as a variety of drugs.[91]

The donation by CMAZ substantially helped the hospital. Although in the latter years, inconsistence was the order of the day, making it difficult for some workers to be paid especially those whose salaries were under some charitable organisations.[92]

The post-colonial government continued showing a sound political will to support health services at Chitokoloki Mission Hospital. In 1973, for example, the Zambian Government donated a $100,000 which facilitated the opening of a 48-bed wing known as *Kariba*. This brought the number of beds available for in-patients to 150. However, bed facilities remained scarce since, at times, the hospital served a large number of patients. For this reason, it was noted also that Bud MacDougall, a CMML missionary from Kenya, arrived to commence building the additions to the hospital in 1990.[93]

In order to maintain cordial relations between the Government and the missionaries, distinguished Government dignitaries had visited Chitokoloki Mission Hospital at different times. Dr Kenneth Kaunda, for example, visited the hospital twice in 1972 and in 1974.[94] During the first visit, it was reported that Kaunda went to Mpidi to see the farming activities and then passed through Chitokoloki to monitor developmental projects. Jill Ngangula also stated that the Head of State was on a familiarisation tour and wanted to see how the Hospital was performing.[95] Generally, Chitokoloki Mission Hospital was one of the rural hospitals in North-Western Province that attracted the attention of top government officials not for political expedience but for monitoring the Government financed developmental projects.

It is also important to note that on the medical front the CMML, especially at Chitokoloki Mission Hospital, filled an important gap for the Zambian Government. The 2012 List of Health Facilities in Zambia-Preliminary Report showed that "if Brethren Missions were to pull out today, North-Western Province would lose over half of their tuberculosis testing sites, X-ray machines, and operating theatres."[96] This was an indication that Chitokoloki

[91] Annual Report, Chitokoloki Mission Hospital, 1987.
[92] Annual Report, Chitokoloki Mission Hospital, 1999.
[93] Ian Burness, personal communication, UK, e-mail, 20 June, 2019.
[94] Interview with Kabwita Charles, Chitokoloki Mission Hospital, 16 January, 2019.
[95] Interview with Jill Ngangula, Chitokoloki Mission Hospital, 16 January, 2019.
[96] Health Facilities in North-Western Province, The 2012 List of Health Facilities in Zambia-Preliminary Report (Draft No. 15) Lusaka, Zambia, p. 177-197.

Mission Hospital, just as many other missions in the region, played an integral role in the provisions of health services.

It was further established that several other distinguished Government officials visited Chitokoloki Mission Hospital. One such example was that of Zambezi Member of Parliament (MP) Roy K. Saviye in 2001. He even made some contributions towards the hospital. Saviye's effort towards the betterment of the hospital was evidenced in a letter addressed to him by the hospital administration dated 19 April, 2001 which read in part:

> …we would like to extend to you and through you to the Government, our most thanks for the very kind and generous gift of 200 blankets that were delivered and presented to us [Chitokoloki] by the Zambezi District Administrator Mr Majomba….[97]

The aforementioned gesture by the former MP demonstrated how various individuals from the government supported Chitokoloki Mission Hospital.

In 2014, Chitokoloki Mission remarkably commemorated the hundred years of its existence. For that reason, numerous missionaries, both local and overseas based, convened to celebrate the event. The centenary celebration of Chitokoloki Mission took place on 16 May 2014.The event attracted people from all walks of life and was attended by high profile Government officials. One such political figure was the then Vice President, Dr Guy Scott, who was the Guest of Honour. Hanna reminisced that:

> The Vice President, Dr. Guy Scott and his entourage arrived by helicopter at around 9:20 a.m. and prior to that many others had arrived by road. Chitokoloki has never seen so many vehicles, police, dignitaries, planes, helicopters and activity in its 100 years. For many of the local people this was the biggest event here at Chitokoloki in its entire history.[98]

In light of the above findings, it can be deduced that there had been concerted effort by the Government of the Republic of Zambia towards appreciating the health services provided at Chitokoloki Mission Hospital. The celebration to mark the 100 years of existence, as a

[97] Chitokoloki Mission Hospital, Letter written by Gordon Hanna, Administrator to Honourable Saviye on 19 April, 2001.
[98] Interview with Hanna, Chitokoloki Mission Hospital, 17 January, 2019.

mission, was simply to remind the masses about the contributions made, successes scored and challenges that the CMML at Chitokoloki had encountered during its existence.

2.5 Human Resource and Working Conditions

2.5.1 Expatriates

The credibility of missionary hospitals depended on many factors such as the availability and competence of human resources. However, some mission hospitals in Africa lacked trained medical expertise who could offer reliable services to the people. In colonial Zimbabwe, for example, Zvobgo indicated that "…at some mission stations where a trained doctor was not available, some missionaries practised as amateur doctors."[99] This was a similar scenario at Chitokoloki Mission Hospital as it suffered a shortfall of trained doctors in its formative years, especially between 1914 and 1930. Those who went to Chitokoloki earlier were mere missionaries who lacked medical proficiency. For example, Thomas Hansen, John Rodgers and Stanley Coad joined Chitokoloki Mission between1920 and 1925 and none of them was a trained medical personnel.[100]

Other missionaries who served at Chitokoloki Mission Hospital by 1920, were Douglas Hume and Ada Hilton, a nurse, who later got married to Henry Faulkner. Davy also arrived in 1923 and Miss C. Saunders in 1924. They married the following year and it was believed that they later went to serve in Nigeria.[101]

In 1930, the Mission received James and Norah Caldwell who were very much involved in electrical engineering, school expansion, village evangelism and radio broadcasting to reach the masses with the gospel for many years.[102] In 1945, they moved to the Copperbelt. After Suckling died from a liver disorder in 1952, in a Livingstone Hospital, Cardwell returned to Chitokoloki in 1955 to continue the radio ministry.[103] The radio ministry was a useful tool that early missionaries at Chitokoloki used to evangelise both to the patients and their relatives who escorted them. Nevertheless, the only limitation was that radios were scarce in

[99] Zvobgo, Medical Missions, pp. 109-118.
[100] Turnbull, *Chitokoloki*, p.143. *See also* personal communication with Ian Burness, 2 April, 2020. He noted that there was in those days a Missionary Training School in East London which provided some basic training on Health, First Aid, Pharmacy, common Disease and others. Most missionaries from the U.K would have completed this before they went to Africa.
[101] Mutenda, *A History of the Christian Brethren*, p.51
[102] Mutenda, *A History of the Christian Brethren in Zambia*, p.51.
[103] Turnbull, *Chitokoloki*, p.143.

those early days and the frequency was bad. So, very few people, except those who were admitted to the hospital, could listen to the programmes.[104]

Theodore Deubler, a dental surgeon, also went to Chitokoloki in 1936. It was recorded that Deubler, travelled extensively into the most remote areas around Chitokoloki doing dental work. He was one of the first dentists who went to Chitokoloki and worked in the Department from 1936 to 1970.[105] In the year 1970, Deubler died at Chitokoloki and the Epitaph reads, "Life's work-well done, life's race-well run; life's crown-well won."[106] He was remembered, according to Ngangula, for the special ability that he had in terms of dental operations.[107]

In addition, Dr James Threshie Worsfold joined Chitokoloki Mission Hospital in 1947, having been recommended by Christian Assemblies in New Zealand. Burness indicated that Worsfold first travelled to London, England where he enrolled in a Tropical Medicine course. Later on Worsfold went to Glasgow, Scotland where he completed his medical training in 1940.[108] While at Chitokoloki Mission, Dr. Worsfold directed and supervised a Leper Settlement. Worsfold married Hilda Seccombe, a trained nursing sister, on 7 July, 1949. She assisted her husband with surgical operations and other general hospital activities.[109] In terms of the human resource at Chitokoloki Mission, the hospital's Annual Report of 1949 showed that there were 10 expatriates at the station.[110]

More notable was that in 1951, Dr Worsfold spent three months at the Leprosy Research Unit in the Nigerian Leprosy Service and was able to acquaint himself with the latest developments in that field. As a result, in 1966, the Government of the Republic of Zambia recognised and appointed Dr. Worsfold as the "Government Leprologist" for the North-Western Province of Zambia.[111] It was noted that the appointment ushered and took Dr. Worsfold into many journeys throughout the country. Several informants at Chitokoloki narrated how skilful and talented Dr Worsfold was, especially where the treatment of the leprosy scourge was concerned. Chinyama Kafwale stated that of them all, Dr Worsfold

[104] Interview with Jill Ngangula, Chitokoloki, 16 March, 2019.

[105] N.A.Z, MH1/2/62, Development and Welfare Schemes: Rural Hospitals and Dispensaries, Annual Report, 12 May, 1948.
[106] Inscriptions at the Grave of Duebler, Chitokoloki Mission Cemetery, recorded on 16 March, 2019.
[107] Interview with Jill Ngangula, Chitokoloki, 16 March, 2019.
[108] Ian Burness, UK, e-mail received on 12 June, 2019. He also added that Worsfold did his research on the incidence of leprosy in North-Western Zambia.
[109] N.A.Z., MH1/2/64, Christian Mission in Many Lands; Chitokoloki Leprosy Settlement: General. Annual Report, 8 August, 1949.
[110] N.A.Z.,MH1/02/62, Development and Welfare Schemes; Rural Hospitals and Dispensation, 12 May, 1948.
[111] N.A.Z.,MH1/03/64, Balovale Medical Officer's Annual Report, 16 October 1952.

contributed immensely towards the development of the hospital.[112] Doctor Worsfold as a result earned himself a Luvale name "*Samangana*" which means "*Father of wisdom*."[113] He was indeed, in the words of many old residents, a medical genius and the messiah of the time.

In addition, some local people remembered how Dr Worsfold could conduct successful operations under a mango tree within the shortest period of time. In other words, Worsfold was one of the missionaries at Chitokoloki who spearheaded the building of the leper colony and other infrastructure at the hospital. To confirm the expertise that Dr Worsfold exhibited, the tour report by a leprosy specialist in 1970 recorded that:

> Chitokoloki Settlement is the only mission leprosy Settlement in Zambia with a highly qualified doctor with 24 years of experience in leprosy. Dr. Worsfold was named the consulting leprologist for the North-Western Province…[114]

There is no shadow of doubt that Worsfold immensely developed the medical work at Chitokoloki Mission Hospital until he left Zambia to his home country, New Zealand in 1977. He died at the age of 92 in Kerikeri, New Zealand on Thursday, July, 2005.[115]

After three years of Zambia's independence, Gillian Harris and Marie Conder joined Chitokoloki Mission Hospital. In terms of medical qualifications, Harris was a registered nurse from England while Conder was a trained lab technician. Turnbull recorded that Conder helped at the general hospital and at the leper colony.[116] This was a relief to Dr Worsfold who, initially, was the only specialist in treating leprosy patients.

In 1972, there were also other missionaries who joined Chitokoloki Mission Hospital. For example, Norman Gibson from New Zealand joined the Mission. She was a midwife and worked in maternity with Gill Maunsell. The latter headed clinics for expectant mothers while the former attended to children under five on a weekly basis. Gibson worked at Chitokoloki up to 1985. Others were Wilma Palmer from Northern Ireland who was involved at the leprosarium section up to 1987. Christopher Aman assumed supervisory activities at the colony after the departure of Miss Palmer in May 1987. According to the hospital's

[112] Interview with Chinyama Kafwale, Chitokoloki, 23 January, 2019.
[113] Interview, with Jill Ngangula, Chitokoloki, 16 January, 2019.
[114] N.A.Z., MH1/ 03/ 143, Leprologist Tour Reports, Leprosy Specialist Tour Report, 18 August, 1970.
[115] Email by Sefton Marshal, Operation Director for Global Connections in Missions, New Zealand, 19 June, 2019.
[116] Turnbull, *Chitokoloki*, p. 146.

Annual Report of 1986, Dr. Karen McClean from Canada supervised the medical and surgical work throughout the year.[117]

One of the medical practitioners reported to have immensely contributed to the medicinal ministry at Chitokoloki Mission was Jim Rennie. Dr Jim Rennie went to Chitokoloki Mission Hospital in 1973 and did hospital ministry, Sunday school, clubs, camps and religious instruction classes in the primary school until he moved to Kalene Mission and then to Canada in 1985. According to many informants, Dr Rennie was given a local name, *Chimwanga* meaning the one who would "wipe out diseases."[118] It was Dr Rennie who was left by Dr Worsfold as a resident doctor.

Besides, in 1974 Laurie Meers from Australia, a laboratory technician came to Chitokoloki Mission Hospital. It was reported that Meers provided the useful services at the hospital until 1988. According to the Echoes of Service Report, Vivian Ewart, a nurse and a former professor of nursing at the University of Toronto served at Chitokoloki Mission Hospital and did evangelistic outreach. Unfortunately, Vivian Ewart left in 1984 due to ill health and died in 1985.[119]

A qualified medical specialist in obstetrics and gynaecology, Dr. Ian Burness, came to Zambia from the United Kingdom (UK) and officially went to Chitokoloki Mission Hospital in April 1979. He worked with Dr Rennie from 1979 until 1981.[120] Burness could remember his workmates at the Mission and noted that:

> Expatriate personnel at Chitokoloki Mission were Dr Jim Rennie, his wife Kathy (nurse), Lawrie Mears (Laboratory Technician) and his wife Elaine Mears (nurse), Bill and Gillian Maunsell, Ron Locklear (Lab technician and maintenance), Beryl Scrimgeour (senior nurse), Norma Gibson (Midwife), Wilma Palmer, and Vivian Ewart (nurse).[121]

[117] Annual Report, Chitokoloki Mission Hospital, 1986.
[118] Interview with Jill Ngangula, Chitokoloki Mission Hospital, 16 January, 2019.
[119] Echoes of Service News, a mission service agency based in Bath, England, Accessed 9March, 2019.
[120] Ian Burness, personal communication with Dr Burness through an E-Email, who served at Chitokoloki Mission Hospital from 1979 to 1981.Later on moved to Chavuma Mission Hospital where he worked from 1981until 1990. He was trained at the University of Aberdeen, and graduated in 1974, MB ChB. He is based in UK. He became a Member of the Royal College of Physicians (MRCP) and also of the Royal College of General Practitioners (MRCGP). Mail Received on 12 March, 2019
[121] Burness, personal communication, e-mail, 12 June, 2019.

The above submission demonstrated that Chitokoloki Mission Hospital had at least some expatriate personnel at any given time that helped in the running of the institution since its inception.

In 1980, Heather Budge also went to Chitokoloki Mission Hospital. Thereafter, she became a hospital administrator. When Heather got married to Robert Harries in 1990, Gordon Hanna took over the administrative work. Thereafter, she concentrated on teaching Religious Education, running the Emmaus correspondence course as well as running the book room.[122] According to the available evidence Heather did not specialise in any of the medical work.

In 1986, Gordon Hanna, the current Chief Missionary Administrator, joined the mission and had helped in the expansion of the hospital in many spheres.[123] However, there are contrasting views behind mission establishments in Africa. Some scholars, like Ado Tiberondwa and Walter Rodney, in their separate accounts, contended that missionaries were active agents and the harbingers of colonialism on which capitalism thrived.[124] However, Hannah maintained that the CMML at Chitokoloki, were motivated by what Christ Jesus mandated the disciples to go to the whole world and preach the gospel. Therefore, the mission's existence and all the medical services offered at the hospital were purely for evangelistic purposes. To support his argument, the missionary commented that he left a lucrative job in one of the biggest companies in Canada and decided to come to Africa, particularly in the rural Zambia at Chitokoloki Mission Hospital to offer a service.[125] However, to be a missionary administrator meant that Hanna was involved in most of the activities at the Mission and ensured the continuity of the health service delivery.

According to various Chitokoloki Mission Hospital Annual Reports, many other missionaries went to Chitokoloki in the 1980s and 1990s. For example, Loretta Severin, a physiotherapist from the United States of America (U.S.A) was at the mission hospital from 1982 to 1990. In addition, Dr Barbara Oolman worked at the hospital from 1983 to 1987, and Dorothy Woodside joined in 1991among many others.[126]

[122] Heather Budge, personal communication, based in Canada, e-mail received on 8 July, 2019.
[123] Interview with Kanoka Kaposhi, worker at Chitokoloki Mission Hospital, 20 January, 2019.
[124] Ado K. Tiberondwa, *Missionary Teachers as agents of Colonialism: a Study of their Activities in Uganda, 1877-1895*, (Lusaka: Kenneth Kaunda Foundation, 1978), p.53. Walter Rodney, *How Europe Underdeveloped Africa*, (London: Bogle-L'Ouverture Publications, 1973).
[125] Interview with Hanna, Chitokoloki Mission, Zambezi, 17 January, 2019.
[126] Annual Report, Chitokoloki Mission Hospital, 1990. *See also* Annual Reports of 1996, 1997&1999.

The most recent to have joined Chitokoloki Mission Hospital was Dr. David McAdam. He was described by many informants as an excellent surgeon, who came to Chitokoloki from Congo DR in 1990. He then, because of political turmoil in the Congo, moved across to Kitwe in Zambia and then to the hospital at Chitokoloki in 2000. Dr. McAdam was highly spoken of throughout the province for his medical and surgical expertise. Some informants like Ngangula "celebrated" the political turbulence that took place in Congo and considered it to be a blessing in disguise.[127] Furthermore, the report indicated that during 1999 the medical personnel changed considerably with the addition of several trained staff and the arrival of Dr. McAdam.[128]

Dr McAdam, who hailed from Ireland, led the medical team as he was the only resident doctor by 1999. He was assisted, however, at various times during the year, by visiting surgeons and other specialist doctors. Among them were Dr. Rodney Strahan, a radiologist from Australia, and Dr. Desmond Norris from Canada, contributing considerably to the medical work by their annual visits. Hanna stated that:

> Dr Rodney Strahan was licensed to work at the hospital and had been coming for 16 years consistently. Dr Strahan tremendously helped in setting up a digital X-ray, ultrasound department. The mission also had a very good internet set up probably better than the vast majority of hospitals in Zambia.[129]

Others who joined the Mission Hospital in the 2000s were Tanis Walker, Julie Rachael Elwood and Christina Gagnon. Hanna commented that from time to time, other trained medical specialists also dedicated a few weeks to the work at Chitokoloki and the Hospital had a network of doctors. The Hospital attracted the interest of many countries all over the world such as Australia, New Zealand, UK and Canada.[130] Otherwise, the usual medical staff at the Hospital could not attend to all the needs of the large number of patients who required attention.

According to the annual hospital's report of 1999, the institution had the most active surgery department in North-Western Province, averaging 300 major operations a year. As a result, Chitokoloki Mission Hospital was ranked by the Ministry of Health as one of the busiest and

[127] Interview with Jill Ngangula, Chitokoloki, Zambezi, 16 January, 2019.
[128] Annual Report, Chitokoloki Mission Hospital, 1999.
[129] Interview with Hanna, Chitokoloki, Zambezi, 16 January, 2019.
[130] Interview with Hanna, Chitokoloki, Zambezi, 16 January, 2019.

largest missionary hospitals in rural Zambia and remained a lighthouse for the needy people throughout Zambia.[131] Many reports showed that most of the patients who went to Chitokoloki were from various parts of Zambia including neighbouring countries like Angola and Congo DR.

2.5.2 Contributions of African Workers at Chitokoloki Mission Hospital

The Missionaries at Chitokoloki Mission Hospital recognised the roles played by the Africans in different capacities. Some of them worked as auxiliaries, untrained nurses, office orderlies, clinical officers and administrators. From the very beginning, the missionaries had employed quite a number of local men and women. Most of them worked at the hospital until they retired. Burness reminisced that:

> Most of the Zambian staff in those days were working as dressers who were locally trained. They [Africans] were not of course recognised by the government, but provided a valuable resource. There were kitchen staff, cleaning staff, Lab technicians, etc.[132]

In the early years, most of the African workers were locally trained by the missionaries in order to increase their knowledge and ability. It was the missionaries who also determined the monthly wages for the African workers. According to Burness, it was evidenced that most of the Africans were of good quality and they worked until they retired.[133]

The above narrative clearly confirms the argument that in terms of the development of Chitokoloki Mission Hospital, most of the people who helped to build the hospital were the local people. Among the first African workers were Thomas Chinyama, Moses Sakavungu, Kaputungu Sang'ambo, and Samukonga Mwondela. These accompanied Suckling from Mwinilunga when they went to establish the Mission. Kafwale noted that these were the front runners who helped in the establishment of Chitokoloki Mission. Suckling also found among others headmen Moono Kaumba, Mayeng'u, and Ntengu.[134]

[131] Annual Report, Chitokoloki Mission Hospital, 1999.
[132] Ian Burness, personal communication, UK, e-mail, 12June, 2019.
[133] Burness, personal communication, UK, e- mail, 12 June, 2019.
[134] Interview with Kafwale, Chitokoloki, Zambezi, 20 January , 2019

Aaron Makayi was also among other Africans who were employed and brought by Suckling at Chitokoloki Mission. Makayi worked as a cook until his resignation in 1942.[135] In other words, African workers at the mission hospital were not mere recipients of whatever came in their way but rather they too had higher expectations from the missionaries in terms of the conditions of services. This scenario clearly explains that African workers at Chitokoloki did not accept any form of exploitation in exchange for future security.

After the resignation, some local people would leave Chitokoloki area while others stayed and embarked on various personal businesses. For example, when Aaron Makayi left his job as a cook at the hospital in 1942, he opened two shops and one bakery at his residence. The two shops included a liquor store which he obtained under a liquor license issued to him by the colonial government in the Balovale District.[136] The Ministry of Health Annual Report for May 1946 also showed that Makayi of Tengu Village in Chitokoloki was among the 35 general dealers' shops inspected by the colonial government.[137]

Robson Kaposhi was also among the earliest Africans to have worked with Suckling in the 1940s. Kaposhi managed the mission post office, the book room, and *Chisheti* "food store". He was also involved in the purchase of food for the patients. Other duties for Kaposhi included assisting in carpentry and teaching. Kaposhi further stated that he traversed with Suckling to Kabompo and neighbouring villages as an African evangelist.[138]

Another African worker at Chitokoloki Mission Hospital was David Kapalu Sefu. Sefu worked with Amos Chiseya, Arnot Kasweya and Tom Samakayi, whom he admitted were his seniors. His working at the hospital was in two phases. The first one was in August 1957 as an untrained officer but later "voted with his foot" because the salary was little. He disclosed that his pay was pegged at £2.5s per month.[139]

David Sefu thereafter, went to Balovale Hospital where he joined the government hospital and trained as a clinical officer. The wages for African workers were also confirmed by Sefu.

