Doctors of Body, Soul and Society - Scottish Medical Missionaries of the Livingstonia Mission in Nyasaland, 1875-1914

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Tiivistelmä -Abstract

Tutkielmassa tarkastellaan skotlantilaisen presbyteerisen vapaakirkon (Free Church of Scotland) lähetyslääkäreiden ja -sairaanhoitajien aatteita ja toimintaa Nyasamaan protektoraatissa (nyk. Malawi) Livingstonia-lähetysaseman perustamisesta ensimmäiseen maailmansotaan. Metodologisesti tutkielma kuuluu sekä lääketieteen sosiaalihistorian että aatehistorian piiriin. Päälähteistön muodostavat Livingstonia-lähetysseuran viralliset lähetysjulkaisut ja lähetyssaarnaajien kirjeenvaihto. raportit. Tarkasteltavana Livingstoniassa palveli poikkeuksellisen runsaasti lääketieteellisen koulutuksen saaneita lähetyssaarnaajia, ja lähetysseuran johto oli vahvasti lääkäreiden käsissä. Tutkielman tarkoituksena on valottaa lääketieteen ja lääketieteellisen ajattelun osuutta lähetystyössä, sekä aattellis-ideologisella että käytännöllisellä tasolla. Tutkielman ensimmäisissä luvuissa selvitetään lähetyssaarnaajien taustaa ja sijoitetaan heidät 1800teollistuvan ja urbanisoituvan Britannian, imperialismin, lähetysliikkeen, evolutionismin ja modernisoituvan lääketieteen konteksteihin. Luvuissa 4 ja 5 tarkastellaan kronologisesti lähetyssaarnaajien harjoittamaa sairaantervevdenhoitotvötä Nyasamaassa. Lääketiede oli lähetyssaarnaajille välttämätön apuväline, sekä lähettien oman terveyden turvaamisessa, että käännytystyön ja diplomatian harjoittamisessa. Livingstonian lähetyssaarnaajat pyrkivät yhdistämään työssään modernin lääketieteen ja evoluutio-opin vaatimukset puhtaasta ja terveestä yhteiskunnasta kristilliseen lähetystehtävään. Heidän tarkoituksenaan oli moraalisen ja fyysisen regeneraatio-ohjelman kautta luoda uusi afrikkalainen kristitty yhteiskunta. Tässä ohjelmassa, jota tarkastellaan yksityiskohtaisesti luvussa 6, lääketieteellä oli tärkeä rooli käännytystyön ja kristillisen opetuksen rinnalla, mutta lääkärin ja papin roolit eivät aina sopineet yhteen saumattomasti tai ongelmattomasti.

Asiasanat

Afrikan historia - lähetystyö - lääketieteen historia- aatehistoria- imperialismi- Malawi

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1. Introduction

1.1. The objectives and methods of the study

Historians of imperialism, modern medicine and Christianity have all pointed out the need to investigate medical missions and missionaries in Africa during the pre-colonial and colonial periods. Nevertheless, they still remain relatively neglected. The Livingstonia Mission of the (Presbyterian) Free Church of Scotland in the Northern Province of Nyasaland, now Malawi, is especially interesting as it was established in memory of the best-known British medical missionary, Dr. David Livingstone, founded by a medical missionary, Dr. James Stewart, run by a medical missionary, Dr. Robert Laws, between 1876 and 1927, and because its personnel included for an African mission an exceptionally large proportion of qualified doctors and nurses. Furthermore, at least until the early twentieth century, in the treatment of indigenous population the Livingstonia missionaries, together with their Established Church of Scotland colleagues in Blantyre, had a practical monopoly in western medicine in Nyasaland.1

This study examines the medical mission work in Livingstonia from 1875, when the first mission station was founded, to the First World War. During this period, the mission expanded considerably and, backed by wealthy Glasgow businessmen, was arguably the most influential Christian mission in Malawi. During the 1910s, other missions began to gain more influence as the resources of Livingstonia diminished.

Roland Oliver has called the period 1884-1914 the zenith of mission influence in East Africa, after which the strengthening of colonial administration and the emergence of independent African churches undermined the importance of European missionaries.2 This period of New Imperialism is particularly interesting for medical mission history, as the role of medical missions as representatives of western medicine was arguably on its highest before the establishment of government hospitals.

This thesis examines the background, ideas and activities of medical missionaries in

¹ See, for example, Etherington 1996, p. 201; McCracken 1973, pp. 188-189; Vaughan 1991, p. 55.

² Oliver 1965, pp. 128-130.

Livingstonia. For the nineteenth-century missionaries, the term medical missionary meant a missionary doctor. In this study it also includes the missionary nurses. In addition, it should be noted that most missionaries, especially in pioneer conditions, did some minor medical work, which was not insignificant. Furthermore, often the wives of missionaries, who were not "official" mission workers, were fully qualified nurses. Their work has generally been overlooked in official mission histories. This thesis attempts to pay attention also to this side of medical work as far as possible. In practice, however, the emphasis in this study is on the ideas and activities of missionary doctors, who are best represented in the mission sources.

To understand the medical missionaries and their work in Livingstonia, it is necessary to study their background in industrialising Scotland and their education in times when medical science and profession were advancing rapidly and gaining increasing prestige. What was the position of medical missionaries in the Scottish mission circles and their perceived role in the overall evangelisation scheme of Africa? What was the relationship between medical and clerical missionaries? What was the motivation for a medical mission career? What were the tools, material, intellectual and ideological, the medical missionaries were equipped with?

After studying the background and position of medical missionaries, the study is to give a chronological overview of medical fieldwork in Livingstonia in chapters 4 and 5, from the pioneering period to the establishment of the first permanent mission hospitals. What were the priorities of the medical efforts, and the position of medical work in relation to other branches of mission endeavour? What ills and diseases the missionaries were able to cure within their limited resources? What was the encounter between medical missionaries and the indigenous societies, patients and medical practices like? How the medical missionaries perceived their African patients and vice versa? An important theme dealt with in chapter 5 is the medical training and work of the African medical assistants in the mission hospitals and dispensaries.

It should be noted that lack of detailed medical knowledge sometimes limits the historian's possibilities especially regarding the question of the efficiency of the missionary medicine. Sometimes it is difficult for even a medical doctor of today to estimate to which degree

different treatments of Victorian doctors were effective, or if one method was more effective (or less harmful) than the other.3 Therefore, the interesting question of efficiency must be approached with caution. However, it is more feasible to understand what methods the doctors studied regarded as effective or ineffective.

Roy Porter has emphasised that among all the disease and devastation caused by colonialism and ecological change in the Third World, the good that western medicine did was marginal and incidental. Nevertheless, modern medicine formed an integral part of the ideological baggage of western empires. Medical missionaries, in particular, were an acceptable face of colonialism.4 How the Livingstonia medical missionaries perceived the changes caused by colonialism, especially after the turn of the century, when an increasing number of new tropical diseases were "found" and previously rare or unknown diseases like tuberculosis or sleeping sickness were spreading to Central Africa?

In her analysis of European colonial medical discourses concerning Africa and the Africans, Megan Vaughan has pointed out some of the differences between secular and missionary medicine. According to Vaughan, missionary medicine, unlike secular medicine, attempted to conquer disease through the advancement of Christian morality, family life and society. Vaughan argues that missionaries used evangelisation, education and social engineering as medicine against various perceived "ills" of the Africans.5 One aim of this study is to test Vaughan's theory in Livingstonia context by examining the means by which the Livingstonia missionaries diagnosed and attempted to cure the moral and social "illnesses" of the indigenous population. Another objective is to analyse the way in which scientifically educated Presbyterian medical missionaries viewed the contemporary ideas of evolutionary thought, fears of racial and individual degeneration and how they combined them with traditional missionary concepts of Salvation and regeneration at a time when, according to many western commentators, "inferior races" were inevitably "doomed to extinction" 6. It has been argued that during the nineteenth

³ See, for example, Gelfand 1964, pp. 238-239 regarding different treatments of blackwater fever.

⁴ Porter 1997, pp. 466, 482.

⁵ Vaughan 1991, pp. 56-57, 68.

⁶ Among such Victorian and Edwardian Social Darwinists were people ranging from Frederick Farrar, a clergyman, writer and an Harrow schoolmaster, to Karl Pearson, a socialist, mathematician and an eugenist. For Farrar's enthusiastic view of the disappearance of the "degenerate" negro race, see Farrar 1867, pp. 116-126, also quoted in Biddis 1979, pp. 150-151 and Mangan 1987, p. 149. For Pearson, see Pick 1989, pp. 199-200,

century, Darwinism had an especially powerful impact on the Presbyterian Churches in Scotland. During the period under study, the Livingstonia mission and the Christian communities under its supervision expanded considerably as Christianity became a popular movement in Nyasaland. How ideas of evolution, regeneration and degeneration influenced mission policy and what actions were taken to protect and advance the "moral health" of the Christian community?

Karen Fields has pointed out that the Livingstonia missionaries could mean by "immorality" various things ranging from beer-drinking and polygamy to disloyalty and disobedience.7 In this study the concept of "moral illness" includes those practices the missionaries regarded primarily as dangerous to moral well-being, but which could lead into mental and physical disorder as well. The major moral diseases, and the great sources of degeneration in the eyes of the Victorians, were "overindulgence" in alcohol and sex. What were the medical elements in missionary thought regarding regeneration and degeneration? Which customs were seen especially "unhealthy" and on what grounds they were determined?

This thesis deals with both themes of social history of medicine (especially chapters 4 and 5) and history of ideas (chapter 6). Methodologically, it relies on the modern traditions of both disciplines. This dual approach arises from the view that medicine and disease appear to a historian as historical practices and facts on one hand, and socio-cultural constructions in languages of the people as well as of the medical science, on the other. The illnesses and the cures are both products of medical discourses and experienced and interpreted parts of the lives of the patients and doctors of the past.8 In the case of Livingstonia medical missionaries, it is necessary to study both the actual medical practice and the ideology underpinning it, and the changing relations between the two in order to understand them. In this thesis, after the study of the medical missionary background and the history of the medical practice, the connection between medicine and morality in the thought and deed of the Livingstonia missionaries is analysed in chapter 6.

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⁷ Fields 1985, p. 106.

⁸ Halmesvirta 1998, p.10.

In modern, critical social sciences, western medicine is not studied as a "pure" or "neutral" unfalteringly progressing science, but as a human construction with its successes and failures, strong points and drawbacks, which has always to be seen in the various social, political, technological and ideological contexts it is practised in. Medicine is viewed as a tool which has many uses, from relieving human suffering to defining "otherness" as a Foucaultian instrument of "bio-power", for example. The approach in this study examines medicine and medical thinking both as a tool for missionary enterprise and an active element influencing it.

It is necessary to observe the "failures" and "mistakes" as well as "successes" of medical missionaries in order to understand them. They have to be placed in European, British and Scottish contexts of industrialising society, evangelical missionary revival, evolutionism, imperialism, the rise of modern medicine and the professionalisation of doctors and nurses. On the other hand, it is imperative to study them in African contexts, their encounter with African societies, customs and individuals. The aim is to analyse medical mission practice from both the doctors' and the patients' point of view, and their interaction as a two-way and reciprocal, sometimes complex relationship. This holistic approach for the social history of medicine has been emphasised by Roy Porter, among others.9 In order to achieve this, the missionary sources have to be read and analysed critically and carefully, comparing them with other sources. These other sources consist of contemporary European writings, colonial administration reports and relevant anthropological and historical studies, which are examined in more detail in the following section.

On a theoretical level, Vaughan's analysis of colonial medical discourses, as put forth in her book *Curing their Ills. Colonial Power and African Illness* (1991), provides one major starting point for this study.10 Another important perspective is provided by Daniel Pick's study of ideas of degeneration in European thought.11

An important theme in the thesis is the sometimes complex dual role of medical

⁹ See, for example, Porter 1997, pp. 12-13.

¹⁰ See especially the chapter on missionary medicine: Vaughan 1991, pp. 55-75.

¹¹ Pick 1989.

missionary as a doctor/minister (or nurse/teacher). The starting point is the view that Christian religious thinking often underpinned and influenced the medical, political and ethical views and actions of doctors in Victorian Britain, but that the relationship between science and religion or medicine and morality could be complex, problematic and changing. A Victorian doctor appeared often in the roles of priest, legal advisor, humanist and prophet. In this context, medical, moral and ideological strands were often intertwined.12 In the case of medical missionaries, their dual role as priest as well as physician and possible complexities within it are of particular interest.

As the French medical historian J.P. Goubert has noted, one main danger for a social historian of medicine (as for all historians of science) lies in his or her own contemporary prejudice. This tends to result either in uncritical praise of the "successful" or "heroic" healers of the past or hypercriticism of their activities.13 The previous study on the medical missionaries of Livingstonia has arguably tended to be on the line of uncritical praise, portraying the medical missionaries as heroic pioneers of constantly progressing and beneficial Western medicine.14 This study aims to be more critical, but also to avoid the danger of hypercriticism, trying above all to understand the medical missionaries studied.

1.2. Notes on sources and relevant literature

The primary sources for this study are the correspondence, diaries and journals of Livingstonia missionaries located in the National Library of Scotland, New College Library, Edinburgh, and the Edinburgh University Library. The most important archive material are the letters from the Livingstonia missionaries to the secretaries of Foreign Missions Committee of the Free Church of Scotland and letters from other missionaries to Robert Laws. One important source consists of personal letters from Dr. Walter Elmslie to Robert Laws between 1894 and 1907. The correspondence material is especially abundant for the period 1890-1900, but notably few letters are available from the period 1900-1914.

¹² Porter and Porter (eds.) 1993, Introduction.

¹³ Goubert 1987, p. 43.

¹⁴ See especially Gelfand 1964, passim.

A valuable addition to the missionary correspondence is the printed collection of *The Letters of Jane Elizabeth Waterston*, 1866-1905 (LJEW) which includes letters from the period 1879-1880, when Dr. Waterston was practising as the first woman doctor in Livingstonia.

Of the published mission sources, the most important for this study are *Proceedings and Debates of the Free Church of Scotland* (from 1900 the United Free Church of Scotland) from 1875 to 1914, which include annual *Reports on Foreign Missions* as an appendix, and *Livingstonia Mission Annual Reports* from 1900 to 1914. The most important missionary periodicals are *The Free Church of Scotland Monthly Record* (FCSMR) published under various titles (from 1900, *The Missionary Record of the United Free Church of Scotland*) between 1875 and 1914, and the Livingstonia mission publications *The Aurora* (1897-1902) and *The Livingstonia News* (1909-1912). These missionary publications are arguably less trustworthy than the archive sources, especially regarding the drawbacks and difficulties in medical work as well as the attitudes and actions of the Africans. However, they are of greater value in analysing the missionary ideas and thought, and are used extensively in chapter 6. In addition, the FCSMR frequently published quotes of missionary letters which have not survived, providing valuable primary material especially from the early mission period and the period 1900-1914.

From the 1890s onwards, it is possible to compare the missionary sources with other European sources regarding Nyasaland. The most important of these are the official publications of the imperial administration and the extensive book, *British Central Africa* (1897) of the first Commissioner of the British Central Africa, Sir Harry Johnston. Another valuable contemporary view of the medical mission work in Central Africa is provided by Dr. James Johnston in *Reality versus Romance in South Central Africa* (1893).

The published Livingstonia medical missionary reminiscences, such as Robert Laws's Reminiscences of Livingstonia (1934) and Walter Elmslie's Among the Wild Ngoni (1899) contain notably little references to actual medical mission work and serve more as an introduction to the general mission history. An exception to this is an article "Central African Experiences" by Dr. William Scott, which, although it covers only short period of

time (1883-1885), provides a valuable description of the early medical mission practice. Regarding the ideological background of the Livingstonia missionaries, the most important published primary sources are Professor Henry Drummond's *Natural Law in the Spiritual World* (1884), John Lowe's *Medical Missions. Their place and power* (1886) and the published lectures of the founder of Livingstonia, Dr. James Stewart, *Dawn in the Dark Continent* (1902).

Especially regarding the missionary ideas of moral illness and health, one important non-medical missionary is included in this study. Reverend Donald Fraser wrote extensively on Livingstonia, dealing with medical and environmental themes, for example, as well as evangelistic and educational matters. The study of Fraser's writings is arguably more valid for this study as his wife, Dr. Agnes Fraser, was a qualified doctor, and they worked closely together.

A major problem for research of African history for the early colonial period is that little written evidence from the African point of view is available. In the cases when Africans are quoted in the mission sources, for example, what is published has often been selectively edited. In addition to critical reading of missionary and administrative sources, valuable evidence based on oral testimony is sometimes available in anthropological studies. For this thesis, Margaret Read's *The Ngoni of Nyasaland* (first published 1956) has been particularly valuable. Unfortunately, lack of specific studies regarding traditional medical practices in Northern Malawi limits the analysis of relationships between traditional and missionary medicine.

Apart from the traditional mission histories, the Livingstonia mission and its missionaries have been under modern historical and theological research from the late 1960s, but the medical mission aspect has been largely ignored, as John McCracken, the leading historian of the mission, pointed out as early as in 1973.15 McCracken's book *Politics and Christianity in Malawi* (1977) which studies the political, social and economic impact of the Livingstonia mission in the Northern Province, forms a main historical frame for this thesis. Other important studies are T. Jack Thompson's *Christianity in Northern Malawi* (1995) which concentrates on the work of Donald Fraser and the Christian movement

among the Ngoni and Karen Fields's Revival and Rebellion in Colonial Central Africa (1985), which examines the emergence of independent African Christian movements in the early 1900s. Of the missionary biographies, most recent is Hamish Mcintosh's Robert Laws. Servant of Africa (1993), which continues the tradition of heroic missionary biographies, although admittedly with more critical approach.

One central problem for the historians of medicine rises from the fact that few scholars fulfil both the requirements of a medical specialist and a professional historian. This handicap is apparent in the work of those medical doctors who have written the histories of modern medicine in Malawi. Although they lack the comprehensive historical view and knowledge of not only of doctors but of the patients, ideas and societies required of a social historian of medicine, a non-medically qualified historian cannot dismiss their knowledge of medicine and disease. For this study, Michael Gelfand's *Lakeside Pioneers* (1964) and Michael and Elspeth King's *The Story of Disease and Medicine in Malawi* (1992), provide specifically valuable background regarding the details of medical practices and various diseases. More generally, the study relies on Roy Porter's *The Greatest Benefit to Mankind* (1997) and various essays in the *Companion Encyclopedia of the History of Medicine* (1993).

The study of medical missionaries in Africa during the age of imperialism requires also a view to the connection between medicine and colonialism. Recently, historians have been increasingly interested in the role of medicine in colonial occupation, both as a tool enabling the conquest and in legitimising it.16 On the other hand, specific attention has been given to the role of epidemics or specific diseases in African history. For example, smallpox, influenza, syphilis and sleeping sickness have been under study. In addition, the role of disease and medical aid in the lives of African poor has been investigated.17 Many of these studies have touched upon the medical mission work, but a specific study of medical missionaries, with the exceptions of David Livingstone and Albert Schweitzer,18

¹⁵ McCracken 1973.

¹⁶ See, for example, Arnold (ed.) 1988; Arnold 1993; Curtin 1989; Lewis and Macleod (eds.) 1988; Meade and Walker (eds.) 1991; Watts 1997. A critical study of the relationships between modern medicine and imperialism was started in the social sciences in the 1970s, but historical studies have adapted this approach somewhat later. For early Marxist studies, see Doyal 1979.

¹⁷ See, for example, Lyons 1992, Ranger and Slack (eds.) 1992. For poverty and disease, see Iliffe 1987.

¹⁸ See Cook 1994, Gelfand 1973. Of Livingstone biographies, Tim Jeal's Livingstone (1973) has been used

has so far been rare in the field of social history of medicine in Africa.

2. Disease, Medicine and Imperialism in Central Africa

2.1. Background: Malawi in the pre-colonial era

The European missionaries, hunters and traders who settled in the Malawi region from the 1870s onwards, were the latest of various ethnic groups to enter this area, the narrow, thickly populated strip of land west and south of Lake Nyasa. The region had traditional trading contacts especially east and south-east, to the coast of the Indian Ocean. The first ivory traders from the east arrived in Northern Malawi in the late 18th century settling and mixing with the local tribes, the Tumbuka and the Tonga.19 They established a northern trade route to the East Coast and connected Central Africa with the Islamic states of the Swahili. Zanzibar became the capital of the Swahili Arabs and a major commercial centre on the coast in 1832. Apart from ivory, the main economic commodities sought by the Arabs and the Swahili Arabs were slaves. Growing economic pressures, above all the increasing demand for ivory (the ivory prices in Zanzibar increased about sixfold between the 1820s and the 1890s) pushed the Swahili further into the interior in search of ivory and slaves. By the 1860s, they had advanced west of Lake Nyasa, establishing fortified trade centres along their routes. Lake Nyasa provided a waterway for their dhows, and Nkhota Kota (Kota Kota) on the western shore of the lake became their main trading post in the area. 20

In Southern and Central Malawi, most of the country belonged at one point to the centralised states of Maravi peoples established in the 16th century. By the nineteenth century, however, these kingdoms had become decentralised and had dissolved into various tribes belonging to the same cultural and language group. These people, of which the Chewa were the most numerous tribe, were mainly agriculturists. The encounters between them and the new invaders, sometimes peaceful, sometimes violent, created an

most extensively in this study. For an interesting new approach to the connections between evangelism and missionary medicine see Landau 1996.

¹⁹ Pachai 1973, pp. 9-10.

²⁰ Iliffe 1979, pp. 40-52; Pachai 1973, pp. 9-10, 41-49.

increasingly complex political situation in the country as the nineteenth century passed. 21

During the first half of the nineteenth century, two major new groups entered the Malawi region from south and south-east. First were the Yao from the south-east, a people with long trading traditions and connections to the coast. They advanced northwards, driven by internal wars and external conflicts with other tribes as well as with the Swahili and the Portuguese. The most valuable trading goods during violent times were firearms, which the Yao bought with slaves and ivory. When David Livingstone encountered the Yao in the 1860s he saw them as the main slave traders of the area, together with the Arabs in the east of the lake. By this time guns, gunpowder and slaves had replaced iron goods and ivory as their main trade items. 22

From the south, the Malawi regions were invaded by another, aggressive and militant group of peoples. These were the Ngoni, originally from northern part of the Zululand, splitting away and escaping northwards from the expanding power of the Zulu monarch Shaka in the 1820s. As the Ngoni groups moved on, they lived on raiding local peoples, who were incorporated into their state system. Two major Ngoni groups reached Malawi in the mid-nineteenth century, one settling in northern Malawi, the other in southern and central parts of the country. By the 1870s, four Ngoni kingdoms and several smaller groups were established in Malawi.23 The economy of the Ngoni kingdoms was based on cattle and frequent tribal raiding. Their effective military organisation and Zulu-type skills of warfare made them the rulers of highlands west and south-west of Lake Nyasa. The captives of subdued tribes, such as the Chewa, the Tonga and the Tumbuka, were assimilated into Ngoni society.24

The first European reports of Malawi region in the 1860s and the 1870s described it as a politically unstable and violent area. Frequent warfare and raiding were the main results of slave trade and the Ngoni invasion, although it has been pointed out that the destructive consequences in the area were not universal. For example, some tribes settled under the

²¹ McCracken 1977, pp. 1-3; Schoffeleers 1992, pp. 41-48, 117-119. Since the Maravi kingdoms left no written records, the exact timing and placing of these states remains a point of dispute between scholars.

²² Pachai 1973, pp. 52-54.

²³ McCracken 1977, pp. 7-8; Pachai 1973, pp. 22-23; Thompson 1995, pp. 7-16.

²⁴ McCracken 1977, pp. 8-9; Thompson 1995, pp. 17-20.