[135] Statement of the Makayi Family: On Mr Aaron Makayi; Patriarch, Sakazawu Village, Chitokoloki Zambezi, North Western Province, Zambia submitted to His Royal Highness Chief Ishima Sankeni VI ,03/02/2019.
[136] Case of the Makayi Family over Sakazawu Village, 3 February, 2019.
[137] N.A.Z., MH1/02/62, Development and Welfare Schemes, Rural Hospitals and Dispensaries Annual Report, Balovale Hospital and Kabompo District, 23 May, 1946.
[138] Phone Interview with Robson Kaposhi, Chitokoloki, Zambezi, 12 July, 2019.
[139] Phone interview with David Kapalu Sefu, based in Kabompo District, 17, May, 2019. He worked at Chitokoloki Mission Hospital in 1947. Later on, Sefu was called back for work at the Hospital in 2007 as a Clinical Officer until 2013 when he retired and settled in Kabompo.

For example, the letter addressed to the accountant in the Department of Medical Services indicated the monthly wages paid to African staff as follows:

Table 2: African Monthly Wages by 1947

Position	Name	Amount
Orderly	Samulinga Chilila	£2.5s
Orderly	Salucy Mwondela	£1.0s
Orderly	Tom Samakayi	£1.0s
Orderly	Arnot Kasehela	£1.5s
Midwife	Nyamanasa	£1.5s

Source: N.A.Z.,MH1/02/064, Christian Missions in Many Lands-CMML, Chitokoloki Leprosy Settlement: General, 20 November, 1947.

The African workers' emoluments were considerably low and the Ministry of Health report did not show, for comparative sake, how much other untrained western missionaries received. However, there was a slight adjustment in terms of the wages for the African workers. It was observed that the highest paid African worker received £4.5s per month. According to the Annual Medical Returns of 1949 below, it showed the positions held by various African workers and their wages.

Table 3: African Workers and Monthly Wages in 1949

African	Position	Wages per Month
Samulinga Chilila	Head Orderly	£4.5s
Arnot Kasehela	Microscopist	£2.17s.6d
Salucy Mwondela	Orderly	£1.15s
Tom Samakayi	Orderly	£2.15s
Muyanji Chingungu	Midwife	£1.0s

Source: N.A.Z., MH1/3/38, Christian Mission in Many Lands; Chitokoloki Mission Hospital Annual Medical Returns-1949.

In 1952, it was established that Salucy Mwondela, Zakeyo Sangambo, Jonas Chiyesu and Muyanji Chingangu were among the Africans who were still working at the hospital.[140] It was not until 1955 when Samulinga who had worked for 16 years that his wages were adjusted upwards from £4.5s to £9.5s. This was contained in the hospital's annual report of 1955 as illustrated in table below.

Table 4: African Workers Monthly Wages- 1955

African	**Position**	**Years Served**	**Monthly Salary**
Samulinga Chilila	Head Orderly	16 years	£9:5s
Arnot Kasehela	Microscopist	6	£5:5s
Zakeo Sangambo	Orderly	6	£4:5s
Jonas Chiyesu	Orderly	6	£3:5s
Edward Kamwanga	Orderly	3	£3:5s
Muyanji Chingungu	Orderly	14	£2:5s

Source: N.A.Z., Chitokoloki Mission Hospital, 1955.

The reason some African workers like David Sefu resigned, emanated from the low positions and income that most of the Africans were subjected to as shown in the table above. Sefu only re-joined Chitokoloki Mission Hospital with the wife who worked at the hospital as midwife in 2007.[141]

Charles Kabwita, born in 1947, started work at Chitokoloki Mission Hospital in 1973. Gordon acknowledged that "Charles Kabwita, for example, has been working at the hospital

[140] N.A.Z.,MH1/02/66, Christian Mission in Many Lands: Chitokoloki Mission Balovale, Annual Report 6 February, 1952.
[141] Phone interview David Kapalu Sefu, Kabompo district, 17 March, 2019.

for 41 years"[142]. He worked together with Roma Luvuwa, Paul Chingelesu and Edwin Chiwaya. Kabwita narrated that in colonial Zambia, there were no government workers at the hospital. Therefore, the local people were employed and worked without undergoing any professional training except "learning by doing".[143] The African workers were initially employed on permanent basis but after sometime contracts were introduced.

Despite not undergoing any medical training, local people played a major role in sustaining Chitokoloki Mission Hospital through job on training. Later, most of them had become the most experienced as they learnt hands on. Charles Kabwita narrated that "we were given books to study and in the absence of a doctor, a matron would come to test our understanding by practising on the patients".[144]

The first African worker to become a hospital administrator at Chitokoloki Mission Hospital was David Katota. Katota received his certificate in Hospital Administration in 1980, and since that time, he had been responsible for the day-to-day control, management, and co-ordination of common services, catering, supplies, security, and dealing with many government issues.[145] The hospital's 1999 Annual Report showed that Katota was appointed Assistant Administrator and assisted in the smooth running of the hospital.[146] Furthermore, the 2013 annual report indicated that David Katota continued in his excellent work as Assistant Administrator. He was capable of dealing with staff issues and many complex matters that arose while not only doing the work of an administrator but also many other programmes that kept the hospital functioning.[147]

In the 1980s, several local people had continued working at the hospital and among these were Jill Ngangula. She worked almost in all the departments such as X-ray, theatre and Out Patient Department (OPD). Ngangula was also at one point in charge of the midwifery department at the old hospital.[148] The hospital continued training the local people to help in the running of the hospital. For example, nine new employees were accepted for job on

[142] Interview with Hanna, Chitokoloki Mission Hospital, 17 January, 2019.
[143] Interview with Kabwita, Chitokoloki Mission, Zambezi, 16 January, 2019.
[144] Interview with Kabwita, Chitokoloki Mission, 16 January 2019.
[145] Interview with Katota David, Chitokoloki Mission Hospital, 23, 2019.
[146] Annual Report, Chitokoloki Mission Hospital, 1999.
[147] Annual Report, Chitokoloki Mission Hospital, 2013.
[148] Interview with Jill Ngangula, Chitokoloki, 16 January, 2019.

training beginning in January 1991.[149] Afterwards, most of those African workers became potential dressers, maternity nurses and cleaners.

An organisation such as a missionary hospital was only as good as the staff that ran it. This was certainly true for Chitokoloki Mission Hospital. This was not only in the medical work, but with the maintenance staff as well. Justin Masachi was one of the local staff who contributed immensely to the development of the hospital for he was not only capable but also dependable.[150] He was described as a hard working employee willing to do extra work whenever the need arose. Masachi started work for the Mission in 1986 and developed much of his knowledge to learn several skills such as electrical, mechanics, and welding. He was also the main driver of the mission trucks. Hanna confirmed that "Masachi is relied on in so many ways because the logistics of keeping a place as complex as Chitokoloki Mission in good working order was hugely unpredictable and needed a man such as him."[151]

The role that African workers played at Chitokoloki Mission could not be overemphasised and many of those individuals were still in the minds of many missionaries who retired and left the Mission. Burness remembered that he worked with several African workers such as Reuben Mutondo, Peter Hayindi, Jill Ngangula and Charles Kabwita among others. It could be deduced that in almost each department of the hospital, African workers were of necessity and contributed immeasurably in the running of the hospital.[152]

The hospital's Annual Report of 1986 also indicated that the government-sponsored medical personnel were recruited. For example, Patrick Munjunga, a Laboratory Assistant, joined in May, 1986 after he completed his two year course at Chikankata Salvation Army Mission Hospital. Chola Makabe, a Health Assistant, also joined Chitokoloki Mission Hospital in June. In general, by 1986, December 31, the hospital was staffed as shown below.

[149] Annual Report, Chitokoloki Mission Hospital, 1990.
[150] Interview with Hanna, Chitokoloki Mission Hospital, 17 January, 2019.
[151] Interview with Hanna, Chitokoloki Mission Hospital, 17 January, 2019.
[152] Burness, personal communication, E-mail received on 12 June, 2019.

Table 5: Staffing at Chitokoloki Mission Hospital -1986

Position	Actual Staff	Establishment
Medical Officer	2	2
SRN/SCM	1	2
SRN (BSCN)	3	4
Laboratory Technician	1	1
Pharmacist	1	0
Health Assistant (Seconded)	1	-
Laboratory Assistant	1	0
Dressers	12	12
Zambia Enrolled Nurses (Z.E.N)	3	1
Z.E.N. (Seconded)	5	-
Certified Daily Employee (CDE)	38	38
Clinical Assistant	3	0

Source: Annual Report, Chitokoloki Mission Hospital 1986.

From the above statistics, the majority of the workers at the hospital were Africans. From its inception, the hospital had never operated without the local people whose contributions were not acknowledged in the earlier accounts consulted. It was observed that almost the same scenario in terms of staffing applied according to the hospital Annual Report of 1987 except that there was one medical doctor and the other one went on leave that began in March. However, in 1988, the number of dressers rose to 15 and 5another five outdoor workers were included. By December 31, 1990, Chitokoloki Mission Hospital total staff, both Africans and expatriates, was at 65 and by 1996 the number of staff had increased up to 87.[153]

[153] Annual Report, Chitokoloki Mission Hospital, 1996, *see also* Annual Report, Chitokoloki Mission Hospital, 1987, 1988 &1990.

In 1999, the number of staff at Chitokoloki Mission Hospital considerably reduced to 73. The reason for the reduction in the number was that some of the expatriate medical officers left for their home countries and few local people resigned. However as at December 31, 2007 the total number in terms of staffing was 86. Even so, there was only one trained medical doctor, one medical licentiate, one laboratory technologist and one clinical officer among others. The statistics showed that there were 15 Africans who worked at the hospital as dressers and three others worked as clinic cleaners.[154]

The total number of workers at Chitokoloki Mission Hospital between 2011 and 2014 was 85 on average, with the majority being African workers. For example, in 2011the total medical staff was at 82 while in 2012 the number was 85. Furthermore, the hospital's annual report of 2013 showed that by 31 December, 2013, the number rose to 90.[155] During these aforementioned years, it was Dr McAdam who continued to lead the medical team and was assisted at various times by visiting surgeons and other specialist doctors.

2.6 Equipment at the Hospital

Another critical area in the effectiveness of health service delivery at the Mission Hospital was the availability and types of equipment. What distinguished Chitokoloki Mission Hospital from others was the aspect of medical equipment. In the early years, the case at Chitokoloki Mission was that the hospital did not have complicated or advanced medical equipment. However, in the 2000s, it was observed that some of the advanced equipment used in the medical operations at Chitokoloki Mission Hospital were not found anywhere in Zambia. In this regard, Hanna commented that:

> Chitokoloki Mission Hospital in Zambezi District of North-Western Province has one of the most advanced equipment for surgeries in Zambia. The success of this hospital has attracted patients from as far as Angola and the DR Congo. Some operations conducted here [Chitokoloki] are supervised by doctors based in Australia who offer advice in real time to medical personnel through the internet.[156]

[154] Annual Report, Chitokoloki Mission Hospital, 2007.
[155] Annual Report, Chitokoloki Mission Hospital, 2013, *see also* Chitokoloki Annual Reports for 2011 and 2012
[156] Interview with Hanna, Chitokoloki Mission Hospital, 16 January, 2019. *See also* Paul Monde Shalala, Chitokoloki Mission Hospital Documentary, 2 June, 2017. Newsline on the Zambia National Broadcasting Corporation Television (ZNBC TV 1) Accessed on 03/04/2019.

From the above submission, it should be noted that the advancement of technology in the world eased work at Chitokoloki Mission and that made a huge difference in health service delivery at the hospital. This type of medical advancement at the hospital was owed to some individual missionaries who made efforts to visit regularly. Examples of such missionaries were Dr Rodney Strahan based in Australia, and Dr. Desmond Norris from Canada.[157]

In 2011 for example, Dr Strahan, a Radiologist, set up a digital X-ray system when he visited Chitokoloki. Hanna Gordon reported that instead of using X-ray film and chemicals, a digital plate captured the image which it stored on a computer. Thereafter, Dr Strahan while in Australia would be able to look at the images and provide radiological reports on the findings.[158] This technology enabled some operations to occur based on the findings from Australia.

Another noticeable development at Chitokoloki Mission was that the hospital had an advanced and modern Intensive Care Unit (ICU) with monitoring equipment and oxygen concentrators to deal with special situations. More recent was the addition of a new and modern theatre and storage area. Hanna reported that "piped oxygen and suction was then available in all the three theatres at the hospital."[159]

In order to deal with emergencies and lessen the burden of long distances, Chitokoloki Mission Hospital acquired an aeroplane. The aeroplane, Cessna 206, arrived in Zambia towards the end of 2010 from the overseas. Turnbull commented that "the aeroplane had been of great help to the missionaries, visitors and patients."[160] It was purchased from funds donated by numerous Christians from overseas. It was further noted that the piloting responsibilities were shared by Philip Grove, Larry Franklin and Don Amborski, who went to Chitokoloki for a month or two at a time. Hanna maintained that the pilot was a missionary, who like all others at Chitokoloki Mission lived by faith without a salary.[161] However, due to the availability of the plane it was observed that several medical trips were made between Chitokoloki and the other mission hospitals in the region such as Chavuma, Loloma in Manyinga and Kabulamema in Kabompo. The aeroplane, therefore, was of great benefit in emergency transfers and outreach to other Mission Hospitals for surgical trips.

[157] Annual Report, Chitokoloki Mission Hospital, 2013.
[158] Annual Report, Chitokoloki Mission Hospital, 2011.
[159] Interview with Hanna, Chitokoloki Mission Hospital, 17 January, 2019.
[160] Turnbull, *Chitokoloki*, p, 81.
[161] Hanna, personal communication through an e-mail, received on 10 July, 2019.

In addition, the mission had two large trucks. These were a 15 tonne Volvo and a DAF truck. The hospital also had other utility vehicles among which were an ambulance donated by the Government. The availability of vehicles at Chitokoloki Mission Hospital enabled the movements of various commodities that were received from outside the country. Turnbull noted that most of the goods from overseas accumulated at Musenga Mission near Chingola where they were off-loaded awaiting transportation to Chitokoloki Mission.[162] As a result, trucks could make trips to collect such commodities among which were various types of medicines to be used at the hospital.

In terms of electricity, most of the missionaries in rural areas were not connected to the national grid and Chitokoloki Mission Hospital was not an exception. Being a considerable distance from any external source of electricity, the mission had maintained its own two generators. According to the Mission Administrator, the generators produced 220 volts of power specifically for the hospital, for one hour in the morning and for three and half hours in the evening. In addition to providing lighting, the generators were also used to pump water from the Zambezi River up into a large reservoir tower. Approximately, over 45,000 litres of water was used each day.[163]

Besides, one of the greatest improvements in many years was the solar electrification project at Chitokoloki Mission. The hospital and other areas were rewired and had 24-hour electric supply from large banks of batteries charged by photovoltaic solar rays. According to Hanna, attributes were made to electrician Don McKay, Murray Riddolls and others who were involved in the project.[164] It was also noted that both the hospital and several other areas had been provided with electricity. Shalala also reported that:

> Chitokoloki Mission Hospital stands out as the only health centre that solely runs on solar energy in Zambia. The hospital which has a large compound is powered by over 600 solar panels which produce about 170 Kilo volts of power. This energy powered the hospital, 52 staff houses, a workshop and various auxiliary facilities.[165]

[162] Turnbull, *Chitokoloki*, p, 82.
[163] Interview Hanna, Chitokoloki Mission Hospital, 17 January, 2019.
[164] Interview Hanna, Chitokoloki Mission Hospital, 17 January, 2019.
[165] Paul Monde Shalala, Chitokoloki Mission Hospital Documentary Report on ZNBC TV 1, 2 June, 2017, accessed on 3 April, 2019. https://youtu.be/-8D-1y9Nqb4www.youtu.be.com.

Furthermore, by December 2012, the institution had the system capacity at 79 kilowatts of solar PV panels, with inverters capable of generating about 180 amps of current at 220 volts, when at full power. In attempting to explain how the electrification project began, Hanna stated that, the mission started with 100 watts panel and by 2014, Chitokoloki Mission had 300 watts panels. Since the sun was readily available, it was trapped during the day and later converted into electricity by the batteries.[166]

As a result of the above developments, there were various developments at the hospital. For example, critical medical operations also were conducted successfully without the fear of power outage. Equipment such as oxygen concentrators could run continuously. Solar energy enabled doctors to conduct delicate operations without the fear of power cuts. Hanna, when interviewed by Paul Shalala, mentioned that "the administration was grateful because there was power that was not only constant but stable."[167] As a result, Chitokoloki Mission Hospital did not experience electricity that fluctuated and never lost a piece of equipment because of power failure. However, it was not so at other missions run by the CMML. One example was the case at Loloma Mission Hospital in Manyinga. *Lusaka Times* reported that:

> A 41-year-old expectant mother, Ireen Jimba of Bilembuluka village, who was undergoing an emergency caesarean section is said to have died after a power failure during the operation at Loloma Mission Hospital. As a result, Manyinga residents protested and blamed the death of Jimba on ZESCO….[168]

In order to avoid similar occurrences, Chitokoloki Mission had invested in solar energy which could generate the required electricity.

By 2013, most of the dwellings on the mission were upgraded and solar installed in several battery bank areas. The missionary and staff houses had access to constant power. However, the surrounding villages and other dwellings near the Mission hospital were yet to benefit from such developments. Sadly, according to some informants, such electric energy developments were just in the confines of the missionary premises.[169]

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[166] Interview with Hanna, Chitokoloki Mission Hospital, 17 January, 2019.
[167] Documentary by Paul Monde Shalala, Chitokoloki Mission Hospital, ZNBC TV 1, 16 March, 2017, https://youtu.be/-8D-1y9Nqb4www.youtu.be.com.
[168] Lusaka Times, 'Pregnant woman dies on operating table due to Zesco power failure', 19 January, 2014.https://www.lusakatimes.com/2014/01/19/manyinga-residents-protest-death/
[169] Interview with Chinyama Kafwale, Chitokoloki, Zambezi, 24 January, 2019.

At any health providing institution, sanitation is cardinal and so Chitokoloki Mission Hospital endeavoured to make improvement in that area. It was reported by the Hospital Administrator that solar power pumps were installed to provide water to the two hospitals and the future plans included expanding to other areas. The solar panels were also being used to pump water from the Zambezi River. Hanna noted that "this solar energy had cut down on the use of the generators and was realising great savings in diesel fuel expenditure."[170]

2.6 Conclusion

The chapter has explored the historical development of Chitokoloki Mission Hospital by tracing the footprints of the itinerant missionaries such as Frederick Arnot, Rodgers Lambert and George Suckling. When the early missionaries, led by Suckling, established Chitokoloki Mission, there was an urgent need of a dispensary to meet the health needs of the people. The dispensary played a crucial role in providing health services not only to the local Africans but missionaries as well.

Chitokoloki Mission Hospital developed from a grass-thatched one room in 1920 to what would later be a major referral hospital in the North-Western Province of Zambia by 2014. The hospital did not only attract the people of Zambezi District but also patients from other regions. This included the neighbouring countries such as Angola and DR Congo. It was so due to the gradual hospital's improved infrastructure, equipment and medical personnel. The chapter has also established that Chitokoloki Mission Hospital was recognised by the Colonial Government to be the Leprosy Centre for the province under the supervision of Dr. Worsfold.

Besides, the chapter established that contrary to the popular view that missionaries largely depended on medical services as a method to convert the Africans to Christianity, the method proved ineffective at Chitokoloki Mission Hospital. It was a common trend that people went to the hospital more than any other mission institution because they wanted to be healed from (*mosong'u),* disease. Therefore, the mission was less dependent on medical evangelism.

Furthermore, Africans played a crucial role from inception and contributed immensely to the establishment of the hospital. Some Africans worked as brick layers and carpenters, dressers (untrained nurses), cooks, post office managers, nurses, drivers while others took up high ranking jobs such as assistant hospital administrators. However, the response towards

[170] Interview with Hanna, Chitokoloki Mission, Zambezi, 17 January, 2019.

Africans' conditions of service such as low wages made some African workers to "vote by their feet". For example, African workers especially those who worked under Suckling, resigned due to low wages. Those who resigned as workers from the Mission Hospital either ventured into personal businesses or joined government institutions. Others opted to go as far as Southern Rhodesia where they worked as miners. However, the expatriate medical missionaries at Chitokoloki Mission Hospital also had a far reaching and profound impact on the health service delivery.

Furthermore, the success and sustenance of Chitokoloki Mission Hospital largely hinged on the financial supported from successive governments, Faith Based Organisations and individuals. Some of the organisations were MMN, MS, Echoes of Service International, ACCTS and CMAZ. It was from such monetary assistance that much of the hospital infrastructure was built. Initially, the hospital began with a small room that was used as a dispensary but later on expanded especially in the 1970s, when the new hospital block was built and named *Kariba*. Chitokoloki Mission Hospital's equipment advanced due to technology. These and many other factors such as air transport, availability of medicine, medical personnel aided the hospital's medical service delivery.

CHAPTER THREE

SOCIAL IMPACT OF CHITOKOLOKI MISSION HOSPITAL ON THE PEOPLE OF ZAMBEZI DISTRICT

3.1 Introduction

This chapter assesses the social impact of Chitokoloki Mission Hospital on the people of Zambezi District. Chitokoloki Mission Hospital provided health care services to local communities and contributed to the social well-being of the people. However, the hospital did not only treat patients from within Chitokoloki area, but also those from other districts, and neighbouring countries.

In terms of diseases and healing, Chitokoloki Mission Hospital impacted lives of people in the treatment of leprosy, malaria, tuberculosis, venereal diseases and many other ailments. The hospital also conducted diverse medical operations. Due to the availability of leprosy specialists and medicine, Chitokoloki Mission Hospital became a Leprosarium. Therefore, this chapter also elaborates the social activities and responses of patients at the Leper Settlement.

While the quality of the health care provided by medical missions had sometimes been criticised and neglected by a section of scholars, this chapter shows the contribution of the Chitokoloki Mission Hospital in the health service provision during colonial and post-colonial periods. The chapter further demonstrates that despite the institution being in a rural area, which was often neglected by the colonial state, Chitokoloki Mission Hospital became relevant to the people of Zambezi District. The chapter also argues that while missionary medicine has commonly been associated with superior healing powers (in the western imagination), there was an on-going conflict between the scientific practice of medicine and the cultural acceptance of sorcery and herbal remedies at Chitokoloki Mission Hospital.