Ngoni rule peacefully and others made treaties with them. Nevertheless, agricultural peoples of the region suffered severely as a consequence of the new invasions, being often forced to retreat into stockaded villages on the lake shore, like the Tonga, or to seek shelter in mountains or swamps. At least three major groups of agriculturists remained independent by the 1870s: the Ngonde at the north end of the lake, the Chewa ruled by Mwase Kasungu, and the Tonga, who were frequently fighting with the Northern Ngoni. For the Livingstonia missionaries, the most important tribes would be the Tonga and the Northern Ngoni, among whom they settled in the 1880s. 25

Malawi in the nineteenth century was therefore undergoing powerful changes, economically, politically and socially. These changes put growing pressures on the existing religious institutions. To generalise, most people in the region had three common religious beliefs. The first was the belief in witches, responsible for misfortune and sickness and detectable by the specialists, witch-doctors, who often used *muave* poison ordeal 26 as a method of locating the culprit. The second was the belief in the spirits of the dead, intermediaries between this world and the beyond. The third was the belief in the existence of a High God, often worshipped through various territorial cults.27 Terence Ranger has stressed that the various political and economic changes in Central Africa influenced the local religious systems. For example, the Ngoni brought new religious ideas, techniques and rites with them, sometimes adapting local practices, sometimes challenging them.28 The pressures on the religious institutions were to be further increased with growing contacts with the Arabs and the Europeans, culminating in the colonial occupation of Central Africa in the 1890s.

Before turning to the European invasion of the Malawi area, however, it is necessary to consider the indigenous medical theories and practices in the area. Religious belief systems and medical theories, it can be stated, have strong and direct connections in most premodern societies. Following Roy Porter, it can be argued that religion and medicine have a

25 McCracken 1977, pp. 10-12; Thompson 1995, pp. 15-20; van Velsen 1959, pp. 1-4.

²⁶ The poison was prepared from *muave* bark and mixed with water. If the imbiber vomited the poison he was considered to be innocent, if not, he would often die from poisoning or be killed. The strength of the poison could vary considerably according to the mixture. Sometimes *muave* would be administered to animals instead of people. See Johnston 1897, pp. 441-442.

²⁷ McCracken 1977, pp. 13-14.

²⁸ Ranger 1975, pp. 6-8.

common aim in making people whole. Some belief systems have a single thaumaturgist, caring for both body and soul. Most "great cultures", however, create and stress the conceptual distinction between body and soul/mind/spirit, resulting in specialisation between doctors of the body and priests of the soul.29 To make some generalisations about Central African medical theories and practices, it can be stated that they were often strongly connected with the various local religious systems. The new challenges to the religious practices could extend to the medical realm as well. For example, new trading connections spread old epidemics like smallpox and new diseases like syphilis, which often proved incurable through traditional medicine. Without any comprehensive study on medical anthropology on this region, however, further generalisations are made on an unsure footing. The Central African religions had functional and structural differences, and new ideas and practices were adapted or rejected within a complex pattern of response.30 There is reason to believe, therefore, that the medical theories and practices could be equally complex and variable in their developments.

In her anthropological study of the Ngoni of Malawi, Margaret Read at least provides some insight into the medical thinking in this tribe. The concept of medicine for them included both prophylaxis and cure. Medicines were also administered for success in war; to strengthen and protect the warriors and to weaken the enemy.31 Harry Johnston, the first Commissioner of the British Central African Protectorate in 1891-1896, differentiated between two classes of African medical practitioners: those who relied only to magic and those "genuine doctors" who had "honest" therapeutic powers through the use of various drugs.32 Among the Ngoni, the former were the diviners, who held a powerful place in the society. In the case of paramount chief's illness, they would give advice on the course of action. The diviners could recommend sacrifice to the ancestral spirits, or suggest that the cause of illness was witchcraft and that a witch doctor should be called, or declare that the cause of illness was natural. In this case, an "ordinary" doctor, often a herbal specialist, was called.33 In short, there were specialists in religion and medicine, working in various

²⁹ Porter 1993, p. 1449.

³⁰ Iliffe 1979, p. 81; Ranger 1975, pp. 8-10.

³¹ Read 1970, pp. 39-40, 71. The word for medicine in various African languages and cultures had a distinctly different meaning from the western, scientifically specialised use. Magical medicines as well as herbal cures were the essential elements of medical practice among the Ngonde as well. See Mackenzie 1925, pp. 270-291.

³² Johnston 1897, p. 442.

³³ Read 1970, pp. 39-40, 71. For another anthropological study commenting on Central African medical

roles (diviners, witch-doctors and doctor-herbalists) and in order of precedence. Knowledge of medical plants was handed down from generation to generation, and consequently the healing practice was in some tribes connected to the religious relationship with the ancestral spirits.34

2.2. The European invasion of Malawi and the establishment of the British Central African Protectorate

Although Livingstone gained the reputation of having "found" the Malawi region, travelling down the Zambesi in 1856 and reaching Lake Nyasa during the Zambesi expedition in 1859, he was not the first European in the region. The Portuguese, who had established their colonial rule in the coast of Mozambique in the 16th century, and had advanced up the Zambesi by the early 17th century. They knew about Malawi long before Livingstone's travels. Portuguese traders, soldiers and explorers had travelled from Angola to Mozambique and located the Shire Highlands and the lake regions before Livingstone, but declined to occupy territories there, lacking resources and the interest to advance north of their settlements on the Zambesi. The fame Livingstone gained and his encouragement for British trade in Central Africa, however, upset them as they correctly saw his actions as a beginning of British territorial claims in the area.35

However, it took thirty years before the official British invasion to Central Africa took place. After the failure of Livingstone's Zambesi Expedition and the disaster of the first mission settlement of the Universities Mission in the early 1860s, the British Government lost its initial interest in Livingstone's plans for commercial and industrial settlements in Central Africa, refusing to support further exploration or missionary activity in the area.36

The missionary societies did not share the attitudes of the Government. The mapping of East and Central African territory between 1858 and 1876, and especially the locating of the great lakes and waterways that provided the transport routes for steamers, made the

practices, see Wilson 1970, pp. 142-153. T.J. Thompson has argued that among the Ngoni of Nyasaland, one major function of religious rituals was the well-being of society as a whole. He neglects the connection between religion and medicine, however. See Thompson 1995, pp. 35-36.

³⁴ Mackenzie 1925, pp. 270-291; Wilson 1970, pp. 142-153.

³⁵ Jeal 1973, pp. 215-219; Pachai 1973, pp. 61-70; Schoffeleers 1992, pp. 119-126, 133-136.

missionary advancement into African interior possible. With the evangelical revival strong in almost every Christian denomination in Western Europe, missionary zeal was on the rise. The discovery of the Bantu peoples of the lakes, and the shocking details of the slave trade promoted new impulse for sending missionaries to these "suffering heathen". Livingstone was the major figure in this movement in Britain in his life as well as in his death. The news of his death in a lonely hut in Chitambo, his last appeal for every man who would "cure this open sore of the world", the loyalty of his porters, who carried his body through Central Africa for five months to the coast, and his glorious burial in the Westminster Abbey made an enormous emotional impression to the nation.37

The first Europeans to settle in the Malawi region were the Scottish missionaries, who established the Free Church mission of Livingstonia in the south end of Lake Nyasa in 1875 and the Blantyre Mission of the Established Church of Scotland in the Shire Highlands the following year. They were followed in 1878 by the Livingstonia Central Africa Company, later called the African Lakes Company, an independent company closely related to the Livingstonia Mission and funded by the same Glasgow businessmen, which attempted to introduce "legitimate trade" to the lake regions.38 The Universities Mission returned to Malawi in 1885, settling on east coast of the lake. The Dutch Reformed Church Mission, which co-operated closely with Livingstonia, was established in 1889.39 Thus there were four Protestant missions working in the country before colonial occupation. Apart from the missionaries, individual European hunters and traders started to arrive from the 1870s and the first coffee planter (an ex-missionary from Blantyre) started his enterprise in 1881.40

By the 1880s, therefore, several British subjects were working in the Malawi regions. Their only line of supplies was in Portuguese hands, which controlled the Zambesi mouth. This fact was to increase tension between Britain and Portugal as the decade wore on. Then developments in Southern and Eastern Africa aggravated imperial rivalry further. The improved communications and transport routes as well as the discoveries of diamonds

³⁶ McCracken 1977, pp. 22-25.

³⁷ Hewat 1960, pp. 1-10; Jeal 1973, pp. 366-384; Oliver 1965, pp. 26-35; Walls 1996, pp. 79-84.

³⁸ McCracken 1977, pp. 43-44; Pachai 1973, p. 88.

³⁹ Pachai 1973, pp. 85-88.

⁴⁰ Ibid, p. 97. For further reading on the individuals entering East and Central Africa, see Cairns 1965, passim.

in South Africa and gold in Matabeleland made Africa far more reachable, important and interesting to the British than ever before.41 With the Germans entering East Africa in 1885, the 'Scramble for Africa' was well under way.42 In increasing rivalry with the Portuguese, who attempted to push their sphere of influence further north to the Shire Highlands, the British Consul at Mozambique and the African Lakes Company made treaties with the local chiefs, offering them British protection. In 1888, the British Government sent Harry Johnston to Lisbon to negotiate the spheres of influence in Central Africa with the Portuguese. During the negotiations, the Church of Scotland organised a huge campaign for the regions they considered had been occupied by their mission, and insisted that the Portuguese should be kept out of the Shire Highlands.43

By this time the African Lakes Company and the Livingstonia missionaries had been involved in a war against the Swahili Arabs at the north end of Lake Nyasa. This put more pressure on the Government to establish a protectorate in the area. There was little interest, however, in investing Government funds for such a purpose. The solution to this financial problem was provided by Cecil Rhodes, who offered funding for the establishment of the protectorate, for the sake of his commercial interests in Central Africa. In 1889, the British South Africa Company of Rhodes had become a major shareholder of the African Lakes Company. The power struggle between Britain and Portugal reached its climax in 1890, when an imperial war between them seemed imminent. The militarily weaker Portuguese ultimately gave in and the Anglo-Portuguese treaty signed in June 1891 defined the southern border of the new British Central African Protectorate as the British desired.44

Harry Johnston was appointed the first Commissioner of the new Protectorate, first called the Nyasaland districts, then the British Central Africa Protectorate and from 1907, the Nyasaland Protectorate. The British Treasury paid in the beginning only the salaries of the British officials (in the beginning there were only three), the rest was paid by Rhodes' company, which supported the administration until mid-1895, with about £ 17,500 annually. After the first five years, the Treasury took over the financial responsibility.45 In

41 Pachai 1973, pp. 70-72.

⁴² Oliver 1965, p. 94.

⁴³ Pachai 1973, pp. 74-76.

⁴⁴ Oliver 1965, pp. 115-129; Pachai 1973, pp. 77-80, 82.

⁴⁵ McCracken 1977, p. 169; Pachai 1973, pp. 81-82.

1893, the British South Africa Company bought the ALC and its considerable land holdings in the Protectorate. Rhodes wanted the preferential treatment for the BSAC for acquiring land and mineral concessions in the area. Johnston, who was strongly influenced by the opinion of missionaries and planters who protested against the turning of the country into another Rhodesia, managed to restrict the influence of Rhodes in the Protectorate. Nevertheless, by 1893, the BSAC owned one-fifth of the land in the country and remained an influential force in the region with close relations to the Livingstonia Mission.46

Between 1891 and 1898 the British rule in the Protectorate was established by treaties and small local wars. The only major area to remain independent longer was North Ngoniland, which was finally incorporated into the Protectorate in 1904, with Livingstonia missionaries acting as intermediaries between the Government and the Ngoni. The European population of the country grew rapidly in the 1890s, from 57 in 1891 to over 300 in 1896. In 1897, the Administration had over 80 senior officers.47 Most of the Europeans settled in the Southern Province of the Protectorate, especially in the Shire Highlands, with the Government centre established in Zomba. In the Northern Province, the sphere of influence for the Livingstonia Mission, the number of Europeans remained low, with just five administrative outposts in the northern half of the country by 1905.48

The establishment of British colonial rule and increasing contacts with the Empire brought massive changes in the local economies. A money economy and taxation were introduced, cultivated products like coffee replaced gathered products like ivory as the major export items and so forth. Wage labour, which was introduced by the missionaries and the African Lakes Company long before the coming of the administration, was often the only way for the Africans to adapt to changing economic demands. This was especially the case in Ngoniland, where the indigenous economy was at the point of collapse in the early 1890s. The raiding had ended and the rinderpest epidemic of 1893 had destroyed most of

48 McCracken 1977, pp. 110, 113.

⁴⁶ McCracken 1977, pp. 169-170; Pachai 1973, pp. 82-83. It should be noted that by this time European missionaries, traders and planters owned about one-fifth of the land in the country, while the Africans held about two-fifths. For the map of the land settlement in 1893 see Pachai 1973, p.101.

⁴⁷ Baker 1972, p. 339; McCracken 1977, pp. 110-113; Pachai 1973, p. 86. These included only three medical officers, however, while at the same time Livingstonia mission alone had five doctors in its staff. One of these first medical officers was a former Livingstonia missionary, Dr. David Kerr-Cross.

the cattle. By the end of the century, the Ngoni were departing as migrant labour in all directions. Tonga and Ngoni from the Northern Province travelled down to European plantations in the Shire Highlands, and increasingly to the service of the expanding mining industry in southern Rhodesia and South Africa.49

The growing popularity of mission schools and the widespread adoption of evangelical Christianity, which took place among the Tonga and the Ngoni in the 1890s, must be seen in the context of the changing political, social, economic and ecological conditions, as John McCracken has demonstrated. The Livingstonia mission was successful among these tribes as it offered valuable new skills through the education it provided. In Tongaland, the number of mission schools rose from 18 to 53 between 1895 and 1898, while the average attendance grew from about 1600 to about 5000. In Ngoniland the number of pupils increased from 630 in 1893 to over 4000 in 1898. In comparison, the Ngonde at the North End of the lake, who remained economically better off, recovering rapidly from the rinderpest and becoming successful cash-crop farmers, remained relatively indifferent to missionary education.50

The rapid expansion of Christianity among the Tonga, the Tumbuka and the northern Ngoni in the 1890s was made possible by a long-time contact and alliance with the Livingstonia Mission. The ongoing economic and social change coincided with the improvement in evangelistic techniques. The missionaries had learned local languages more thoroughly by this time, and the African evangelists were taking increasing part of the evangelisation work. The younger Livingstonia missionaries, and above all Rev. Donald Fraser introduced a new, emotional and dramatic element to the evangelisation, which appealed to the Africans with unprecedented effect.51 While in 1891 Livingstonia consisted of four European stations (of which two were later abandoned)52 with thirty-five mission schools, by 1901, the mission had 6 main stations, 5 fully formed African congregations with 1576 members, 142 schools with 11,000 pupils and 531 African

⁴⁹ Krishnamurthy 1972, pp. 392-397; McCracken 1977, pp. 113-116; Pachai 1973, p. 83.

⁵⁰ McCracken 1977, pp. 113-120.

⁵¹ Ibid., pp. 120-125. For Donald Fraser and the evangelical revival among the northern Ngoni, see Thompson 1995, passim. In this thesis, references to the Ngoni and Ngoniland concern only the northern Ngoni unless otherwise indicated.

⁵² Reports on Foreign Missions for 1891-1893.

teachers and preachers.53 By this time, Livingstonia was clearly the most influential mission in Malawi, with significantly larger financial resources than the Established Church mission of Blantyre.54

2.3. Disease and Medicine in the age of Imperialism: The origins of "tropical medicine"

'The Scramble for Africa' in late 19th century would not have been possible, it can be argued, without quinine, the steam engine and the Maxim gun. Only during the second half of the century did the mortality rate among the European explorers, missionaries, hunters, traders and soldiers advancing into African interior decrease to a tolerable level, making imperial occupation feasible. The main medical problem in the interior, relieved only by quinine, was 'the fever', and above all malarial fevers.55

Present-day medicine divides malarial fevers in four different categories, caused by different types of *Plasmodium* parasites, entering the blood through a mosquito bite. Of these, quartan malaria, caused by *plasmodium malariae*, is a milder disease, beginning with a chill followed by high fever, nausea and vomiting. After about six hours, the temperature falls as the fever attack passes. Second and subsequent attacks follow every fourth day, and the disease may recur for several months if untreated. In comparison, *plasmodium falciparum* causes much more dangerous malignant tertian malaria, resulting in more prolonged and variable fever, which may be continuous, remittent or intermittent. The patient suffers from severe anaemia and bilious vomiting, the spleen and liver become enlarged and the patient is jaundiced. In a complicated case, the disease can develop into "blackwater fever", marked by completely black urine as a result of massive haemolysis (breaking-up of the red blood-corpuscles).56 During the nineteenth century, it was frequently fatal.

In the early nineteenth century, little was known of the origins and causes of malaria, but

⁵³ Hewat 1960, pp. 212-215; Pachai 1973, p. 89.

⁵⁴ McCracken 1977, pp. 176-177.

⁵⁵Curtin 1989, pp. 62-68, 132-140, 159-161; Headrick 1981.

⁵⁶ Wilson 1993, pp. 384-388.

its deadliness was well recognised. The first British expedition to the Congo in 1816 lost 36.5% of its force due to fever in just three months. The first Niger Expedition in 1832 had to be abandoned, with staggering casualties of over 81 per cent. Neither of these expeditions used quinine as a prophylaxis or as a cure. Quinine sulphate had first been isolated in 1820 from cinchona bark, which was known as a fever medicine in Europe certainly from the 17th century onwards. The prophylactic value of cinchona against malaria was demonstrated in 1826, when the crew of HMS North Star took it daily when working ashore in Sierra Leone, remaining in good health. The second Niger Expedition in 1841-42 used quinine, with a subsequent mortality rate of "only" 29 per cent. Although the reason for quinine's effectiveness was not fully known, the experiences in West Africa ensured that it was soon recognised as one remedy against the "African fevers". Livingstone, working in Bechuanaland in the early 1840s, became aware of quinine's reputation and adopted it in his travels to Central African interior. He was also aware of its value to the Christian missionary expansion. "I may mention here that the fevers seem the greatest barrier to the evangelisation of Africa we have", he wrote in 1843.57 The study of "the fever" became part of Livingstone's main journeys in 1853-56 (transcontinental), 1858-63 (the Zambesi expedition) and his last journey of 1866-1873, during the Zambesi expedition especially, which suffered severely from fever, despite quinine.58

Livingstone accepted the prevailing miasmata theory of the disease, that fever was caused by 'miasmata', noxious vapours from the soil. He noticed mosquitoes signified malarious territory, but did not connect mosquitoes directly to malaria. Until the discoveries of Ronald Ross and Giovanni Grassi in the late 1890s established the parasitical model for malarial fevers, the miasmata theory held sway. Consequently, Livingstone made distinctions between "the fever" in different regions, explaining the difference as a result of different soil miasmata. Livingstone also made a distinction between remittent and intermittent groups of fever, although the precise distinction was always a point of debate between individual doctors. Livingstone used quinine as a prophylaxis, although the daily dose of 2-3 grains was too low from a modern point of view. As a remedy against malaria, he prescribed a mixture of quinine and purgative, developing different mixtures of his own

57 Cook 1994, pp. 35, 37.

⁵⁸ Cook 1994, p. 33. Quinine was not accepted universally, however, as there was uncertainty about its dosing, timing and efficiency as a prophylaxis or a cure. In addition, it had an unpleasant and bitter taste. See Curtin 1989, pp. 62-65.

from the 1850s onwards. The rationale for using the purgative was to assist the evacuation of bile from the gall-bladder. The best-known of Livingstone's mixtures was "a pill composed of 3 or 4 grains of jalop, three or four of calomel, an equal number of quinine - a drop or two of tincture of cardamoms to dissolve the resin and ginger or cinnamon to form the bolus". This became later known as "the Livingstone Pill" (or rouser) and was adapted by Burroughs Wellcome, who produced it until 1930.59 This "rouser" was to be a standard article in the medicine-chests of medical missionaries in Africa. The Zambesi Expedition of 1858-1863 suffered heavily from "the fever", the dangerousness of which Livingstone constantly played down for political reasons, one of the casualties being Livingstone's wife. Nevertheless, the relative success of Livingstone's treatment may be gauged from the fact that during the five years expedition, the European death rate was only 16.7% (three out of eighteen).60 Malarial fever was not the only health hazard Livingstone encountered in his travels. He himself suffered repeatedly from intestinal infections, especially from diarrhoea and dysentery. One reason for this was undoubtedly polluted water.61

Livingstone made medical observations throughout his travels, recording various diseases and making inquiries about local remedies and herbs. He practised surgery, obstetrics and ophthalmology within his limited resources, noticing that in these fields the superiority of European medical skill was most apparent.62

Between the graduation of Livingstone in 1840 and the founding of the Livingstonia Mission in 1875, there was increasing development and progress in Western medical science, and especially in the field of surgery. Through the work of Pasteur, Koch and others, scientific laboratory medicine emerged strongly in France and Germany, producing the breakthrough of germ theory and the science of bacteriology in the 1870s and 1880s.63 In surgery, Scottish hospitals and medical schools were one of the main centres of advance. The first anaesthetic operation was performed in 1846. Chloroform, first adapted among Edinburgh surgeons, became the standard anaesthetic in Britain in the 1850s. Another crucial development was the aseptic and antiseptic solution to the previously most

⁵⁹ Cook 1994, pp. 35-36; Porter 1997, pp. 468-471.

⁶⁰ Cook 1994, pp. 36-37; Gelfand 1973, pp. 186-188.

⁶¹ Cook 1994, p. 38.

⁶² Ibid, pp. 35, 38.

⁶³ Porter 1997, pp. 304-333, 428-445.

lethal problem of infection. Joseph Lister developed his successful antiseptic and aseptic standard in Glasgow in the 1860s, based on the use of carbolic acid. Lister's ideas were not widely accepted, however, until the 1880s.64 Anaesthesia and antiseptics contributed to a surgical revolution from the 1860s onwards. Ulrich Tröhler, who has called the period 1860 to 1914 the heyday of modern surgery, has pointed out that antiseptic medicine reinforced notions of cleanliness prevailing in Protestant Victorian society.65 The idea of cleanliness being next to godliness was now confirmed by the increasingly successful and respected science of medicine.

One branch of new scientific medicine developed directly as a requirement of imperial medical practice, namely tropical medicine. It was established during the 1890s and was mainly concerned with parasitic infections, such as malaria, yellow fever and trypanosomniasis (sleeping sickness). According to Michael Worboys, before the 1890s the doctors treated "diseases in the tropics", practising ordinary medicine in extraordinary conditions. With the new discipline of tropical medicine, the notion of "tropical diseases" was introduced.66

3. Background of Livingstonia Medical Mission: The nineteenth-century Scottish missionary movement

3.1. Medical missionaries in the Scottish missionary scene

The first Scottish foreign mission was established in 1800 in Jamaica, although the enthusiasism for foreign missionary work had been growing throughout the second half of the eighteenth century. Independent societies took the initiative. It was not until 1824 that the Presbyterian Church authorities officially approved foreign mission work. The historians of the Church have emphasised the evangelical impulse and the horrified

⁶⁴ Porter 1997, pp. 367-374; Tröhler 1993, pp. 984-990.

⁶⁵ Tröhler 1993, pp. 984-990.

⁶⁶ Worboys 1993, pp. 512-520. Worboys points out that while the emphasis of scientific tropical medicine has been on the research of parasitic infections, many of the so-called tropical diseases are actually diseases of poverty, malnutrition and insanitary conditions connected with the social, economic and environmental

reaction to the slave trade as the main stimuli to the overseas missionary movement in Scotland. They have argued further that the movement was essentially a late nineteenth-century phenomenon. India had been the major field for Scottish missionary work since the 1820s, but it was the travels, journals and tragic death of Livingstone and the subsequent missionary penetration to African interior, that advanced the missionary interest in Africa.67 As one Free Church writer put it in summarising the first fifty years of the Free Church's African missions:

"I must say candidly that neither Africa nor its people were very interesting to us in those days [the 1840s]. India was the land of poetry and romance...In comparision with India, Africa and its people seemed dull and uninteresting. I mention this in order to contrast with it the overwhelming interest which Africa creates now. All eyes are turned to the Dark Continent." 68

In Africa, the pioneer fields had been South Africa, where the Glasgow Missionary Society started its Kaffraria Mission in 1821, and West Africa, where Calabar Mission was founded in 1846.69 Until 1870s there was no notable expansion, as the African interior was mostly unexplored with little inviting prospects. The travels of Livingstone, Burton, Speke and others provided new information and the motivation for the missionary movement. Not only did they locate the great lakes, waterways and the peoples of the interior, but by means of their explorations and by revealing the extent and the character of the slave trade, they made missionary effort in Central Africa possible and desirable in the eyes of many contemporaries.70

Advance into East and Central Africa required funds and the technology to establish and maintain mission stations. In particular, steam power was necessary to travel by waterways. Medical aid was also crucial to help the missionaries survive among the malarial fevers. Medical missionaries, therefore, were an essential part of the Scottish missionary activity in Central Africa from the beginning.