3.2 Primary Health Care Services

Primary health care, by all standards, could be divided into several categories. These are under-five clinics that include nutrition, immunisation, health education and growth monitoring. Second was the Maternal and Child Health such as Ante-natal and Post-natal clinics and immunisation of women of child-bearing years, and Family Planning. There was

Environmental Health where programmes such as sanitation and water supply, food and meat inspection fell under. Another section was that of Tuberculosis and Leprosy.[1]

It must be noted from the onset that Chitokoloki Mission Hospital was one of the hospitals that provided primary health care in rural Zambezi District. While the colonial government concentrated its efforts in providing health services in urban areas, some missionaries such as CMML targeted rural areas. For example, the Annual Report of 1944 by a Medical Officer stated that:

> There were no government rural dispensaries constructed in the province. All the work in the outlying districts is done by mission dispensaries of which there are 3; those at Chitokoloki, Kabulamema and Chavuma….[2]

This demonstrated a common trend by the colonial government who did not concentrate on rural health services. In order to maintain the economic hegemony, the colonial government concentrated on urban health services. This was in quest to provide basic healthcare services to African labourers who were used as tools for championing capitalist interests. So, in rural areas like Chitokoloki, the missionaries bridged a gap by providing health services to the people.

In terms of affordability, Philip Wood noted that medical provision in both government and mission aided institutions were becoming expensive the 21st century.[3] Therefore, accessing proper medication by the general public in such institutions had been a major concern. At Chitokoloki Mission Hospital, for example, patients who went to the hospital were not charged fees for any services.[4] In terms of primary health care, a visit by a Medical Officer to Chitokoloki in 1948 indicated that the dispensary had three sections in operation. These were the main dispensary for the general public, a clinic that operated every morning at the boys' school and another clinic at the girls' school.[5]

[1] Interview with Hannah Gordon, Chitokoloki Mission Hospital, 16 January, 2016.
[2] N.A.Z, MH1/2/60, Dispensaries: Balovale District, Annual Report 1944, 133/B/6.
[3] Philip B. Wood, 'Mission Hospitals in Africa: What's Their Future?' https://missionexus-hospitals-in-africa-whats-their- future/. Accessed on 4 December, 2018.
[4] Interview with David Katota, Chitokoloki Mission Hospital, 23 January, 2019.
[5] N.A.Z, MH1/02/64, Christian Mission in Many Lands, Chitokoloki Leprosarium Settlement- General, Letter to the Director of Medical Officer , 22 April, 1948, No:M1/1/1/48

3.3 Maternal and Child Health

Maternal and child health was one of the major challenges most African rural hospitals grappled with. In Kenya for example, Kaseje noted that high levels of maternal, child and infant mortality and low rates of immunisation were symptomatic of great neglect of Africa's rural communities. It was alleged that prior to 1950, not more than 50 per cent of the babies born in Africa reached the age of two years.[6] Zambian rural communities such as Chitokoloki in Zambezi were not exceptional to such health challenges.

It is for this reason that maternal and child health had been one of the departments that Chitokoloki Mission Hospital paid attention to in the early and later years. Therefore, the hospital started maternity and child welfare work targeting women as they were more vulnerable.[7] However, in the early years, women around Chitokoloki area were not willing to attend antenatal programmes. So in order to encourage births at the hospital, local medical practitioners introduced some measures that could attract women. For example, every baby born at the hospital was given some clothes and other gifts.[8]

In terms of deliveries, Chitokoloki Mission Hospital recorded a significant number of births. For example, in 1949, at the welfare clinic, the Annual Report showed that the number of new babies born within the hospital was 74. Even so, it was noted that despite the efforts made by the management to encourage hospital deliveries, the hospital in the early years witnessed a number of home delivery cases.[9] The hospital, however, continued to provide primary health services not only at the antenatal clinic but also in communities.

It is also worth pointing out that Chitokoloki Mission Hospital did not only provide health services to the people of Zambezi but also to those from other districts, provinces and neighbouring countries. In some instances, the hospital also attended to patients of different races. For instance, the Annual Report of 1952 showed that there were 166 Africans and 2 European women who were admitted at the antenatal clinic. The attendance in the same year showed that a total number of 751 attended the antenatal clinic of which 12 were

[6] Dan Kaseje, 'Health Care in Africa; Challenges, Opportunities and an emerging model for improvement', Paper Presented at the Woodrow Wilson International Centre for Scholars on Nov. 2 2006, p. 4. https://pdfs.semanticscholar.org/1266/. Accessed on 12.11.2018.
[7] Alma Turnbull, *Chitokoloki: Celebrating a Century of the Lord's Work in Northwestern Zambia* (Ontario: Gospel Folio Press, 2014), p.33.
[8] Interview with, Charles Kabwita, Chitokoloki Mission Hospital, 16 January, 2016.
[9] N.A.Z., MH1/3/38, Christian Mission in Many Lands, Leprosy Settlement Annual Report, 1949.

Europeans.[10] In 1955, there were 987 African women who attended antenatal clinic and 8 were of European origin.[11]

One of the issues that many Africans in Zambezi District struggled with in terms of health services was accessibility to health institutions. At Chitokoloki, some patients in the maternity wing travelled from far flung areas such as Pungu Village which is 35 kilometres away from the hospital on the western side of the Zambezi River. When they reached the hospital, the expectant mothers were housed and fed at the Old Hospital section until they were discharged.[12]

During the post-colonial period, Chitokoloki Mission Hospital continued to provide maternal and child health services to the people in Zambezi District. In the 1960s and 1970s, the hospital provided maternal and child healthcare services to the communities. There was an improvement to the women and children's health provision because the Government was also concerned.[13] However, there were several factors that caused reduction of births in the area as time went by. For example, due to an outbreak of tick fever,[14] the number of deliveries at Chitokoloki Mission Hospital dropped. The hospital's Annual Report of 1986 noted that at the end of the year, there was a dramatic increase in tick fever cases. This resulted in an increased number of spontaneous abortions at the hospital.[15] Even so, the hospital, under the department of obstetrics, recorded a total number of 287 deliveries. [16]

In 1988, Chitokoloki Mission Hospital recorded 2,480 admissions under the obstetrics department. The total number of deliveries recorded was 356. Of that number, live births were 345 and the rest were miscarriages and still-births. This represented 98.65 % successful deliveries recorded at the hospital. It was also noted by medical missionaries that about 14

[10] N.A.Z., MH1/3/64, Balovale Medical Officer's Report, Chitokoloki General Hospital Annual Report, 1952.
[11] N.A.Z., MH1/3/89, Heath Department Annual Report, 1954-1956.
[12] Annual Report, Chitokoloki Mission Hospital, 1967.
[13] Annual Report, Chitokoloki Mission Hospital, 1968 and 1972.
[14] For more information see Nathalie Roch, 'African Tick Bite Fever in Elderly Patients: 8 Cases in French Tourists Returning from South Africa', *Clinical Infectious Diseases*, Volume 47, Issue 3, (1 August 2008), Ps 28–35. African tick-bite fever, a tick-borne disease caused by Rickettsia africae, is endemic in rural areas of sub-Saharan Africa and in the French West Indies. Most cases reported in the literature occurred in middle-aged, otherwise-healthy persons and corresponded to benign diseases. The course of African tick bite fever in elderly people is less well documented.
[15] Annual Report, Chitokoloki Mission Hospital, 1986.
[16] Annual Report, Chitokoloki Mission Hospital, 1986.

deliveries occurred from the villages. Even so, 317 mothers successfully attended antenatal clinic in the same year.[17]

In the 1990s, Chitokoloki Mission Hospital witnessed a slight higher number of deliveries compared to the previous decades. The 1990, for example, statistics showed that 414 was the total number of deliveries of which 405 were live births while nine were still-births. However, the hospital continued recording admissions whose deliveries were at the village. It was reported that in the same year, 13 of those deliveries occurred from the villages. In terms of maternity, the hospital provided the services to the community not only to the people at the hospital but also to nearby places. Some of the villages where the under-five clinics were established were at Kakong'a, Kashona, Pungu, Likungu, Kayombo, and Minganja.[18]

Geographically, Kakong'a clinic is situated on the East Bank of the Zambezi River, approximately 25 Kilometres south of the mission. Kashona is located on the west bank of the Zambezi, and is the closest to Zambezi town. Pungu, the smallest clinic, is located 35 kilometres to the west of the mission on the western side of the Zambezi River. These clinics were constantly visited and supervised by the medical officers from Chitokoloki Mission Hospital.[19]

In 1996, the hospital provided the Under-Five and Antenatal Clinics in a manner which was described as acceptable by all standards. For example, each week throughout the year, the maternal and child health services in that area were provided. At the beginning of 1996, Ruth Young, in conjunction with Chola Makabe, a second health inspector, was responsible for the running the Under-Five Clinics at Chitokoloki. Alice Ndonji, a Zambian enrolled Nurse (ZEN), was responsible for Antenatal Clinic until she stopped work in 1996.[20] After independence, the department was mostly run by Zambian personnel. The hospital's report indicated that:

> September saw major changes in the running of all the clinics due to the departure of the expatriate staff. As a result, all the under-five and antenatal clinics are now being run by Reuben Matondo.[21]

[17] Annual Report, Chitokoloki Mission Hospital, 1988
[18] Annual Report, Chitokoloki Mission Hospital, 1990.
[19] Interview, David Katota , Chitokoloki Mission Hospital, 16 January, 2019.
[20] Annual Report, Chitokoloki Mission Hospital, 1996.
[21] Annual Report, Chitokoloki Mission Hospital, 1996

The introduction of Health Education by the Zambian Government, through the Ministry of Health enabled Chitokoloki Mission Hospital to thrive in that area. In 1996, for instance, Chola Makabe, a Health Inspector, monitored villages on Chitokoloki Road and the surrounding areas.[22] Therefore, the hospital sensitised the local people on various health aspects.

In 1999, Chitokoloki Mission Hospital, recorded an unprecedented number of under-five clinic attendance. During the year, 1,722 children were treated at the clinic. The total number of antenatal clinic attendance was 3,749.[23] From these statistics, it was evident that the hospital witnessed an increase of maternal health cases compared to the previous years. Gifts in clothes continued whenever children went for vaccination. The gesture was to encourage the women to attend the clinics. Table 6 shows the situation at the hospital in terms of the under-five clinic attendances.

Table 6: Under-Five Clinic Attendances at Chitokoloki Mission Hospital, 1999

Clinic	Total Attendance	No. of Clinics	Average Attendance	No. Below Line	% Below Line
Chitokoloki	3,749	48 static	98	1,745	46%
Kakong'a	2,215	12 out-reach	184	1,083	49%
Kashona	1,731	12 out-reach	111	727	42%
Pungu	1,145	9 out-reach	123	392	34%
Total	**8,8840**	**81**	**109**	**3,947**	**44.64%**

Source: Annual Report, Chitokoloki Mission Hospital, 1999.

Despite having rural health clinics, serious cases were transferred to Chitokoloki Mission Hospital because of the availability of the surgeon. The workers at the rural health centres were employed and supervised by the Chitokoloki Mission Hospital staff.[24] However, some rural health centres like Pungu, on the west of the bank of the Zambezi River, became inaccessible during the rainy season due to floods. Even so, statistics for 2005, 2006 and 2007

[22] Annual Report, Chitokoloki Mission Hospital, 1996.
[23] Annual Report, Chitokoloki Mission Hospital, 1999.
[24] Interview with Gordon Hanna, Chitokoloki Mission Hospital, 16 January, 2019.

deliveries illustrated that it was in 2006 when the hospital recorded the highest number. Table 7 shows the details of the total number of deliveries for the aforementioned years.

Table 7: Baby Deliveries at Chitokoloki Mission Hospital, 2005 – 2007.

	2005	2006	2007
Total Deliveries	502	515	399
Normal Deliveries	434	419	372
Still Births	18	23	18
Low weight babies	57 (11.3%)	36 (6.99 %)	38 (7.62%)
Complicated deliveries	68 (13.5%)	97 (18.83%)	92 (19.0%)
Caesarean Sections	15 (2.9 %)	30 (5.8 %)	13 (2.6%)

Source: Chitokoloki Mission Hospital Annual Report, 2007.

From the table above, it is evident that Chitokoloki Mission Hospital recorded the lowest deliveries in 2007 compared to the other years because of the off shoot of various rural health posts. The rate of complicated deliveries and still births was minimal in the three years as illustrated from the table.

The Maternity Ward, like other departments at Chitokoloki Mission Hospital, continued with its routine operations. In 2010, for example, there were 546 deliveries of which 495 were normal deliveries; eight were still babies, 55 low weight babies and 24 underwent caesareans. It was also noted that all babies born in the hospital were provided with free baby layettes received in containers from Canada, U.S.A, and the U.K.[25] This was in a quest to discourage home deliveries. Even so, the trend of recording home deliveries continued. Some home deliveries were largely due to long distances to the hospital. In addition, many rural health centres under Chitokoloki Mission Hospital had few trained staff.[26]

In making efforts to improve people's health, Chitokoloki Mission Hospital continued in the provision of health services to the people of Zambezi District and beyond. In terms of

[25] Annual Report, Chitokoloki Mission Hospital, 2010.
[26] Interview with Charles Kabwita, Chitokoloki Mission Hospital, 16 January, 2019.

maternal and child health, the trend in the years 2011, 2012 and 2013 was that Family Planning Clinics were conducted every Tuesdays, Under Five Clinic or Post Natal Clinics on Wednesdays, and Antenatal Clinics on Thursdays.[27]

However, it was noted that the number of Antenatal re-attendance reduced drastically during the years. Some of the reasons mentioned by pregnant women during Antenatal Clinics were long distances to the hospital, non-availability of trained staff especially female nurses at most rural health centres and outreach clinics. Others preferred home deliveries to the clinic especially if the rural health centre was headed by a male nurse.[28] It was noted that the strength and observance of these customs had for a long time differed from one area to another. This concern was reported in the hospital's Annual Report of 1950 which read in part:

> In general, African customs demand that no male shall be present at birth and that no female shall be present, let alone assist, who has not herself had a child.[29]

African women continued to refuse the assistance of an unmarried European nursing sister and male doctors to attend to them during deliveries. Thereafter, such resistance by local women reduced through continued sensitisation.

3.4 Child Adoption by the Missionaries

Chitokoloki Mission did not establish any orphanage centre and that was not part of the institution's agenda for many years. However, just as any other hospital, Chitokoloki had situations where some mothers could die during or after delivery. In such instances, some relatives who were in such situations either voluntarily declared their inability to take care of the surviving baby or the nurses could offer themselves to support such children. In 2004, for example, Keith and Gayle Bailey provided a home for girls, some of whom were abandoned by their families.[30] Kanoka Kaposhi confirmed that there were some nurses who took the orphans on and managed to sponsor such children even up to secondary level of education.[31] However, unlike their counterparts at Kalene Hill Mission, who had established an

[27] Annual Reports, Chitokoloki Mission Hospital, 2011, 2012, 2013.
[28] Interview with Jill Ngangula, Chitokoloki Mission Hospital, 18 January, 2019.
[29] N.A.Z., MH1/1/22, Public Health; General, Annual Report, 1 August, 1950, Ref. No: G/10/6.
[30] Philip C. Parson, CMML Visits Africa, https://www.cmml.us/sites/default/files/mag_pdf/missions_feb2018_web.pdf, accessed on 12 June, 2019.
[31] Interview with Kanoka Kaposhi, Chitokoloki Mission Hospital, 17 January, 2019.

orphanage, Chitokoloki Mission did not have one, except few individual missionaries who, out of personal convictions, decided to take up such social responsibility.

3.5 Disease and Healing

Chitokoloki Mission Hospital dealt with all diseases varying from one level of complexity to another. Mostly, the hospital dealt with referral cases from other hospitals such Chavuma, Dipalata and Loloma mission hospitals. The hospital equally treated various diseases such as fevers, respiratory, and venereal diseases. Table 8 below shows the classifications of some of the diseases and the number of cases treated at Chitokoloki Mission Hospital in 1949.

Table 8: Classification of Diseases and Number of Patients treated at Chitokoloki, 1949

Disease	Number
(i) Fever:	
Malaria……...	7119
Measles…….	21
Relapsing Fever……	42
(ii) Abdominal:	
Amoebic Dysentery…….	3
Other abdominal ……..	1,158
(iii) Helminthic diseases:	
Hookworm……..	536
Bilharzia……	265
Tape worm……	2
(iv) Infections:	
Measles……	21
Whooping Cough……	23
Influenza…….	9
(v) Venereal:	
Syphilis……	225
Gonorrhoea…….	66

Source: N.A.Z., MH1/03/38, Tour Reports; Christian Mission in Many Lands, Chitokoloki Leprosy Settlement, Annual Medical Returns -1949.

The table above shows that fevers and malaria had the highest number of cases treated at the hospital, with 7119 cases in a single year.

Contrary to Alma Turnbull's argument, Chitokoloki Mission Hospital did not only treat Africans but Europeans as well. The Annual Medical Returns of 1949 showed that 17 Europeans were treated at Chitokoloki Mission Hospital. The table below shows the statistics for both Africans and Europeans that was recorded in 1949.

Table 9: Patients attendances for both Africans and Europeans at Chitokoloki, 1949

PATIENTS	AFRICANS	EUROPEANS
In-Patients	541	17
In-Patients	5,476	
Out-Patients	12,369	7
Attendance	29,610	
Confinements	39	2

Source: N.A.Z., MH1/03/038, Christian Mission in Many Lands, Leprosy Settlement Annual Report, 1949.

The table above demonstrates that in 1949 Chitokoloki Mission Hospital treated 17 Europeans of which two were contagious cases, hence the confinement. The hospital in this case also became a place of healing for both Africans and Europeans.

The CMML expanded and developed their influence in most of the parts of North-Western Province. One area of influence was through the establishment of hospitals. The act of building mission hospitals was not only an act of benevolence but a tool for converting Africans to Christianity.[32] Of the mission hospitals established in the province, Chitokoloki treated diverse and complicated cases. In most instances, the other hospitals referred emergency cases to Chitokoloki Hospital. Table 10 is an illustration of how Chitokoloki socially impacted the people in terms of disease treatment in 1952.

Table 10: Disease Treatment at Selected Health Institutions in North-Western Province, 1952

MISSION STATION	IN-PATIENTS	OUT-PATIENTS	
CMML MISSIONS		CASES	TOTAL OF ATTENDANCE
Chavuma	----	6,704	14,487
Chitokoloki	714	14,929	40,699
Kabulamema	152	1,842	15,201
Dipalata	83	784	15,680

Source: N.A.Z., Balovale Medical Officers Annual Report, 1952.

The number of in-patients at Chitokoloki Mission Hospital was high compared to other mission hospitals. This demonstrates the extent to which the lives of the people were impacted by the hospital. The reason behind such huge difference in numbers at Chitokoloki

[32] Walima T. Kalusa, 'Language, Medical Auxiliaries, and the Re-interpretation of Missionary Medicine in Colonial Mwinilunga, Zambia, 1922-51 ', *Journal of Eastern African Studies*, Vol. 1, 1 (2007), pp. 57 – 78.

was not accidental, neither was the area highly populated to disadvantage other hospitals. It was basically as a result of the quality and advanced medical services provided by the Hospital. In 1953, statistics showed that Chitokoloki Mission Hospital received 517 in-patients. In general, the total number of cases handled at the hospital was 13,851.[33]

The trend of attending to more people at Chitokoloki Mission Hospital continued. According to the annual report of 1954, the Hospital under the Out-Patient Department (OPD) indicated that there were 37,768 patients who were attended to at the hospital. Out of those, 14,435 were serious cases. It was noted in the annual report that there was an increase in the number of patients treated at Chitokoloki Mission Hospital in 1954 compared to 1953.[34]

Chitokoloki Mission Hospital in the latter years continued to record large numbers of surgical operations in the province. For example, the 1955 Ministry of Health annual report showed that the hospital conducted 32 major operations and 83 minor ones. Some of these operations were conducted on Europeans patients. From the total number of the operations conducted, it was noted that hernia-related cases were many compared to other cases. Among other operations recorded were hydrocele and various fractures.[35]

In the 1960s and 1970s, Chitokoloki Mission Hospital dealt with various diseases and continued conducting diverse and complicated medical services. With support from the Zambian Government in terms of finance and human resource, the hospital earned special recognition from the State as it offered medical relief to the people. A Medical Officer once remarked that:

> The medical missionaries at Chitokoloki Mission Hospital have already made a special contribution in leper work, maternity work, child welfare, community services, etc., and their existing services should be recognised in any plans envisaged by the Government.[36]

In order to ensure that the people in the surrounding areas were in good health, a doctor in 1968, called the people from the villages for medical examination. It was reported that minor illnesses were dealt with on the spot, the serious cases were noted and the people affected

[33] N.A.Z.,MH1/03/64, Balovale Medical Officers Annual Report 1953.
[34] N.A.Z.,MH1/03/64, Balovale Medical Officers; Annual Report, Health Department Balovale and Kabompo 1954.
[35] N.A.Z.,MH1/03/038, Christian Mission in Many Lands, Leprosy Settlement Annual Report, 1955.
[36] N.A.Z.,MH1/03/036, Deputy Director of Medical service Tours, Chitokoloki Mission Hospital, Annual Report, 1965.

were asked to report to the hospital.[37] This was one way in which the hospital provided some community medical services. The trend continued as it was evidenced in the 1975 annual report that the hospital conducted both major and minor surgeries in diversity including gun-shot wounds.[38] Most of the patients for gun-shot wounds were the survivors of the Angolan civil war.[39]

In 1986, Chitokoloki Mission Hospital recorded a total number of 442 surgeries. These, among other categories were anaesthetics, obstetrics, ophthalmology, and orthopaedic. However, statistics showed that 210 major surgeries were conducted at the hospital. The general surgeries were 91, obstetrics related operations was 84, ophthalmology was 24 and, 11 operations were of orthopaedic cases.[40]

Chitokoloki Mission Hospital's social contribution was also to be found in the numbers of in-patients recorded over the years. In 1988, for instance, the Mission Hospital admitted 2,480 patients and that entailed that on a daily average, 180 patients went to the hospital for treatment. The approved beds were 150 out of 254 available beds. So, in most cases other patients were not admitted on account of lack of hospital beds. In terms of operations, there were 324 major operations and 446 minor surgeries and 88 deaths were recorded in 1988.[41]

Towards the end of the twentieth-century, the situation at Chitokoloki Mission Hospital in terms of health service provision continued on the right trajectory. It was observed that at the Kariba section, there were 1,269 admissions while 247 were at the old hospital.[42] In total, 27 deaths were recorded at the hospital. It was also noted that the average length of stay was nine and 25 days at the Kariba and old hospitals, respectively, during the same year.[43] In terms of surgeries, the hospital recorded a total of 208 major and minor operations

[37] N.A.Z.,MH1/03/036, Deputy Director of Medical service Tours, Chitokoloki Mission Hospital, Annual Report,1967.
[38] Annual Report, Chitokoloki Mission Hospital, 1975.
[39] Interview with Charles Kabwita, Chitokoloki Mission Hospital, 16 January, 2019. *Note that:* The Angolan Civil war began immediately after Angola became independent from Portugal in November 1975. The war was a power struggle between two former liberation movements, the Communist Peoples' Movement for the Liberations of Angola (MPLA) and the anti-communist National Union for the Total Independence of Angola (UNITA).
[40] Annual Report, Chitokoloki Mission Hospital, 1986.
[41] Annual Report, Chitokoloki Mission Hospital, 1988
[42] Annual Report, Chitokoloki Mission Hospital, 1999.
[43] Annual Report, Chitokoloki Mission Hospital, 1999

combined.[44] This demonstrates the extent to which the institution had impacted the community.

In 2005, 2006 and 2007, Chitokoloki Mission Hospital recorded a considerable increase in the number of admissions both at the Kariba and old hospital. It was noted in the Annual Reports that each year that passed, the number kept on increasing at both sections. For example, in 2005, 1,777 admissions were recorded at Kariba, 1,819 in 2006, and 2,301 in 2007.[45] The statistics in terms of the number of admissions entailed that several patients went to the hospital for medical care. Therefore, it can be stated that the hospital socially impacted the people of Zambezi district and beyond.

It was also noted that a wide variety of surgeries, both elective and emergence were carried out at the hospital. However, the number of major surgery cases decreased in 2007 due to the absence of Dr. David McAdam for a period of 10 weeks. Even so, the Hospital continued receiving patients for surgeries from every district in North-Western Province as well as the Western Province. In general, there were 1,099 and 788 major surgery cases in 2006 and 2007, respectively. The minor cases recorded in 2006 were 459 and 244 in 2007.[46]

The number of in-patients at Chitokoloki Mission Hospital kept on fluctuating. For example, in 2009 alone, there were 2,424 at Kariba hospital and 154 at the old hospital.[47] In 2010, the hospital had 1,500 admissions at the Kariba hospital while at the old hospital 241 were recorded.[48] The situation in 2011 was not very different from that of 2010. Nonetheless, quite a number of deaths were recorded at Chitokoloki in all departments between 2009 and 2011. For example, at Kariba alone, 97 and 56 deaths were recorded in 2009 and 2011, respectively.[49] However, statistics showed that there were no deaths recorded at the old hospital in 2009 except for two in 2010.[50]

In 2011, there was also a wide variety of medical surgical operations, both elective and emergency. During the course of the year the hospital continued to record an increase in admissions as patients came for surgery from far and wide. In order to reduce the number of

[44] Annual Report, Chitokoloki Mission Hospital, 1999.
[45] Annual Report, Chitokoloki Mission Hospital, 2007.
[46] Annual Report, Chitokoloki Mission Hospital, 2007.
[47] Annual Report, Chitokoloki Mission Hospital, 2009.
[48] Annual Report, Chitokoloki Mission Hospital, 2010.
[49] Annual Report, Chitokoloki Mission Hospital, 2011.
[50] Annual Report, Chitokoloki Mission Hospital, 2011.

people from travelling to Chitokoloki for surgeries, medical practitioners travelled to other parts of the district. On this matter Gordon Hanna noted that:

> Almost every week, a team from Chitokoloki Mission Hospital travelled to another Mission Centre. These were Chavuma, Dipalata and Loloma to assist in patient care and also to perform surgical procedures. This has reduced the number of transfers from these centres to Chitokoloki and has helped manage the patient care which was becoming too much for the capacity of the hospital.[51]

The work of itinerant medical personnel from Chitokoloki benefited people in the surrounding areas. As a result, patients who were not critically ill could wait for the medical officers to visit.[52] By so doing the hospital became relevant to the social well-being of the people.

3.6 Leprosy Treatment at Chitokoloki

One of the most common dreaded diseases suffered by innumerable people throughout the history of mankind has been leprosy. In this regard, missionaries championed the fight against leprosy in Northern Rhodesia. This was done through the establishment of leprosy centres in their areas of influence. Some of the earliest leprosarium centres to be established by the missionaries in Northern Rhodesia were Kawimbe among the Mambwe people in 1893 in Northern Province by the London Missionary Society (LMS), and Chikuni which was run by the Jesuits in 1909, in Monze district. Others were Luampa in Kaoma district established in 1910 by the South African General Missions, and Chitokoloki was declared a Leprosy Centre in 1928.[53] Many other leprosy centres were opened in the country thereafter. Before independence in 1964, the commonest disease among Africans was leprosy which was locally called *Musongú wa mbumba* in Lunda.

The treatment of leprosy patients had always been a very important part of the missionary endeavour at Chitokoloki. First, reference to this service appeared in a letter which was published in the April, 1928 Tour Report from Suckling and Thomas Hansen.[54] The report

[51] Interview with Hanna Gordon, Chitokoloki Mission Hospital, 20 January, 2019.
[52] Interview with Gordon, Chitokoloki Mission Hospital, 20 January, 2019.
[53] Mbaita B., Liwoyo,. 'Missionary, the State and Leprosy in Zambia, 1893-1964', M.A. Dissertation, University of Zambia, 2011, p. 73. *See Liwoyo's Dissertation for more details on Leprosy.*
[54] N.A.Z., BSE1/2/1, Tour Reports: Balovale , 1922-1930.

indicated that there were 14 lepers living in the leper camp.[55] Without the aid of a trained leprosy medical doctor, George Robert Suckling and Thomas Hansen were helped by Dr. Walter Fisher who was at Kalene Hill, but intermittently made trips to Chitokoloki.

The treatment of leprosy at the Mission Hospital became a focus by the colonial government. In 1931, for example, there were 30 lepers who underwent regular therapy.[56] On January 16, 1936, Suckling received a letter from the Government Medical Officer, A. J. Board, who had regularly visited the leper colony at Chitokoloki. In part the letter read:

> The importance of the general hygiene principle is appreciated at Chitokoloki, and the housing, clothing and feeding of this community is satisfactory in every respect….For the patients, the Mission provides a comfortable and pleasant refuge as opposed to the neglect which would invariably be their lot in their own village. It is in my opinion, a very fine practical example of Christianity.[57]

Lepers were not only treated of the disease but also received clothes and other necessities that could improve their lives while at the leper settlement.

In 1948, Chitokoloki Mission Hospital recorded an increase in the number of leper cases. The Ministry of Health Annual Report of 1948 showed that at the beginning of the year, there were 159 cases that were contagious while 37 were not.[58] The report further indicated that out of the 160 admitted cases, 45 patients were discharged and at the end of the year a total number of 204 with contagious cases were recorded.[59] Table 11 shows the summary of figures of leper patients at Chitokoloki Leprosarium in 1948.

[55] N.A.Z., BSE1/2/1, Tour Reports: Balovale , 1922-1930.
[56] N.A.Z., BSE1/2/1, Tour Reports: Balovale , 1922-1930.
[57] N.A.Z., MH1/4/36, Leprosy, 1939-1940.
[58] N.A.Z.,MH1/03/038, Christian Mission in Many Lands, Leprosy Settlement Annual Report, 1948.
[59] N.A.Z.,MH1/03/038, Christian Mission in Many Lands, 1948.

Table 11: Leper Patients at Chitokoloki, 1948

In-Patients	Contagious	Non-Contagious	Cripples	Non-Lepers	Total
Beginning of year	157	37	3	27	224
Admitted	160	116	2	41	319
Discharged	45	84	2	37	168
End of year	204	69	3	31	307

Source: N.A.Z.,MH1/03/038, Christian Mission in Many Lands, Leprosy Settlement Annual Report, 1948.

The table above shows that in 1948, the number of in-patients for contagious cases of leprosy recorded an increase. This indicated that Chitokoloki Leper Settlement played a crucial role and became a place of healing leprosy in the region.

There were also some lepers who were treated for other diseases in 1948. For example, 41 lepers were diagnosed with hookworm, five with bilharzia, gonorrhoea cases were 12 and those found with syphilis were seven.[60]

Chitokoloki Leprosarium Centre gained a special recognition by the colonial government. Most of the lepers came not only from the region but also from other areas along the line of rail who were referred to Chitokoloki Mission Hospital. The reason was that in 1947, the Hospital employed Dr Worsfold who had expertise in treating leprosy in the region. By December 1949, a Medical Officer indicated that:

> It was probably wise to have all lepers removed as far as possible from the centre of population on the line of rail. These schemes should cater for areas west of railway and should include Solwezi, Kasempa and Kabompo administrative areas all of which at present are sending cases to Chitokoloki Leper Settlement.[61]

[60] N.A.Z., MH1/03/038, Christian Mission in Many Lands, Leprosy Settlement Annual Report, 1948.
[61] N.A.Z., MH1/03/038, Leprosy Settlement Annual Report, 1949.

In the same year, statistics showed that the total number of lepers under treatment at Chitokoloki Mission Hospital was 568.[62] Out of these, 24 were contagious cases and only 3 were completely crippled.[63]

Strides continued to be made in order to combat leprosy during the early 1950s as a large number of patients were discharged. Most of them were completely free of all signs of the disease, although many suffered severe and permanent disabilities as a result of their experience. Eventually, as the number of acute leprosy cases waned, a new phase was launched by admitting Tuberculosis (T.B) patients at the leprosarium.[64]

Figure IV: Chitokoloki Leper Settlement in the 1950s.

Source: Picture courtesy of David Wilkin, a missionary on www.chitokoloki.com/missionin-pictures.

In 1952, Chitokoloki Mission Hospital made efforts in the provision of general medical services to the people. It was not only Africans who were the beneficiaries of such services

[62] N.A.Z., MH1/03/038, Leprosy Settlement Annual Report, 1949.
[63] N.A.Z., MH1/03/038, Leprosy Settlement Annual Report, 1949.
[64] N.A.Z.,MH1/01/02, Public Health, 1949-1962.

but Europeans settlers, too. For example, out of a total number of 714, 16 cases were Europeans.[65] The out-patient numbers were 14,929 of Africans and 18 were the Europeans.[66]

Chitokoloki Mission Hospital in terms of leprosy treatment was a shining example to all other leprosarium centres within the province and beyond. Some lepers who were transferred to the leprosarium centre were in critical condition. In order to show the extent to which the centre impacted the lives of people, a Medical Officer reported that:

> those who were classed as cripples and derelicts receive preferential treatment in the way of extra food, clothes from the mission; these people are quite unable to help themselves and are with us 'till death do us part'.[67]

The treatment of leprosy at the hospital attracted attention as many patients were admitted to the settlement. Some were declared 'full-time Leprosarium residents' for they never went back to their home areas.

3.6.1 Resistance to be at the Leprosarium by the Lepers

The creation of leprosarium centres country-wide by the colonial government was one method of preventing the disease from spreading further. However, the development received some challenges during implementation. Brenda Liwoyo commented in treating leprosy, that "missionaries thought confinement was the best method to control the spread of the disease."[68] From the government point of view, confining leprous persons in one place made drug administration easy and systematic. It was felt that lepers in Africa were marginalised by society and were socially isolated.[69] It must be stated, however, that some lepers did not willingly want to leave their villages. The District Medical Officer commented that "there is bound to be initial difficulty in getting the Africans to accept the idea…."[70] Some leprosy patients in the early colonial years demonstrated resistance towards the government policy of confinement at leper settlements.

Some of the reasons that led to the lepers' resistance were that most men did not want to be displaced from their traditional land. To them, that would result into a loss of pastoral and

[65] N.A.Z., MH1/03/06, District Tours by the Director of Medical and Official Visits Services, 1940-1952.
[66] N.A.Z., MH1/03/06, District Tours by the Director of Medical and Official Visits Services, 1940-1952.
[67] N.A.Z., MH1/03/064, Chitokoloki Leprosy Settlement, Annual Report, 1952.
[68] Liwoyo, Missionaries, The State and Leprosy In Zambia,1893 – 1964, p.73
[69] Liwoyo, Missionaries, The State and Leprosy in Zambia, 1893 – 1964, p.74.
[70] N.A.Z.,MH1/03/038, Tour Reports: Christian Mission in Many Lands, Leprosy Settlement, Annual Report, 1 January, 1950.

agricultural land, animals and crops. In addition, most lepers felt that by the time they would return to their villages, they would have lost their ethnic identity. They also did not want to become victims of rejection and segregation by the community.[71] For instance, at Chitokoloki Leprosarium Centre, Kenneth Samanenga narrated that "some men feared to leave their wives and families behind."[72]

Furthermore, most women admitted to the settlements were worried about their absence from home which they felt would threaten their marital relations and they not cope with the trauma of leaving children in the village. The Ministry of Health Annual Report of 1956 indicated that "all children and babies in the settlement were removed from contagious parents as far as possible and put in care of healthy relatives."[73] In other words, the women who gave birth in the leper settlement did not want to pass through emotional trauma should their babies be separated from them for many years to prevent them from being infected by their mothers. Hence, the combination of various reasons by the leper patients made them to resist what they referred to as "confinements".[74]

In order to attract lepers to be at the Leprosarium, the government introduced some deliberate measures for Africans to accept the idea. The following were some of the administrative policies imployed towards persuading lepers who resisted living at Chitokoloki Leprosy Settlement:

First, the government introduced the policy that all food for the patients was to be provided free of charge for the first year or two of the scheme. Secondly, there was a slight increase in wages for lepers who worked at Chitokoloki. Free blankets were offered to the lepers as well. Furthermore, there were amenities such as films being shown and radios provided to the lepers as form of entertainment. Besides, lepers were to sell the agricultural produce if they wished while in the colony in order to make some money for themselves. Free seeds and advice in agriculture was to be offered to the lepers in the settlement. Finally, there were neither tax exemptions nor employment for any leper outside of Chitokoloki Leprosy

[71] Interview with Kenneth Samanenga, Chitokoloki Mission Hospital, 20 January, 2019.
[72] Interview with Kenneth Samanenga, Chitokoloki Mission Hospital, 20 January, 2019.
[73] N.A.Z., MH1/03/064, Chitokoloki General Hospital Annual Report, 1956.
[74] Interview with Kenneth Samanenga, Chitokoloki Mission Hospital, 20 January, 2019

Settlement.[75] These measures to some lepers encouraged them to join the leper settlement. The medical officer further emphasised that:

> The lepers who refuse to be at the designated centres should not be granted tax exemptions unless they come and live at these centres. These rules should be rigidly enforced.[76]

In addition, free transport was to be provided to the lepers from their villages to the leper centres. The gesture was similar to the Nigeria situation where those who submitted to voluntary segregation were usually mendicant leprosy sufferers who were attracted by allowances from the local administration.[77]

3.6.2 Experience and Activities of Lepers at Chitokoloki Leprosarium

While at Chitokoloki Leprosarium, several patients of leprosy continued with their normal life after they recovered. Some went back to their villages. Due to stigma and rejection by family members and the community, some lepers decided to return to the leper colony. For example, Kenneth Samanenga, an 86-year-old man, had been in the leper colony since 1952. Samanenga was from Kasamba area in today's Manyinga district of North-Western Province. After Samanenga was discharged, some of the relatives he left in Kasamba Village had relocated elsewhere and those that remained rejected him. Finding himself in such a social dilemma, Samanenga returned to the leprosarium centre.[78] He has been at the leper colony since then. Being the oldest among the surviving lepers, Samanenga was appointed village headman for the leper community. It can be deduced that the Leper Settlement was not only a place of healing but also provided a political platform to some lepers. For example, lepers like Samanenga were appointed to provide leadership at the settlement.

Socially, some lepers at Chitokoloki Leper Settlement married and eventually had families. For example, in 1978, Samanenga married a fellow leper, Grace Kabisu and settled at the colony permanently. Grace Kabisu, narrated that she went to the Leper Settlement in 1972

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[75] N.A.Z.,MH1/03/038, Tour Reports: Christian Mission in Many Lands, Leprosy Settlement, Annual Report, 1948.
[76] N.A.Z.,MH1/03/038, Tour Reports: Christian Mission in Many Lands, Leprosy Settlement, Annual Report, 1 January, 1950.
[77] Tunde Oduwobi, 'Tackling Leprosy in Colonial Nigeria, 1926-1956' *Historical Society of Nigeria*, Vol: 22, (2000), pp. 178-205.https://www.jstor.org/stable/24768922.

[78] Interview with Kenneth Samanenga, Chitokoloki Leper Colony, 20 January, 2019.

and married in 1978. They had one child and three grandchildren.[79] Chitokoloki, therefore, acted as a place of refuge to many who were unable to return to their homes.

Figure V: Kenneth Samanenga and his wife Grace Kabisu at Chitokoloki Leper Settlement

Source: Picture, courtesy of Monde Shalala (2017).

While at the Settlement, lepers got involved in various activities as part of the rehabilitation process. For instance, it was discovered that all the buildings at the Leper Settlement were constructed by the lepers under Mr Mawhinney's supervision.[80] Lepers were also taught bricklaying and carpentry skills until they reached a high standard of proficiency. Lepers made doors, window frames and items such as knives, axes and hoes.[81] All these trades were taught to new learners each year. While at Chitokoloki Leper Settlement, the patients were involved in agriculture too. They cultivated cassava and other crops. In other words, the lepers were not merely dependent on what the missionaries provided for them but were engaged in various economic activities for the betterment of their lives.

[79] Interview with Grace Kabisu, Chitokoloki Leper Colony, 20 March, 2019. *See also* Paul Shalala Documentary on ZNBC on https://www.youtube.com/watch?v=pAfgVSZZmr0. Accessed on 03/04/2019.
[80] N.A.Z.,MH1/03/038, Tour Reports: Christian Mission in Many Lands, Leprosy Settlement, Annual Report, 1949.
[81] N.A.Z.,MH1/03/038, Tour Reports, 1949.

In addition, some lepers who possessed special expertise in certain professions contributed to the social well-being of the people within the Leper Settlement. For example, Timothy Nosiku, who reached standard VI, became a teacher and was in-charge of the school at the leper settlement in 1950. This was after he persuaded the missionaries to set up a school at the settlement so that children within could be given instructions in western education. Nosiku himself was employed to teach at the school and was paid for the duties that he executed.[82] The existence of the school was basically to help maintain discipline of the children at the colony. However, the school did not continue with its operations after Nosiku was healed and subsequently left the leprosarium.[83]

3.6.3 Social Cohesion

Chitokoloki Mission, being the Leprosarium, attracted different men and women from different parts of the country. For example, in the 1950s, statistics show that different ethnic groupings were represented at the settlement. Furthermore, lepers from different countries were also recorded. Some were from as far as the Democratic Republic of the Congo and Angola.[84]

Therefore, Chitokoloki Leprosy Centre became the place of social cohesion as various men and women from different districts received treatment. For example, in the Ministry of Health 1950 annual report, statistics showed that a total number of 840 lepers from different tribal groupings were at the Leper Settlement.[85] The majority were Luvale, numbering 282, followed 141 Lunda. The two ethnic groups dominated in the leper colony because of their proximity to the settlement. The least number were Bemba, Lamba and Tonga among others. However, some lepers came from as far as Kalabo, Mporokoso, and Mazabuka districts.[86]

It was further established that 57 % of the lepers were from outside the Balovale area. For example, the Ministry of Health annual report of 1951, indicated that a total of 242 lepers of

[82] N.A.Z.,MH1/03/038, Tour Reports: Christian Mission in Many Lands, Leprosy Settlement, Annual Report, 1950.
[83] N.A.Z.,MH1/03/038, Tour Reports: Christian Mission in Many Lands, Leprosy Settlement, Annual Report, 1951.
[84] N.A.Z.,MH1/03/038, Tour Reports: Christian Mission in Many Lands, Leprosy Settlement, Annual Report, 1950.
[85] N.A.Z.,MH1/03/038, Tour Reports: Christian Mission in Many Lands, Leprosy Settlement, Annual Report, 1950.
[86] N.A.Z.,MH1/03/038, Tour Reports: Christian Mission in Many Lands, Leprosy Settlement, Annual Report, 1950.

different tribes were at Chitokoloki Leprosarium Centre. That included 13 from Angola and one from Congo.[87] The concern was reported by a Medical Officer who indicted that:

> A good number [of lepers] come from Angola and others from Belgian Congo, Tanganyika and Nyasaland. However, the numbers in the settlement have been kept up this year by the sending to us of large numbers of Lamba people from districts over 500 miles away.[88]

While conflicts at times became apparent at the leprosy hospital, people of different ethnic groupings lived and were bound to each other by a common sympathy.[89] Lepers at the settlement, therefore, exchanged cultural values such as language, as they interacted. Table 12 shows the ethnic grouping and areas of origin.

Table 12: Ethnic Groupings and areas of origin at Chitokoloki Leprosarium-1951

Ethnic	**Districts Represented**
Lovale……..93	Balovale……..105
Lunda……...29	Mongu……..25
Kaonde…….25	Solwezi…….24
Lamba……. 19	Mankoya……..17
Mbunda…...18	Kabompo……15
Chokwe…...18	Kalabo……..13
Luchazi……17	Angola…….13
Lozi……..9	Ndola……12
Nkoya……..4	Kasempa…….9
Tonga……..3	Mazabuka……...4
Mbowe……2	Senanga……..3
Viye…….1	Congo……1
Makoma……1	Mwinilunga……1
Lwimbi……..1	**Total……242**
Kwangwa…...1	
Matotela…….1	
Total……...242	

Source: N.A.Z., Chitokoloki Leprosy Settlement, Annual Report, 1951.