The pioneering fields for Scottish medical missionaries had been Middle East, India and

conditions, often wrought by changes caused by imperialism.

⁶⁷ Drummond and Bulloch 1975, pp.139-149, 167; Hewat 1960, pp. 1-10; Oliver 1965, p.35.

⁶⁸ Jubilee Number of Free Church Monthly Record 1893, Letter XV, p.18.

⁶⁹Drummond and Bulloch 1975, pp. 153-161; Hewat 1960, pp. 175-176, 193-196.

⁷⁰ Oliver 1965, pp. 26-34.

China. In these areas medical practitioners were often welcomed for their practical skills in places where ordinary evangelists were not tolerated. The medical missionary activity abroad was supported by medical mission societies in Scotland, the most important of which was the Edinburgh Medical Missionary Society. The Society was founded in 1841. It carried out medical work among the sick poor, in particular the Irish immigrants in Edinburgh. The Edinburgh Medical Missionary Society was open to all Protestant denominations, but it had particularly strong connections with the Free Church of Scotland. The co-operation between the E.M.M.S. and the Free Church started in the Madras Medical Mission, where the first Free Church medical missionary started his work in 1856. Livingstone, who was the second medical missionary in Southern Africa, and the first in Central Africa, was a corresponding member of the E.M.M.S.71 During the second half of the century, the numbers and fame of medical missionaries rapidly increased: in 1852, there was 13 medical missionaries at home and abroad, by 1886, the number of qualified medical missionaries was 170.72

Medical missions were a new phenomenon in the 19th-century missionary scene in Scotland, and the spokesmen for medical missionary societies laboured to establish a clearly defined status and position for them. They found their justification for existence in the Bible. In the words of John Lowe, secretary of the E.M.M.S., Jesus was "the Great Physician", Luke had been "the beloved physician" and the Acts of the Apostles could be interpreted as "the first report of the first Medical Missionary Society".73 The proponents of medical missions emphasised that medical mission work was not mere philanthropy, but genuine evangelisation, which should be recognised as "the right hand of the Church". Another concern for them was the professional qualification of the medical missionary: only qualified doctors should be recognised as medical missionaries. Furthermore, they argued that medical work should not be limited to the role of a pioneering agency, but it should be continued along the evangelistic work in all possible regions.74 All these writers represented the Edinburgh Medical Missionary Society and the elite of Scottish medical

⁷¹ Cook 1994, p. 33; FCSMR March 1889, pp. 80-81; Jeal 1973, pp. 14-15; Lectures on Medical Missions 1859, pp. 35-37; Lowe 1886, pp. 217-218. Livingstone was arguably more explorer than missionary, making only one (subsequently lapsed) convert and resigning his connection with the London Missionary Society in 1857.

⁷² Lowe 1886, pp. 217-218.

⁷³ Lowe 1886, pp. 12-17; see also Lectures on Medical Missions 1859, pp. 27-30.

⁷⁴ Lectures on Medical Missions 1859, pp. 47-48; Lowe 1886, pp. 28-30; Therapeutes 1859, pp. 125-131.

profession: their aim was to make a clear distinction between the qualified missionary physician and the ordinary missionary doing minor medical work in mission field.

The advocates of medical missions had no doubts about the superiority of Western medicine to all others. Indigenous medical theories and practices were, in their opinion, based on ignorance, superstition, false religious beliefs and lack of scientific knowledge. The healing abilities of the indigenous practitioners were deemed little or non-existent, often more harmful than helpful to the patients. At best, it was recognised that they could have knowledge of some powerful plant cures.75 In theory it was acknowledged that medical missionaries could advance medical science by new knowledge, especially in Materia Medica, through introduction of new drugs. It was remembered that cinchona bark was first introduced to Europe by Jesuit missionaries. Although the idea of missionary medicine as a contributor to Western medical science was indeed one argument for medical missions, the idea of missionaries consulting indigenous practitioners was rarely even mentioned. David Livingstone was one of the very few medical missionaries who respected their indigenous colleagues and was interested in their methods. 76

The field where the superiority of western medicine was seen to be best demonstrated was surgery. Therefore medical students preparing for missionary work were advised to emphasise surgery in their training. "How noble! by the simple operation for cataract, to 'throw open the darkened windows of the soul, and let the sweet light of Heaven into man's otherwise dreary tabernacle!", exclaimed James Miller, professor of surgery in the University of Edinburgh, in his appeal for medical students.77

J.P. Goubert has noted that healers can expect return for their services in both material and immaterial ways: in payment and gratitude in this world, or in the next world, with an open door to heaven.78 For medical students choosing the missionary field there could be promised little material prospects. Their return would be in the form of "...honour from fellow-men, in his life and in his death; honour from God, through life, beyond the grave,

⁷⁵ Lectures on Medical Missions 1859, pp. 24-26, 93-96; Lowe 1886, p.41.

⁷⁶ Cook 1994, p. 38; Forster 1989, p.4; Lectures on Medical Missions 1859, pp. 38-39.

⁷⁷ Lectures on Medical Missions 1859, pp. 48, 56; Lowe 1886, pp. 39-41.

⁷⁸ Goubert 1987, p. 43.

and in eternity."79 In Presbyterian mentality, a career as medical missionary could be perceived as means of proving one's place in the kingdom come.

The missionary call was readily responded by the Presbyterian medical students. In 1876, Murray Mitchell, Foreign Missions Secretary for the Free Church of Scotland, noted that "...the missionary zeal is steadily increasing among the medical profession in our land." and hoped that the divinity students would respond to the challenge of medical students adequately.80 By 1887, the total number of Free Church medical missionaries had grown to 17. Of these, four were located in Livingstonia. In 1895, the number was 28. In 1902, the United Free Church of Scotland had 55 medical missionaries abroad, only the Church Missionary Society having more British medical agents in its service.81

Another concern for medical mission advocates was the position and status of medical missionaries within the missions. The E.M.M.S. argued that medical missionaries should be recognised as medical evangelists, but they should not be required to take theological studies in addition to their medical training. In fact, it was argued that formal theological training would limit the medical skill of the missionary doctor and even "mar him as a surgeon".82 In 1882, the Society appealed to the Free Church of Scotland for official ecclesiastical recognition to missionary doctors.83 The Free Church recognised medical missionaries (doctors) as equal to the ordained missionaries in that they were both "first-class" missionaries in terms of status and salary, who in Livingstonia were allowed a seat in the local Mission Council. To be ordained as ministers, however, they would have to take some theological courses in university, preferably for two or three years, although there is evidence that some missionary doctors were ordained after shorter training. Alternatively, they could be given the status of an Evangelist and ordained after their first period of service.84 Of the first ten missionary doctors appointed to Livingstonia during 1875-1890, seven were ordained before leaving Scotland. Between 1891 and 1914,

⁷⁹ Lectures on Medical Missions 1859, p. 60.

⁸⁰ Proceedings and Debates of the General Assembly of the Free Church of Scotland, 1876, p. 62.

⁸¹ Proceedings and Debates of the General Assembly of the Free Church of Scotland, 1887, Appendix VIII, p.6; Proceedings and Debates, 1902, p. 65.

⁸² Lowe 1886, pp. 35-39.

⁸³ Proceedings and Debates 1882, p.72.

⁸⁴ Report on Foreign Missions for 1885, Appendix III, General Rules for the Guidance of Missionaries from Scotland. Dr. George Steele, for example, took only one years' theology course. See Steele to Laws 27 July 1889, NLS, MS. 7892, 150.

however, only three out of thirteen new doctors were ordained before their first term of service.85 This marks a clear change from a doctor-minister who was more or less fully educated in both medicine and theology, to a more specialised missionary doctor, who would be possibly ordained as a minister only after some years of missionary experience.

3.2. The Livingstonia Recruits

Between 1875 and 1914, twenty-three doctors and nine nurses were appointed to Livingstonia mission. During the first twenty-five years of Livingstonia medical missionaries made up about one fourth of the European staff appointed (twenty out of eighty-one). During this period medical missionaries were mostly doctors: eighteen out of twenty. 86 Of these, four died in the field, three were invalided home and five resigned. One, Dr. James Stewart, was in charge of the mission only temporarily during 1876-1877 and then returned to the South African mission field. Both nurses appointed in the period 1875-1900, Margaret McCallum and Maria Jackson, married lay missionaries (Charles Stuart and Malcolm Moffat) ceasing to be official, paid missionaries, but continuing their medical work in their respective mission stations. During the period 1901-1914, of twelve new medical recruits, seven were nurses, five doctors. Of these twelve, one died, one retired and three resigned before 1914, two on health grounds.87

Almost all missionary doctors of Livingstonia were educated in Aberdeen and Glasgow Universities or in Edinburgh Royal Colleges for Physicians and Surgeons. Exception to this was Dr. Jane Waterston, who studied in London and Glasgow and took her licentiate from King's and Queen's College of Physicians of Ireland in 1876, which was one of the few places accepting women at the time.88 Medical missions were one readily open field for the first women doctors in Britain: in 1888 it was noted that of the sixty female practitioners on the English medical register, ten had gone to the foreign mission

⁸⁵ See Appendix I.

⁸⁶ See Appendix I, McCracken 1977, p. 52.

⁸⁷ Appendix I, McCracken 1977, pp. 37-38.

⁸⁸ Letters of Jane Elizabeth Waterston 1983 (LJEW), p. 111. Edinburgh University was the main battleground for admission of women to medical profession. See Porter 1997, pp. 356-358.

service.89 In Livingstonia, however, after Dr. Waterston's short service in 1879-1880, it took over twenty years before next woman doctor arrived, and then as a missionary's wife, not as an officially appointed missionary. Dr. Agnes Fraser (nee Robson) graduated from Glasgow University at the turn of the century, when women were increasingly entering into medical profession.90

Before 1894, Livingstonia doctors came almost exclusively from Aberdeen or Glasgow. Glasgow graduates attended Free Church College to obtain theological education in addition to their medical studies.91 Between 1894 and 1900, however, five out of seven new doctors came from Edinburgh. All of them were connected with the Edinburgh Medical Missionary Society. There is evidence that most of the missionary doctors appointed to Livingstonia had previous experience from the home mission field. Robert Laws, William Black and George Steele all worked in Glasgow Medical Mission while Walter Elmslie practiced in countryside in North-East Coast Mission.92

The work in home medical missions provided models for foreign mission work, and undoubtedly also influenced the ideas and attitudes of young medical students. In the city missions, in between medical treatment they held prayer meetings and lectures for out-and in-patients, discussed with patients, provided them with religious literature, taught sick children and so forth.93 The Edinburgh Medical Missionary Society shared the legacy of Livingstone with Livingstonia Mission: it named its new institution, founded in Cowgate in 1877, "Livingstone Medical Missionary Training Institution". For many contemporaries, Livingstone's medical missionary work among the "heathen" of Africa was fully comparable with the home mission work "...in the very midst of the moral and spiritual wastes of our home heathenism..." . 94 These "wastes" consisted of alcoholism, crime and

⁸⁹ FCSMR March 1881, pp. 80-81.

⁹⁰ In 1890's, independent medical missionary women emerged to the Free Church mission field, operating mostly in India and China; see Proceedings and Debates, 1894, p.124. Jane Waterston was certainly a groundbreaking pioneer in Africa, although her practice in Livingstonia lasted only for a few months. As Agnes Fraser was not an official missionary, her practice remains partly hidden from the official reports.

⁹¹ Report on Foreign Missions of the Free Church of Scotland, 1885, p.10.

⁹² Elmslie 1899, pp. 257-259; FCSMR October 1877, pp. 247-248; Livingstone 1921, pp.33-34; Proceedings and Debates of the General Assembly of the Free Church of Scotland, 1884, Appendix VIII, Report on Foreign Missions, p.10.

⁹³ For description of home medical mission work see Lasbrey, F.O.: Cowgate Medical Mission, and Lowe 1886, passim.

⁹⁴ Lowe 1886, pp. 217-218.

prostitution, which were perceived as the main social and moral diseases of the industrial cities of the time. Working in home missions arguably reinforced the views of Livingstonia medical recruits regarding these "diseases".

Theorists of medical missions repeatedly emphasised the traditional Christian connection between suffering and sin. "How blessed is that skill which cures the ulcerous wound, and mitigates the agonies of fell disease! -but how far more blessed, to heal the soul's deadly hurt, and pour the 'balm of Gilead' into the sinner's wounded spirit!"95 said Professor Miller.

In 1859, Dr. David Brodie, writing under the pseudonym "Therapeutes", presented the connection between sin and disease in following terms in his book "The Healing Art. The Right Hand of the Church.":

"The ailments of the body are closely connected with those of the soul; and even if, in individual cases, this cannot be proved, yet, in the whole progress of human development there is always a casual connection between sin and evil - between the disorganisation of the spirit through sin, and all forms of bodily disorder. Some of these diseases, also, arose purely from moral causes, and could be thoroughly cured only by moral and spiritual remedies." 96

The idea of moral disease was common to both religious and scientific thinking in Victorian Scotland, where the connection between religion and science was especially strong.97 The most important of moral diseases, curable only by personal choice of "healthy" living, were alcoholism and venereal disease. It can be argued that in the Free Church, which tended to "reduce complex social issues to matters of personal morality" the idea of moral disease was especially widely accepted.98

Livingstonia was founded in the atmosphere of rising missionary enthusiasm and strong belief in rapidly progressing Western medicine, combining in the profession of the medical missionary. This new profession found supporters easily. In Glasgow, for example, Dr. Joshua Paterson founded a scholarship for a student who took a full course of medical

⁹⁵ Lowe 1886, p. 273.

⁹⁶ Therapeutes 1859, pp. 270-271.

⁹⁷ Forster 1989, p. 3.

⁹⁸ Drummond and Bulloch 1975, pp. 24-28.

study in University, and a partial course of theology in the Free Church Hall and would commit himself to mission work after graduation. For Paterson, medicine was the handmaid of Christianity, but he also emphasised the professionalism required of the medical missionary.99

First graduate of the Paterson scholarship was William Black, who was to be second medical missionary appointed to Livingstonia, and originally intended to take the place of Robert Laws in the first expedition. Coming from a teacher home, Black studied to become an architect in St. Andrews University. After a religious awakening at the age of 21, he became an active member of YMCA and started to study medicine in Glasgow. He was a promising student, receiving first-class honours in the Institutes of Medicine. Turning down offers from India, he preferred African field because of its pioneering possibilities. Black was an eager supporter of the Livingstonia scheme, making public appeals for it while at University and working with the Glasgow Medical Mission. Before his departure to Livingstonia, a large farewell meeting was held at the Free Church College Hall. Visitors including University professors and Miss Livingstone, David's sister, who had provided the event with an exhibition of items belonging to the late medical missionary model and martyr. Dr. Black was presented with "two valuable cases of surgical instruments" and his medicine chest and magic lantern were provided by the Glasgow Sabbath Scholars.100

In studying the background of Livingstonia missionaries, John McCracken and Peter Forster have emphasised the high proportion of people coming from relatively poor, agricultural or artisan background. Exception to this were the missionaries coming from the clerical homes. This generalisation correspondens with the medical missionaries as well. Medical education in Scottish universities was comparatively cheap and open to a relatively large proportion of population. 101 Robert Laws was a son of a carpenter, and paid his own way through university in medicine and theology. James Stewart and George Prentice came from small farms, George Steele, J.C. Ramsay and James Chisholm paid their studies by their work.102 They could be called "self-made men", who exemplified

⁹⁹ FCSMR June 1876, pp. 146-147.

¹⁰⁰ FCSMR June 1876, pp. 146-147.; FCSMR October 1877, pp. 247-248.

¹⁰¹ Forster 1989, pp. 4-5; McCracken 1977, pp. 33, 181.

¹⁰² Chisholm to Smith 21 October 1898. NLS, MS. 7881, 79; Prentice to Smith 14 July 1892. NLS, MS. 7900,

the Victorian Scottish ideas of self-help and hard work ethics. To them university education in medicine and theology meant substantial social advancement, especially as the status and prestige of medical profession was increasing considerably. These men were a minority in the 19th century medical schools, however, as medical profession was, according to Porter, "a magnet for middle classes".103 It is also noteworthy that their practical skills in carpentry and agricultural work, for example, proved a useful asset in the pioneering conditions of Central Africa. In testifying for the Christian character of Dr. Ramsay (a standard procedure before appointment), A.N.F. Barbour of the Royal College of Physicians, Edinburgh, stressed the fact that Ramsay was "...a self-made man educationally...a man who could stand alone...".104

A large proportion of medical missionaries in Livingstonia, however, were children of the manse, especially after the turn of the century. According to the Livingstonia Staff-Book, at least six out of twenty medical missionaries working in Livingstonia between 1900 and 1914 came from minister families. Three of them were nurses, three doctors. Dr. Agnes Fraser's father was a missionary activist, Dr. William Turner was a son of a missionary in Jamaica. In addition, nurse Ruth Livingstone-Wilson and her brother, Dr. Hubert Wilson, appointed in 1914, were grandchildren of David Livingstone.105 These people were familiar with the foreign missionary scene from childhood. Especially for the daughters of the manse, career as a medical missionary must have often been one choice for independent life readily acceptable to the family. For the grandchildren of Livingstone, the decision to follow in their famous grandfather's footsteps by starting medical practice in the very same area he died 106 is hardly surprising, and probably one first formulated in childhood.

It seems that the decision to become a medical missionary to foreign lands was often made in childhood or teens. According to Hamish McIntosh, Robert Laws admired Livingstone at the age of twelve, and had a definite "call" for foreign mission work at fifteen.107 For many, specific interest in the Livingstonia mission and the subsequent decision to go there

63; McIntosh 1993, pp. 1-15.

¹⁰³ Porter 1997, pp. 348-352.

¹⁰⁴ Barbour to Smith 7 November 1895, NLS, MS. 7873, 134.

¹⁰⁵Livingstonia Staff-book, NLS, ACC 7548 D.73.

¹⁰⁶ Station of Chitambo, founded in 1907. See Annual Report for 1914.

were taken quite early, at school or in University. Dr. George Prentice was one missionary for whom Livingstonia had been a long-time goal:

"...I was led to the knowledge of the truth as it is in Jesus in the spring of 1887...I was then serving an apprenticeship for commercial life but was led to think of the claims of Christ for the Foreign Field. After much thought & prayer the way was opened up by a chain of singular providences....I have had for a very long time a great desire to go to Livingstonia..." 108

Prentice was sixteen at the time of his religious awakening. He subsequently studied medicine in Edinburgh University in regular connection with the Edinburgh Medical Missionary Society, taking some theological courses in addition to his medical studies. After his first five-year term in Livingstonia, he reflected that one reason for his interest in that mission had also been imagined romance and adventure in Africa:

"Was it not the romance of missions that brought you here? And was it not that book, **Heroes of the Desert**, you read at school that influenced your choice more than your deliberate judgment after fully weighing in your mind the spheres of probable usefulness?" 109

By the early 1890s, Livingstonia had become a famous and well-known mission in Scotland. This interest was further increased by the establishment of the British Central African Protectorate in 1891. The work of Livingstonia was associated with fight against the slave trade, war, witchcraft and superstition among fierce warrior tribes like the Ngoni. The mission was getting increasing number of converts and it claimed the honour of making peace between the Ngoni and the Tonga. It was also associated with the 1887-1889 "Arab War". Missionary doctors were portrayed in the Free Church periodicals as peacemaking diplomats and military surgeons as well as medical evangelists.110 At least one missionary doctor, David Fotheringham, was attracted to Livingstonia more because of perceived adventure and excitement than the desire to cure bodies and save souls. During his period in Bandawe station in 1891-93, he seemed to have concentrated on hunting and fortifying the peaceful station against imaginary attacks. Furthermore, he scared his colleagues by carrying loaded firearms all the time and reportedly even sleeping with them.

¹⁰⁷ McIntosh 1993, p. 5.

¹⁰⁸ Prentice to Smith 14 July 1892, NLS, MS.7873, 63.

¹⁰⁹ Report on Foreign Missions, 1900, p. 99.

¹¹⁰ See, for example, FCSMR October 1887, pp. 306-307; May 1888, p.143; August 1888, pp. 238-239;

"Certainly Dr.F. has misunderstood the mission call, or been led away by the knowledge of his brother's work at the North End.", wrote Walter Elmslie, who was worried over the sanity of his colleague as well as the safety of the mission.111

From the 1890s, medical mission work in Africa appeared also more challenging from the doctors' professional point of view. At the time, as stated earlier, the concept of "tropical diseases" was formulated, and increasing number of "new" diseases were classified. Tropical medicine emerged as a specialised discipline attracting much attention and established its position in Britain with the founding of London and Liverpool Schools of Tropical Medicine. Doctors in the tropics could be seen as heroes struggling to conquer strange and deadly diseases.112 Possibility to do research in connection with the mission work was inviting to Dr. Ramsay, who had studied bacteriology intensively, and had aspirations to study tropical diseases, especially malaria. After his appointment to Livingstonia in 1896, he approached the Foreign Missionary Committee for funds to obtain a bacteriological outfit:

"...I have not the slightest hesitation in saying that I believe it would be one of the most beneficial scientific outfits that have ever gone up the Zambesi. To come into this conclusion we have but to look into the work that that branch of scientific medicine...has done to promote the science and usefulness of medicine." 113

The realities of medical practice in Livingstonia, however, would cause severe disappointment to those who had great professional expectations and ambitions. Such feeling was one cause for resignations among the medical staff. This was the case with Dr. Robert Scott, who left his resignation after the first year of service in 1899:

"This is in consequence of the medical work not being what I expected and wished when I was appointed. When I left home I thought I was coming to a growing practice that would take up the greater part of my time....I know this has been a specially healthy year but I am not satisfied that at any time I should have the practice I want here." 114

August 1889, p. 239.

¹¹¹ Elmslie to Laws 28 May and 27 June 1892, NLS, MS. 7896, 75, 91. Dr.Fotheringham's brother, L. Monteith, was an agent of the African Lakes Corporation, who took part in the Arab war and wrote a book, *Adventures in Nyassaland* (London, 1891) of his experiences.

¹¹² Porter 1997, pp. 462-480; Worboys 1993, pp. 518-521.

¹¹³ Ramsay to Smith 6 May 1896, NLS, MS. 7879, 99. The Committee granted Ramsay's request, the price of the outfit being £29. See Smith to Laws May 1896 (undated), NLS, MS. 7900, 68; Ramsay to Smith 1 December 1896, NLS, MS. 7879, 227.

¹¹⁴ Scott to Smith 12 October 1899, NLS, MS. 7882, 88.

Scott's straightforward resignation came as a shock to his colleagues and the Foreign Mission Committee at home. He had been a promising missionary candidate, being a former President of Student's Volunteer Missionary Union in Glasgow University. The Union, formed in 1891 after an American example, was increasingly popular in Scottish Universities in 1890s and 1900s. Of Livingstonia medical missionaries it is known that Drs. George Steele, Alfred Roby-Fletcher, Frank Innes, Berkeley Robertson and William Turner were all Volunteer Union activists in their student days.115

One reason for Robert Scott's rapid disappointment might have been the fact that he had had a promising practice in Scotland after graduation, having worked as a House Surgeon in the Perth Infirmary.116 Some of the Livingstonia recruits had intensive hospital experience before their appointment. Laws worked in the smallpox and fever hospitals of Glasgow, Berkeley Robertson practiced in the Glasgow Royal Infirmary and in the Ophthalmic Institution, specialising in the diseases of the eye, and William Turner was a Casualty House Surgeon in the Glasgow Royal Infirmary.117 Most of the missionary doctors, however, went out relatively inexperienced, almost immediately after graduation, having been recruited and provisionally appointed while still in University. If, for some reason, they could not be sent out immediately after graduation, they would be in a difficult position, being unable to take regular posts available in Scotland. Dr. Ernest Boxer explains his situation while waiting for the confirmation of his appointment to Livingstonia:

"As you will understand it is very trying time after time to have to refuse good posts because of a "possibility"...There are such a number of very lucrative posts vacant at present that temptation...is very strong."118

Facing such "temptations" required religious conviction and a strong sense of personal missionary call. None of the Livingstonia recruits explained his background and personal conviction as thoroughly in writing as Dr. Alfred Roby-Fletcher. A son of a manse, he was introduced to the foreign mission work in childhood while he visited India with his father,

¹¹⁵ Steele to Laws 27 July 1889, NLS, MS. 7892, 150; Minutes of the Livingstonia Mission Committee, 20 May 1898, NLS, MS. 7913, 76; Livingstonia Mission Staff-Book, NLS, ACC 7548 D.73.