In 1956, there was progress towards the complete control of leprosy at Chitokoloki Mission Hospital. Ministry of Health Annual Report indicated that there were 1,016 leper patients at the Leper Settlement. This was due to a change in lepers' admission policy by the

[87] N.A.Z.,MH1/03/038, Chitokoloki Leprosy Settlement, Northern Rhodesia Annual Report, 1951
[88] N.A.Z., MH1/02/45, Christian Mission in Many Lands, Chitokoloki Annual Report, 1952.
[89] Global Connections in Missions, 'In His Name; 2nd Ed.', p.121. Document sent through personal communication with Sefton Marshall

government rather than an increase in the number of leprosy in the district.[90] Another reason for the increase was that no patients were permanently discharged during 1956. When it was no longer necessary for a patient to be returned to the Central Leprosarium, he or she had a choice of settling in the rehabilitation area at Nyamong'a. Therefore, Nyamong'a became an out- patient centre of Chitokoloki.

Chitokoloki Mission Hospital continued recording a steady decline in leper cases over the years. In 1957, it was noted that no patients were permanently discharged but increased efforts were made to transfer all sustainable patients to attend the nearest clinic as soon as their clinical conditions permitted them. At the end of 1957, the total number of patients under supervision rose to 1,585.[91]

In 1979, it was reported that a number of leper patients increased world-wide, and at that time there were 45,000 patients for every trained Leprologist. Chitokoloki being the biggest Leprosarium Centre in North-Western Province received a number of leper cases. In this regard, Chitokoloki Mission Hospital continued to be relevant as leprosy patients were housed, fed, clothed and treated.[92]

In the 1980s and 1990s, the trend was similar at Chitokoloki Leper Settlement in terms of numbers. The hospital experienced a reduction in the number of new cases compared to the previous years. In 1986, for example, Chitokoloki Leprosarium and T.B Centre showed that the number of leper cases reduced. There were only 15 new leper cases received and 98 patients were discharged. However, two deaths were recorded during the year.[93] Further, the Hospital's Annual Report of 1988 showed that out of 39 patients examined, only 14 were positive with leprosy.[94] In 1990, the number of new leper cases was seven, which was half the number of the previous recorded cases and in 1999 the number of new leper cases reduced to three.[95] The main reason in the reduction of leprosy cases, according to Ian Burness, was due to therapeutic advances following the discovery of *dapsone* and other modern therapeutic approaches that reduced the scourge world over.[96] This demonstrated that in terms of leprosy treatment in Zambia, Chitokoloki Mission Hospital played an essential role.

[90] N.A.Z., MH1/03/064, Chitokoloki General Hospital Annual Report, 1956
[91] N.A.Z., MH1/02/064, Balovale Medical Officer's Report, Chitokoloki Annual Report for 1957.
[92] Annual Report, Chitokoloki Mission Hospital, 1979.
[93] Annual Report, Chitokoloki Mission Hospital, 1986,
[94] Annual Report, Chitokoloki Mission Hospital, 1988.
[95] Annual Report, Chitokoloki Mission Hospital, 1999.
[96] Ian Burness, Personal Communication, 12 June, 2019.

In the 2000s, the 150 houses built for the leper patients almost became vacant. However, in 2007, the situation at the leper settlement was that the institution continued to receive new cases of leprosy. However, there were few cases of leprosy and some of those were advanced. There were only eight new leprosy patients enrolled on treatment in 2007.[97]

Furthermore, there was a drastic change in the number of leper cases in the latter years after 2007. According to the statistics, the number of admissions of lepers at the settlement showed that far from being completely wiped out, there were still some new cases recorded. For example, there were 78 leper cases in total, in 2009. The number slightly increased in 2010 by 12. However, in 2011, the number of admissions reduced to 59 as many were discharged and few deaths were recorded. In 2012 and 2013 the hospital received four and five cases of leprosy, respectively. The report indicated that these cases mostly were from outside Zambezi catchment areas such as Mufumbwe and Chavuma Districts.[98]

3.7 Outbreak of Bubonic Plague at Chitokoloki

Apart from leprosy, Chitokoloki area experienced an outbreak of a unique plague that was reported in May 1955 by Dr Worsfold. The disease was endemic in the Zambezi Basin. The plague was known as bubonic. It was noted that there were nine cases reported of which five were fatal. Worsfold further reported that:

> With one exception, all cases were seriously ill and the only four cases that were nursed in the hospital showed mental excitement and/or confusion.[99]

The outbreak of the plague with a unique physical manifestation and attack was a new case at Chitokoloki. For example, a middle-aged female who lived in the infected village was suddenly taken ill after she had a 'lump in the groin' and died. It was noted that she was buried without being seen by anyone responsible.[100] The plague, however, was contained by the medical practitioners at the hospital.

3.8 HIV/AIDS and Tuberculosis (TB)

Chitokoloki Mission Hospital also dealt with other ailments alongside the HIV and AIDS pandemic. One such disease was Tuberculosis (TB). Several reports indicated that TB

[97] Annual Report, Chitokoloki Mission Hospital, 2007.
[98] Annual Report, Chitokoloki Mission Hospital, 2012, 2013.
[99] N.A.Z., MH1/03/064, "An Outbreak of Plague at Chitokoloki, Balovale" By J. T. Worsfold, Chitokoloki General Hospital Annual Report, May 1955,
[100] N.A.Z., MH1/03/064, Chitokoloki General Hospital Annual Report, May 1955.

continued to be one of the commonest public health problems especially with the coming of the HIV/AIDS pandemic.[101] In the early 1980s, there was a general myth that whoever was found with TB was infected with HIV/AIDS. Therefore, due to fear of stigmatisation, those with TB symptoms avoided seeking treatment at the hospital. After sensitisation by health workers, the situation improved. For example, it was noted that a total of 157 patients were tested for Pulmonary TB in the laboratory in 2007. The results recorded were that three patients came out positive and 52 patients were put on TB treatment.[102]

Generally, TB remained one of the commonest public health hazards at the hospital and the measures to combat the scourge were underway. In addition, the establishment of an Antiretroviral Therapy Centre helped in providing counselling, especially to all those who were tested HIV/AIDS positive.[103]

In 2012, for example, Chitokoloki Mission Hospital recorded an increase in the number of TB patients compared to the previous years. For example, a total of 71 TB patients were treated at the hospital.[104] The scenario in 2013, was that 59 new cases were treated for TB. Those who were infected were isolated and kept at the leper colony for many houses were vacant due to a drastic reduction in leprosy cases.[105]

3.9 Venereal Diseases

Towards the end of the 19th century and early parts of the 20th century, African countries were colonised by European countries. It was during colonialism that Africans experienced an increase in famine and disease. Prior to colonialism, many African states had mastered their environment and the spread of diseases was relatively under control. Africans acquired skills which ensured that famines were never an issue and diseases could be controlled. Africans had cultural norms that placed a great deal of value on the environment and animal species. Some scholars argued that early contact with European soldiers, traders and missionaries introduced diseases that devastated local African tribes.[106] Little wonder, then, that North-Western Province and Zambezi District to be specific was not immune to such diseases.

[101] Annual Report, Chitokoloki Mission Hospital, 2007.
[102] Interview with Charles Kabwita, 16 January, 2016.
[103] Interview with David Katota, Chitokoloki Mission Hospital, 17 January, 2019.
[104] Annual Report, Chitokoloki Mission Hospital, 2012
[105] Interview with Kenneth Samanenga, Chitokoloki Leprosarium centre, 21 January, 2019.
[106] Disease and Depopulation of Africans during Colonialism.www.globalblackhistory.com accessed on 23.06.2019.

Therefore, apart from other diseases, Chitokoloki Mission Hospital witnessed an increase in patients suffering from venereal diseases. The Venereal Diseases were Sexually Transmitted Infections (STIs). The commonest recorded STIs were gonorrhoea, syphilis, and Pelvic Inflammatory Diseases (PID). These were attributed to promiscuous life styles such as adultery and illicit sexual activities.[107] Most African communities did not treat venereal diseases seriously. Initially, venereal diseases posed a danger to African health and treatment became difficult. The STIs became common and the Institution took it upon itself to find ways in which to mitigate such diseases. It was noted that ignorance played a big role in the increase of venereal diseases. Chinyama Kafwale commented that most of those infected with STIs in the early years accused others of witchcraft.[108]

There was a common trend on how infected Africans responded to treatment of venereal diseases. For instance, some of those who were infected did not want to visit the hospital on time, but opted to do so when the situation deteriorated.[109] Those who were infected transmitted venereal diseases to others and so it spread. It was noted that most of the carriers of venereal diseases in the 1930s and 1940s were retired miners, who went back to rural areas from mining towns.[110] The trend by Africans to go to the hospital after an illness deteriorated annoyed some medical practitioners at Chitokoloki Mission Hospital. As a result, there was growing animosity between patients and medical practitioners. Some patients were shouted at and others ended up being slapped. However, those missionaries who exhibited such behaviour never stayed long at the Mission.[111]

In the early years of its establishment, Chitokoloki Mission Hospital hardly treated venereal diseases because they were not common. It was not until 1996 that the institution started a regular STIs clinic, under which the education on venereal diseases, AIDS, counselling and testing, diagnosis and treatment with follow-up examinations were provided. During the early stages, the hospital could only treat a patient if both partners were tested and counselled. The STIs clinic faced the challenge of limited staff. As a result, the clinic was no longer held and patients were seen in other regular clinics.[112]

[107] N.A.Z, MH1/02/062, Development and Welfare Schemes: Rural Hospitals and Dispensaries, 1948-1958.
[108] Interview with Chinyama Kafwale, Chitokoloki, 23 January, 2019.
[109] Interview with Charles Kabwita, Chitokoloki Mission Hospital, 16 January, 2019.
[110] Interview with Charles Kabwita, Chitokoloki Mission Hospital, 16 January, 2019.
[111] Interview with Chibanda Mushivi, former pupil, Chitokoloki Primary, Mufumbwe District, 24 July, 2019.
[112] Annual Report, Chitokoloki Mission Hospital, 1996.

In the 2000s, Chitokoloki recorded an increase in the number of people who visited the hospital as a result of suffering from STIs. In 2007, for example, the hospital continued the diagnosis and treatment of the patients with STIs. Counselling went hand in hand with treatment. Although strict health education regarding treatment, behaviour change, testing and treating partners was given, it was still difficult to reduce these diseases as not all the partners were taken for treatment. By gender, there were 40 and 38 females and males, respectively that were diagnosed with gonorrhoea. In terms of syphilis, there were 18 females and 61 males. There was a new government policy of diagnostic counselling and testing for all STI carriers for HIV/AIDS. This was introduced towards the end of December 2007 at Chitokoloki Mission Hospital. Table 13 shows statistics of some of the STIs treated at the hospital between 2005 and 2007.

Table 13: Statistics of Sexually Transmitted Infections, 2005 - 2007

DISEASES	**FEMALES**			**MALES**		
	2005	**2006**	**2007**	**2005**	**2006**	**2007**
GONORRHEA						
Pregnant mothers	10	19	30			
Neonatal gonorrhea	2	4	6			
Other patients	32	43	40	18	32	38
SYPHILLIS						
Pregnant mothers	13	25	30			
Congenital syphilis	0	0	0	0		
Other patients	13	12	18	17	42	61

Source: Annual Report, Chitokoloki Mission Hospital, 2007.

Apart from syphilis and gonorrhoea, chancroid was also another STI of which PID was the most common among the women.

Chitokoloki Mission Hospital continued to impact lives in the treatment of venereal disease. In 2009, for instance, there were 19 women who were diagnosed with gonorrhoea and in 2010 there were 10 women, while in 2011 the hospital recorded eight cases among the women.[113] Some of those infected were pregnant women. Among the males, the statistics showed that there were 20 patients in 2009 and 12 in 2010.[114] A Similar trend occurred in terms of the number of the people who were infected with syphilis in 2011. The number

[113] Annual Report, Chitokoloki Mission Hospital, 2011.
[114] Annual Report, Chitokoloki Mission Hospital, 2010.

among the men went up to 30. With reference to treatment, it was noted in the Hospital's Annual Report that an exception was made to pregnant women as considerations were made to ensure the safety of the unborn baby.[115]

3.10 Selected Emergencies

Several emergency cases were recorded at the Hospital not only from the surrounding areas of Chitokoloki, but also from far places. At times, the hospital received cases from neighbouring countries, such as Congo DR and Angola. A case which demonstrated that Chitokoloki Mission Hospital did not only impact the local people but also those from neighbouring countries was that of Jonah Sakwiza. Paul Monde Shalala interviewed a 72-year-old man, Sakwiza, an Angolan national, who admitted that he could not find specialist attention in his home town. He narrated that:

> I came from Limbala Ngimbu in Angola. I have hernia and failed to find treatment back home. That is how I came to Chitokoloki.[116]

The case above was not the only one as the hospital's medical operations statistics showed that several surgeries were conducted on the people from other parts of the country not only those from neighbouring countries but also on the Europeans.[117]

In addition, Chitokoloki Mission Hospital being near the banks of the Zambezi River meant that the people were occasionally susceptible to crocodile attacks. It was noted that nearly every year the Mission Hospital treated people that had wounds from crocodile attacks.[118] School pupils who crossed the Zambezi River were the main victims of crocodile cases. Kafwale reported that:

> The record at hand was that between 2000 and 2014 Chitokoloki Secondary School had lost four pupils, and the primary school had lost seven pupils. Within the same catchment areas such as Kayula, there were five children caught by crocodiles and in Kakong'a area there were six.[119]

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[115] Annual Report , Chitokoloki Mission Hospital, 2011.
[116] Paul Monde Shalala, Chitokoloki Mission Hospital Documentary, 2 June, 2017. News line on the Zambia National Broadcasting Corporation Television (ZNBC TV 1), https://www.youtube.com/watch?v=pAfgVSZZmr0. Accessed on 03/04/2019.
[117] Annual Report Chitokoloki Mission Hospital, 2009.
[118] Interview with David McAdam, Chitokoloki Mission Hospital, 24 January, 2019.
[119] Interview with Chinyama Kafwale, Head Teacher Chitokoloki Primary School, 20 January, 2019.

However, the local people, like Kafwale viewed that some crocodile incidents around Chitokoloki were witchcraft or magic-related. This conclusion was arrived at because after searching for the bodies and recovering them, most of the crocodile victims were discovered with only few scratches. At times, only eyes and private parts were missing on some bodies. This was uncommon for a normal crocodile attack.[120]

In addition, Chitokoloki Mission Hospital handled certain critical cases that could not be contained by other hospitals. This was a case of Emmanuel Masonde, who while on the hospital bed, narrated that:

> The armed robbers attacked me and cut almost all the veins on the body with the knives and left me unconscious in the pool of blood by the road side. I awoke [Masonde] only to discover that I was on the hospital bed.[121]

He was first taken to Ndola Central Hospital and later referred to the University Teaching Hospital (UTH). From UTH, the referral letter to take him to South Africa or India for special treatment was given.[122] Unable to meet the required costs, the family decided to take him to Chitokoloki Mission Hospital. Masonde was still undergoing specialist treatment at the time of the interviews. He had been at Chitokoloki Mission Hospital since 2012. This case was one of the shining examples of many other complicated operations conducted at the hospital. This was a demonstration of how Chitokoloki Mission Hospital had socially impacted people's lives in its health service delivery.

3.11African Response to Western Medication

Since the pre-colonial period, Africans had their own ways in which they treated various diseases. Therefore, they could not accept western medical therapies easily as alleged by some Eurocentric scholars. Emphasis must be made that there have been various scholarly controversies or academic debates on missionary medics in Central Africa. For instance, the views of Lewis Gann, and Peter Duignan were that Christian medics projected themselves as bearers of a superior system of healing and wished that Africans could be converted to missionary medicine, to Christianity and perhaps to the Western way of life.[123] On the whole, they argued that western medicine was superior to African healing remedies. This was

[120] Interview with Chinyama Kafwale, Chitokoloki Primary School, 20 January, 2019.
[121] Interview with Emmanuel Masonde, Chitokoloki Mission Hospital, 21 January, 2019.
[122] Interview with Masonde, Chitokoloki Mission Hospital, 21 January, 2019.
[123] L.H. Gann and P. Duignan, *Burden of Empire: An Appraisal of Western Colonialism in Africa South of the Sahara* (Stanford: Hoover Institution Press, 1967), p.283.

a common European belief in many mission hospitals. To a greater extent Chitokoloki Mission Hospital also showed resistance towards African therapies in the quest to convert the people to Christianity.

Chitokoloki Mission Hospital had a long-standing conflict between the scientific practice of medicine and the cultural acceptance of sorcery and herbal remedies.[124] In an attempt to document missionary activities at Chitokoloki, Alma Turnbull did not consider the African agency in the use of traditional healing remedies. For example, in trying to show the importance of the medical work at Chitokoloki, she cited a Medical Missionary report of July 1952, which stated that:

> Not only is our little hospital a place where Christ is made known, but also a place of comfort to the believers whose life, if we were not here [as missionaries], would be tempted in the time of sickness…to go to the native 'medicine man.' It is thus our joy and privilege to be a help in such times of severe testing.[125]

Despite the efforts by missionaries at Chitokoloki to thwart the use of African traditional therapies, most of the informants held the view that Africans had never stopped taking traditional medicine and consulting herbalists for medication and healing.[126] This clearly demonstrated that Africans did not abandon their cultural beliefs completely. They thus maintained their social and cultural hegemony.

This work, therefore, disassociates itself from the views of various scholars who position themselves and indicate that Africans abandoned their traditional medicine and therapies. It must be argued against the assertions advanced by a cohort of academics who contend that Africans stopped using their traditional therapies. The fact that Africans had not stopped using tradition medicine was noticed by missionary medical practitioners who wanted to completely eliminate the practice. For example, patients at Chitokoloki Mission Hospital were warned against taking African herbal medicines while admitted to the hospital. In the quest to obliterate this act the resident medical surgeon, David McADam, wrote a notice both in Lunda and Luvale at the hospital admission office and read as follows:

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[124] Heather Harris, Chitokoloki Mission Hospital Administrator (1980-1989), Personal communication through e-mail, based in Canada. Received on 28 July 2019.
[125] Turnbull, *Chitokoloki*, p.34.
[126] Interview with Chinyama Kafwale, Chitokoloki Mission Hospital, 20 January, 2018.

Yitumbu yanyikala yafwana nankashi mulong'a yajahang'a. Antu amavulu anakufwa kwayu.

Antu akuleta yitumbu iyi kuchipatela nakukisha ayeji adi namuna, akuyifwetesha K10,000. Muyeji nawa akumulukulula muchipatela.

Mazu akufuma kudi Ndotolu McAdam nawankong'i achipatela.[127]

The notice in English literally means that:

> Traditional medicine is very dangerous. As a result, many people have died. Anyone who will bring such medicine to administer to patients in the hospital, will be charged K10,000 and the patient will be discharged from the hospital almost immediately. Message from McAdam and management.[128]

It was observed from the notice inscribed in two common languages with cautiousness that the main targets were the local people. This was so since the warning was in the widely spoken languages, namely, Lunda and Luvale. To a certain extent, the notice impeded Africans from taking traditional therapies within the premises of the hospital. It also perhaps depicted African medicine to be evil and posed a great danger to people's health. Such assertions had the potential to undermine the healing potency of African therapy. Apart from that, lack of statistics to show how many Africans had died after taking *yitumbuyanyikala* (traditional medicine) invalidated the concern by management. In order to illustrate the conflict between western medicine and African therapies, Ian Burness noted that:

> Traditional medicine was still widely used, and occasionally we saw fatal consequences, and recognised that most sick patients before they reached us had already been seen by local traditional doctors and healers.[129]

Some informants indicated that the efforts by missionaries to abolish African traditional therapies were far from being fruitful. It was stated by Chinyama that some patients were cured more easily and quickly from syphilis using the African therapies than going to the mission hospital. For instance, some patients were taken across the Zambezi River where a

[127] Notice to the General Public by Dr David McADam, Chitokoloki Mission Hospital, obtained on 16 January, 2019.
[128] Translated by Collins Masumba, based in Mufumbwe, on 4 February, 2019.
[129] Ian Burness, personal communication, based in UK, e-mail, received on 17 July, 2019.

diviner by the name of Sakambungo had resided since the 1980s. It was alleged that those with mental health related cases were healed by Sakambungo.[130]

The argument advanced by missionaries to urge people to avoid taking traditional herbs at Chitokoloki Mission Hospital was that the dosage was too much and the diviners made people to pay exorbitantly. On the contrary, Western medicine could only be given after undergoing a diagnosis process. For the local people at Chitokoloki, much emphasis was placed on the strong conviction that there was still room for African medicine to treat some diseases. For example, some people believed that snake bites were treated easily using African medicine than the western remedies.[131]

It was noted by some informants that the extent to which traditional therapy was used in the area was quite advanced. For example, Kanoka commented that even amongst the workers at the hospital, some people could leave the institution and opted to seek healing from African traditional doctors.[132] It was a common practice, especially among women to carry traditional medicine in the hospital with the view to combining it with Western therapy.

Africans always had ways in which they expressed their happiness and grievances to certain occasions. Traditionally, there were certain practices that Africans performed after child birth or during the death of their beloved ones. At Chitokoloki Mission Hospital certain traditional practices that were against the medical practitioners within the hospital took place. For example, when a child was born, the relatives could sing, ululate as well as apply cassava mealie meal or ashes on the forehead of the parents and danced within the hospital. Despite the missionaries discouraging these performances, Africans did not stop completely.[133] The lives of the people, according to some informants in Chitokoloki, were not improved as expected by the missionaries citing some elements of segregation that was witnessed at the hospital. For example, it was purported that the missionaries had their own school at Sakeji in Mwinilunga and they also rarely admitted their fellow whites in the same wards in which Africans were admitted.[134]

It is also worth noting the context in which Africans went to the mission hospitals to seek healing. There were a combination of factors behind Africans' acceptance of Western

[130] Interview with Chinyama Kafwale, Chitokoloki Mission Primary School, 20 January, 2019.
[131] Interview with Chinyama Kafwale, Chitokoloki Primary School, 20 January, 2019.
[132] Interview with Kaposhi Kanoka, Chitokoloki Mission hospital, 17 January, 2019.
[133] Interview with Edwin Nkanza, Chitokoloki Mission Hospital, 20 January, 2019.
[134] Interview with Chinyama Kafwale, Chitokoloki Primary School, 20 January, 2019

medicine and their response thereof. Among others were affordability, accessibility and the proximity of mission hospitals to their areas of residence. These factors were similar to Alex McKay's arguments who contended that:

> It appears in Eritrea, as in other parts of Africa…mission medicine was preferred to local therapy in a pragmatic, and selective way based on principles of effectiveness, cheapness and a relatively easier availability of missionary medical treatments.[135]

The foregoing statement demonstrates the factors that persuaded some Africans to accept Western medication. The fact that the medications at Chitokoloki Mission Hospital were dispensed for free might have been the "magnet" to some Africans who could not pay elsewhere. It was for this reason that in order to inculcate fear, a penalty fee might have been introduced considering the economic constraints that most people in the rural parts of Zambia underwent.