¹¹⁶ Minutes of the Livingstonia Mission Committee, 20 May 1898, NLS, MS. 7913, 76.

¹¹⁷ Livingstonia Mission Staff-Book, NLS, ACC 7548 D.73; McCracken 1977, p. 179.

a mission enthusiast. He finished his medical training in Edinburgh, where he was the President of the Student Volunteer Union. He worked with the Edinburgh Medical Mission Society residing at the Livingstone Medical Missionary Institution. Fletcher organised missionary lectures to the Edinburgh public school pupils, attempting to increase interest in mission work. He even planned a book on the philosophical aspect of the mission cause, but left it at a manuscript stage, wanting actual field experience before publishing.

"As a medical it is my special desire to let the attention given to the bodily frames of the people have a Christ-like significance, more in the spirit in which such work may be done than in the mere exhibition of cures; while at the same time one may point all, whether suffering or in good health, to the Risen Christ who in supplying the needs of the soul has no human limitations...It is with a deep gratitude and joy that my life purpose has at last reached the time for action..."119

Fletcher stressed the spiritual element of the medical work for himself as well as for the people treated. His main aim was to become as Christ-like as possible through the healing work. For him, the evangelical objective of striving for personal holiness would be best achieved through medical practice. Fletcher's work in Livingstonia was to be tragically short. He died of fever just four months after his arrival.120

Most medical women appointed to Livingstonia came from middle-class, and especially from minister families. Both lady doctors and at least four out of nine nurses had middle-class background. Jane Waterston's father was a bank manager, and her family, not connected with the missionary circles, was against her decision to become a missionary, a resolution made in her youth. In 1866 she was appointed Superintendent of the Girls' Institution in Lovedale, South Africa, where she worked with Dr. James Stewart. She returned to Britain to study medicine, completing her training in 1878. 121 She was therefore an experienced missionary by the time she arrived at Livingstonia in 1879. However, she resigned after only six months, largely because of disappointment and disillusionment of the mission reality, disagreement with the mission policy towards Africans and the personal conflicts she had especially with Robert Laws. She felt her experience and qualifications were not valued, as she was given the most basic teaching

¹¹⁸ Boxer to Smith 27 June 1900, NLS, MS. 7883, 102.

¹¹⁹ Fletcher to Smith 9 August 1897, NLS, MS. 7880, 71.

¹²⁰ Laws to Smith 10 March 1898, NLS, MS. 7881, 22.

¹²¹ LJEW, pp. 12-13, 111.

work in addition to the medical work.122 "I was judged fit to teach Anatomy in London. I am thought fit for the Alphabet here." 123, she wrote bitterly to Stewart. In her letter of resignation, she emphasised she had to resign as she refused to give up her profession as a doctor for the sake of teaching work:

"1st. Because it [her profession] has cost me everything to get it. 2nd. It is all I have to fall back on if invalided home and therefore I cannot afford to grow rusty in it. 3rd. That, while I dislike merely elementary teaching, my whole heart is in my medical work." 124

Relatively little is known of the personal backgrounds, motives and attitudes of the first missionary nurses appointed to Livingstonia, as only a few of their letters survive. However, the Livingstonia Staff-Book contains some information. After the marriages of Misses Jackson and McCallum, the three nurses (Mary Fleming, Jessie Martin and Winifred Knight) appointed in 1900-1901 all came from minister families and seemed to have had relatively little training and working experience. There is a notable comparison with the four nurses appointed during 1904-1914 (Mary Henderson, Mary Ballantyne, Elizabeth Cole and Ruth Livingstone-Wilson), who were all certified nurses with hospital experience. Mary Ballantyne had worked in the Edinburgh Royal Infirmary and taken a six months course in Missionary Training Home. Elizabeth Cole had taken a maternity course at Belfast and served as a sister in Scottish Red Cross Hospital during the Boer War.125 At the turn of the century, modern nursing as a paid and training occupation was developing rapidly. Hospital-trained and certified, highly professional nurse replaced the older model of nurse, middle-class housewife trained in invalid cooking and cleaning. While the early training of nurses concentrated on diet, quiet and cleanliness, by the end of the century, certified nurses received training on anatomy and physiology, drugs, chemistry, bandaging and so forth.126

¹²² LJEW, pp. 151-152.

¹²³ Jane Waterston to James Stewart 14 February 1880. LJEW, p.168.

¹²⁴ Waterston to Laws 19 February 1880. LJEW, p. 171. Eventually Jane Waterston returned to Cape Colony, working with the Lovedale Institution as well as keeping a successful private practice. She obtained her M.D. from Brussels with high distinction, and became a well-known and popular figure in South Africa.

¹²⁵ Livingstonia Mission Staff-Book, NLS, ACC 7548 D.73.

¹²⁶ Maggs 1993, pp. 1309-1310.

3.3. The Legacy of Livingstone and founding of Livingstonia

The idea of introducing "legitimate" commerce along with Christianity to Africa as a solution to the slave trade was first presented to David Livingstone in 1840, while he was still a medical student in London, by Thomas Fowell Buxton, leader of the anti-slavery movement. When Livingstone reached the Zambesi River in 1851, he was certain that he had discovered means to put this idea into action, seeing the river as a "God-given highway" and solution to transport and communications problems.127 The Zambesi Expedition brought him to Lake Nyasa in 1859. Livingstone regarded the populous Malawi regions, reachable through Zambesi and Shire rivers, promising for commercial settlements.128 He estimated the Shire Highlands to be especially healthy location for a mission station. As noted earlier, Livingstone, who fought against "the Fever" during all his travels, understated its seriousness in his appeals to Britain, giving the impression that it was not much worse than the common cold.129 This illusion was shattered when malaria took its toll on the Universities Mission to Central Africa, the first mission to follow Livingstone's call. Its leader, Bishop Mackenzie, died of fever in January 1862, about a year after his arrival. Health problems, involvement with local tribal fighting and other difficulties eventually lead to the evacuation of the mission to Zanzibar in 1863.130 Another attempt to realise Livingstone's plans of an agricultural and industrial mission settlement was made by James Stewart, a Free Church of Scotland student of divinity and medicine. He found initial support for his schemes, which emphasised the idea of a selfsupporting mission, from businessmen and local politicians in Britain, although the Free Church authorities declined to officially authorise the plan. Stewart went to Malawi in 1861 to carry out a preliminary survey for the founding of the mission. The journey proved to be a disappointment, and seeing all the obstacles Livingstone had overlooked, disillusioned Stewart returned home in 1863, recommending the abandonment of his scheme.131

By the early 1870s, however, the conditions for missionary enterprise in the Malawi area

¹²⁷ Jeal 1973, pp. 22, 101-102.

¹²⁸ McCracken 1977, pp. 18-19.

¹²⁹ Cook 1994, p. 36; Jeal 1973, p. 237

¹³⁰ Jeal 1973, pp. 235-255; McCracken 1977, p. 20; Pachai 1973, p. 71.

¹³¹ McCracken 1977, pp. 21-24. At this point, Stewart had completely lost his faith in his former idol

appeared again more promising. The opening of the Suez Canal in 1869 and the establishment of a monthly mail service from Aden to Durban via Zanzibar in 1873 provided regular communications and transport to the East African coast, making the prospects of inland commerce better. The leaders of the Free Church had in turn become more interested in mission expansion to East Africa. At that time the publicity and attention given to the death and glorious burial of Livingstone provided unprecedented emotional momentum and home support to missionary work for Africa. When Stewart, who had just returned to Scotland from Lovedale, South Africa, made his new proposal for founding a mission carrying Livingstone's name in Central Africa, the area where he died, his plan was readily accepted by the Free Church 132

Financial support for Stewart's scheme came from wealthy Scottish businessmen, especially from Glasgow. This relatively small group of Free Church industrialists continued to fund the Livingstonia Mission until the 1900s, and it was only in 1914 that the mission became under the financial control of the Free Church Foreign Missions Committee. Until that time, a separate Livingstonia Sub-Committee representing the financiers was responsible for the administration of the mission. The approval of the businessmen was required for all major plans and for the appointment of the European agents of the mission. Especially influential were the first Convenors of the Livingstonia Committee, James Stevenson (1875-80), James White (1880-1884) and John Campbell White (1884-1908). The communications between the Livingstonia mission and the two committees in Scotland were the responsibility of the secretary of the Foreign Missions Committee, Murray Mitchell (1875-1879) and Dr. George Smith (1879-1910). 133

Salaries of several missionaries were paid by individual contributors or groups. According to the Livingstonia Staff-Book, John Campbell White, Lord Overtoun, paid the salaries of three medical missionaries (£250 for unmarried, £330 for married medical or ordained missionaries) until his death in 1908. Salary for Robert Laws was paid by the Laing Trustees of the United Presbyterian Church, Frank Innes was supported by "friends". As for nurses, Jessie Martin paid her own charges and had a status of a honorary worker,

Livingstone, although he later regained some of it.

¹³² McCracken 1977, pp. 26-28; Pachai 1973, p. 71.

¹³³ McCracken 1977, pp. 28-32.

Winifred Knight was supported by "the Somerville Connection" and Ruth Livingstone-Wilson by Glasgow-Westbourne.134

When the Livingstonia scheme was put into action, the three elements of work emphasised were evangelisation, education and industrial work. Medical work was not mentioned as a separate mission agency in the first Livingstonia Report.135 Medicine was included compulsorily in the plans, however, by the obvious need for medical care for the missionaries. By the time Laws took charge of Livingstonia in 1877, however, medical work was clearly recognised as a separate department alongside the evangelistic, educational and industrial departments.136 This was perhaps due to the recognition of the need for medicine after the first mission casualties as well as the fact that some medical practice among the Africans could be started while there was little hope of evangelistic work before the missionaries had learned local languages.

4. Pioneer Medical Practice in Livingstonia, 1875-1891

4.1. The Cape Maclear years (1875-1881)

The first Free Church missionary party to Malawi was led by E.D. Young, a naval officer who had visited the area in search of Livingstone in 1867. Second in command was the medical officer and ordained missionary, Robert Laws, followed by five artisans.137 The transport of the party depended on a small steamer *Ilala*, which could be put to pieces and rebuilt after passing the Murchison cataracts of the Shire. In October 1875, the missionaries reached Lake Nyasa, and received a permission to settle in the Yao chief Mponda's territory. They chose as their base of operations Cape Maclear at the south end of the lake. The place provided an excellent harbour for the mission steamer, but it was distant from the local villages and confined by rocky hills.138

¹³⁴ Livingstonia Mission Staff-Book, NLS, ACC 7548 D.73

¹³⁵ Report on Foreign Missions for 1876, p. 12.

¹³⁶ Medical Report for 1876-1877, Cape Maclear Journal 1875-1876, NLS, MS. 7908.

¹³⁷ McCracken 1977, p. 33.

¹³⁸ McCracken 1977, pp. 34-37.

The health of the pioneer party seemed relatively good at the beginning. The first report of the mission stated that the fact that all members of the party survived to the lake with only slight fever was "a singularly noteworthy event".139 Laws used quinine as a prophylaxis, and every member of the party had a daily dose, at least during the river journey.140 The observations around Lake Nyasa were not promising from the medical point of view, however. In February 1876 Laws, following the miasmata theory, estimated that "half of its shores will be found to be malarious".141 The essential danger seemed to be the swamps, therefore the rocky and sandy soil at Cape Maclear was estimated as healthy though unsuitable for cultivation.

Although no complicated cases occurred at first, the Cape Maclear Journal for 1875-76 demonstrates that usually at least two of the seven European members of the party were on a sick list for some part of the day. Laws had a very limited supply of medicines and surgical instruments in the beginning. Against malaria, he had quinine, "rousers", and mustard plasters. The latter were applied to neck and calves of the legs.142

The medical practice among the Africans was started almost immediately after the first party's arrival. The first ones to be advised and treated were chiefs and their families, as a part of the missionaries' diplomatic approach. Mponde welcomed the missionaries as medical advisers and technical specialists, who could repair guns or musical boxes and provide arsenic against leopards as well as cure the sick.143 Just two days after their arrival at the lake, the missionaries sailed to Kota Kota, the main trading centre in the lake, where the chief, Jumbe, consulted Laws. Laws promised to alleviate his pain, "...but only continuous surgical treatment could afford any hope of cure." 144 Laws' diagnosis was that Jumbe was probably suffering from syphilis, and was "...quite reduced in strength and very thin." 145

¹³⁹ Livingstonia: The Mission of the Free Church of Scotland to Lake Nyasa, 2nd Edition, Edinburgh 1876, p. 16

¹⁴⁰ Cape Maclear Journal entry for 27 July 1875. NLS, MS.7908.

¹⁴¹ Laws to Rev. MacFarlane 21 February 1876. NLS, MS. 7876, 37.

¹⁴² Cape Maclear Journal. NLS, MS. 7908; Gelfand 1964, p. 35.

¹⁴³ McCracken 1977, p. 40.

¹⁴⁴ Cape Maclear Journal entry for 12 October 1875. NLS, MS. 7908.

¹⁴⁵ Ibid. If Laws was right, there was very little he could have done, as there were no particularly effective remedies against syphilis at the time. See Porter 1997, pp. 451-452.

The first surgical operation under anaesthetic was performed in March 1876. In Mponda's village, Laws had met a young man with a cystic tumour above his left eye. The man, called Koomponjeera, was taken to the mission station, where he was successfully anaesthetised with chloroform and operated upon. There were three witnesses present, as Laws wanted to demonstrate the power of Western medicine. 146 He wrote this estimate on the effects of chloroform a year later:

"The effects of chloroform quite took them by surprise, and as they saw the patient quietly sleeping while the knife was being used, and afterwards heard him declare he felt no pain, they spoke of him having been dead. Chloroform by itself has in the native mind, drawn a distinct line between the medicine and the practice of the English doctor, and that of the native dealer in charms and practices too hideous to mention." 147

By this time, an increasingly critical attitude towards the local healers is apparent in Laws' text. Arguably, Laws was wrong in his idea of chloroform as an ideal marker of difference between Western and African medicine. As the effects of chloroform are instantaneous, it agrees with the idea of instant, magic-like cure, which, as the medical missionaries frequently pointed out, was one very common to the Central African medical thinking.

Laws emphasised the importance of this operation for the future of the mission.148 The patient recovered well, staying in Cape Maclear for some days. At the same time, one of Mponda's wives was treated in the station for rheumatic pains. It was clear that the missionaries were locally accepted as healers by this time.149 Chief Mponda's faith in Laws as a healer is shown by the fact that when the chief was dying in 1885, he turned to Laws for medical aid.150 Most of the missionaries time, however, was spent on building and developing the station and learning the language, so there was little time given for medical work in the beginning. The role of African Christians who acted as intermediaries during this important initial period, should not be overlooked, although their work was often neglected in contemporary mission sources. They interpreted the missionaries' messages to the chiefs and the people.151

¹⁴⁶ Cape Maclear Journal entries for 1-2 March 1876. NLS, MS. 7908.

¹⁴⁷ Medical Report for 1876-1877. NLS, MS. 7908.

¹⁴⁸ Laws, quoted in FCSMR, August 1876, p.192.

¹⁴⁹ Cape Maclear Journal entry for 5 March 1876. NLS, MS. 7908.

¹⁵⁰ McCracken 1977, p. 40.

¹⁵¹ McCracken 1977, p. 48; Thompson 1995, p. 40.

The second party arrived in Livingstonia in October 1876, led by Dr. James Stewart, who took over the charge from Young, and included Dr. William Black, four artisans and four African evangelists from South Africa. The initial reports of Stewart and Black seemed optimistic:

"The climate around the lake is by no means bad; fever there is of a much milder type than it is in the valleys of lower Shire and Zambesi; a delightful breeze nearly always blows to or from the water, greatly tempering the heat." 152

Stewart soon corrected this observation, however:

"Still, let no one here think that here there has been, or will be for some time to come, perfect immunity from our dreaded enemy, the fever." 153 He believed that better housing and food would reduce the fever, advocating boarded floors and plentiful supplies of wheaten bread and milk. 154 In March 1877, Stewart observed that the nutritional situation of the missionaries was alarming, noticing "...more debility among the force that I would like to see...". To relieve the situation he sent an order for a ton of flour and half a ton of salt beef. 155 The order for these "luxury" products suggests that the food among the pioneers was not particularly healthy.

Indeed there was no such thing as perfect immunity from fever. The first Livingstonia missionary to die of fever was Dr. William Black, in May 1877. He had taken over the medical department in Cape Maclear soon after his arrival, estimating the soil poor but less malarious. Most of his time was, however, given to the general construction work in the station. Black recognised his limited medical opportunities:

"Our medical work is not organised into any sort of system as we have had so many other things to do...until a hospital is put up...I fear we will not be able to do much." 156

Most African patients at this time were treated for skin diseases, especially ulcers. The African population of the station had grown to about sixty by March 1877. Some of them had, according to Black, come originally for medicine and remained after getting

¹⁵² FCSMR March 1877, p. 60. This "delightful breeze" was later interpreted in far more ominous way.

¹⁵³ Stewart to Duff 26 October 1876, quoted in FCSMR April 1877, p. 91.

¹⁵⁴ Ibid.

¹⁵⁵ Stewart to Duff 28 March 1877. NLS, MS. 7876, 194.

¹⁵⁶ Black to Smith 3 March 1877. NLS, MS. 7876, 176.

When Dr. Black became ill, Stewart was in the Church of Scotland mission at Blantyre and Laws was away on the steamer. When Laws returned after a couple of days, he observed that Black was very jaundiced and somewhat confused with high fever and vomiting. He had possibly taken an overdose of morphine while trying to treat himself. Laws prescribed calomel and jalap as purgatives, and tried Chloral hydrate, which the patient vomited. To rouse Black from his increasingly worsening state, Laws applied a large mustard plaster over his stomach. This revived the patient somewhat, and Black spoke of his illness, saying he wanted to go home but assured Laws it was not because he was not discouraged by the work. Then he took another turn for the worse, and Laws resorted to champagne as a stimulant. Now desperate, Laws dreaded coma and continued to apply mustard plasters, observing that Black's condition on the day he died resembled a severe case of typhus. Plasters ultimately failed to revive Black, who died after six days' illness. Laws took the loss very severely, regarding it a heavy blow to the entire mission. He later reminisced that he missed "very much the counsel of Dr. Stewart" at the time of Black's illness.158

During 1877, two other deaths occurred at Cape Maclear, but neither of these were attributed to the malarial fever or climate. When Laws gave the years' medical report, he observed that the general health of the missionaries had been better than expected, although he argued that the climate "reduces mental and bodily vigour to a minimum". Mental vigour was essential to physical health for Laws, to whom "The arrival of a large mailbag is in itself an excellent medicine." 159 Better communications with the outside world would improve mental and physical health in the conditions where the actual remedies against fever and intestinal diseases were limited. As the theories on the cause of malaria were based on miasmata thinking, they searched generally the cause from the climate or the soil. When the health of the Europeans was markedly better during 1878, Laws was not sure whether it was "...from the dryness of the year or from some other unknown cause...". He also emphasised the benefits of visits to higher altitude at Blantyre:

¹⁵⁷ Black to Smith 3 March 1877. NLS, MS. 7876, 176.

¹⁵⁸ Laws to Mrs. Findlay 12 March 1878. NLS, MS. 7876, 221. It was almost a year later that Laws described Black's illness in great detail in this letter, based on his notes at the time. 159 Medical report for 1876 and 1877. NLS, MS. 7908.

"... [a visit] amid the clean bracing air greatly invigorates each individual." 160

The mission attracted its initial African settlers, according to McCracken, from among "those on the periphery of the tribal system". Disappointed headmen and individuals, former slaves and generally those without strong tribal or family position sought European protection among the missionaries, who now faced the problem of political, social and juridical control of their dependants. The Africans were given food supplies until they managed to settle and cultivate their own crops. In return they worked for the missionaries. Polygamy and beer-drinking were forbidden, although the missionaries were forced to tolerate the former for the time being. The missionaries also acted as temporal authorities, punishing offenders with fines, imprisonment, expulsion or flogging. By August 1878, the number of Africans in Cape Maclear had risen to over three hundred, and in 1880, their number was over five hundred.161

From December 1876 to 1878, Drs. Stewart and Laws took turns in taking care of the Blantyre mission, which was without an ordained missionary or any proper leadership almost collapsed with demoralisation and disease.162 Dr. Stewart, who was severely strained by malaria, (at one point even described as possibly going out of his mind) left Livingstonia in December 1877 and returned to Lovedale. Laws took charge of the station permanently at this time.163 His medical report confirms Black's views regarding the limited practice among the Africans:

"Among the natives, medical work is still in its infancy. I can present no glowing report of a series of brilliant operations, and crowds of people daily receiving medicine. As yet, ours is more sombre work, such as prescribing Epson salts, rhubarb pills and extracting teeth. Yet even in this the confidence of the natives has greatly increased....For the proper treatment of many of the cases coming for relief, an hospital would be needed, so that the nursing and feeding of the patients might be attended to, which is not the case, when left to their own resources. Natives who have received relief have several times shewn their gratitude, by bringing a present of a fowl, or some native flour, to the mission station. This is pleasing not so much for its value, as for the spirit it evinces. The good we have been able to do the bodies [sic] of the people, they can readily appreciate and they are thus the

¹⁶⁰ Livingstonia Mission Report for 1878. NLS, MS. 7876, 243. Although the basis of Laws' thinking was, from modern point of view, wrong, his observations correspond with the mosquito factor: dryer year may have meant less mosquitoes, and the higher altitudes and colder climates were free of malaria because of lack of mosquitoes.

¹⁶¹ McCracken 1977, pp. 46-50. The temporary prison was constructed in July 1877.

¹⁶² Ibid, p. 65.

¹⁶³ Ibid, pp. 37-38, 52.

more ready, while at the station, to listen to the great truths we proclaim, and on returning to their villages they carry with them a good report of our transactions...and open up a way for our reception among them." 164

Laws' report deals with themes that were to recur numerous times in medical missionaries' writings over the next two decades: lack of hospital, limited medical supplies but "the growing confidence of the natives" as a positive gain. The role of medicine as an agency for mission propaganda among the Africans, especially in forming the first contacts, is frequently stressed. It is noteworthy that this report describes African patients in rather positive way, pointing out their gratitude and appreciation of the medical work.

During 1877-1880, artisans were frequently in charge of Cape Maclear station and the new observatory station at Bandawe on the western lake shore.165 When Laws was not present, they did what medical work they could. Allan Simpson, an engineer, described his work at Bandawe:

"A young girl whom I had been treating for a sort of a blood poisoning and whose life I had little hope of is rapidly recovering. Numerous other patients who have been treated have all gone well with one exception - that of a woman with syphilis but she is somewhat improved." 166

Simpson mentioned having treated poisoning cases, ulcers and inflammations. Owing to the lack of forceps and "a suitable knife" he declined to operate on a man with a bullet in his back, waiting for Laws in this case.167 Although the medical knowledge and resources of the artisans were obviously limited, they took their share of medical work out of necessity, and were willing to try, in a self-made man fashion.168 The pioneering medical practice among the Africans as Laws described it, prescription of simple drugs, and basic dentistry, did not require great medical specialisation, and was in theory open to all missionaries who had access to medicines and surgical instruments.

The selection of surgical instruments was extremely limited, however. When Laws wrote to Scotland in January 1879, he asked that Dr. Jane Waterston, preparing to sail for

¹⁶⁴ Medical Report for 1876 and 1877. NLS, MS. 7908.

¹⁶⁵ McCracken 1977, p. 52.

¹⁶⁶ Bandawe Journal entry for 7 August 1879, NLS, MS. 7910.

¹⁶⁷ Bandawe Journal entries for 28 July, 8 August 1879 and 3 March 1880. NLS, MS. 7910.