By and large, it was discovered that Chitokoloki Mission Hospital was, and is, uncommon in its administration of medical aid. Unlike the missionaries at Kalene Mission Hospital, whose medical aid was an example of a service without westernisation as the end goal, Chitokoloki Mission Hospital, was the exact opposite of what obtained at Kalene. The missionaries at Chitokoloki did not embrace "Africanisation" in terms of medicine. While the missionaries at Kalene Hill Mission Hospital did not want to absolutely thwart the local medical culture, Chitokoloki Missionaries' motive might have been purely to alienate Africans from taking their traditional therapies and introduce Western medicine.

The situation at Chitokoloki Mission Hospital exclusively embraced Western medicine as the only source of healing. That was not the case at Kalene Hill, where at conceptual level, Western missionaries wanted to incorporate Lunda witchcraft and ancestral aetiologies into their own discourse.[136] This resonated with Sarah Ponzer's analysis, who explained the Kalene Mission Hospital administration's stance that:

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[135]Alex McKay, 'Towards a History of Medical Missions', *An international Journal for the History of Medicine and Related Sciences*', Vol.51, No. 4 (Oct 1 2007),pp. 547-551. *See also* Kalusa, 'Disease and the Remarking of Missionary Medicine in Colonial Northwestern Zambia. p. 153. Kalusa argues that … their proximity to missionary medicine enabled local employees to appreciate the effectiveness of evangelical medicine against diseases as well as its superior affectivity over "traditional" medicine.

[136] Walima T. Kalusa, 'Disease and the Remarking of Missionary Medicine in colonial Northwestern Zambia: A Case Study of Mwinilunga District, 1902-1964, p.129.

> The uniqueness of its policies put it in a category of its own in regard to implementation of aid work, as its policies embraced portions of indigenous culture, rather than completely demolishing them.[137]

Due to the assimilation of the Lunda culture by the missionaries at Kalene Mission Hospital, there was a common belief among the local people that Western medicine was little more than superior witchcraft, and did not perceive the Brethren as being scientific. This situation at Chitokoloki was quite different as the missionaries did not embrace African traditional herbs.

The scenario at Chitokoloki Mission Hospital demonstrated that while the missionaries treated various diseases, anything from an African perspective was undermined and if noticed, a fine was imposed. For example, it was a chargeable offence for any patient who was found practising African therapies within the confines of the hospital. Jill Ngangula also confirmed that medical practitioners at Chitokoloki Mission Hospital had, on several occasions, warned the local people on the danger of combining African therapies with the western medication.[138] It was against this premise that Gordon Hanna reiterated that:

> Unfortunately, when people become sick here [Chitokoloki], they will first go to the diviner where they are compelled to pay money sometimes huge amounts. After realising that they could not get the needed help and having spent their money, at times the sickness becomes worse than before, that is when they decide to come to the hospital as their last resort.[139]

Taking into account the submissions made by the Chitokoloki Mission Chief Administrator, it can be deduced that mostly, the local people first considered African traditional therapies as a mode of healing for sickness and diseases. The scenario also illustrated that the hospital became the second option for healing to Africans. It was not possible however, to ascertain the extent to which the local people preferred the African traditional therapy to Western medication.

It was further established that far-flung villages from the hospital were mostly the victims of African diviners' activities. Hanna observed that a diviner could use terrible acids and other

[137] Sarah Ponzer, 'Disease, Wild Beasts, and Wilder Men: The Plymouth Brethren Medical Mission to Ikelenge, Northern Rhodesia', *Conspectus Borealis,* Vol. 2, No. 1, (2017), pp.1-36.
[138] Interview with Jill Ngangula, Chitokoloki, Zambezi District, 16 January, 2019.
[139] Interview with Gordon Hanna, Chitokoloki Mission Chief Administrator, Zambezi District, 16 January 2019.

stuff that made a patient's condition far worse than before such a person consumed such concoctions.[140] This view was void because the degree of acidity of traditional therapy could not be ascertained and lacked scientific authenticity. In other words, it can be argued that some patients went to the hospital to seek Western medication "miracle" over certain diseases. In a quest to impede the African therapeutic inclination, it was hoped that if patients sought medication promptly it would be a lot better.

There was also a different view advanced on the controversy between traditional medicine and the western one. Ephraim Kangungu stated that some diseases could be healed by traditional therapies so easily while others were to be healed by the western medicine. For example, Kangungu noted that:

> Diseases such as epilepsy (*Chinkonya*) were treated easily using traditional medicine. He added that at times, the medical practitioners elsewhere could even advise some victims to seek medical attention from a traditional doctor.[141]

It is irrefutable that some local people could only take cases to Chitokoloki Mission Hospital that were considered grievous and after the African local therapy yielded no result. For this reason, people in the area rarely went to the hospital on time and sometimes waited until the sickness deteriorated.[142] Therefore, what was prevailing overall at Chitokoloki Mission Hospital was that the local people had so much faith in African traditional healing remedies. Little wonder that only a small percentage of the local people took up the hospital sick bed spaces at Chitokoloki Mission Hospital.

3.12 Conclusion

The chapter assessed the social impact of Chitokoloki Mission Hospital on the people of Zambezi District in the North-Western Province. From its inception the hospital embarked on providing basic primary health care to the people in Chitokoloki area until it became a referral medical centre in the province. The findings were that not only did the hospital receive referral cases of patients from other districts within the province but also from other provinces and beyond Zambian borders. Chitokoloki Mission Hospital treated various diseases such as malaria related cases, venereal diseases and many others. Chitokoloki

[140] Interview with Gordon Hanna, Chitokoloki Mission Chief Administrator, 17 January, 2019
[141] Interview with Kangungu, Mufumbwe District, 25 March, 2019.
[142] Interview with Gordon Hanna, Chitokoloki Mission Chief Administrator, 17 March, 2019.

Leprosy Settlement, being one of the largest leprosarium in Northern Rhodesia, became a shining example in the treatment of leprosy in the country. Furthermore, Chitokoloki Leprosy Centre became a place of social cohesion as various ethnic groupings were taken to the hospital to seek healing.

In terms of disease and healing, Chitokoloki Mission Hospital contributed immensely to the provision of healthcare services to the local people. However, Africans first visited traditional healers and the hospital became a second option of healing. Among other factors that attracted Africans who sought healing from the mission hospital were availability, affordability and proximity. Cultural practices by African women after child birth continued even in the confines of the hospital.

Therefore, contrary to the popular view that Western medicine supplanted African traditional therapies, at Chitokoloki Mission Hospital, people continued taking African remedies despite stringent measures put up by the hospital surgeon to discourage the practice. Therefore, the long-standing conflict between traditional therapies and western medicine at Chitokoloki indicated that Africans did not completely abandon their cultural healing practices despite the missionaries' hegemonic influence.

CHAPTER FOUR

CHALLENGES FACED BY CHITOKOLOKI MISSION HOSPITAL IN THE PROVISION OF HEALTH CARE SERVICES

4.1 Introduction

In its quest to provide medical services to the people in Zambezi District, Chitokoloki Mission Hospital grappled with diverse hitches. In this chapter it is noted that the Hospital had multi-dimensional challenges that impeded the provision of medical services and were unique in the nature of occurrence. Among other challenges during the initial stages were that the hospital had poor infrastructure, use of unorthodox medical equipment, ecological constraints and disruption of families and shortage of food supply during the war periods. Besides, a conflict between medical missionaries and the African cultural acceptance of herbal remedies has will be elaborated in the chapter. Other challenges examined in this chapter are those of poor communication and road transport network. Calamities such as accidents and how they affected the medical service provision at Chitokoloki Mission Hospital have discussed are also discussed. Therefore, this chapter examines the challenges that the hospital faced in the provision of health care services from 1914 to 2014.

4.2 Lack of Infrastructure and Sufficient Equipment

When Chitokoloki Mission Hospital was established, one of the challenges that the institution faced was the problem of lack of infrastructure. For example, between 1920 and 1940 the dispensary did not have a well-defined structure except a small-mud, and grass thatched room. The size could not support the medical demands of the people at that time.[1] In 1947, Dr James Worsfold, did not even have accommodation. This was evidenced in a letter to the Director of Medical Services by the Provincial Medical Officer that read in part: "there is at present no house for Dr. Worsfold and I was requested to ask you whether you would consider a grant towards this".[2] The situation was also confirmed in another letter dated 22 April, 1948 that a doctor at that time lived in a hut at one of the missionaries' house. It was

[1] Interview with Charles Kabwita, Chitokoloki Mission, 16 January, 2019.
[2] National Archives of Zambia [Here after] N.A.Z., MH1/2/64 Christian Mission in Many Lands: Chitokoloki Leprosy Settlement: General. A letter dated 17 December, 1947.

suggested again that a grant would be welcomed towards the building of the house.[3] In 1949, the house for Dr. Worsfold was finally built using a government grant.[4]

During the colonial period, the situation at Chitokoloki Mission Hospital in terms of equipment was that the institution did not have advanced medical equipment. The hospital did not possess special medical equipment neither did it have advanced facilities to be used, for instance, in a theatre. In a letter dated 3 November 1948, addressed to the Director of Medical Services by the medical officer, it was noted that "the theatre in mention is for the general dispensary where no operating facilities exist as yet."[5] The implication of the absence of operating facilities was that in the initial years of its existence, the hospital did not deal with serious medical conditions that required major operations. As a result, the hospital only handled minor illnesses.

4.3 Human Resource

After the hospital was established in the 1920s, there was an urgent need of medical personnel. Charles Kabwita noted that in the early years of its establishment, the hospital had only one worker on duty to attend to patients during the day and another at night. In addition, Chitokoloki Mission Hospital engaged a male and a female cleaner for the entire hospital.[6]

Resignations of some African workers affected the running of the hospital. Low monthly wages demotivated the workers and many of them quit in search of well-paying jobs. For example, the highest paid African worker by November 1947 received £2.5s while others received as low as £1.0s.[7] As a result of low wages, individuals such as David Sefu resigned and joined the government in Zambezi while Aaron Kaliye Makayi started his own shop and liquor business in Chitokoloki. Robson Kaposhi who managed the Post Office at the hospital resigned in 1948 and went to work for the mines in Southern Rhodesia.[8]

By 1950, there were only four expatriate medical officers at the hospital. In order to mitigate the shortfall of medical personnel, the hospital engaged other missionaries without medical

[3] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General. A letter by Medical Officer to The Director of Medical Services, on 22 April, 1948.
[4] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, Letter to the Director of Medical Services dated 9 August, 1949.
[5] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General. 3 November, 1948.
[6] Interview with Charles Kabwita, Chitokoloki Mission Hospital, 16 January, 2019.
[7] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, 20 November, 1947.
[8] Interview with Robson Kaposhi, Chitokoloki, Zambezi, 23 January, 2019.

work background. There was a danger in engaging those who were not medically qualified.[9] Those who worked at the hospital without medical expertise compromised the quality of health service delivery. David Sefu commented that due to lack of medical knowledge by some hospital workers, some medications were dispensed based on mere guess work and thus endangered the lives of the patients.[10]

Chitokoloki Mission Hospital from its inception relied mostly on few expatriate resident medical doctors. However, Turnbull noted that the expatriate staff situation reached a nadir in 1971 and late 1990s when it was felt that the Hospital would have to be closed because of acute shortage of medical staff.[11] The Hospital's 1990 Annual Report also showed that the hospital operated without any resident doctor. At the beginning of the year, the hospital was helped by Dr Noel Eatoff who returned to Australia in February.[12]

As a way of bridging the medical gap, on two occasions, doctors who were of European descent at Mukinge Mission Hospital in Kasempa came to Chitokoloki to assist in surgery.[13] Lack of a resident doctor at the hospital encouraged the dressers to attend to patients without carrying out proper diagnosis or surgery. This had a negative impact on the medical provision. Even so, in 1999, the hospital continued in the provision of healthcare services in the community. Factors which precluded the hospital in not providing the much needed medical services at that time were primarily lack of sufficient medical personnel.[14]

Chitokoloki Mission Hospital also grappled with the problem of lack of trained nursing staff even in the 2000s. For instance, the Hospital's Annual Report of 2007 showed that David McAdam continued to lead the medical team and assisted at various times throughout the year by visiting surgeons and other specialist doctors. "The surgical work at Chitokoloki had increased dramatically but lack of trained nursing staff continued to be one of the major problems."[15] In 2011, it was noted that three trained staff left and took up employment in town creating a shortage of medical workers at the hospital. There was still a need for more

[9] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, 20 November, Letter Dated 21 July 1950.
[10] Phone Interview with David Sefu, Kabompo District, 23 March, 2019.
[11] Alma Turnbull, *Chitokoloki: Celebrating a Century of the Lord's Work in Northwestern Zambia* (Canada: Gospel Folio Press, 2014), p. 14.
[12] Annual Report, Chitokoloki Mission Hospital, 1990.
[13] Annual Report, Chitokoloki Mission Hospital, 1990.
[14] Annual Report, Chitokoloki Mission Hospital, 1999.
[15] Annual Report, Chitokoloki Mission Hospital, 2007.

nurses, midwives, laboratory and clinical officers. Due to the extra work load, a large amount was paid out in overtime to the staff by the Government.[16]

Another way in which the Chitokoloki Mission Hospital was affected lack of sufficient medical personnel. This was mainly due to retirement of workers and family relocation. Gordon Hannah commented that at times, there were a lot of changes concerning medical personnel. For example, some families left Chitokoloki to other places where high school education could be accessed for their children. Some workers retired, causing a significant decrease in the number of workers. In the absence of a resident doctor, the workload was shouldered by nurses and visiting expatriate medical doctors. This, at times, became difficult for the nursing staff to cope with the ever demanding health needs of the people at Chitokoloki Mission Hospital.[17]

A change in the workforce at Chitokoloki Mission Hospital had a negative impact on the delivery of medical services. In the early years, Chitokoloki had some members who were locally trained by mission workers. These people were members of the community, who spoke the local languages and were mostly Christians recognised for their potential. As years went by, some local staff reached retirement age and their replacement by other locally trained staff became difficult. A number of college and university trained staff was sent to Chitokoloki by the Government. This meant that they cautioned the problem of labour shortage at the hospital. Even so, Julie-Rachel, a missionary lamented that most of these medical officers hardly confirmed to Christian standards thereby defeating the whole purpose of the hospital's existence in terms of medical evangelism.[18] On the contrary, the defect of this approach has been its tendency to overlook the critical role which Africans played at the hospital. It was not the question of them working against hospital's mission of evangelising through medics for they simply provided the required services.

4.4 Cultural Differentiation

Cultural differentiation at Chitokoloki Mission Hospital was another challenge in the medical operations of the early missionaries. It was a nightmare for some of the expatriate medical practitioners to adjust to the rural area and accommodate African culture. Therefore, some missionaries could not live long at the station, of which among other reasons was the failure

[16] Annual Report, Chitokoloki Mission Hospital, 2011.
[17] Interview with Gordon Hannah, Chitokoloki Mission Hospital Chief Administrator, 16 January, 2019.
[18] Julie-Rachel Elwood, "Medical Mission in Chitokoloki" News in Echoes International Charity, https://www.echoesinternational.org.uk/medical-mission-in-chitokoloki/ Date Accessed: 20 January, 2019.

to adjust to the rural set up at Chitokoloki Mission. For instance, according to statistics concerning overseas missionaries, several of them went to Chitokoloki Mission Hospital, but by 2013 there were only four expatriate missionary nurses. Further, the hospital had only one expatriate resident doctor, Dr David McADam who joined the hospital in 2000. As a result, the surgeon was always overwhelmed with diverse medical operations.[19]

4.5 Poor Work Culture

Poor attitude towards work was exhibited by those who were employed at community health centres. Some Africans who were trained as dressers at Chitokoloki were non-performing. Those who were given tasks to manage some clinics in various villages exhibited some levels of incompetence. For example, the Hospital's Annual Report of 1986 showed that during a surprise visit to Likungu Clinic by the Medical Officer on March 17, it was discovered that the dresser in-charge had not been carrying out his responsibilities in a trust worthy-manner.[20]

In addition, the report at the health post showed that no entries had been made in the record books. Worse still, the medical officer discovered that almost all of the drug supply for the month had been exhausted and there was no proof that drugs had been dispensed to patients. However, the situation misappropriation of drugs that seemed to be long-standing was not reported. It took the involvement of Lieutenant Col. E.F Munamunungu, a Zambezi District Governor, who commissioned the work, repaired the building and arranged the appointment of a new health committee at Likungu Health Post.[21]

4.6 Overcrowding

Overcrowding was another challenge that Chitokoloki Mission Hospital grappled with especially in the 2000s. Any missionary medical institution that offered free and good medical services risked facing the challenge of overcrowding. Since, Chitokoloki was known to have had an excellent reputation within Zambia and neighbouring countries, people visited the hospital for various medical services. Gordon Hannah noted that the hospital was initially only meant for the people around Chitokoloki area. However, as years went by, the reality was that 65% of patients came from other districts, provinces and neighbouring countries.[22]

[19] Annual Report, Chitokoloki Mission Hospital, 2013.
[20] Annual Report, Chitokoloki Mission Hospital, 1986.
[21] Annual Report, Chitokoloki Mission Hospital, 1986.
[22] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 17 January, 2019.

Therefore, the hospital was regularly full to capacity with multiple floor beds in the respective wards. Surgery and medical needs were constant and often overwhelming.[23]

4.7 Impact during the War Periods

The impact of the First and Second World Wars to a certain extent disrupted the operations of missionary hospitals in Central Africa. For example, some Africans who, at times, were required to play various roles in missionary establishments were recruited as porters while others were conscripted in the army.[24] Chitokoloki Mission Hospital was also not spared. For instance, Chabatama argued that the mission experienced difficulties in procuring food during the First World War period because the source of food supply was disrupted and became unreliable. As a result, the mission relied on African food supplies and embarked on farming. During evangelisations, Africans were encouraged to grow food crops like wheat, rice, fruits and groundnuts which the missionaries needed for consumption.[25]

During the Second World War (1939-1945), the road connecting Chitokoloki Mission Hospital to other parts of Zambezi District was closed so that African troops could not cross to the other side. As a result, it was discovered that the hospital was cut off from the regular supply of medicine and in some instances medicines were destroyed in the process. One such incident was the destruction of a makeshift ferry during the war which led to the cutting off of all medical supplies to the hospital. This was indicated in the Hospital's Annual Report of 1948 which noted that:

> During the war, a road, which was only a grass track, was put through to the mission station, mainly for the use of African troops. The road crossed the Kabompo River and the only way of their truck to go over was by putting it on a wooden platform mounted on empty gas cans, which the native [Africans] pulled across the river. Unfortunately, on one occasion, the platform capsized and the truck sunk with valuable drugs and supplies on it.[26]

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[23] Paul Monde Shalala, Chitokoloki Mission Hospital Documentary, 2 June, 2017. News line on the Zambia National Broadcasting Corporation Television (ZNBC TV 1), https://www.youtube.com/watch?v=pAfgVSZZmr0. Accessed on 03/04/2019.
[24] Hugo F. Hinfelaar, *Missionaries in Africa: History of the Catholic Church in Zambia*, (Lusaka: Book World Publishers, 2004), pp. 82-83.
[25] C. M. Chabatama, 'The Colonial State, The Mission and Peasant Farming in North-Western Province of Zambia: A Case Study of Zambezi District, 1907-1964', M.A. Dissertation, University of Zambia, 1990, p. 28.
[26] N.A.Z, MH1/3/20, Tour Report of the Provincial Medical Officers; Barotse Province, 1945-1955.

The sinking of valuable drugs had a damaging impact on the medical care service provision. Drug shortages during the war period compromised and threatened health care quality.

Another negative effect of the Second World War on Chitokoloki Mission Hospital was the loss of lives of some members of the missionary family. For example, George Suckling had three sons, Eddie, Kenneth and Gordon. Both Eddie and Kenneth died in the World War II.[27] The experience potentially destabilised the normal hospital operations. The death of Suckling's sons was confirmed in a message of condolences dated 9 January, 1945 by John F.C. Haslam. The message read in part:

> I was deeply distressed to hear that your sons, Eddie and Kenneth, have been killed in action during the war. Tender my heartfelt sympathy to yourself and your wife.[28]

Eddie was conscripted in the British Army, Kenya regiment and was killed in action in North Africa. He was buried in the Commonwealth graves in Addis Ababa, Ethiopia. Edie's brother, Kenneth, was in a British Northern Rhodesia Regiment. He was killed by the Japanese soldiers in Burma. However, Kenneth's remains were buried in India because the British army would not burry their soldiers in Burma. Gordon was the only son of Suckling who survived during the war because he remained at Chitokoloki Mission to help his father in the hunting expedition.[29] Gordon earned himself a Lunda name, *Kachong'u Musesambig'a*, meaning the great hunter, due to his prolific hunting experience.[30]

The news that missionaries in Northern Rhodesia became victims of the Second World War, contributed to the delay of some doctors to report for work at Chitokoloki Mission Hospital due to security concerns. For example, it was hoped that Dr Worsfold would join the mission hospital as early as 1940, he instead joined in 1947.[31]

4.8 Other Social Related Challenges

After independence, the Government of the Republic of Zambia continued supporting missionary hospitals both financially and with human resource provision. However, there was

[27] Turnball, Chitokoloki, p.22.
[28] N.A.Z. MH1/2/64 Christian Mission in Many Lands, Chitokoloki Leprosy Settlement: General, 1949-1962, 126/M1/3/B/1.
[29] Eira Suckling Patching, daughter to the only surviving son of Suckling, Gordon, based in Mwinilunga at Sachibondo Mission, phone interview on 28 May 2019.
[30] Interview with Freddy Mulala, based in Mufumbwe and once lived in Mwinilunga, 30 July, 2019.
[31] Global Connections in Missions, 'In His Name', 2nd Edition (Kerikeri: Marsh Erlano, 1987), p.121. Document sent through an E-mail by Sefton Marshall.

a concern about some trained staff employed by the Government, especially those who grew up in towns. These medical personnel often abandoned the place after failing to cope with village life at Chitokoloki.[32]

Chitokoloki Mission Hospital experienced a constant turnover of medical workers. This meant that staff retention was a difficult venture. In general, most trained medical officers were from urban areas. Some were displeased to be posted to a rural setup, far from their families, without the attractions that city life offered.[33] Sometimes medical officers, both men and women, who were separated from their families returned to their wives and husbands as soon as an opportunity for a transfer arose. It was further noted that a number of the local Christian young people who attended nursing college did not want to be posted back to Chitokoloki because they too wanted to experience town life.[34]

Language barrier also worsened the medical provision situation as some doctors and nurses hardly learnt the local languages, Lunda and Luvale. This made it difficult for the medical officers to communicate with the patients. The danger was that some patients remained unattended to until one who was conversant with the local language came to their rescue. Most missionaries spoke Lunda and Luvale more fluently than newly deployed Zambian health personnel. As a result, some patients became victims of wrong drug prescription due to language barrier. This was confirmed by Julie-Rachel Elwood who commented that:

> They [Zambian Medical officers] do not speak other local languages easily or have the same focus of spiritual care as our local Christian staff. It is more crucial than ever before that mission workers learn local languages well. In fact, our Zambian colleagues often look to us for help with communication to our Lunda and Luvale-speaking patients.[35]

Therefore, the failure to learn and understand the local languages by some staff derailed the smooth delivery of the medical services at Chitokoloki Mission Hospital.