¹⁶⁸ It should be noted that two of the artisans of the first Livingstonia party studied medicine and qualified as

Livingstonia, would be provided with a plentiful supply of instruments and medicines. Laws pointed out that he had gone out with only a "emergency case" of medical instruments, and

"Miss Waterston ought to be provided for what is required for a hospital at home...".169 What medical instruments Dr. Waterston received, is unknown. It is probable, however, that they did not include sufficient equipment for a Scottish hospital of the time.

Dr. Waterston arrived in Livingstonia in November 1879, and stayed for only six months, as noted previously. Her disillusionment of a mission work owed a great deal to the missionaries' treatment of Africans. The missionaries, especially in Blantyre but also in Livingstonia, were exercising civil powers to the extremes. Floggings were common and in Blantyre a man was executed.170 The news of these atrocities caused a tremendous uproar in Britain, and both Blantyre and Livingstonia received orders to cease their temporal activities by 1881.171

The medical work took also a heavy toll on Dr. Waterston. In Livingstonia she had difficulties to settle and she couldn't get on with Laws. She described the confrontation between the two doctors:

"....Dr Laws began to describe the sort of person he dreaded to see come to the country. I listened quietly and then said, 'Dr Laws, do you know that you have just been describing me?' He answered, 'but you have this comfort, that women stand malaria better than men'. I said, 'I know that' and then proceeded to give him Surgeon Major Gunn's verdict, a man of... larger experience which, of course, was a direct contradiction of the Doctor's....Neither malaria nor anything else will be able to prevent me, as for trying to frighten me, I am not a bairn nor a fool and my professional knowledge stands me in good stead."172

This letter gives an impression that Laws was suggesting Livingstonia was not healthy for Waterston, although she might stand malaria better, and she felt he was not respecting her professionally. It seems probable that Laws found it difficult to cope with an unmarried,

doctors after their return to Scotland. Neither of them returned to the mission field. See McCracken 1977, p. 52. 169 Laws to Main 3 January 1879. NLS, MS. 7876, 240.

¹⁷⁰ McCracken 1977, pp. 65-66; Waterston to Stewart 4 October 1879. LJEW, pp. 155-156; Report on the Blantyre Mission Case, NLS, MS. 7904. In one case a man was flogged to death in Blantyre and doctor Macklin of the mission tried to help cover up the fact by claiming he had died of a heart failure -not mentioning the 275 lashes given.

¹⁷¹ McCracken 1977, pp. 66-69.

¹⁷² Waterston to Stewart 10 November 1879. LJEW, p. 161.

older and independent woman doctor in his mission. It should be remembered that women were just getting the right to qualify as doctors at all.173

After a month, Dr. Waterston wrote to James Stewart asking him to arrange her recall.

"If possible, recall me, for it will save me...stating that the Humbug I have seen has altered my views...I cannot give any religious teaching as....I have been ashamed of being a Missionary. I might manage to recover a little moral and mental tone at Lovedale, never in this country." 174

Another reason for her resignation, as noted earlier, was the heavy work in both medical and educational department, especially as she didn't want to do the elementary teaching:

"...I am seeing patients every day, **plenty.** I am teaching the lowest class in the school and I am teaching sewing three times a week....I take the heavy end of the medical work and am training three girls...It is a mercy I am not taking fever as I am so depressed it will fare with me as it did with Black." 175

Medical work was what she enjoyed, however, after all. She seems to have taken over much of the increasing practice among the Africans.

"I am terribly alone here but the medical work is increasing so fast that I am kept very busy. Sunday...I had seven patients and paid eight visits. Saturday I had twelve patients and paid nine visits, three of these by boat...At present Gunn says, he never saw so many sick people come here before...All this medical work is rousing me and I am thankful for my profession."176

Dr. Waterston resigned in February. Before that, she assisted Laws in a vain attempt to save a fellow missionary dying from a "malarious dysentery". In a bad case of malaria or intestinal infections, she emphasised early use of stimulants and feeding, especially eggs and milk beaten up with brandy.177 By this time she had taken the responsibility of all African patients, mentioning there were several suffering from fever and bronchitis.178 Nevertheless in her letter of resignation she stated that she resigned because she didn't want to lose her profession and as there "was work for only one doctor in the station", she

¹⁷³ McIntosh 1993, pp. 62-64. McIntosh notes that Laws had a low opinion of Waterston's work in general, suggesting that if he had given her more professional respect she might have remained.

¹⁷⁴ Waterston to Stewart 11 December 1879. LJEW, p. 162.

¹⁷⁵ Ibid. This suggests, as Laws' emphasis on the importance of the mental and moral well-being, that there was feeling that Black's illness might have been worsened because of depression and disillusionment.

¹⁷⁶ Waterston to Stewart 29 December 1879. LJEW, pp. 165-166.

¹⁷⁷ Waterston to Stewart 14 February 1880. LJEW, pp. 166-168.

would have to resign.179 This was an acceptable argument for resignation for the home authorities. In discussing the case later, Stewart, sympathetic as he was to Waterston, stated that the climate was not suitable for her temperament and constitution.180 Because the real reasons for her resignation were too painful for mission authorities to deal with, the theory of unsuitability of single women in Central African climate was put forward. It took fourteen years before the next single woman missionary was appointed to Livingstonia.181

The Livingstonia mission report for 1880, written by Laws, was not particularly positive from the medical point of view. Two missionaries had died of fever and dysentery (there was no mention of African deaths). Laws stated that the medical department had been popular, for the first time giving figures of African medical attendance: during the past nine months there had been 776 attendances, of which 495 were first visits. There was no details of the cases, but the ideology of the medical work was formulated thus:

"The medical mission work is the practical exposition of the precepts of Christianity, which the dullest mind is capable of comprehending and valuing." 182

The practicality of medical work seemed comforting to Laws at the time when he was complaining about the "ignorance" and "lack of intellectual activity" of the Africans, reflecting his disappointments in the educational and evangelistic departments.

By 1881, the mission work at Cape Maclear had indeed failed, and the transfer of the mission to Bandawe at Tongaland, which was proposed for some years, was approved. McCracken has pointed out how the mission could not succeed among the Yao, whose economy was fundamentally based on the coastal trade, mainly in slaves, that the missionaries opposed equally fundamentally.183 The arguments for abandoning Cape Maclear, dating back to 1877, stressed its poor soil, isolation and unhealthiness in turn. It is interesting to note that the appeal for changing the site in August 1877 after the first deaths, did not directly mention malaria or unhealthiness as a drawback for Cape

¹⁷⁸ Ibid, pp. 167-170.

¹⁷⁹ Waterston to Laws 19 February 1880. LJEW, p. 171.

¹⁸⁰ Stewart to Young 20 April 1880. LJEW, p. 173.

¹⁸¹ Miss L.A. Stewart, as teacher, in 1894. Report on Foreign Missions for 1899, p.19.

¹⁸² Livingstonia Mission Report for 1880, p.3. NLS, MS. 7904.

Maclear.184 Three years later, however, Stewart, writing from Lovedale, included malaria as one of the main causes for European withdrawal:"...the immediate site of the buildings is a sandy soil - one of the worst for malaria."185

While Stewart was blaming the soil (which was earlier thought to be healthy if poor), Laws was more concerned about the air and the winds. Later, in Bandawe, he had the new houses built facing inland to avoid the blowing of miasmata from the water.186 He discussed his concern with Thomas Binnie of the Livingstonia Committee, who in 1891 suggested planting of quickly growing trees to shelter the station from "harmful winds".187 The idea of Cape Maclear being an unhealthy station for Europeans became universally accepted: in 1884, Dr. William Scott compared the "nice cool breezes" at Bandawe favourable with the "oppressive air" he felt when visiting Cape Maclear.188 When the mission moved finally to Bandawe in 1881, it was the perceived healthier location of the new site that was emphasised.189

Was Cape Maclear an unhealthy station? Of the seventeen Europeans and three African evangelists from Lovedale working in the Cape Maclear station 1875-1880, four had died 190, but exactly how many of them died of malaria is not sure. As Michael Gelfand has noted, the diagnosis of malaria requires a microscopic analysis of the blood film, which was not available at the time. Throughout the nineteenth century at least, many cases of malaria were mistaken for other ailments, and vice versa.191 Two of the Cape Maclear cases were described as malaria, one as malarious dysentery, and the African evangelist Shadrach Ngunana was reported of dying from consumption.192 The European death rate of 17.6 per cent was not actually exceptionally high at the time (the death rate for the entire

¹⁸³ McCracken 1977, pp. 41-56.

¹⁸⁴ Livingstonia Missionaries to the Foreign Missions Committee 6 August 1877. NLS, MS. 7876, 214.

¹⁸⁵ Stewart to the Secretary of the Livingstonia Committee 18 August 1880. NLS, MS. 7876, 304.

¹⁸⁶ Gelfand 1964, p.233.

¹⁸⁷ Binnie to Laws February 1891 (undated). NLS, MS. 7899.

¹⁸⁸ Scott, quoted in FCSMR, February, 1885, p. 50.

¹⁸⁹ Report on Foreign Missions for 1881, p. 58.

¹⁹⁰ Report on Foreign Missions for 1899, p. 18. In addition, one Livingstonia missionary died on his way in Zambesi.

¹⁹¹ Gelfand 1964, p. 247. Although the Livingstonia doctors followed closely the developments in British medical science (through journals like *The British Medical Journal* and *The Lancet*) from early on, and Laws brought the first microscope to the country in 1886, the actual research done seems to have been quite limited. See Elmslie to Laws 25 February 1887. NLS, MS. 7890, 33.

¹⁹² Medical Report for 1876 and 1877. NLS, MS. 7908; Livingstonia mission report for 1880. NLS, MS. 7904.

period 1875-1900 was 22.2 per cent 193). It was, nevertheless, combined with other reasons, high enough for the change of location at the time. The medical argument for the changing of site, presented by the doctors on the spot, was a strong one that the Committees at home could not overlook. As it was to be seen, the new station at Bandawe did not prove particularly "healthy" either.

4.2. Medical evangelists, doctor-diplomats and military surgeons - medical work among the Tonga, the Ngoni and the Ngonde, 1881-1889

The new Livingstonia settlement at Bandawe in Tongaland was regarded as a base for mission expansion, especially towards the Ngoni, whom the missionaries now regarded as the most influential tribe west of the Lake. In settling among the Tonga, who were frequently fighting with the northern Ngoni as well as among themselves, the missionaries found themselves in a diplomatically difficult position. By this time the idea of missionaries having powers of civil jurisdiction was generally abandoned, and Laws adapted a policy of neutrality and informal influence with the local chiefs194. In this, he largely succeeded, enabling the further growth and development of the mission. During the 1880s, the mission started three new stations: one at Northern Ngoniland (1882), one at the north end of the lake (1884) and one in the Livlezi valley near Southern Ngoniland (1887).195 In each of them, a medical missionary was appointed.

Medicine remained a special tool for informal influence available to the medical missionaries. While still based at Cape Maclear, the missionaries had formed initial contacts with the Ngoni and demonstrated their skill with chloroform. Two Ngoni messengers were invited to witness a removal of tumour under chloroform which Laws performed at Blantyre, where he deemed the conditions for operating were best.196 The reputation of Laws as a powerful healer helped to establish a friendly contact with the

¹⁹³ McCracken 1977, p. 52. Eighteen out of eighty-one European agents appointed between 1875-1900 died, most from malaria and blackwater fever. In addition, eleven Europeans were invalided back to Scotland.

¹⁹⁴ McCracken 1977, pp. 64-65, 70-77; van Velsen 1959, p. 4.

¹⁹⁵ McCracken 1977, pp. 71-73.

¹⁹⁶ FCSMR June 1879, pp. 137-138.

Northern Ngoni. According to Laws, the medical aid rendered to women, and the paramount chief's head wife in particular, played an important part in the acceptance of the mission.197 The Ngoni allowed the missionaries to establish a pioneer station at Nyuju, the base for the paramount chief Mbelwa (Mombera), in 1882. Three years later, the first medical missionary among the Ngoni, Dr. Walter Elmslie, arrived at the station, introducing himself to Mbelwa as a teacher of Word of God and a healer to all the sick. The medical work was readily welcomed by the chief and the headmen, while the school work was not yet permitted.198

The first chloroform operations among the Tonga, an excision of a tumour and an amputation of hand, were performed during 1882. Local chiefs were invited to witness the operations, "...and their astonishment at the effect of chloroform was unbounded." 199 Laws was careful and selective in the operations he undertook, as he felt that the success of the entire mission depended greatly on his reputation as a surgeon. 200 After a year's work in Bandawe, he reported that the medical work there had been more abundant than in Cape Maclear, and he had to decline several operations as the conditions were not favourable. 201

The health problems among the missionaries themselves remained grave after the change of the site. "The fever" continued to trouble the staff.202 The Rev. Dr. Hannington, who was sent to relieve Laws, had to be invalided in 1882 just a few months after his arrival at Bandawe. In his case "the local fever assumed a critical type".203 It was not until late 1883 that Laws was able to return to Scotland, after the arrival of Dr. William Scott and Rev. J.A. Bain.204 Dr. Scott stated later that the missionaries had by this time noticed that those with the best mosquito curtains suffered least from malaria. They failed to connect

197 Laws 1886, pp. 20-21; Moir 1924, p. 25.

¹⁹⁸ FCSMR October 1885, pp. 299-300; McCracken 1977, pp. 90-91.

¹⁹⁹ Report on Foreign Missions for 1882, pp. 64-65.

²⁰⁰ After an successful operation in 1883, Laws wrote to the mission journal: "We thank God for Jack's recovery and trust that the success of the operation may be a means of enlarging His kingdom." See Bandawe Station Journal entry for 28 July 1883. NLS, MS. 7911.

²⁰¹ FCSMR August 1882, p. 235.

²⁰² See, for example, Bandawe Station Journal entries for April, 1883. NLS. MS. 7911.

²⁰³ Laws, quoted in FCSMR October 1882, p. 299. Whether this was blackwater fever is unclear.

²⁰⁴ FCSMR August 1883, p. 240 and April 1884, pp. 111-112. Bain, who died in 1889, was the first non-medical ordained missionary at Livingstonia, and the only one before 1893. The mission was therefore strongly in the hands of medical men between 1881 and 1891: Drs. Laws, Scott, Elmslie, David Kerr Cross, George Henry, and George Steele.

the disease with mosquitoes, however, thinking that the curtain acted as a filter against the miasmata in the air. Even less was known of the causes of blackwater fever, which was sometimes suspected to result from quinine overdose. Scott mentioned that he, who loathed to take quinine, had an attack of blackwater fever (which in his case resembled closely ordinary malaria), which convinced him that the quinine poisoning theory was not valid. 205

During 1882, there were 3104 reported African medical cases, of which 800 were seen on journeys. Of the 2304 cases treated at Bandawe, the majority, 1843, were seen for the first time, the rest being second or subsequent attendances. 206 The fact that over one fourth of the cases were seen on journeys shows that Laws (and Hannington for a short time) was frequently practising while touring in the Tongaland, thus establishing the reputation. The medical facilities in Bandawe remained still very modest. Laws apparently had a some sort of "infirmary"-building constructed but it was reported having collapsed some months after his departure in 1883 and not been rebuilt.207 The medical practice in the station increased rapidly, however. In 1883, there were 7000 recorded cases, and over 10 000 next year. This was hailed as proof of increasing confidence of the Africans in the medical missionary. 208 The chances for utilising this confidence for religious conversion remained limited, however. When there were patients residing at the station, Laws arranged the mission converts to have Bible-reading and prayer meetings with them daily.209 Before the 1890s, none of the missionaries spoke Chitonga, however, and as most of the pioneer African agents holding services were of different tribal origin, it is hardly surprising that conversions remained rare. The Tonga accepted mission education, employment and medical aid, but their own religious institutions held their ground during the 1880s.210

One local medico-religious custom that the medical missionaries attacked furiously was the *muave* poison ordeal, used frequently among the Tonga to solve disputes like witchcraft accusations. Laws tried to demonstrate the power of the person administering

²⁰⁵ Scott 1985, pp. 50-51. This suggests that quinine was not universally accepted and used regularly even among the medical men.

²⁰⁶ Report on Foreign Missions for 1882, pp. 64-65.

²⁰⁷ Bandawe Station Journal entry for 25 February 1886. NLS, MS. 7911.

²⁰⁸ Livingstonia Mission of the Free Church of Scotland at Lake Nyasa: Eleven Years' history and appeal. Glasgow 1886, p. 13.

²⁰⁹ Bandawe Station Journal entry for 3 April 1883. NLS, MS. 7911

the poison by a display where he put strychnine on one glass and emetic on the other. He then showed the glasses to the people and stated that although they look the same, one kills while the other makes the imbiber vomit.211 The influence of such shows was doubtful. More effective was the fact that through the administration of emetics like apomorphine, the missionary doctors could cure people who had not vomited the poison. All the people saved in this way were not particularly grateful, though. By the late 1880s, nevertheless, there were increasing numbers of *muave* cases treated by the missionaries and there was a growing public opinion against the ordeal itself.212 In the medical report for 1887, Laws claimed that it was in the attack against the poison ordeal that the medical work at Bandawe had been the most successful.

"The agency of the medical department...has been most distinctly seen in the increasing number of cases ...where assistance has been asked to rescue the recipient from death. Formerly such assistance would have been, and is even yet often, shunned rather than invited. Of the five treated, one patient died...The women are...as patients, the most difficult to deal with. Perhaps this is due to the fact that the majority of them have to submit to this ordeal before marriage, and having escaped once, they believe they will do so again."213

Among the most serious cases treated by the medical missionaries were the wounds inflicted by wild beasts. In April 1883, a man severely mauled by a crocodile was brought in to Laws' care. He was tended for nine days, but the gangrene had set in his wounds, and Laws couldn't save him, partly blaming the local method of covering the wounds with "...charcoal, oil, burned leaves & other dirt...they could hardly be cleared out." 214 After the patients' death, two of his wives and the chief Katonga expressed their gratitude to Laws for his treatment. "Such expressions of gratitude are rare" 215, the doctor observed. It can be argued, however, that such a case requiring intense care and prolonged treatment was rare as well at the time when the medical resources and the accommodation possibilities of the missionaries were very limited.

William Scott, who was in charge of the medical work in Bandawe 1884-1885, reminisced

²¹⁰ McCracken 1977, pp. 84-85.

²¹¹ Bandawe Station Journal entry for 3 May 1883. NLS, MS. 7911.

²¹² Bandawe Station Journal entries for 20 November 1886 and 2 September 1887.

^{213 &}quot;Bandawe Report for 1887". FCSMR September 1888, pp. 267-268.

²¹⁴ Bandawe Station Journal entries for 9-19 April 1883. NLS, MS. 7911. Covering wounds with charcoal and leaves may have actually had beneficial effects: see Johnston 1897, p. 440.

²¹⁵ Bandawe Station Journal entries for 9-19 April 1883. NLS, MS. 7911.

his practice forty years later:

"There was practically no house for a hospital. I had a sort of Dispensary to which the sick came in the mornings. Many suffered from diarrhoea, caused by the food and the lack of variety led to ulcers from the legs which were very common and slow to heal and cases of chest complaint were frequent. Acute Pneumonias and Bronchitis, but no consumptives. Skin diseases were also common, especially scabies. Tootache was also common. Although they took care of their teeth, using a tooth brush made of softish wood...They were always willing to have teeth removed when diseased...Smallpox had been prevelent in some areas...Vaccination was introduced. Leprosy was common, especially the ulcerative variety...Specific diseases [venereal diseases] were uncommon..."216

Of the eye diseases, ophthalmia was very common, especially in the beginning of the rainy season in November and December.217 On a busy day, the missionaries received over sixty patients a day. This was considerably over the average attendance, however.218

Diarrhoea, ulcers, skin diseases and toothache were among the less serious complaints the missionaries could help. Of the more dangerous illnesses, medical missionaries could provide vaccination against smallpox. This disease was endemic in some parts of East and Central Africa, but with the increasing contacts with the coast in the 19th century, became widespread in its epidemic form reaching large areas it had been unknown previously.219 As early as 1883 Laws had vaccinated the schoolboys at Bandawe.220 The success of the vaccination depended on the availability and quality of vaccine lymph, however. Scott hoped that the surgical work would be extended in the future, emphasising it as the strong speciality of the missionary doctor:

"The use of cutting instruments for disease is something they never thought about, although they believe greatly in getting medicine to take." 221

Scott continued Laws' custom of village visitation. On these medical evangelist tours, the programme consisted of visiting the chiefs, holding evangelistic meetings and treating the

²¹⁶ Scott 1985, p. 54.

²¹⁷ Bandawe Station Journal entry for 21 December 1885. NLS, MS. 7911.

²¹⁸ FCSMR October 1884, pp. 301-302. It is difficult to estimate what the "average attendance" might have been. Assuming that medical work was done in five days a week on average, the average daily attendances for 1883 would be near thirty and and for 1884 near forty.

²¹⁹ Ranger 1992, pp. 243-244.

²²⁰ Bandawe Station Journal entry for 21 May 1883. NLS, MS. 7911.

²²¹ Scott, quoted in FCSMR April 1884, pp. 111-112.

sick.222 Medicines were dispensed and the more serious cases were invited to the mission station. During these visits politics, evangelisation and medical practice were combined.

Among the Northern Ngoni, Walter Elmslie started his practice in May, 1885. He was warmly welcomed by the headmen:

"All the speakers expressed their indebtness that we should come amongst them, and especially that now they would have the benefit of a doctor, as in the tribe there is much sickness." 223

Elmslie recognised that in practice he could do little, noting, however, that the first ones treated were the elite of the Ngoni society, and again emphasised the powers of surgery:

"Only a few patients attend, but some come from great distances, and so far the work is hopeful enough. The chief Mombera and several of his councillors have applied for medicine, but by most our medicines are regarded as charms just as their own. In surgical work, however, there is no room for such ideas, and some (to them) wonderful cures has been wrought." 224

During 1885, Elmslie recorded 1973 cases, the majority of them (59.6%) being surgical. His skill as a dentist seems to have made a particular impression.225 Writing for the *Monthly Record*, Elmslie presented his view of the position and the possibilities of the medical work among the Ngoni, stressing the importance of his challenge to the local practitioners:

"They [the Ngoni] are, from frequent sickness, death and other events, constantly in the hands of native doctors, who are trusted to the utmost as the only channel of communication with spirits. Consequently, the doctors have the people completely in their power, and except in one instance (our nearest neighbour, and a regular attender at our services) these doctors are decidedly against us, because their craft is in danger...It is precisely among such a people as in Angoniland that the real value of medical mission work becomes apparent. The successful treatment of cases by one who at the same time can preach the Gospel and expound the Scriptures relating to the many questions which the people raise is the kind of work that will make more impression in uprooting their

²²² Bandawe Station Journal entries for 20 December 1884 and 17-18 April 1885. NLS, MS. 7911

²²³ Elmslie 29 May 1885, quoted in the FCSMR, October 1885, pp. 299-300. It is possible that Elmslie arrived at the time of an epidemic, as there certainly was an epidemic of an unknown disease in Tongaland at this time. Scott observed that this disease, called Kanzi by the Tonga, resembled scarlet fever in many respects, but was a distinct disease, greatly feared by the Africans. Whether this disease was troubling the Ngoni as well is unclear, however. Elmslie does not mention it, so the epidemic was not troubling the Nyuju neighbourhood at the time. 224 Ibid.

²²⁵ Report on Foreign Missions for 1885, pp. 52-53; McCracken 1977, p. 91.

superstition than any other I know."226

Elmslie did not make any difference between different specialists of healing in Ngoni society. The diviners, witch-finders and herbalists were all labelled under "native doctor" or "witch doctor" associated with superstition and fraud. The possibilities of attacking these "false" medical practitioners and through them the religious institutions of the Ngoni were the main motives for his medical practice, which was numerically less significant.227 As to the attitudes of the local diviners and healers, Elmslie seems to be self-contradictory. If the doctors would have had the people "completely in their power" and would have been decidedly against the missionaries, it is unlikely that the station would have been welcomed at all. Either Elmslie underestimated the influence of the Ngoni doctors or misunderstood their attitude. It is quite possible that the doctors did not see Elmslie as a great threat, and there was room for another medical specialist in Ngoni society, which seems to have been relatively open to different medical as well as religious ideas.228 Another possibility is that the missionary doctor was welcomed against the doctors' advice by the chief and the headmen who wished to have an alternative medical specialist to challenge the influence of local diviners and healers.