[32] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 16 January, 2019.
[33] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 16 January, 2019.
[34] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 16 January, 2019.
[35] Julie-Rachel Elwood, Echoes International News, Medical mission in Chitokoloki. Accessed on 5 March, 2019 on https://www.echoesinternational.org.uk/medical-mission-in-chitokoloki/

4.9 Treatment of Leprosy

Chitokoloki Leprosarium Centre experienced its own unique challenges with regard to the treatment of leprosy. Management of leprosy was very costly for both the hospital and the successive governments. For instance, in the colonial period the expenditure for October 1947 amounted to £116[36] while the expenses as of April, 1948 was estimated at £129.[37] On 15 March, 1949, the total expenditure for February expenses was at £162.[38] As time went by, the cost of maintaining lepers became enormous. For example, in 1951 the summary of recurring expenditure for the months of June, July, August and September was at £608.10.[39] The Government spent money on the management of leprosy throughout the area by providing basic needs. For instance, during the cold season, the lepers needed clothes and blankets. The request to the Director of Medical Services was usually done in advance by Suckling. In a letter dated 20 May, 1948, the request was made of blankets for the 230 adult lepers at the Leper Settlement[40] and the same request was advanced on 5 May, 1950.[41]

There was also a challenge in implementing some of the Government policies by the missionaries concerning leprosy. While the Government insisted that the number of admission to the leper colony must be limited in order to maintain the amount of money allocated to the hospital, the missionaries wanted it to be unlimited. Even so, Government suggested that only those with infectious cases were to be allowed to stay at the settlement. George Suckling was averse to that but Dr Worsfold felt that the request could be carried out despite the fact that it was against his humanitarian principles. According to the letter written by the Provincial Medical Officer, dated 17 November, 1947 to the Director of Medical Services:

[36] N.A.Z., MH1/2/64 Christian Missions in Many Lands: Chitokoloki Leprosy Settlement. General, Financial Report prepared by Missionary in-charge G.R. Suckling on 6 November, 1947.
[37] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, May, 1948.
[38] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, March 1949.
[39] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, Chitokoloki Leper Settlement Financial Report, 1 November, 1951.
[40] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, Letter by G.R. Suckling, on 20 May, 1948.
[41] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, Letter by Chitokoloki Leprosy Settlement Medical Officer, 1950.

> Mr Suckling was worried about having to tell the non-lepers and non-contagious cases that they could not stay in the Colony and felt that I should inform them but when I offered to do so no more was heard about it.[42]

The reason Suckling was hesitant to make such a pronouncement was that his conviction as a missionary, was to render help to all those who were taken to the Leper Settlement. But that was against Government's policy. The Government further insisted that burnt-out and crippled leper cases together with the non-lepers were not the responsibility of the Health Department. It was agreed and suggested that when necessary, such cases should be taken care of by the African Local Authority (ALA).[43]

Lack of good financial accountability at Chitokoloki Leper Settlement was yet another challenge. It was noted by the Medical Director that there was financial mixing of expenditure between the leprosy work and the general health expenditure. As a result, Mr Suckling was asked by the Provincial Medical Director to keep separate, the monthly expenditure of the Leper Settlement from the general medical work. The Director noted that instructions were made to Suckling on the system of handling government money and the necessity of keeping within the estimates.[44] This was because the Auditors from the Government offices noticed some financial anomalies concerning how the money was spent at Chitokoloki Leprosarium. The lepers also responded to certain financial irregularities in the colony. For example, the Hospital's Annual Report of 1952 recorded that:

> Several letters from the anonymous have been received by the Chief Secretary, the police and I [Medical Officer] by one signing himself as 'Dead bodies'. The gist of these is lack of food supplied to the lepers and the use of Government funds by the mission for its own use.[45]

The letters written by the 'Dead bodies' was a demonstration that the lepers were also concerned and aware of what contributed to the suffering in the settlement. The writing of the letters was also an act of peaceful demonstration against the missionaries' financial mismanagement.

[42] N.A.Z., MH1/2/64 Christian Missions in Many Lands: Chitokoloki Leprosy Settlement. General, Letter to the Director of Medical Services, Dated 17November, 1947, No: 471/B3/B/1
[43] N.A.Z., MH1/2/64 Christian Missions in Many Lands: Chitokoloki Leprosy Settlement. General, 1947.
[44] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, 1948
[45] N.A.Z., MH1/2/66, Christian Missions in Many Lands: Balovale, Annual Report, 1952.

The non- availability of many trained surgeons in the field of leprosy treatment had a negative impact on the leper patients. Dr Worsfold was the only leprologist in the province. At times he was assisted by Miss Falconer who also left and started her missionary work at Kabulamema in 1949. The departure of Miss Falconer and the absence of Dr. Worsfold at times, posed a great danger to the medical provision at the settlement. This was noted in a letter by the acting Director of Medical Services, A.T. Howell addressed to the Medical Officer of Balovale which read in part that:

> I am very sorry to hear that Miss Falconer has left the Chitokoloki Leprosy Settlement, especially in view of Dr. Worsfold's inability to carry out his duties.[46]

The concerns raised by the Acting Director of Medical Services were not resolved. Therefore, as lepers were taken to the Settlement, those who needed immediate attention waited until Dr. Worsfold resumed work. The organisation of anti-leprosy work could only be undertaken thoroughly by one who was a specialist in the disease, its treatment and prevention.

The medical operations at Chitokoloki Leprosarium Centre were once negatively affected by a serous fire that led to the destruction of property and medicine. It was reported that on 17 April 1950, fire destroyed large buildings in the leprosy settlement. The institution was at a loss because the property was not covered by any insurance.[47] In an attempt to recover some property, the matter was taken to an insurance cover with the London and Lancashire Insurance Company Limited in 1951 and no compensation was granted. Among the property destroyed at the settlement were the houses of the doctor, sister and the guests, leprosy hospital, dispensary and a laboratory. At the General Hospital, the property which was destroyed included the surgical theatre and the Out-Patient Department (OPD). The total cost for the loss was estimated at £4,900.[48] The cause of the fire was not established. The fire did not only destroy important documents such as records of the hospital but also property for the lepers. The patients did not also have access to medication until the new leper hospital was built.[49]

[46] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General. 31 January, 1949.
[47] N.A.Z., MH1/2/60, Dispensaries, Balovale District, Chitokoloki Leprosy Settlement, Annual Report, 1950.
[48] N.A.Z., MH1/2/60, Dispensaries, Balovale District, Chitokoloki Leprosy Settlement, Annual Report, 1951.
[49] Interview with a Kenneth Samanenga, A Leper and Village Headman, Chitokoloki Leprosarium Centre, 21 January, 2019.

Accidents concerning vehicles at Chitokoloki Leprosarium Centre also adversely affected medical services delivery. For example, in 1954, Dr. Worsfold, the Medical Officer-in-Charge of the settlement, informed the Government about the sinking in the Zambezi River of the vehicle that carried drugs. Any delay in responding for help would result in the loss of lives and some leprosy conditions worsening. However, the Director of Medical Services quickly responded to the request for help to salvage what could be saved and avoided a disaster.[50]

The reduction in funding by the Central Government concerning leprosy treatment had a negative effect on the lepers. For example, in 1958, the Northern Rhodesian Government grant to Chitokoloki Leprosy Settlement was reduced from £90 to £60 per year, a move that threatened the closure of the settlement.[51] Had it not been for the quick intervention by Colonel Stewart Gore-Browne, then Minister of Health, the Settlement would have closed. Gore-Browne held the view that Chitokoloki should not be closed down because of its unprecedented work in leprosy control in the province. In order to avoid the closure, the Minister sourced funds from the Leprosy Relief Association (LRA) and the settlement continued operating.[52] The Government's subsequent reduction of the grants and its inconsistence in remitting them to the Leper Colony was against the promise it made. For example, Suckling reminded the Provincial Medical Officer that:

> In the Minute No: 126/M1/B/1 dated 9 January, 1947. Government agreed to pay 100% of the expense incurred in the running of the Leper Colony and in view of that he refused donations from other channels.[53]

However, it was argued that the reduction of the grant was due to running costs that had become too high for the government because of the large number of patients.[54]

Another challenge at Chitokoloki Leprosarium was that medicine sometimes either went missing or delayed reaching the settlement. This had a negative impact on medical service provision at the hospital. For example, it was noted by a Medical Officer who indicated in the letter that:

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[50] N.A.Z., MH1/3/20, Tour Report of the Provincial Medical Officer: Balovale Province, 1945-1955.
[51] N.A.Z., MH1/2/64 Christian Mission in Many Lands: Chitokoloki Leprosy Settlement: General, 1947.
[52] N.A.Z., NR7/187, Chitokoloki Leprosy Settlement 1952-1958.
[53] N.A.Z., MH1/2/64 Christian Mission in Many Lands: Chitokoloki Leprosy Settlement: General, 1947.
[54] N.A.Z., NR7/187, Chitokoloki Leprosy Settlement 1952-1958: Letter to the Director of Medical Services, 19th January, 1953. See also Mbaita B. Liwoyo, 'Missionary, the State and Leprosy in Zambia, 1893-1964', M.A, Dissertation, University of Zambia, 2011, p.82.

> The drugs requisitioned for as at the end of February, 1948 have not yet come and we have now depleted most of the essential drugs to carry on treatment in the Colony, I [Medical Officer] would be obliged if it is possible to expedite the issue.[55]

Apart from the delay in the delivery of the medicine, Chitokoloki Leprosarium Centre ran out of some essential drugs. For instance, in 1949 *Moogrol* and penicillin medicine ran out at the settlement making it difficult for lepers to have the much required medicine.[56]

As the number of lepers increased, Chitokoloki Leprosarium Settlement was overwhelmed. The situation became a health concern. Due to the presence of Dr Worsfold, the Settlement received an overwhelming number of lepers from all over the country. This made the place too small to accommodate everyone. As a result, one room could accommodate four or more lepers.[57] The Hospital's Annual Report of 1951 showed that 57% of the lepers had been imported from outside the Balovale area. Little wonder then that the Medical Officer launched a complaint that:

> To some extent this Settlement [Chitokoloki] has become a dumping ground for unwanted people from other districts. The welfare of these people should be the concern of the missions but it is going to defeat our medical objectives if the Settlement is to receive unlimited numbers of such people from outside our own areas.[58]

The situation was also highlighted in the Hospital's Annual Report of 1954 that indicated that the leprosy department at Chitokoloki Leprosarium Centre was full.[59] In order to reduce the congestion from the leper houses, it was suggested that avoiding admitting and keeping non-contagious cases and non-lepers would be of help. If well implemented that would have reduced the number by at least one third.[60]

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[55] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: Letter by the Medical Officer to the Director of Medical Services, 20 May, 1948.
[56] N.A.Z., MH1/2/64, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement: General, 20 November, 7 July 1949.
[57] Interview with, Kenneth Samanenga, Senior Village Headman at Chitokoloki Leprosarium Settlement, 20, January 2019. See also N.A.Z., MH1/2/64, and Christian Mission in Many Lands: Chitokoloki Leprosy Settlement, General, Letter to a District Commissioner, 1949.
[58] N.A.Z.,MH1/03/38, Tour Reports: Christian Mission in Many Lands: Chitokoloki Leprosy Settlement, Annual Report 1951.
[59] N.A.Z., MH1/3/64, Baluvale Medical Officers Annual Report, 1954.
[60] N.A.Z., MH1/3/38 Tour Reports, Christian Missions in Many Lands, Chitokoloki Leprosy Settlement, 1948.

Lack of proper instruments at the Leper Settlement for diagnosis was another challenge. In 1955, the Leper Colony was using an old microscope. The accuracy of the diagnosis using old instruments compromised the results. In order to avoid such medical challenges, the Medical Officer stated in a letter dated 28 April, 1955 which read in part:

> I have raised the matter several times in the past 8 years but no instrument has been received. We are doing bacteriological work under considerable difficulties as the only microscope we have was bought years ago by the Mission and is not in good condition. [61]

The lack of terms of medical instruments had a negative impact on the effectiveness of health service delivery at the leper hospital.

The welfare of the lepers became difficult at some point. According to the Ministry of Health Annual Report of 1952, the aspect of feeding the lepers became a challenge. This was because there was a sharp rise in the cost of both mealie-meal and meat. Lack of transport at the leper colony made the situation worse.[62] Not having transport, specifically for the Settlement, posed a challenge in maintaining meal supplies. For example, Samanenga explained that in the 1960s, 1970s and 1980s lepers used to receive blankets, various food stuffs and medications from the missionaries regularly.[63] However, after 1991, the missionaries could not afford to provide all the necessary requirements for the lepers effectively. This was due to the erratic funding by the Government. The implementation of Zambia's Structural Adjustment Programme (SAP) meant that Government withdrew its financial support from missionary hospitals. Samanenga further mentioned that since 2000, the lepers were providing food for themselves. However, they could at times receive meals prepared for patients from the main general hospital.[64]

4.10 Cultural aspects

The use of herbs by Africans was never welcomed by the missionaries. Therefore, there was a long-standing conflict between the scientific practices of medicine and the cultural acceptance of sorcery and herbal remedies. It was noted by missionaries that Africans went to

[61] N.A.Z., MH1/2/60, Dispensaries Balovale, Chitokoloki Mission Hospital, Annul Report, 1955.
[62] N.A.Z., MH1/1/22 Health General, 1949-1962.
[63] Interview with, Kenneth Samanenga, Senior Village Headman at Chitokoloki Leprosarium Settlement, 20 January, 2019.
[64] Interview with, Samanenga, 20 January, 2019.

traditional doctors first before a decision was made for someone to visit the hospital. Julie-Rachael Elwood stated that:

> Witchcraft and belief in traditional medicine were still as strong as ever. It was hard to see people attending hospital with diseases that would likely have been curable at the time they first went to the witch doctor. After many months of the problem worsening, as a last resort they attend the hospital - by which stage, there is [was] little we could do.[65]

Africans at Chitokoloki Mission Hospital continued with the habit of combining traditional medicine with Western medicine even in the precincts of the hospital. It was further submitted by some former medical missionaries at Chitokoloki Mission Hospital that the cultural distance and world view conflict between Western medical professionals and African Traditions led to problems. Some expatriates who knew the local language well did manage to cross the divide better, but often as Walima Kalusa has written, even in the medical words missionaries used the local language but reinforced ATR view of disease and illness. So to a large extent, medical missionaries did fail to confront this gulf.[66] In an effort to thwart the Africans continued trend of using tradition herbs, Dr. David McAdam put a warning notice at the reception section of the Hospital. Nevertheless, the effort proved futile.

The contributing factors to the delay by the local people to seek medication at the hospital were caused by threats and beliefs held by the traditional healers who told patients that they would easily die if they went to the hospital.[67] To the missionaries, this cultural belief posed a danger on the dispensing of Western medicine at Chitokoloki Mission Hospital. In the Ministry of Health Annual Report of 1960, there was a suggestion to register African "medicine men" and village midwives in an effort to bring them under some control and cure "their more dangerous" activities.[68] It was alleged that one cause of high maternal morbidity and mortality were the old women midwives in the villages. The village-based midwives were in the habit of inserting various herbs in the private parts of expectant mothers in order to enhance quick delivery and ease the pain. It was proposed that the trend should be

[65] Julie-Rachel Elwood, "Medical Mission in Chitokoloki" News in Echoes International Charity, https://www.echoesinternational.org.uk/medical-mission-in-chitokoloki/ Date Accessed: 20 June, 2019. Julie Elwood is Registered Nurse (RN), a midwife at Chitokoloki Mission Hospital and joined in 2009. *See also* Turnbull, Chitokoloki, p.148.
[66] Ian Burness, Personal Communication, Email Received on 12 June, 2019.
[67] Interview with Jill Ngangula, Chitokoloki Mission Hospital, 16 March, 2019.
[68] N.A.Z., MH1/2/45, Christian Missions in Many Lands: Grants in Aid- General. Annual Report, 1960.

forbidden. It was also concluded that the herbs led to infections that reduced chances of further pregnancies.[69] Even then, the practice was far from being abolished.

4.11 Financing Medical and Food Supplies

Generally, hospitals in rural parts of Zambia have challenges concerning the requirsite medicine. However, at Chitokoloki Mission Hospital, the case was different. Most of the drug supply at the hospital was provide by donors based in America, Europe and Australia. Hannah acknowledged that:

> Chitokoloki was a blessed hospital for much of the medical supplies came from the overseas nations. About 90% of the medical supplies is [were] obtained from overseas and they bought a large amount of medicine from Canada and UK and shipped them in the containers. [70]

Therefore, it can be argued that while it was a common trend to find the scarcity of medicine supply in both Government and some mission hospitals in Zambia, Chitokoloki Mission Hospital was an exception. The only major challenge was the logistics of organising supplies, purchasing and transportation of the required medicine by the hospital management. [71]

Inconsistent food supply was yet another challenge that was faced by Chitokoloki Mission Hospital. For example, in 1987, there was a critical shortage of mealie-meal in North-Western Province combined with the fact that cassava fields were destroyed by the mealie bug.[72] This led to hunger in the villages around Chitokoloki. Over reliance by the hospital on local supply meant that the provision of food became a challenge. Therefore, identification of areas to purchase food from became inevitable if food supply was to continue. [73] The Hospital's Annual Report of 1988 indicated that:

> A shortage of mealie-meal in the District often meant travelling to Kabompo District to purchase the commodity. Local producers kept the Hospital supplied with fresh fruit, vegetables and beans.[74]

[69] N.A.Z., MH1/2/45, Christian Missions in Many Lands: Grants in Aid- General. Annual Report, 1960.
[70] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 16 January, 2019.
[71] Interview Hannah, Chitokoloki Mission Hospital, 16 January, 2019.
[72] Annual Report, Chitokoloki Mission Hospital, 1987.
[73] Annual Report, Chitokoloki Mission Hospital, 1987.
[74] Annual Report, Chitokoloki Mission Hospital, 1988.

The implication of buying mealie-meal from Kabompo District was that there was an extra cost on the part of the hospital. It is tenable to argue that the money which was meant to purchase other things at the hospital such as medicine went to fuel and payments of allowances to those involved in the programme.

In terms of food security and sustainability, the Hospital initially used to grow vegetables and other crops. However, when there was a shortage, the hospital embarked on buying these from the local people. The mission had second-hand clothes or what now is commonly known as *salaula* in exchange for food.[75] The local people took vegetables and other local food stuffs at the food storage (*Chisheti*) for money or to exchange for clothes according to their preference. In order to have continuous food supply at the hospital, the mission strategically had a special programme on Tuesdays when clothes were sold out to the local people in exchange for food crops.[76]

4.12 Communication and transport network

For the Hospital to function in an effective manner, reliable communication and transport network was a necessity. However, the communication and transport network, in the words of Kabwita, was one of the greatest challenges in the past years that Chitokoloki Mission Hospital contended with. People used to walk from distant places in order to report medical cases. By the time a doctor or nurse went to the scene, the patients' situation would have worsened.[77]

Since Chitokoloki Mission Hospital mainly depended on external donors, there was need for communication to be efficient. By 1947, the Mission Hospital did not have the most reliable means of communication except through the post office that was located at the Zambezi Boma. Therefore, a mail runner travelled twice in a week from Chitokoloki to Zambezi to post and collect mail at the post office. There were instances when some post mails went missing or was delayed in reaching the institution. The delay implied that information and programmes which needed the urgent attention of the medical officers could not be attended to. Since there were no telephone network providers during that time, communication became a challenge. Only a short wave radio was used though it was unreliable.[78]

[75] Interview with Hannah, Chitokoloki Mission Hospital, 16 January, 2019.
[76] Interview with Hannah, Chitokoloki Mission Hospital, 16 January, 2019.
[77] Interview with Charles Kabwita, Chitokoloki Mission Hospital, 16, January 2019.
[78] Phone interview with David Sefu, Kabompo District, North-Western Province, 25 March, 2019.

During the colonial period, the scarcity of vehicles in Zambezi District just as it was elsewhere in Northern Rhodesia was a real challenge. However, in the early days the Central African Road Services' buses used to travel to Chitokoloki from Zambezi and transported people as far as the Copperbelt Province. It was also noted that B.P. Rudge, a missionary and businessman who had buses and controlled the Baluvale Transport Services (BTS), was of help in terms of transport. Routinely, Rudge used to send a bus every Wednesday from Zambezi to Chitokoloki and further travelled from North-Western to the Copperbelt Province. Where buses were not available the people and missionaries used to travel on foot.[79]

Apart from walking to places, early medical missionaries used bicycles as a means of transport in order to reach patients. For example, Dr Worsfold used a bicycle to reach some distant places to offer medical services. Later, he bought a motor cycle which developed faults more often because of the bad terrain. Sometimes he faced the challenge of fuel shortages while in the bush.[80] Therefore, lack of reliable transport eroded the morale of some missionaries to reach out to people especially those who did not have means to reach the hospital. Hospital Administrator, David Katota commented that sometimes trained medical staff was taken on ox-carts from Zambezi.[81]

During the rainy season, it was not uncommon for ox-carts to get bogged in mud and/or break down. At Chitokoloki Mission Hospital, it was common for people also to carry their patients on ox-carts. The slow movement of the ox-carts at times contributed to deterioration of some patients' conditions. Turnbull commented that:

> An ox-cart could often be seen arriving at the hospital with a severely injured person lying in the cart, surrounded by family members. This required immediate interventions by the medical staff on duty….[82]

The above type of an unconventional means of transport contributed to the loss of some lives even when it was not meant to be if there had been reliable transport. Some ailments that required immediate medical attention delayed due to transport challenges.