"I would not say that an estimate of the benefit of a medical mission here can be made, but there is sufficient evidence to show that such a special work will be an immense power for the Christianizing of the people....I do not estimate the utility of my work here by the number of cases treated. It is those cases (and they are steadily increasing) where the power of the native doctor has been futile, and where I am then called, and, by God's help, succeed in saving the patient's life. The gratitude of the people insures my popularity. But that is a small matter compared with the splendid opportunity it gives me of attacking their belief in spirits and the deceit of the native doctors."229

Elmslie strongly condemned "the native doctors" who would charge their patients several times, playing on their fears and supernatural beliefs without providing any real relief to them. In comparison, the missionary doctor would help without charge and explain the

^{226 &}quot;The missionary position among the Wild Angoni Zulus". FCSMR May 1886, p. 138.

²²⁷ Elmslie's practice in Nyuju and later in Ekwendeni station seems to have been quite modest in terms of numbers of patients treated: exact figures were rarely given, but the ones included in Annual Reports during 1902-1914 fluctuated between two and four thousand. It should be noted, however, that the population of Ngoniland was scattered and there were no large central settlements like in Bandawe and in Karonga at the north end of the lake.

²²⁸ See Read 1970, pp. 39-40, 71. T.J. Thompson has pointed out that during drought in winter 1885-1886, the "traditional doctors" actually agreed that the missionaries were not to be blamed for the drought, although local opinion held the missionaries responsible. See Thompson 1995, p. 51.

^{229&}quot;The missionary position among the Wild Angoni Zulus". FCSMR May 1886, p. 138.

"truth" of the matter:

"Where I have such cases, I take pains to explain the nature of the disease and my treatment, to show that there is not that mystery regarding its origin which they believe; and nothing shows the worthlessness of the native doctor's unseemly decoctions and external paintings so much as a successful issue of the case by manual or instrumental interference, frequently of a very trivial nature." 230

Elmslie's explanatory powers could not have been great, however, before he mastered the language. In 1887, the African evangelist William Koyi still acted as his translator in his transactions with patients.231 Even after he learned the language, it can be argued, he still had to explain his actions in the local medical terms, which makes it more likely that it was his ideas that were reinterpreted in the traditional framework, partly accepted, partly rejected, than the case of simply replacing "superstition" with Western medical ideas. In addition, as Elmslie himself admitted, the majority of his patients had "trivial" troubles, in which cases the impression made was not necessarily too great. Furthermore, as many of the cases Elmslie treated had consulted local practitioner before, it was only the cases that were not cured that turned to him. Those who were satisfied with the local practice never came under his notice.

By 1887 Elmslie had became increasingly disappointed in the response given to his practice, complaining he received rarely any acts of gratitude in the form of payment. One case, in which he had successfully treated a case of constipation (with cinchua mixture and red jodide), enlightens his troublesome relations with some of the patients who had consulted local doctors as well:

"[the patients husband] told she was better though my professional brother claimed the cure because he claimed the payment. I was honoured with a long story about my superiority and then told that as I had been so generous as to visit and treat his wife & ask nothing he was sure I would give him some cloth to pay the other doctor. You can imagine how I felt and how Koyi would make his ears tingle with the reply."232

Such cases convinced Elmslie that the introduction of fees was necessary to establish his reputation as a healer not to be abused. He was so bitter to the man who had dared to ask

²³⁰ Ibid.

²³¹ Elmslie to Laws 6 June 1887. NLS, MS. 7890, 127.

²³² Elmslie to Laws 6 June 1887. NLS, MS. 7890, 127.

him to pay the local doctor for the cure Elmslie himself had provided, that he later refused to treat the man's wife while she was in labour. Elmslie was determined to teach them a lesson although he had second thoughts about refusing to help.233

Even though the medical practice among the Ngoni remained modest, the station in Ngoniland was deemed excellent for the missionaries' health. Located in the highlands, it provided a sanatorium for the Bandawe missionaries as well, which was one of the reasons it was founded as the first of the new stations. At times of serious illness at Bandawe and at the north end, Elmslie wrote to Laws that it was "...not of my own choosing that I am in this healthy district".234

In Bandawe, William Scott resigned for health reasons (he and his wife and child had all suffered from fever) in January 1886, leaving the station in the hands of Rev. Dr. David Kerr-Cross who had arrived a few months previously. Scott had had a serious attack of blackwater fever and later stated it was only because he was near a medical man who provided him with stimulants and above all champagne, that he survived.235

Cross found himself soon in the middle of intense fighting between the Tonga chiefs. He and the mission teacher Smith were called to help one wounded chief, Zhigo, who was shot in the arm. Surrounded by armed warriors, the missionaries were worried to take the medical responsibility of the chief, but couldn't refuse.

"Before we treated the arm we made it perfectly plain to all his [Zhigo's] councillors who sat around us that it was a most serious case. We assured him that if he entrusts himself to our care we would do our best, but that if anything serious should happen he must not lay it to our charge...he replied decidedly that the white man was his friend and that he would go with him. The councillors all replied <u>It is well!</u> They would trust us! 'Perhaps there is life; perhaps there is death' they all replied..." 236

²³³ Ibid.

²³⁴ Elmslie to Laws 26 February 1887. NLS, MS. 7890, 37. The "healthier atmosphere" at the highlands was not only resorted to in the case of missionaries' sickness. In May 1886, Elmslie attempted to take a little boy from Bandawe, who was suffering from an ulcer threatening to cripple him, to Ngoniland. The rains and floods prevented the transfer, however. See Bandawe Station Journal entry for 14 May 1886. NLS, MS. 7911.

²³⁵ Bandawe Station Journal entries for December 1885 and January 1886; Scott 1985, p. 51. Later there was some controversy over Scott's resignation as Laws and Elmslie seem to have thought that there were not enough medical grounds for his departure. Scott emphasised his concern for the health of his family at the time. See Scott to Laws 17 March 1887. NLS, MS. 7890, 57.

²³⁶ Bandawe Station Journal entry for 25 February 1886. NLS, MS. 7911.

The chief's arm was dressed and a splint was adjoined and he was taken to the station for further treatment. The missionaries were also called to visit the camp of the opposing side to see the wounded and used the opportunity to make propositions for peace, which was made shortly afterwards. The neutrality of the missionaries was crucial to the peace negotiations, as the fighting had originally resulted from the friction between those Tonga leaders who benefited from the presence of the mission, and those who did not.237

Zhigo resided at Bandawe until April when his arm was united and the splints were removed. Although the bullet remained in his arm, the missionaries were satisfied with the success of the treatment.238 Inexperienced in the country, Cross was obviously afraid that if the chief had died under his care, his reputation as a healer would be ruined and perhaps the missionaries themselves would be placed in danger.

After Laws' return in September 1886, Cross was sent to the pioneer station at the north end of the lake in Mweniwanda, where Bain had started his work two years previously.239 Disease struck the new station heavily after just a few months. While Cross was extremely ill with fever, his wife, who had treated him for weeks, died suddenly. She had been suffering from fever, weakness and troubles in digestion, but the cause of her death remained obscure. The carpenter of the station, Mcintosh, died of fever the following day. Cross, who recovered slowly after moving to the African Lakes Company station at Karonga, thought that the direct cause of all the disease among the party had been in the house they had been dwelling. He argued that it was built too hurriedly with wet bricks during the rainy season.240 Basing his thinking on the miasmata theory, Cross became convinced that there were marked differences between the fever at Bandawe and at the North End, where "...the giddiness is much more marked... the heart more affected and that sickness and delirium are frequently connected with an ordinary attack..."241

The mission work in the north end of the lake was hampered by the outbreak of the "Arab

²³⁷ Bandawe Station Journal entry for 25 February 1886. NLS, MS. 7911; McCracken 1977, pp. 78-79.

²³⁸ Bandawe Station Journal entry for 10 April 1886. NLS, MS. 7911.

²³⁹ Bandawe Station Journal entry for 28 September 1886. NLS, MS. 7911; McCracken 1977, pp. 72-73.

²⁴⁰ Cross to Laws 20 January 1887. NLS, MS. 7890, 18.

²⁴¹ Cross to Laws 3 June 1887. NLS, MS. 7890, 117. Cross seems to have had a tendency to suffer bad deliriums during fever: See Elmslie to Laws 2 November 1889. NLS, MS. 7892, 261.

War" in 1887, which started as a conflict between the Swahili traders and the Ngonde. ALC's agents became involved in the side of the Ngonde and Bain and Cross joined them. In 1888, Cross joined the European-led expedition against the Swahili as a military surgeon.242 The *Monthly Record* described the war as a heroic struggle against the slave-traders, but tried to emphasise that Cross attended it as non-combatant surgeon.243 Cross treated wounded rescued slaves as well, and blamed the Swahili Arabs for introducing syphilis among the Ngonde, whom he regarded as the finest race in Central Africa.244 His main concern was however the health of the European military expedition, led by Captain (later Lord) Frederick Lugard. In a disastrous attack against a Swahili stockade in June 1888, two Europeans and five Africans were killed in the field and several others wounded, including Lugard.245 Cross regarded Lugard's survival something of a miracle: "In all my experience I never met a more remarkable set of wounds."246

As the war continued in 1889, Cross settled in Karonga, which was the central garrison for Company's troops. Although his missionary work seems to have been quite limited there, there was plenty of medical work to be done. Smallpox was raging in the area and the people, who had heard of Laws' successful vaccinations at Bandawe, demanded medicine from Cross.247 When the disease entered the Karonga stockade, infected people were removed to bush and their huts were burned down. At one point, Cross had 37 smallpox cases under his care, and in some villages the disease was so common that he couldn't even count the cases. To make matters worse, only the third supply of lymph sent by Laws worked, and although Cross managed to vaccinate hundreds of people in October, he had no tubes to preserve the lymph for a longer period of time.248

The most serious medical concern for Laws and Elmslie at this time was the health of the European missionaries. Bain died in Laws' hands at Bandawe, presumably from blackwater fever, in May. Laws consulted Elmslie, who agreed on the lines of treatment. Elmslie noted, however, that he had purged freely in a similar case which had led to

²⁴² McCracken 1977, pp. 103-104.

²⁴³ FCSMR August 1888, pp. 238-239 and October 1888, pp. 293-294. Cross had, however, a dozen armed men under his command to defend the "field hospital" if necessary.

²⁴⁴ Cross, quoted in FCSMR, October 1888, pp. 308-309.

²⁴⁵ Ibid

²⁴⁶ Cross to Smith 20 August 1888. Quoted in FCSMR January 1889, pp. 14-15.

²⁴⁷ Cross to Laws 22 April 1889. NLS, MS. 7892, 82.

recovery. Laws apparently did not do this and was deeply troubled afterwards, as Elmslie had to assure him that he had done everything possible, purging probably would not have helped in Bain's case, and that Laws had used morphine "wisely and profitably". The doctors suspected that the disease resulted from wetting, exposure and bad diet and was fatal because of kidney failure.249

In December 1889, Elmslie in turn was very worried over the health of Charles Stuart, a recently arrived missionary teacher in Ngoniland. Stuart suffered from fever, constipation and weakness, being delirious and terrified during a fever attack. Elmslie suspected matters were made worse by spiritual anxiety, blaming religious emotionalism for endangering Stuart's mental and physical health. The patient recovered, however, and improved rapidly in the following weeks.250

Elmslie's African practice seems to have concentrated on the chiefs and their families, although he was very careful not to undertake risky operations in these cases. Although chief Mtwaro of Ekwendeni, for example, appreciated Elmslie's successful treatment of his son, the doctor decided not to offer his services later when he noticed Mtwaro was seriously ill.251 Good relations with the Ngoni leaders were largely formed with the help of medical advice, although this advice was often of a minor scale.252 Waiting to be relieved by Dr. George Steele, Elmslie summed up his experience after four years in Ngoniland in a letter to Laws:

"His [Steele's] medical experience will not be too great but I suppose like myself you have found that medical work in itself is unsatisfactory from a doctor's point of view but as a means to an end it is full of importance and crowded with opportunities." 253

Almost immediately after his arrival, Steele decided to treat Mtwaro against Elmslie's advice, although with intense care.

"I said to him [Mtwaro] that I would apply remedies and do all I could for him, but was

²⁴⁸ Cross to Laws 31 July, 5 and 21 September, 15 October 1889. NLS, MS. 7892, 152, 203, 214, 238.

²⁴⁹ Elmslie to Laws 17-18 and 27 May 1889. NLS, MS. 7892, 98, 102, 110.

²⁵⁰ Elmslie to Laws 22 November, 7 and 27 December 1889. NLS, MS. 7892, 276, 286, 294.

²⁵¹ Elmslie to Laws 10 December 1887. NLS, MS. 7890, 252.

²⁵² The founding of the Ekwendeni station was later presented as a direct result of Elmslie's treatment of Mtwaro's son. See the Livingstonia News, October 1909, p. 70.

²⁵³ Elmslie to Laws 7 December 1889. NLS, MS. 7892, 286.

very careful to make him understand that I considered his leg very bad and would try remedies in the hope that he might be relieved somewhat, but I did not bind myself to cure him or make him able to walk on it again...In answer to this he said, 'Try, try'..." 254

Although Steele's career as a new court doctor started promisingly with the successful treatment of Mtwaro's head wife 255, Mtwaro's leg was to cause the doctor plenty of anxiety. Steele tried to treat the leg by putting on a starch apparatus "with stimulating ointment below". As the patient complained of pain, however, Steele had to reluctantly remove the bandages and put on a common bandage instead. Two days later, the leg had gone worse with blistering as a result of the ointment being too strong. The complications made Steele "...extremely miserable and bitterly repent that ever had I touched him." 256 Although the doctor felt that Mtwaro trusted him, he was anxious to get rid of the responsibility as quickly as possible, fearing even for his life:

"It is not the case itself I fear...the witchcraft and superstition I have to encounter, for were anything to go wrong with him, while he is in my hands not having any connection with his leg it would be blamed on me and what the result to our work here if not our lives might be would be hard to say." 257

The case demonstrates the difficulties of being a court doctor, when the doctor felt he was actually at the mercy of his patient or the public opinion. Steele was greatly relieved, when Mtwaro's leg returned to its previous state and he got off the case. By now, however, rumours were circulating that Mtwaro was dying. Steele at first dismissed these rumours as nonsense, seeing nothing alarming in the health of the chief. When he noticed Mtwaro was getting visibly weaker, Steele started to worry again and refused the chief's and his wives' demands to open the knee. 258 At this point Steele did not dare even to examine Mtwaro with his stethoscope, although he suspected a chest trouble. Mtwaro's wives disagreed with Steele, saying the trouble was getting to the heart from the knee. After the chiefs' death a few days later, Steele argued that the cause of death was a heart failure complicated with angina "and possibly congested lungs", although he admitted his diagnosis was completely inadequate and unsatisfactory. Steele even attributed some possible causes of Mtwaro's illness to the mentally harmful effects of superstitious fear of spirits and

²⁵⁴ Steele to Laws 23 August 1890. NLS, MS. 7893, 182.

²⁵⁵ Ibid. The patient suffered from the extreme inversion of eyelashes, and Steele had her troubling lashes removed by use of forceps.

²⁵⁶ Steele to Laws 9 September 1890. NLS, MS. 7894, 16.

²⁵⁷ Ibid.

witchcraft.259

The third new Livingstonia station was opened in Livlezi valley with Rev. Dr. George Henry in charge, in 1877. Henry worked mostly among the Chewa, and had little contact with the rulers of the country, the Southern Ngoni.260 His medical work started slowly, with medical tours in the valley, gradually gaining an increasing number of patients.261 During 1889, he recorded 5200 cases, of which the majority (62.1%) were surgical. Of the 2322 cases treated for the first time, however, most were medical cases (59.8%), showing that surgical cases needed often prolonged treatment and subsequent attendances. Henry's case analysis shows that "fever" (15.1% of all cases attended for a first time) and diarrhoea (14.2%) were most common medical complaints. The most numerous surgical cases were ulcers and abscesses (17.1%), skin diseases (8.9%) and eye cases (5.1%).262 These could all be treated, to some extent, in pioneer conditions, when Henry had only his medicine-chest and a portable case of surgical instruments.

5. The Expanding Medical Mission and the Establishment of Permanent Hospitals, 1891-1914

5.1. Mission expansion and the hospital question - The medical practice in the new Protectorate, 1891-c.1900

During the 1890s the demands for mission hospitals in Livingstonia increased with almost every doctor in turn complaining of his lack of facilities. In 1890, Laws reported that the medical mission work at Bandawe, despite its value, was disappointing in both evangelistic and medical respects.

"...we have no hall for the patients to assemble in where the Missionary can address them,

²⁵⁸ Steele to Laws 6 and 20 October 1890. NLS, MS. 7894, 51, 61.

²⁵⁹ Steele to Laws 30 October 1890. NLS, MS. 7894, 77. To Steele's relief, he was not blamed for Mtwaro's death.

²⁶⁰ McCracken 1977, p. 101.

²⁶¹ Report on Foreign Missions for 1888, p.55.

²⁶² Report on Foreign Missions for 1889, p. 58. See Appendix II.

and have his words followed up by assistants while he himself is attending to patients. Indeed it is a difficult matter to get patients to keep to an hour, and anything is a handy excuse for those who do not wish to hear the Gospel (albeit they sorely need it) to enable them to escape from such an opening service when held...From a purely medical point of view much is also disappointing. Patients will come to the Dispensary, get medicine once, and the doctor hears nothing more about them. At Bandawe, and indeed at each of the other medical centres, a small hospital is needed to promote the efficiency of the work."263

A hospital would thus not only provide better medical facilities and accommodation, but it would be essential for better medical and evangelistic control over the patients.

By 1892 Laws had become convinced that the most important short-time goal for the mission should be an educational centre for African teachers, evangelists and craftsmen. As the demand for mission education grew among the Tonga, the Tumbuka and the Ngoni, there was increasing need for post-primary education, especially to train African teachers and pastors to take charge of the mission expansion.. Laws' aim was to educate the Africans in commercial and industrial skills as well, to provide them with new skills required by Europeans in the new colonial economy.264 There was also a medical element in his plan. In his memorandum for the Livingstonia Committee members Laws stressed again the restrictions to medical mission work caused by lack of a proper hospital. By 1892, "not even a single cottage hospital" had been built. Therefore, the new Institution should have a small hospital and one medical missionary in its staff from the beginning. In the Institution, the African evangelists could be taught "how to bring the Gospel to the sick", and some elementary medical training might be also given to the senior girl pupils.265 Although Laws did not have a clear medical training programme, he believed that even elementary medical education would be a useful asset for the African evangelists.

"The true scientific teaching thus impaired would be a useful discipline to the students, and give them a greater influence among the heathen to whom they might afterwards minister. Indeed, there is no reason why such an hospital should not be the embryo of a Medical School for Native Medical Missionaries in Central Africa." 266

²⁶³ Report on Foreign Missions for 1890, p. 65.

²⁶⁴ McCracken 1977, pp. 132-133.

^{265 &}quot;Memorandum regarding the Organisation and Development of the Livingstonia Mission", printed in The Livingstonia Mission, 1875-1900.

266 Ibid.

Laws' scheme was greeted with enthusiasm by the Livingstonia Committee, but his colleagues in other stations held it as best premature and as worst paralysing to the work at all other locations. With the approval of the financiers, however, Laws could proceed in 1894 to select a site for the Institution in Kondowi on the hills. The area was mostly unoccupied territory now owned by Rhodes' British South Africa Company. Rhodes was sympathetic to Laws' plans, as he did not see any imminent use for the area.267 One reason for the founding of the new station in remote hills was perhaps the isolation from the settler community268, but medical arguments were in all probability more pressing. The health of the Europeans was one of the primary concerns at the time, and an hill station with a proper hospital would provide a sanatorium for all the Livingstonia missionaries.

Malarial fevers, and especially blackwater fever threatened the missionaries constantly in the 1890s. Between 1891 and 1895 no less than five European agents of Livingstonia died, most from fevers. Two of them were doctors: Dr. George Henry died of blackwater fever in 1893, and Dr. Steele in 1895. Disease practically wiped out mission work in Livlezi Valley. Apart from Dr. Henry, Mrs. Henry and a teacher James Aitken also died there, and the pioneer outposts in Southern Ngoniland were abandoned.269

In Northern Ngoniland Dr. Steele, who had been ill for a long time, was treated by Elmslie, who noted that though there were improvements in the patients condition (lessening jaundice and no trace of blood in the urine, although black), Steele was so weak that there was little hope from the beginning. Elmslie tried to strengthen Steele by the use of stimulants and nourishment, trying brandy and champagne as well as peptonised milk as teaspoonfuls several times every hour, and also as enemata. The attempts to revive Steele ultimately failed, and he died after three days' treatment.270

Disease and death caused much anxiety in the missionary circles. The healthiness of certain stations, especially Bandawe, was a point of constant dispute. For example, after his first year in the country Dr. David Fotheringham was certain that fever would take out

²⁶⁷ McCracken 1977, pp. 134-135.

²⁶⁸ Livingstone 1921, p. 258, quoted in McCracken 1977, p. 133.

²⁶⁹ Report on Foreign Missions for 1894, p. 83; FCSMR September 1893, pp. 201-203.

²⁷⁰ Elmslie to Laws 24 July and 27 July 1895. NLS, ACC. 7548 D.67

a quarter of his time there, believing that things would be much better "a few miles inland".271 Rev. Alexander MacAlpine argued for the comparative healthiness of Bandawe, pointing out that the reason for many deaths at the station was that many were brought there dying. MacAlpine believed that a "daily dose of quinine under the blessing of God" was a successful prophylactic.272 Most missionaries seem to have been using quinine regularly by this time, although the dosage continued to vary. Elmslie preferred small doses, taking two to three grains of Burroughs & Wellcome "tabloids" every second or third morning, while Cross recommended a two-grain dose of hydrochlorate of quinine every morning and evening.273

At the north end of the lake, a permanent mission station was finally established in Karonga in 1894, after several failed attempts in other locations. Although the educational and evangelistic work at the north end were not particularly successful 274, Kerr-Cross's medical practice seems to have been more extensive. In August 1894 he wrote:

"My dispensary is a little house no better than a native hut...My average attendance of patients is 35 and at the present moment I have eight patients who would be in a hospital if I had one, but are living in native houses." 275

Cross criticised Laws' Institution plans, giving impression that he felt they hampered his work at Karonga. By November 1894, he had a little cottage hospital with two in-patients, and he had recently performed five major operations under chloroform. In two of these, he was assisted by an European missionary, but in three others, his African assistants administered the chloroform.276

During 1894, Cross estimated the average daily attendance had fluctuated between 15 and 35 cases, with an average of three resident cases. The temporary hospital consisted of three huts with "native bed-steads" and was looked after by "an old faithful servant and his

²⁷¹ Fotheringham to Laws 24 September 1892. NLS, MS. 7896, 121. "This is in spite of all reasonable precautions such as carrying umbrellas, protecting the head with helmets etc." wrote Fotheringham, curiously not even mentioning quinine.

²⁷² MacAlpine to Smith 28 December 1894. NLS, MS. 7877, 213. MacAlpine ironically points out the similarity between various missionary ideas of "healthy" sites and the African "superstitious" beliefs.

²⁷³ Report on Foreign Missions for 1894, p.78; Cross 1897, p. 95.

²⁷⁴ McCracken 1977, pp. 105-109.

²⁷⁵ Cross's reply to the Livingstonia Committee Minute 23 August 1894. NLS, MS. 7877, 115.

²⁷⁶ Cross to Smith 2 November 1894. NLS, MS. 7877, 172. The operations included removing tumours weighing from 10 to 50 lbs.

wife". Although Cross admitted that the majority of his cases were not professionally challenging, he was very interested in his surgical work. "Elephantiasis tumours are wonderfully common in here, and I am being forced to make this quite a speciality."277 Of twelve chloroform operations performed during the year, nine had been elephantiasis cases. All these patients recovered.278

Cross's order for medicines for the year 1895 shows that he had ordered 50 different articles, most in the form of pills or tabloids. These included quinine soluble (500 tablets) and antimalaria pills (200 pills). For hypodermic injections, he had morphine, apomorphine and cocaine. Chloroform order for the year consisted of six eight-ounce bottles. The relatively high number of drugs for venereal disease is also noteworthy: 500 antisyphilite and 800 antigonorrhoea-pills.279 During 1894, Cross reported 71 cases of "impure disease" treated.280

At this time, Cross probably had the largest medical practice in Livingstonia. In October 1895, he reported that average attendance in the dispensary was over fifty, with sometimes almost a hundred patients a day. He pointed out that Karonga was on a trade route, which made it important base for medical work.281 Cross' practice seems to have been growing steadily until his resignation in 1896. Cross was helped by his medical assistant Pondhmani, who was taught on the job, having been his chloroformist for seven years.282

In Ngoniland, Steele had given up his initial ideas of hospital and concentrated on medical evangelist touring. Dentistry formed an important part of these journeys. During a ten days tour, he reported having visited 19 villages, preached to over two thousand people, prescribed medicine to 320 people and extracted twenty teeth. Although it was popular,

279 Copy of list of medicines for 1895, included in Cross to Smith 12 May 1894. NLS, MS. 7877, 90. Cross's list is the most extensive of the few surviving orders for medicine in the NLS manuscripts. 280 Cross to Smith 8 January 1895. NLS, MS. 7878, 24.

²⁷⁷ Cross to Smith 8 January 1895. NLS, MS. 7878, 24.

²⁷⁸ Ibid.

²⁸¹ Cross to Smith 4 October 1895. NLS, MS. 7878, 270. This route was in all probability the main transmitter for the venereal disease in the district, as well as for epidemics such as smallpox.

²⁸² Cross to Smith 29 January 1896; Karonga Report for 1895. NLS, MS. 7879, 42-43. Report on Foreign Missions for 1896, pp. 104-105. Reasons for Cross's resignation were varied. It seems he had lost the confidence of the Committee after his initial failures to start a station and his bitter personal conflict with Elmslie, which was felt to be damaging to the entire mission. His medical work was not doubted, however.

itinerant work was restrictive from the medical point of view as the more demanding cases had to be invited to visit the mission station later. Even though he readily admitted his healing skills were far from that of the Great Physician, Steele was satisfied with his work enough to quote a hymn:

"At even, ere the sun was set, the sick, O Lord, around thee lay. O with what divers pains they met! O with what joy they went away!" 283

At Bandawe, the medical work had been in various hands since Laws' furlough until in 1894 a young and ambitious doctor, Dr. George Prentice, took over the practice. He was very disappointed with the situation in the beginning. After his first five years' term, he looked back to Bandawe station in 1894:

"...there was not a room on the station into which patients could be taken for treatment. The old manse was still standing and in an end room of it, the medicines were kept. The patients assembled daily at the door, bawled out their complaints, and received medicine. It would perhaps be wrong to say "were treated"; for the examination necessary to get at the root of the disease was impossible under the circumstances...There was not a table in the dispensary on which to lay a patient for an overhaul...Speak of a hospital, and you were told that no native would sleep in a room in which another had died, and that the first death in hospital would close its doors." 284

Prentice, who clearly had surgical ambitions, continued to describe the initial professional anxiety caused by the limits of his African practice:

"One sighed for a hospital such as men have in China or India...and went into mourning over the death of this or that medical subject which the toils of student days had brought to being in one's mind...Look at the list of operations one old fellow-student sends from China...while you potter away with cases of itch, ringworm, stomach-ache, and common colds!...Medical men will understand something of the scarcity of interesting cases from the fact that only twice during my first twelve months here had chloroform to be administered."285

Prentice admitted openly the "triviality" of most of his treatment. In 1896, he noted that it was possible to prescribe and dispense necessary pills for forty or fifty patients in two hours.286 Giving less than three minutes per case on the average, and considering the

286Report on Foreign Missions for 1896, p. 101.

²⁸³ Steele, quoted in FCSMR December 1894, p. 285.

²⁸⁴ Report on Foreign Missions for 1899, pp. 98-99.

²⁸⁵ Ibid.

difficulties with language, it is hardly surprising that it was difficult to get "at the root of the disease" in such a practice.

From this modest beginning, Prentice started to develop medical work at Bandawe. By mid-1895 he had improvised a cottage-dispensary with a waiting room and a consulting room, enabling him to consult each patient with increased privacy. Two rooms were provided for the in-patients. Previously, serious cases had to be dealt with in their villages. The most serious cases treated were wounds inflicted by lions and leopards, which provided Prentice with some challenging surgical operations.287 Nevertheless, his main surgical work was still the treatment of ulcers. Many patients refused major surgical treatment, preferring risking death to amputation. As Prentice did not have assistants or nurses, the in-patients could stay for a longer time only if they had friends or relatives to attend them. Prentice planned to give some lessons on nursing on local women. During 1895, he recorded 8624 consultations, of which the majority (70.7%) were medical. The most common complaints were chest affections like "common colds" and pneumonia, "fevers" or abdominal complaints like dysentery, diarrhoea and intestinal parasites. The number of obstetric cases was growing, demonstrating that the Tonga women were ready to consult a missionary doctor, although a man, at least in complicated cases. By 1898, Prentice's obstetric practice had grown so that he had built a wattle-and daub maternity hospital. 288

The evangelistic work among the patients remained modest: those seeking medical advice were obliged to attend a morning prayer-meeting, where they received tickets for the dispensary.289 Nevertheless, in the medical developments at Bandawe, it can be said that there was an increasing attempt to control and influence, both medically and evangelistically, the patients.

When Dr. A.W. Roby-Fletcher took over the medical work at Bandawe in 1898, he was positively surprised by the increasing practice. Prentice's views of the possibilities of

²⁸⁷ Prentice to Smith 24 June 1895. NLS, MS. 7878, 200. During this period, wild beast attacks were reported to be on the increase among both the Ngoni and the Tonga, with the missionaries attempting to poison lions and leopards.

²⁸⁸ Medical Report for 1895. NLS, MS. 7878, 304; Prentice to Smith 16 June 1896. NLS, MS. 7879, 129. Report on Foreign Missions for 1899, p. 99. This building had to be used as a all- purpose "hospital", however.

medical work had changed considerably from his early years. He noted later that it took a long time before he actually realised the amount of suffering and sickness in the neighbourhood, pointing out that only after getting to know the people and gaining their confidence it was possible to treat them.290

In February 1898, medical mission work in Livingstonia suffered a severe blow with the loss of two young medical missionaries. Dr. Fletcher died in Bandawe following an seemingly ordinary attack of malaria, with his temperature suddenly rising to 110 degrees Fahrenheit. No professional medical aid was available. George Aitken, who tried to revive Fletcher, suspected that his death was in part caused by an overdose of quinine.291 At the same time, Laws had decided to invalide Dr. Ramsay, who had replaced Cross at Karonga in 1896, home. Ramsay had barely survived his second attack of blackwater fever.292

During the 1890s, blackwater fever had become the main medical problem for Europeans in Central Africa. Theories of its origin and forms of treatment varied considerably, and the use of quinine was especially controversial.293 Livingstonia doctors in general seem to have accepted the use of quinine, rejecting the idea that the disease was partly created by quinine poisoning, as put forth by Robert Koch.294 Although many Europeans never suffered from blackwater fever, it tended to recur in those who were affected. It was estimated that while the mortality rate in the first instance was 40 per cent, it increased to 50 per cent for the second attack and 75 per cent for the third. It was therefore very advisable to send home any Europeans who had survived their second attack.295 As there was little initial therapeutic success against this worst of the fevers, the missionaries and medical officials emphasised housing reforms and shorter periods of service as means of improving the health of the Europeans.

In Livingstonia, housing reforms had been planned from the late 1880s. Thatched roofs especially were seen to be malarious. Plans for new houses were drawn by Elmslie and

²⁸⁹ Medical Report for 1895. NLS, MS. 7878, 304.

²⁹⁰ Report on Foreign Missions for 1899, p.99; Prentice, quoted in FCSMR, September 1899, pp. 210-211.

²⁹¹ Aitken to Smith 19 February 1898. NLS, MS. 7881, 12.

²⁹² Laws to Smith 12 February 1898. NLS, MS. 7881, 8.

²⁹³ Gelfand 1964, p. 240.

²⁹⁴ The Aurora June 1899, p. 19.

²⁹⁵ Johnston 1897, pp. 179-180. Johnston himself was among the few who survived four attacks of blackwater

Thomas Binnie of the Livingstonia Committee in 1890, emphasising the use of corrugated iron roofs, hard-burned bricks and the importance of ventilation. The ground below houses should be dried with trenches.296 However, through the 1890s at least, many mission houses continued to be far more modest than this model. In 1897, for example, Elmslie described the house occupied by Prentice at Bandawe as "the most unhealthy in Africa". The house was deemed to undermine Prentice's health so he was advised to go to the hills to recover.297

The new Livingstonia training institution in the Kondowi area had its housing problems as well. The cooler climate in the hills was healthy as regards malaria, and Laws thought it would stimulate both mental and physical work with "less expenditure of energy".298 The cold climate had its unhealthy drawbacks, however. During the late 1890s the pupils at the Institution suffered severely from pneumonia, pleurisy, bronchitis and "common colds".299 One main reason for this was poor housing, especially the condition of boys' dormitories. The construction of permanent dormitories was not a main priority, and it was constantly delayed.300 Elmslie, who took charge of the Institution for Laws' furlough in 1899, considered the housing extremely unsatisfactory by both missionary and local standards.

"There is not a single native house here as good as they have at home... the boys are exposed to sickness such as they do not suffer from at home. I have seen a greater number of cases of pneumonia & bad fever here in one month than I have had to treat in other places all the time I have been in the mission." 301

Although the Institution was built away from the villages, the Institution hospital soon became quite busy. The European medical staff consisted in the beginning of Laws or Elmslie, and two nurses, Maria Jackson and Margaret McCallum, who had arrived in late 1897.302 In 1900 Elmslie estimated that there was never more than a thousand people in

fever.

²⁹⁶ Report on Foreign Missions for 1890, pp. 10, 95-96.

²⁹⁷ Elmslie to Laws 1 April 1897. NLS, ACC. 7548 D.67. There was practically no ventilation except the windows, and the thatched roof was occupied by thousands of bats which made the house externely unpleasant. 298 Laws 1934, p. 146.

²⁹⁹ Report on Foreign Missions for 1897, p.92; Report on Foreign Missions for 1899, p. 102.

³⁰⁰ McCracken 1977, p. 137.

³⁰¹ Elmslie to Smith 14 December 1899. NLS, MS. 7882, 139. During 1899, there were several fatalities caused by fever "with peculiar head symptoms". Elmslie was afraid of panic and fear of witchcraft among the pupils but cases of recovery seem to have dismissed worst fears.

³⁰² Report on Foreign Missions for 1899, p. 97.

the neighbourhood, but nevertheless there had been almost twelve thousand outpatient attendances during the year. The Institution hospital by this time was a temporary building and deemed "most unsuitable".303 The patients were mostly pupils or working men in the service of the Institution. Apart from chest afflictions, diarrhoea, fevers, ulcers, skin diseases and accidents were most common complaints.304 The health of Europeans was notably good at the Institution. In 1899 it was claimed that Livingstonia "has become known as a health resort for Europeans", with eleven residing patients from outside the mission staff during the year.305 Laws' plan for the European sanatorium seems to have been successful.

The idea that the medical missionaries' first priority should be the care of the European missionaries and their families was not evident in the writings of Livingstonia staff. It is however noteworthy that during the 1890s two independent European commentators stressed it in their writings on Central Africa. The first was James Johnston, a Scottish missionary doctor from Jamaica, who travelled through the region in the early 1890s, visiting both Livingstonia and Blantyre. In his book Reality versus Romance in South Central Africa (1893) he made a critical appraisal of missionary work in Africa, and commented also on medical mission work. Johnston opposed the Scottish medical missionary doctrine which emphasised the employment of fully qualified doctors, arguing that the conditions of the medical practice among the Africans made this "an extravagant waste of ability". Johnston claimed that African customs and superstitions prevented any challenging surgical work, and especially obstetrics. The vast majority of medical work such as dressing ulcers and wounds, preparing lotions for ophthalmia and prescribing simple medicines for indigestion or cough could be performed by any missionary with a basic knowledge of common drugs. Johnston stated that presence of a qualified doctor was justifiable only where there was a party of European missionaries to be taken care of. 306

Dr. Johnstons' criticism of medical missionary work was undoubtedly well aimed, and his observations were not censored by any missionary authorities. It can be argued, however, that he overestimated the hindrances to surgical work rising from African attitudes.

³⁰³ Report on Foreign Missions for 1900, pp. 87-88.

³⁰⁴ Ibid.

³⁰⁵ Report on Foreign Missions for 1899, pp. 103-104.

³⁰⁶ Johnston 1969, pp. 334-336.

According to reports from Drs. Steele, Cross and Prentice, as noted earlier, "interesting" surgical cases occurred from time to time, but usually only after a doctor had spent some years in the country gaining reputation. The same can be said of obstetrics. Although African women did not usually turn to missionary doctor unless there were difficulties in childbirth, all doctors reported having treated such cases. As regards Livingstonia, Dr. Johnston visited only Bandawe in 1892, and had no first-hand experience about other stations.307

The first Commissioner of the Nyasaland Protectorate, Sir Harry Johnston, was not as critical as Dr. Johnston towards medical mission work in his book, *British Central Africa*. This book was published in 1897 after Johnston's six-year period in charge of the administration. He shared, however, Dr. Johnston's opinion on the importance of medical missionaries to the health of European missionaries. He pointed out that the medical missionaries provided better conditions for the missionaries' wives and children, thus making marriages more common in the mission circles. This served the interests of mission authorities in creating stability in the missionary presence. According to Harry Johnston, a married missionary actually became a missionary colonist. Therefore medical missionaries served well the interests of missionary colonisation. 308

Harry Johnston emphasised the value of medical missionaries for the health of all Europeans in Central Africa, and had a high opinion of the Scottish missionaries in Nyasaland.309 He also contradicted Dr. Johnston's claim that Africans were unwilling to submit to operations:

"...they [the Central Africans] have an almost sublime faith in the European doctor and in his hands they are usually confident of recovery while their remarkable insensibility to pain makes them admirable subjects for operations. Many things may be done to a Central African negro without anaesthetics which in the case of a European or Indian would not only require the application of chloroform or ether, but might even then prove too severe a

³⁰⁷ Johnston 1969, pp. 312-314. See also Elmslie to Laws 22 October 1892. NLS, MS. 7896, 146. Elmslie, who was in charge during Dr. Johnston's visit, notes that he spent two weeks writing at the station and only went outside for five times, claiming that Johnston was in no position to criticise work at Bandawe. 308 Johnston 1897, pp. 199-200. The medical care of missionary families was arguably of utmost importance to the Livingstonia doctors, especially in times of childbirth. See, for example, Elmslie to Laws 18 September 1887, NLS, MS. 7890, 196; Elmslie to Laws 10 September 1888, NLS, MS. 7891, 167. 309 Johnston 1897. pp. 190-200.

system for subsequent recovery."310

Johnston's racialist and shocking description of surgical practice in Central Africa creates a markedly different picture of the realities of medical work than the published reports of Livingstonia doctors. It should be noted, however, that his description of medical work was in all probability based on his experiences in military campaigns in the Protectorate, and reveals less of the work of a medical missionary than of a military surgeon. Livingstonia medical sources constantly stress the use of anaesthetics in operations. Nevertheless, in emergency operations without anaesthetics were undoubtedly performed. It should also be noted that the medical authority consulted in Johnston's book was a former Livingstonia doctor, David Kerr-Cross.

Both Dr. Johnston and Harry Johnston described indigenous Central African medical practitioners more sympathetically than the Livingstonia doctors, although both of them quoted statements by doctors connected with Livingstonia. Harry Johnston argued that although local herbalists relied heavily on mysticism, they had "considerable knowledge of drugs" and were able to provide "remarkable cures by honest therapeutics" even in cases that seemed incurable from a Western point of view. He encouraged scientific research of herbal medicines, pointing out that one Central African drug, Strophanthus, had already been introduced to British Pharmacopeia.311

Dr. Johnston shared Harry Johnston's view of the potency of some African herbal cures. Curiously, Dr. Johnston quotes "Dr. E. of Livingstonia mission", undoubtedly Walter Elmslie, who had told him of a seemingly hopeless case which was almost miraculously cured by a local healer.

"More than once for weeks he has continued to treat ulcers with every means and appliance known to our profession, without avail; owning himself baffled, the patient resorted to a native doctor, and returned in a short time, to Dr.E's astonishment, with the wound completely healed." 312

Dr. Cross confirmed Harry Johnston's positive view of some of the African healing practices, drawing on his experience among the Nkonde, praising especially their herbal

³¹⁰ Johnston 1897, p. 441.

³¹¹ Ibid., pp. 442-443.

³¹² Johnston 1969, pp. 334-336.

skills and dry-cupping. His statement "We have a lot to learn from Wankonde doctors." 313 is a unique written opinion from a Livingstonia doctor. Cross had by then resigned his connection with Livingstonia. In the light of Cross's and Elmslie's statements, it seems probable that by the 1890s the medical missionaries had recognised that their indigenous colleagues had actually some real healing skills, and that they could sometimes cure diseases that the missionary doctors couldn't. This was never admitted publicly, however. The Livingstonia reports continued to contain references only to the seemingly dangerous or at best comical practices of African healers.

The critical comments of Dr. Johnston passed largely unanswered. He raised points that undoubtedly troubled many Livingstonia medical missionaries by the end of the 1890s, however. The recognition of the potency of the African herbal medicines and the "triviality" of the everyday mission medical practice would question the basis of medical mission work for the qualified doctors. One answer to this would be to increase the emphasis on the surgical side of the medical work, which had traditionally been the strongest field of European practice. This would require proper hospitals, equipment and nursing staff, however.

5.2. Permanent hospitals, medical education and "colonial diseases" - the period of new challenges, c.1900-1914

At the turn of the century, Livingstonia medical staff was strongly reinforced. Between 1899 and 1901, four new doctors and three nurses arrived at Livingstonia. Frank Innes was first appointed to Karonga, Ernest Boxer to Bandawe, James Chisholm to a new station in Mwenzo (in Northern Rhodesia) and Agnes Fraser accompanied her husband in Ngoniland (First in Ekwendeni and from 1903 in the new station of Loudon). At the Institution, by now named Overtoun Institution, nurses Maria Jackson and Margaret McCallum were replaced by Jessie Martin, Mary Fleming and Winifred Knight.314

The Livingstonia doctors, especially the younger ones, argued increasingly for the

³¹³ Cross, quoted in Johnston 1897, footnotes for pp. 442-443.

³¹⁴Annual Reports for 1900-1903; Livingstonia Mission Staff-Book. NLS, ACC 7548 D.73

construction of permanent hospitals at the turn of the century. An anonymous writer in the Aurora confessed in August 1900 that though Livingstonia had relatively strong medical staff, it was "one of the most meagerly equipped medical missions at the present time." 315 The writer argued that although the initial stage for medical mission was still on, there was now time for expansion. The medical work should be improved, after the model of Indian medical missions, by building a good central hospital, which would form a base for medico-evangelistic tours and branch dispensaries. In the central hospital, systematic training for medical evangelists should be started.316 For his part, George Prentice demanded that doctors should be freed to concentrate on medical and evangelistic work. He argued that because of limited equipment, the surgical side of the work remained modest, although in some districts there was plenty of surgical work to do.317

In October 1900, the principles for medical mission expansion in Livingstonia were laid down in the minutes of the Mission Council. The Council accepted the recommendations of the United Missionary Conference of Nyasaland, stating "That emphasis be laid on the necessity & value of medical missions, not only in pioneer work but in confirming & strengthening the life of the native church; that for the proper development of the medical mission work the establishment of native hospitals in all the principal stations be urged as a prime necessity."318

Although the "hospital question" was now officially solved, it took years before the actual permanent hospitals were established. The development at Bandawe station illustrates some of the difficulties of the hospital construction.

At Bandawe, Prentice had returned to his practice for the third period of service in 1899. Initially, he seemed again disappointed at the possibilities and resources available. He noted in regretful tone that with fewer wild beasts in the neighbourhood one "fruitful source of surgical cases" had gone, and observed also the lessening of difficult ulcer cases. The highlight of surgical work for 1899 was an operation performed by Prentice and Innes

^{315 &}quot;A Medical Mission", The Aurora August 1900, p. 35.

³¹⁶ Ibid.

^{317 &}quot;Medical Missions", The Aurora December 1900, p. 60. In placing more emphasis to the medical side of the work instead of surgical, Prentice seems to agree here in part with Dr. James Johnston against the traditional Scottish medical missionary doctrine, which emphasised surgery.

at Ekwendeni in which they removed 272 ounces of liquid from a man's abdomen.319 Prentice's later letters were more positive, and his old plans for a hospital were resumed. Local contributions from Africans and Europeans provided funds to start the work.320 In January 1900 Prentice reported having undertaken 16 chloroform operations during seven weeks. The gynaecology cases had become more frequent, and Prentice set Tuesday apart for the diseases of women.321

Dr. Boxer, who arrived at Bandawe in late 1900, had an ambitious view for medical developments at the station. He looked forward to having both a maternity and a general hospital, which would require a fully qualified nurse. Boxer admitted he was premature in his expectations when the maternity hospital was still under construction and the general hospital had not even been planned yet. His plans reflected clearly the increasingly ambitious attitudes of a recently arrived doctor:

"...one is looking forward to the day when one will have a proper operating room & appliances because one naturally dreads doing any major operation unless one be quite certain of one's antiseptics." 322

Reality soon forced Boxer to adjust his views. When Prentice left to found a new station at Kasungu in central Nyasaland, he took most of the surgical instruments used at Bandawe with him. Boxer, who apparently had very few instruments of his own, made an urgent appeal for equipment. Although the maternity hospital was under construction, the Bandawe dispensary was reported to be "in an exceedingly rickety condition".323 Boxer's report for 1901 was increasingly pessimistic, as the promising hospital scheme had not taken off.

"I am very glad of an opportunity of stating <u>again</u> that there is <u>no</u> hospital here. By no means glad that there is no hospital here, but having it in print now about six times, and being one's desire for the place, I think that it is about time that the fond idea were officially denied." 324

³¹⁸ Minutes of Livingstonia Mission Council 29 October - 2 November 1900, NLS, MS. 7883, 174.

³¹⁹ Prentice to Smith 20 November 1899. NLS, MS. 7882, 122. Prentice would mention this operation years later as an example of surgical side of the medical mission work.

³²⁰ McAlpine to Smith 14 January 1900; Prentice to Smith 3 July 1900. NLS, MS. 7883, 5, 104.

³²¹ The Aurora February 1900, pp. 6-7.

³²² Boxer to Smith 16 November 1900. NLS. MS. 7883, 190.

³²³ Annual Report for 1900, pp. 18-19; Boxer to Smith 13 July 1901. NLS, MS. 7884, 60.

³²⁴ Annual Report for 1901, pp. 18-19.

The building of the maternity ward was delayed as no doors or windows had been available. As a result, a number of bats and owls had moved in the half-constructed building, making it increasingly unsuitable. Nevertheless, it was better than the twenty-year old dispensary, so it served as the main medical building. Disappointed Boxer refused to start building a general hospital until he had doors and windows available, although he already had the necessary bricks.325 It was not until 1908 that a brick hospital was opened at Bandawe.326

Between 1894 and 1914, Livingstonia mission opened six new out-stations: Mwenzo (1894), Kasungu (1900), Loudon (1903), Chitambo (1907), Tamanda (1913) and Chinsali (1913). Of these, Mwenzo and the three latest stations were situated in Northern Rhodesia.327

The mission annual reports start listing the stations' hospital beds from 1905, when there is reported to be 16 beds at the Livingstonia Institution and 6 beds at Mwenzo station. The other stations had their hospital beds listed only in 1908 (Loudon) and 1909 (Ekwendeni, Kasungu and Bandawe).328 In 1909, the mission had six hospitals with over 50 beds and over 41,000 registered attendances. The number of beds increased to 85 in 1910 and peaked at 102 in 1913, before decreasing to 75 in 1914. In 1913, the Institution hospital had 35 beds and other hospitals between 3 (Chitambo) and 18 (Bandawe) beds. The decrease in 1914 was mostly due to the outbreak of the war, which caused the evacuation of the northern outposts.329

Of the new stations, Mwenzo and Kasungu were headed by doctors (Drs. Chisholm and Prentice). In these cases, the doctors had to continue working in pioneer conditions, and needed to work as a preacher, a teacher and a builder in addition to the medical work. In comparison, other new stations were run by a clerical missionary, and Chinsali and

³²⁵ Ibid.