[79] Phone interview with David Sefu, Kabompo District, North-Western Province, 25 March, 2019.
[80] Interview with Charles Kabwita, Chitokoloki Mission Hospital, 16, January 2019.
[81] Interview with David Katota, Chitokoloki Mission Hospital, 21 March, 2019.
[82] Turnbull, *Chitokoloki*, p. 56.

Figure VI: An ox-cart as one form of transport at Chitokoloki Mission Hospital

Source: Chitokoloki Mission Hospital in photos Archives (1992).

Lack of reliable water transport such as a pontoon to cross the Zambezi River made it difficult for the medical officers to reach the people in Mitete and Kakong'a villages for community health programmes. Therefore, the only means of transport was by canoe which was at times life-threatening. The use of canoes to cross the Zambezi River was considered as a deadly experience by the missionaries. For example, in September 1969 Hilda Seccombe commented that:

> I had to leave on Sunday afternoon and was brought upriver in such a narrow canoe that one could hardly breathe without disturbing the balance! However it was less than a mile and we got safely home.[83]

During the rainy season, the transport system to reach Chitokoloki became even more difficult. For example, in December, 1970 there was an official notice which read that Zambezi's Airport would be closed to December 20. This was so because the rains were too heavy and the road to the Copperbelt was deplorable with only few Lorries and busses that

[83] Turnbull, *Chitokoloki*, p. 46.

got through. Therefore, the missionaries at Chitokoloki were stuck.[84] The implication was that the medical practitioners especially the expatriates could not travel to Chitokoloki Mission Hospital.

The ecological constraints such as floods also affected medical services. During the rainy season some surrounding areas could get cut off from the main hospital. For example, areas like Pungu Health Post were not reachable during the rainy season. Another area which was affected due to floods was Kashona.[85] This challenge was also reflected Hospital's Annual Report of 2007. It was noted that Chitokoloki Mission Hospital continued to hold monthly outreach clinics for antenatal monitoring and vaccination at the three rural health clinics. Pungu on the west bank of the Zambezi River was not accessible in January, February and March due to floods.[86]

The nature of the road that led to the life-saving institution, Chitokoloki Mission Hospital, was not in a good state**.** Since independence the tarmac on Mutanda-Chavuma Road, known as the M-8 road ended at Mutanda, a few kilometres from Solwezi town. The rest of the road remained as gravel up to Chavuma until 2011.[87] Therefore, vehicles got stuck along the way frequently during the rainy season. In addition, the journeys took long hours to reach Chitokoloki from the Copperbelt or Lusaka which were the major sources of medical supply.[88] Even after the Mutanda-Chavuma Road was upgraded to bituminous standard, the 40 kilometre stretch from the tarmac road to the hospital was in a bad state. Shalala also reported that:

> An innocent looking poster on the Zambezi-Kabompo Road announces that one is about to branch off the main road and head to the famous Chitokoloki Mission Hospital in Zambezi. But one is immediately disappointed as they hit the road leading to the Hospital. A gravel road is bumpy and in some parts almost impassable.[89]

[84] Annual Report, Chitokoloki Mission Hospital, 1970.
[85] Annual Report, Chitokoloki Mission Hospital, 1999.
[86] Annual Report, Chitokoloki Mission Hospital, 2007.
[87] Lusaka Times of Zambia " Ishindi thanks Government for tarring the M8 road" August 15, 2011, Accessed on https://www.lusakatimes.com/2011/08/15/ishindi-government-tarring-m8-road/ .
[88] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 17 January, 2019 .
[89] Paul Monde Shalala, Chitokoloki Mission Hospital Documentary, 2 June, 2017. News line on the Zambia National Broadcasting Corporation Television (ZNBC TV 1), https://www.youtube.com/watch?v=pAfgVSZZmr0. Accessed on 03/04/2019.

The state of the road posed a serious danger to patients especially those with emergency cases and worse still for maternity ones. That was the state of the road that led to a place of healing for a hundred-year period. The bad state of the road was also observed by Hannah who commented that:

> Our weakest link is the road. Here, if one is driving on the road one cannot imagine that there is a place which is as big as this. People find it very strange after passing through a terrible road and after some time only to find a full-fledged hospital with all the departments found in the modern hospital.[90]

The state of the road posed a great danger to the lives of the people especially to those who were critically ill. Management at Chitokoloki Mission Hospital further admitted that at times some emergency cases were derailed due to the bad state of the road especially during the rainy season.[91]

Figure VII: Part of the 40 kilometre Chitokoloki Road during rainy season

Source: Photo captured during the research period (15/01/2019).

[90] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 17 January, 2019.
[91] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 17 January, 2019.

Various reasons were advanced to explain why the road was still in the bad state even after celebrating 100 years of existence. Kangungu stated that the Government was to blame because it did not collaborate with the mission management.[92] Others, Like Maria Pata, accused the mission management for presuming that the missionaries were capable of working on the road using their own finances. On the other hand, Maria Pata mentioned that the Government was to blame because it knew that the road network maintenance was its responsibility. However, some observed that there had been a common trend by many missionaries neglecting the roads that led to their institutions.[93]

4.13 Cost of not being connected to the National Grid

One of the challenges that most of rural medical centres in Zambia faced was the lack of electricity supply. Chitokoloki Mission Hospital was not an exception. The early missionaries at Chitokoloki faced the problem of medicine storage. Under normal circumstances, drugs were not supposed to be exposed to excessive heat but due to lack of refrigerators, most of the drugs lost their potency after sometime. In order to reduce on drug wastage and maintain drug efficacy, the hospital eventually acquired a paraffin refrigerator. Turnbull commented that:

> The refrigerator was mainly used for keeping drugs fresh. They had no electricity and depended on oil lamps for lighting.[94]

It is tenable to argue that no reasonable amount of food and drugs meant for the patients could be supported by such unconventional method of storage. In most cases drugs expired or lost potency due to lack of proper storage equipment.

Another challenge due to lack of electricity was that the medical officers found it difficult to conduct accurate analysis of blood. It was noted that Marie Conder went to Chitokoloki in May 1967 to handle blood work in the new laboratory. Even then, haemoglobin tests were done on finger pricks, and then blood was put on filter paper and was compared to a set of red strips in a book to determine the result. Blood matches for transfusions were checked using simple glass slides.[95]

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[92] Interview with Ephraim Kangungu, Mufumbwe District, North-Western Province, 25 March, 2019.
[93] Interview with Maria Pata, Mufumbwe District, North-Western Province, 23 May, 2019.
[94] Turnbull, *Chitokoloki*, p. 32.
[95] N.A.Z., MH1/1/16, Tour Reports by the Medical Officer, 1965-1970.

In the early days, a generator was the only source of energy which could supply power for a few working hours. Jill Ngangula reminisced how at one point she carried out a delivery process in the dark on her own when a generator went off. In the middle of the night, she looked for paraffin so that light could be provided. Such incidents were not uncommon and posed a danger to patients.[96]

Being a considerable distance from the main source of electricity, the mission hospital depended largely on diesel. For this reason, the hospital routinely had to maintain its own generators. Therefore, managing the Hospital on fuel was not an easy undertaking. In the 1990s, the hospital started ordering fuel directly from South Africa when prices in Zambia soared. The fuel later on was stored at Musenga in Chingola until the arrangements to collect the commodity were made. Before that, fuel was brought by a tanker from Copperbelt Province.[97] It was noted that the fuel consumption of a generator was quite high with about 20 litres of diesel per hour.[98] As a result, generated electricity was limited to a short period. The 2011 Hospital's Annual Report indicated that the generator cost amounted to over K 18,000,000 each month.[99]

4.14 Impact of Accidents and Deaths

In the early years of the hospital, the people who had the vision to develop missionary work at Chitokoloki died. This left a glaring and huge burden on Robert George Suckling. For example, Frederick Anort was challenged with ill-health which forced him to return to Johannesburg where he died a few months later on 15 May, 1914, at the age of 55.[100] Added to that was Lambert Rodgers' death from black water fever in 1916. After more than 37 years at Chitokoloki, Suckling also died on May 9, 1952, in Livingstone Hospital after suffering from a liver disorder.[101] His body was buried in Livingstone. However, a cenotaph was erected at Chitokoloki Mission.

Accidents claimed missionary medical personnel at Chitokoloki in numbers. There are about ten graves at the Mission a few metres from the Zambezi River, where some of the

[96] Interview with Jill Ngangula, Retired Chitokoloki Mission Worker, 16 January, 2019.
[97] Ian Burness, Personal Communication, Email Received on 12 June, 2019.
[98] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 16 January, 2019.
[99] Annual Report, Chitokoloki Mission Hospital, 2011.
[100] Ian Burness, From Glasgow to Garenganze: Frederick Stanley Arnot and Nineteenth-Century African Mission (London: Opal Trust and Echoes International, 2017), p.283.
[101] Turnbull, *Chitokoloki*, p.23.

missionaries were interred. Some of the causes of such deaths were road and aeroplane accidents. In 1970, for example, Ian Burness, reminisced that:

> Four women went off the road in a car and hit a tree. The car caught fire and they were all burnt to death. It was a tragic accident. The car was driven by Mrs Collias, the wife of an English trader and builder who was at Zambezi for many years and then at Chitokoloki.[102]

In addition, Alma Turnbull also recorded that Bill Maunsell's first wife, Joyce, was killed in a motor vehicle accident between Chitokoloki and Loloma on June 10, 1970.[103] It must be mentioned that some of those missionaries who perished were helpful in the running of the Hospital and their death meant a loss of the much needed man power.

One of the accidents that had an adverse impact on the running of the hospital occurred when a light aeroplane crashed and plunged into the Zambezi River. The accident happened on 2 June 2012. It involved two missionaries, Cameron Jay Erickson and his wife Joy Katrina. The couple died when the aircraft plunged into the Zambezi River after hitting a Zambia Electricity Supply Corporation (ZESCO) pylon. The pilot and his wife were flying from Chavuma where they had taken a nurse. Hannah reported to other missionaries based elsewhere on various media platforms that:

> It is with profound sadness, a tremendous sense of loss and with very heavy hearts that we are letting you know that we have lost two of our dear missionary colleagues this afternoon. Jay and Katrina went to be with the Lord this afternoon at about 4:30 p.m. after the plane that Jay was flying crashed into the Zambezi River right at Zambezi town which is approximately half way between Chitokoloki and Chavuma.[104]

On that fateful day, Hannah was notified and rushed to Zambezi immediately. By the time he arrived, hundreds of people were at the scene, but the plane was completely submerged. Among other government officials who were at the accident scene were the then Works and Supply, Transport and Communications Permanent Secretary Major Francis Mamanga, North-western Province Minister Josephine Limata, and Zambezi District Commissioner

[102] Ian Burness, former Surgeon at Chitokoloki based in UK. Personal communication through the e-mail, 15 July, 2019.
[103] Turnbull, *Chitokoloki*, p.146.
[104] Chitokoloki Mission Hospital, in News, 'Jay & Katrina' June 3, 2012 https://www.chitokoloki.com/jay-katrinia-update-june-2nd/ Retrieved on 23 July, 2019.

Lawrence Kayumba. The Permanent Secretary and the Provincial Minister had travelled to Zambezi to check on government projects.[105]

Efforts to retrieve the aeroplane proved futile until the Government sent a team of eight commandos from the Zambia Army who searched for the bodies the following day.[106] The divers went down into the plane and recovered the two bodies. The bodies were taken to Chitokoloki Mission. Both bodies were interred in the same grave. The then President of Zambia, Michael Chilufya Sata, accorded them a state funeral. 5 June, 2012 was declared a day of national mourning.[107] The deceased left behind two little girls, Marina aged three and Carol aged 16 months. At the grave of Jay and Katrina Erickson, the epitaph read: *Flew to Heaven, June 2, 2012 "You are a Soul. You have a Body"*[108].

The accident that shook various media airwaves not only in Zambia but the world over had a negative impact on the operation of Chitokoloki Mission Hospital. The hospital faced a challenge of transport when emergency cases occurred. This was so because there was only one aeroplane at the mission which had since been destroyed.[109] For instance, there was a regular need for transporting critically ill patients to the hospital from smaller hospitals and other health centres. Medical supplies, food and transporting visiting volunteer workers became a challenge. Jay Erickson was not only a pilot but an aviation mechanic.[110] Therefore, his death meant that the mission lost his mechanical expertise.

[105] Lusaka Times Newspaper, "Remains of Zambezi plane crash victims found" June 4, 2012, https://www.lusakatimes.com/2012/06/04remains-zambezi-plane-crash-victims/ Accessed on 24 July, 2019.
[106] Lusaka Times Newspaper, "Remains of Zambezi plane crash victims found" June 4, 2012, Accessed on 24 July, 2019.
[107] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 17 January, 2019. See also Turnbull, *Chitokoloki*, pp. 121-127.
[108] Chitokoloki Mission Cemetery. Accessed on 17 January, 2019. The cemetery showed that the Erickson's grave was the latest of them all. The epitaph further showed that Cameron Jay Erickson was born on November 13, 1985 and Katrina Joy February 20, 1986. They were from Spokane, Washington.
[109] Interview with Gordon Hannah, Chitokoloki Mission Hospital, 16 January, 2019.
[110] Interview with Hannah, Chitokoloki Mission Hospital, 16 January, 2019.

Figure VIII: The remains of the aeroplane from the Zambezi River.

Source: Chitokoloki Mission Hospital website (2012).

Though the Government came to the aid of the Chitokoloki Mission during the funeral, it also incurred some expenses. The money that would have been used to buy medicine and subsequently save lives of the patients at the hospital went towards some funeral expenses.

However, the death of Jay Erikson and his wife evoked various reactions by local people at Chitokoloki as to the cause of death. While some residents saw the death of the two missionaries as caused by a plane crash, others sought to understand the invisible force behind it. They accused some of the leading missionaries at the hospital as having used witchcraft to harm the victims. Matthews Chinyama stated that:

> We were shocked by the death of Jay and Joy Erickson. For us it was not just an accident. There was an invisible force behind it. The two were eliminated by fellow missionaries who seemed to be the owners of this mission.[111]

[111] Interview with Matthews Chinyama, Mufumbwe District, 24 July, 2019. Chinyama grew up in Zambezi District.

The myths surrounding the death of the Erikson and Katrina must be understood in the context of African belief system about causation of death. It is usually believed by the local people that death was as a result of witchcraft activities or other evil spells. Little wonder then that Africans at Chitokoloki saw the death of the two missionaries within their existing cultural lens despite the advancement of Christianity in the area. This suggests that Christianity did not wholly end African beliefs, practices and value systems.

4.15 Conclusion

This chapter has examined the challenges faced by Chitokoloki Mission Hospital in its provision of healthcare services to the local people as well as the consequences of such hitches. The chapter has established that Chitokoloki Mission Hospital had multi-faceted challenges. Some of its earliest impediments to the healthcare delivery were inadequate infrastructure, use of unorthodox medical equipment and few trained medical personnel. For example, in the colonial period, there was just a small room used as a dispensary. In the 1920s and 1930s, Chitokoloki Hospital faced a dearth of medical equipment and qualified medical personnel to run the dispensary. This was coupled with the problems that arose due to the outbreak of the Second World War. The war made it difficult for the hospital to receive medical supplies as well as trained health personnel from overseas.

Chitokoloki Mission Hospital was also not immune to financial constraints. This was especially in the area of financing leprosy treatment. The leprosy patients complained about the hospital's management inability to adequately carter for their welfare. This was evidenced in a notice to the Government by a section of lepers who identified themselves "the dead bodies". Being in a rural area of Zambezi District, Chitokoloki Mission Hospital grappled with poor communication and road transport network. In terms of electricity, the hospital was not connected to the National Grid. Therefore, the cost of running the hospital on fuel-generated electrical power was high.

Ecological consequences such as flooding of the Zambezi River posed a great danger to some rural health posts whose access, sometimes, could be completely cut off. This endangered the lives of the people. Failure by some communities to access the hospital during rainy season caused death. Almost every year, Chitokoloki Mission Hospital witnessed crocodile related cases. In this regard, school going children who crossed the Zambezi River were the most vulnerable.

In terms of Western medicine acceptance, Africans did not abandon the use of traditional herbs in combatting certain diseases. As a result, the missionaries wanted to obliterate the African medical practices at all costs but they never succeeded. Therefore, there was a long-standing conflict between the scientific practices of medicine and the cultural acceptance of herbal remedies. This could be understood from the context that Africans had ways in which they treated diseases.

Missionaries at Chitokoloki Mission Hospital were impacted negatively by the World Wars. For example, the World War II disrupted families at Mission Hospital and consequently contributed to the delay of one medical personnel reporting to the institution. Calamities such as accidents negatively contributed to the health services delivery. For example, dire accidents such as car and aeroplane caused death to the much needed medical expertise. This brought negative effects on the health delivery at Chitokoloki Mission Hospital.

CHAPTER FIVE

CONCLUSION

While the contribution of Christian missionaries to African education and Western medicine in both colonial and post-colonial Zambia has been the subject of several academic debates, not enough attention has been paid to the role played by Christian missionaries in the field of African health. This study focussed on the relatively neglected theme which is the history and role of medical institutions in Zambia. Taking Chitokoloki Mission Hospital as an example, Christian missions established medical mission both because they regarded the ministry of healing as an integral part of Christian witness and viewed medical missions as an important evangelistic agency. This study, therefore, sought to write the history of Chitokoloki Mission Hospital and determine its significance in the history of mission hospitals in Zambia.

Chitokoloki Mission Hospital of the CMML became one of the major hospitals in the provision of health services in Zambezi District of the North-Western Province of Zambia. However, the study had three objectives. Specifically, the study sought to explore the historical development of Chitokoloki Mission Hospital from 1914 to 2014. Further, the study sought to assess the social impact of Chitokoloki Mission Hospital on the people of Zambezi District. The study also set out to examine challenges faced by the Mission Hospital in the provision of health care services.

From the study, it is established that Chitokoloki Mission Hospital played a crucial role in the missionary medical provision of health both in colonial and post-colonial Zambia. Not only did the mission hospital become a place of healing to the people in the district but also to other provinces in Zambia including neighbouring countries. This was due to its gradual improved infrastructure, equipment and medical personnel especially in the years after the 1940s. The mission's main agenda from inception was to use the hospital as a tool for converting Africans to Christianity but the method was less effective. Far from a common academic conspiracy and trend that projected Africans as mere recipients of missionary medical activities, this study has established that Africans at Chitokoloki played a significant role in the development of the hospital. For instance, the local people worked as dressers, orderlies, post office managers, clinical officers, and transporters. Among the African workers, some even took high ranking administrative positions at the hospital.

The other conclusions were that the development of Chitokoloki Mission Hospital was not a mono-effort by the CMML missionaries. It was as a result of collaboration and support that came from FBOs and the Central Government in the area of finance and human resource. Some of these organisations were Medical Missionary News (MMN), Echoes of Service International, Accepting Christ's Call (ACCTS), Christian Medical Association of Zambia (CMAZ) and Churches Health Association of Zambia (CHAZ). It was from such monetary assistance that much of the hospital infrastructure was built. They also made provision of medicine and catered for missionaries' welfare.

With regard to the provision of healthcare services, Chitokoloki Mission Hospital treated various diseases. Among others were malaria, venereal diseases and many other ailments. In terms of combatting leprosy, the study demonstrated that Chitokoloki Leprosy Settlement became one of the largest leprosarium in colonial and post-colonial periods. While at the Leper Settlement leprosy patients mingled from various ethnic groupings. Therefore, Chitokoloki Leprosarium became a place of social cohesion.

Contrary to the popular view that the Western medicines supplanted African traditional therapies, this study established that the people at Chitokoloki Mission Hospital continued taking traditional therapies even within the confinements of the hospital. This was notwithstanding warnings put up by the missionary hospital doctor to discourage the practice. This indicates that Christianity was not all-conquering as Africans did not wholly abandon their belief system.

However, Chitokoloki Mission Hospital had multi-faceted challenges that impeded the provision of medical services. For some years after its opening, the hospital had poor infrastructure. The use of obsolete medical equipment and lack of the required medical personnel were among other impediments. The above challenges were compounded by the lack of adequate finances that characterised the hospital throughout the colonial period. One of the areas affected by inadequate funding to the hospital was the Leprosarium where patients who identified themselves "the dead bodies" complained to the Government about their poor living conditions. This was an indication that the operations of Chitokoloki Mission Hospital were not always easy-sailing.

During the First World War period, Chitokoloki Mission experienced difficulties in procuring food and medical supplies. As a result, the station relied on African food supplies and embarked on farming. The study established that evangelism was not only a means of

converting Africans to Christianity but also a forum for encouraging Africans to grow food crops like wheat, rice, fruits and groundnuts which the missionaries needed for consumption. During the Second World War, the road connecting Chitokoloki Mission Hospital to other parts of Zambezi District was disrupted. For example, when a makeshift ferry was destroyed, it was discovered that the Hospital was cut off from the regular supply of medicine and medical supplies were destroyed in the process.

Poor communication and transport network, high cost of running the hospital on diesel-generated electricity and the ecological consequences were among other notable challenges that hampered the medical provision at Chitokoloki Mission Hospital. Some ecological-related ailments were malaria which was as a result of the flooding of the Zambezi River. Others were cases of wounds that emanated from crocodile attacks. The flooding of the Zambezi River also made some rural health posts ran by the Hospital such as Pungu, to be inaccessible.

In addition to the above, the study established that Chitokoloki Mission Hospital's challenges included cultural differentiation between the medical missionaries and the Africans. The long-standing contest between the scientific practice of medicine and the cultural acceptance of herbal remedies derailed the medical provision at the hospital. This old-age conflict between traditional therapies and Western medicines was an indication that Africans did not abandon their cultural healing practices despite the intended missionaries' hegemonic influence.

Finally, the study has concluded that more especially after independence, the hospital experienced a shortage of bed spaces due to an increased number of patients who went to seek medical care. More patients were from other parts of Zambia and other neighbouring countries. This trend led to overcrowding of patients who in some instances occupied floor beds in the hospital wards. The loss of human resource due to accidents also brought negative ramifications on the health service delivery at Chitokoloki Mission Hospital. The accidents further hampered the operations of the hospital due to loss of much needed equipment that ended up being destroyed.

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