³²⁶ Annual Report for 1908, p. 40.

³²⁷ Annual Report for 1914.

³²⁸ Annual Reports for 1905, 1908 and 1909, Statistics No. VI.

³²⁹ Annual Reports for 1905-1914, Statistics No.VI; Report on Foreign Missions for 1909. In comparison with Indian medical missions, medical practice at Livingstonia remained diminuitive. For example, during 1900, Dr. McNicol had more attendances in his dispensary (56,000) in Bengal than all the Livingstonia doctors had

Tamanda did not have a doctor in their staff at all by 1914.330

One reason why a hospital was opened in Mwenzo relatively soon after Chisholm's arrival was the availability of local European funding. The mission station at Mwenzo provided care especially for the BSAC workers. During 1901, for example, Chisholm treated over 60 European cases, attending them in their homes for four weeks and having resident cases at his house for eleven weeks. The European fees for the year were over £105, which was over twice the amount received at other stations together.331 These fees helped to improve African practice as well, but it should be noted that the Europeans required treatment in separate quarters from African patients.

The Overtoun Institution hospital was the closest thing to a central hospital in Livingstonia Mission. Its significance was limited, however, because it was distant from the population centres, so it served mostly the Institution pupils, people working for the mission, and the missionaries.332 The building of a permanent, modern hospital was made possible in 1903 when the two Misses Gordon from Scotland donated £5000 for the mission hospital, which should be named after their brother David, who had died before becoming a medical missionary.333 Despite the availability of funding, the planning and building of the first modern hospital in Livingstonia took years, as the Overtoun Institution was under constant construction in various other departments. In 1904 Elmslie had to explain to the anxious donors why the David Gordon Memorial Hospital still existed only in paper. He emphasised that the hospital had to be carefully planned and erected, as it would include a water supply, heating and proper sanitation.334

The David Gordon Memorial Hospital was not officially opened until 1911, when it was still under construction. It was planned by a Glaswegian architect and Dr. Mcintosh of the Royal Infirmary, and included an operating theatre, sterilising room and wards for both men and women. Dr. Laws arranged the opening ceremony "as a lesson to the pupils in

together. See Report on Foreign Missions for 1901, p. 236.

³³⁰ Annual Report for 1914. Of the old stations, the Overtoun Institution and Ekwendeni were run for most of the period 1900-1914 by Drs. Laws and Elmslie. Bandawe was mostly headed by Rev. A.G.MacAlpine and Loudon by Rev. Donald Fraser. The personnel at Karonga were more fluctuating.

³³¹ Annual Report for 1901, p. 23.

³³² In lakeshore villages, such as in Karonga district, people would often decline to go to the Institution hospital because of the feared "cold" on the hills. See the Livingstonia News June 1912, pp. 39-40.

³³³ Proceedings and Debates, 1903, p.46.

respect and loyalty". The hospital was inspected and opened by the Governor of Nyasaland, Sir William Manning, who addressed the people, "...reminding them of what they owed to the mission...and declared the Hospital the best in East Africa, north of the Zambesi...".335 At this point, the women's ward was nearest completion, but it is unclear whether it was yet open to inpatients.336 The opening of the hospital was a suitable moment for propaganda, to demand African loyalty towards both the missionaries and the Government and to claim the goodwill, as well as the technical superiority, of the Europeans, supposedly evident in the modern hospital. There is some evidence that such an approach towards Africans through modern medicine found a response, at least among the African church members. When the memorial stone for the new hospital was laid, the oldest African member of the mission, Yuriya Chirwa, gave a speech, which was commented in the Livingstonia News:

"Everything impressed them with the views of life and its responsibilities which were taught by their teachers, and that great importance was attached to the welfare of the body as well as mind and heart. He drew a vivid picture of the sicknesses to which they are liable, and to the fact that many diseases are due to insanitary conditions, remarking upon the great boon to their health which the water supply from the hills had been." 337

One important development of medical mission work during the early 1900s was the increasing recruitment and training of African medical assistants. These assistants, together with European nurses, made hospital work possible in a larger scale.

The first African medical assistants, or "dispensary boys", had been taught on the job since the early days of the Livingstonia mission. Their instruction, skills and period of service varied considerably. Dr. Cross's previously mentioned main assistant Pondhani was trained to administer chloroform and worked with Cross at least for seven years.338 For most of the early assistants, however, the dispensary duties were probably restricted to dressing ulcers and wounds, translating and providing general assistance to the doctors. Some of them were very young, like Charles Domingo, who was Dr. Laws's "hospital

³³⁴ Elmslie to Laws 10 November 1904. NLS, ACC. 7548 D.67.

^{335 &}quot;Opening of the David Gordon Memorial Hospital", FCSMR, January 1912, pp. 15-16.

³³⁶ Ibid..

³³⁷ The Livingstonia News, April 1910, p. 20. A piped water supply was introduced at the Institution in 1904. See McCracken 1977, p. 137.

³³⁸ Karonga Report for 1895. NLS, MS. 7879, 43.

boy" until becoming an Institution student, promising evangelist, and later, an independent African churchman.339

In his pioneer study of the history of the East African doctors, John Iliffe has pointed out that the first African practitioners of modern medicine, who worked as assistants for medical missionaries, were mainly young men, often freed slaves, who were uprooted from their traditional societies. Before the access to formal medical education, they advanced through apprenticeship under missionary doctors, much like in the indigenous medical tradition. The important difference was that they had little chance to qualify as independent practitioners who would be accepted by European standards. According to Iliffe, the first African medical assistants had little connections with traditional medical practice. 340

Some of the early medical assistants of Livingstonia were certainly young freedmen, who like their colleagues in East Africa, had become dependants of the mission in childhood or teens. Their relation to local medical practices remains in most cases unknown. One notable exception is Mawalera Tambo, the son of a famous "witch-doctor" in Nyuju, who, encouraged by his father, came to study Elmslie's methods and was one of the first converts in 'Ngoniland, and Elmslie's first assistant. That a local healer decided to send his son to learn European skills may have been exceptional, but it seems to suggest again the relative openness and flexibility of the medical traditions among the Ngoni. Although there is no evidence that Tembo had any detailed knowledge of his father's methods, it is probable that he was at least to some extent familiar with African healing practices as well as mission dispensary work. Elmslie mentioned that Tembo's family background reinforced his status as a healer among the local people.341

Although the more formal medical training in the Overtoun Institution had been planned since the formation of the Institution 342, the training started slowly. In 1904 James Henderson, the headmaster of the Institution, reported that the medical course was "formulating". The language was found to be a special problem, as there were no

³³⁹ FCSMR September 1903, p. 409.

³⁴⁰ Iliffe 1998, pp. 7-19.

³⁴¹ Report on Foreign Missions for 1897, pp. 95-96.

^{342 &}quot;Memorandum regarding the Organisation and Development of the Livingstonia Mission", printed in The Livingstonia Mission, 1875-1900.

translations of medical text-books available. Theoretical instruction was therefore given in English.343 The emphasis in selecting medical students was in their "Christian character". 344 It seems that either the medical course was not a popular career among the pupils, or that the number of students was deliberately limited, or both. As a result, the number of students remained low: for example, in 1909, there were only two medical students at the Institution.345 Apart from these "boys", there was a new female assistant who had done "excellent work" in the hospital.346 African nurses were often neglected in the mission reports where they surface only occasionally. They were not officially trained to become hospital assistants or medical evangelists, but were taught on the job to carry the burden of the day-to day hospital work.

In 1909 the Education Board of the Nyasaland Missionary Conference agreed on the lines of medical education. At this time, formal medical education was given, apart from Livingstonia, at least in the Church of Scotland Mission at Blantyre, where the training of medical assistants had started earlier. The Education Board decided that medical course would lead towards two grades, Hospital Orderlies and Hospital Medical Assistants, which would be recognised by the Government.347 The need for professionalisation sanctioned by authorities in European fashion is evident in this scheme. Dr. Laws advanced the professionalisation of African medical assistants as a member of the Nyasaland Protectorate Legislative Council in 1914, when he secured the official registration for mission trained assistants.348

In practice, most of the medical assistants were still taught on the job in Livingstonia stations. The doctors and nurses at the out-stations continued to give basic medical instruction to their assistants and teachers as time permitted.349 Those with promising skills and attitude could be sent to the Institution for further training. During absence of a doctor or nurse, they took charge of the medical work, sometimes with notable success,

³⁴³ Annual Report for 1904, p. 14.

³⁴⁴ Annual Report for 1906, p. 17.

³⁴⁵ The Livingstonia News February 1909, pp. 8-10.

³⁴⁶ Ibid, p. 11.

³⁴⁷ The Livingstonia News October 1910, p. 85; McCracken 1977, p. 141.

³⁴⁸ Proctor 1989, p. 82. In the Legislative Council, constitutioned in 1908, the Scottish missionaries were reserved a seat, on the understanding that they would represent the African interests. Dr. Laws occupied this seat between 1913 and 1916. See Proctor 1989, pp. 79-80.

like Daniel Gondwe, a Institution trained dispenser, who worked at Ekwendeni in 1909.350

Most of the early African medical assistants and nurses remain nameless and unknown in the missionary sources. One exception is Stefano Mnjuzi Kaunda, a long-time assistant at Bandawe dispensary. A former slave and orphan, he was raised as a "house boy" for a European missionary and later become a teacher and a baptised Christian in the early 1890s. After working as a teacher and preacher, he became a dispensary assistant for Dr. Prentice in 1899, after the suggestion of Rev. MacAlpine. Kaunda was a medical assistant under various doctors and on his own for twelve years, gaining high reputation among both the missionaries and the local population. He died in the line of duty, after treating pneumonia cases and becoming ill himself. At the moment, there was no doctor on the station.351 Kaunda's biography matches closely with Iliffe's view on the career of the early East African medical assistants: a freedman with no family who became a member of a young Christian community and found a career in medicine. Kaunda however became a medical assistant in his middle-age, after working as a teacher and preacher, and apparently only after he was asked to take the job. Later, he refused the offer to become a medical assistant in a rubber estate where the salary would be almost three times as high as the eleven shillings a month paid by the mission.352 It seems he regarded the medical mission work as his duty as a Christian rather than a career for material gain or social advance.

All the medical assistants did not fulfil the standards required by missionaries so well. Some were fired, others resigned. As the Government and the European companies could offer a better salary than the mission, there were good alternatives for those with medical skills and ambitions. In 1907, Elmslie's medical assistant at Ekwendeni, Isaac, refused to take up office work in addition to his medical duties. He seems to have been a skilful assistant with professional pride, who regarded the office work "beneath him". Elmslie in turn demanded an assistant who would help him in all his duties if needed. He argued that the dispensary work took usually only a couple of hours a day, and it was impossible to let

³⁴⁹ See for example Annual Report for 1900, p. 22.

³⁵⁰ The Livingstonia News February 1910, pp. 7-8. Gondwe for example successfully treated a Pott's fracture.

³⁵¹ The Livingstonia News October 1911, pp. 73-77. See also FCSMR July 1897, pp. 168-169.

³⁵² Report on Foreign Missions for 1912, p. 105.

Isaac "go idle" when he was paid 25 shillings a month. Isaac apparently resigned, and demanded a certificate for his job.353 Elmslie, who seems to have appreciated Isaac's skills, hoped that he could be persuaded to go to work on other mission stations where there was more medical work, but thought that Isaac would prefer better paid work outside the mission. According to Elmslie, the Government paid 35 shillings per month to a hospital assistant at this time and there was a lack of skilled assistants.354

Apart from the hospital question, one major subject of discussion among the Livingstonia doctors at the turn of the century was the introduction of medical fees. The most enthusiastic proponent for fees was Elmslie, whose policy, as noted earlier, was influenced by his experiences in 'Ngoniland in the 1880s and 1890s.355 Elmslie started charging fees first for smallpox vaccination and tooth extraction. In 1895, Elmslie charged a threepence for a tooth extraction.356 Other forms of payment included food and livestock, and fees ranged "from a sheep to a fowl, or a few potatoes" .357

The introduction of fees was problematic, however, after a long-time policy of free treatment. An anonymous writer in the Aurora claimed that "Having for so long given free attendance, the native is slow to recognise his obligation to pay for treatment when he is able to do so.", arguing that trained African medical evangelists would be required to make the charging of fees clear.358

Indeed the introduction of fees resulted in decrease in medical attendances. At Bandawe the change was especially dramatic: the attendances for 1908, when fees were first charged, dropped over two thirds (from 19,000 to 5,700) from the previous year. This naturally worried Dr. Berkeley Robertson, who was in charge of Bandawe hospital. He could point out other positive developments, however: with a new hospital, the number of in-patients had risen considerably (from 46 to 104), giving the doctor plenty of medical

³⁵³ Elmslie to Laws 12 June 1907. NLS, ACC. 7548 D.67. Elmslie advised Laws not to give "a very high" certificate to Isaac. Isaac was apparently one of the first Institution medical graduates, who was sent to Ekwendeni in 1906. See Annual Report for 1906, p. 17.

³⁵⁴ Elmslie to Laws 19 June 1907. NLS, ACC. 7548 D.67. Elmslie mentions a case in Fort Johnston where a totally unskilled "boy" bluffed his way into Government service gaining "a very high pay".

³⁵⁵ Elmslie to Laws 6 June 1887. NLS, MS. 7890, 127.

³⁵⁶ Report for Ngoniland District of the Livingstonia Mission 1895. NLS, MS. 7879, 31.

³⁵⁷ Report on Foreign Missions for 1897, p. 95.

^{358 &}quot;A Medical Mission", The Aurora August 1900, pp. 35-36.

work. The fees helped keeping the medical work at manageable size among the other missionary duties, and would keep the begging "medicine eaters" away, argued Robertson.359

Robertson emphasised that the fees would not hinder the evangelistic side of the practice or the competition with indigenous healers. In fact, he claimed, the fees would rise the appreciation of missionary medicine. In Robertson's view, the people of Bandawe were comparatively wealthy, especially the ones who had been migrant workers in the south. They could easily afford the mission fees, which were usually payable by a fowl or some eggs, for example. Robertson admitted that the major setback of fees was that the poor, aged and children might be excluded from aid. He therefore emphasised that no genuinely poor should be turned away from the hospital. In addition, the fees should not be charged in the new mission districts or where the population was especially poor. All in all, Robertson concluded, the properly charged fees would serve the mission aim in teaching self-help and Christlike characters to Africans. In this process, he claimed,"... a manly independence, self reverence and self-help displace the begging and pauper spirit."360

Elmslie shared Robertson's view that free treatment would actually demoralise the patients. He advocated the charging of fees whenever possible, seeing it as part of the missionary programme of moral regeneration. Free medical treatment had been useful in pioneer conditions, helping break down the fears and opposition, but now that the medical missionaries had established themselves in the country, the fees were necessary, except in cases of the genuinely poor, children and serious emergencies. Elmslie argued that without fees, the Africans would regard the medical missionaries either as extremely rich philanthropists or "soft ones to be bled". The fees would free the doctor from the "medicine eaters", people with just "trivial aches" and those who regarded medicine as a charm. Elmslie even claimed that an African man could lie "idle" in a hospital for a year, and return "no worse than his neighbors", because his wives would take care of his gardens. Such situation was intolerable for a Presbyterian, who saw all work as necessary incentive for progress and elevation.361

^{359 &}quot;Medical Fees", the Livingstonia News, April 1909, pp. 27-30; Annual Report for 1907, p. 76; Annual Report for 1908, p.57.

^{360 &}quot;Medical Fees", the Livingstonia News, April 1909, pp. 27-30.

^{361 &}quot;Medical Fees and Mission Work", the Livingstonia News, June 1909, pp. 41-43.

There was another reason for introducing medical fees that Robertson and Elmslie did not emphasise. In 1908 Lord Overtoun, the main individual financier of the mission, who had among other grants supplied the salaries for three medical missionaries, died. Although the growing support through the Foreign Missions Committee covered the income for Livingstonia, it was clear that the mission was financially increasingly insecure.362 There was need to compensate the cost of the relatively expensive medical department by medical fees.

Although in 1908 in Livingstonia it was decided to charge a standard threepence per medical visit 363, the introduction of fees and the actual amount charged varied from station to station. In pioneer stations the fees were apparently not charged. The African response to the introduction of medical fees was not particularly positive, especially at the time when taxation and mission school fees were already burdening the people. The fees were introduced without any consultations with the Africans. As Karen Fields has argued, the mission fees must have appeared to many to be part of the new demands of the colonial regime, resulting in growing tension between the missionaries and the people.364 The resentment against the medical fees was apparent in Bandawe, as noted earlier, and in 'Ngoniland, where Agnes Fraser observed dropping attendances. In addition, there was difficulties in collecting the fees. Curiously, a tooth extraction was one operation that was readily paid. Dr. Fraser also observed that her practice had expanded on the lines of "family practice": successful cases brought her a reputation among certain family or village, who would then continue to consult her.365 Apparently patients from these groups were more sympathetic towards paying fees.

The summary of the medical mission statistics between 1902 and 1914 shows that the medical fees were not particularly significant in the financing of the mission. Although in 1908, when fees were formally introduced, the local income for medical department rose from £38 to £71 and for the year 1908 actually exceeded the local expenditure by £11, this was the only year during the period 1902-1914 when medical mission actually produced

³⁶² McCracken 1977, pp. 227-228.

³⁶³ Fields 1985, p. 109.

³⁶⁴ Ibid.

³⁶⁵ Annual Report for 1908, pp. 28-29.

profit. After 1908, the amount of income fluctuated between £65 and £125. The years of highest income in the medical department were in fact before the introduction of fees, in 1903 and 1904 when the income was £242 and £256 respectively.366 These sums consisted in all probability mostly of donations and grants, such as in Mwenzo, where the local Europeans supported generously the mission hospital.

During the first decade of the 1900's, as noted earlier, new scientific tropical medicine was advancing rapidly. The Livingstonia doctors followed the progress: by 1914, five out of eight doctors in service had obtained a Diploma of Tropical Medicine (D.T.M.),367 most in the Liverpool School of Tropical Medicine. Increasing knowledge brought many previously unknown diseases into the doctors' attention. In Livingstonia, where the traditional main medical problems had been "the fever", chest afflictions, intestinal infections, ulcers and skin diseases, the list of medical challenges changed somewhat, as the following report by Dr. Chisholm in 1909 demonstrates:

"What an important work is waiting to be done in the preventive medicine! Sleeping sickness, Phthitis, Tick fever, Malaria, Leprosy, Bilharziasis, Elephantiziasis, to say nothing of fearful Infant mortality! What is our responsibility as a Mission, and what are we doing before it be too late?" 368

Of the diseases above, sleeping sickness and tick borne relapsing fever were only discovered after the turn of the century. To distinguish tick fever form malaria, a microscopic analysis of blood film was required.369 Mosquitoes had finally been proved as the transmitters of malaria in 1898. Only a year before, there was speculation in the Aurora of the possible connection between malaria and swamp fires which presumably spread the malarial germs in the air, proving that the miasmata thinking stuck deep.370

After the mosquito theory was accepted, new antimalarial measures were introduced,

³⁶⁶ Annual Reports for 1902-1914, Statistics No VI. Between 1902 and 1909, the total income of the mission fluctuated between some £7500 and £12 400. See McCracken 1977, pp. 227.

³⁶⁷ Annual Report for 1914, list of missionaries from Scotland. Of these doctors, Prentice, Innes, Chisholm and Turner took their courses while on furlough, while recently arrived Dr. Hubert Wilson had obtained his diploma before his appointment. The ones who did not take the diploma were Laws, Elmslie and Agnes Fraser.

³⁶⁸ Mwenzo Report for 1908. The Livingstonia News, February 1909, pp. 4-5.

³⁶⁹ King and King 1992, p. 69. The blood film analysis required skill: in 1909, when Chisholm made a successful tick fever diagnosis in Mwenzo, Dr. Turner at the Institution confessed his "ignorance of the microscopic method". See the Livingstonia News, February 1909, pp. 8-10. 370 The Aurora October 1897, p.34.

stressing the use of nets and destruction of suitable breeding grounds for mosquitoes near the mission stations. Segregation between Europeans and Africans was also suggested in the name of hygiene: in 1901 a writer in the Aurora demanded that the African quarters should not be located near the houses of the staff, for both malaria and general hygiene. The writer continued,

"If this is unavoidable then use quinine freely among the natives on the station as a prophylactic both before and after fever develops, and permit no pools or puddles in the vicinity as breeding grounds for mosquitoes." 371

The priorities of the writer are clear: the Africans should receive prophylactic quinine only if they cannot be distanced from the Europeans.

In general, during the first decade of the 20th century, the European health in Central Africa improved considerably. In Nyasaland, the European death rate dropped from about 8 per cent in 1897 to about 2 per cent in 1908.372 The improvements in housing, sanitation and medicine all contributed to this progress. In medicine, the introduction of quinine bihydrochlorate, which could be administered through hypodermic injections, was regarded a notable improvement in the fight against malarial fevers.373

There was no such improvement in the health of the African population. During the early colonial period, a number of new diseases entered the Malawi regions. Jigger, a skin-burrowing sandflea causing serious infections and sores, entered Karonga in the 1890s through the trade routes. Tuberculosis, which had been notably rare in Central Africa, increased rapidly at the turn of the century, especially through migrant workers returning from the South African mines.374 The most deadly of new diseases was sleeping sickness. In 1902 it was discovered that this mysterious and fatal "Negro lethargy" previously confined to West Africa was caused by a trypanosome similar to those parasites fatal to domestic animals and which were spread by tsetse flies. At the turn of the century, sleeping sickness advanced rapidly from West Africa eastwards, and reached Nyasaland in

^{371 &}quot;Malarial mosquito experiments", The Aurora June 1901, pp. 15-16.

³⁷² Report by Consul...Sharpe on the Trade and General Condition of the British Central African Protectorate, 1896-1897, Cmd. 8438, p. 1; Nyasaland Protectorate, Report of Commissioner for 1907-8, Cmd. 3729, p. 19. 373 Report on Foreign Missions for 1900, pp. 100-101; Gelfand 1964, p. 258. Gelfand stresses the role of preventive antimalarial measures and better housing and leave conditions in the overall improvement in European health.

1907.375 The situation was made worse by the spreading of tsetse fly as a result of changing settlement patterns, the rinderpest epidemic, government game policies and the drain of labour. As the people left the old cultivated areas, the fields turned to bush and were infested by tsetse. The trypanosomniasis parasites spread in turn to cattle and people forcing the people to retreat further.376.

The first Livingstonia doctor to encounter sleeping sickness was Dr. Chisholm at Mwenzo in 1907. The patient had presumably contracted the disease on the border of the Congo Free State two years previously. He died almost immediately after Chisholm confirmed the diagnosis through the analysis of blood films. Soon another patient was admitted, and there was concern over the possible spreading of the disease through the infected patient.377

At Kasungu in central Nyasaland, Dr. Prentice observed with concern the spreading of tsetse fly. He argued that the advance of tsetse was in part due to Government game policy. Although it was not yet proved that the local forms of tsetse (*Glossina morsitans*) could spread human trypanosomniasis, Prentice feared the worst.

"...then we shall be responsible for a scourge compared with which the old Angoni wars and the Arab slave wars will be as water to wine. We are at present preparing the culture medium. Sooner or later the germ will be introduced." 378

Although sleeping sickness in Nyasaland did not spread catastrophically as in Uganda, for example, it threatened the western and northwestern parts of the country. By March 1913, there were 126 cases of sleeping sickness registered in the Protectorate. As there was no remedy against the disease, the authorities strove to prevent its spreading by strict control and containment methods. The border zones adjoining potential sleeping sickness areas were closed, people were inspected and all the infected people found were sent to segregation camps. The Livingstonia missionaries took part in these measures, which were sometimes closer to a military campaign than medical practice.379

³⁷⁴ King and King 1992., pp. 68-69, 78-79. Report on Foreign Missions for 1908, pp. 72-73.

³⁷⁵ King and King 1992, p. 114; McCracken 1982, p. 105.

³⁷⁶ Iliffe 1979, p. 163, quoted in McCracken 1982, pp. 105-106.

³⁷⁷ Laws 21 July 1907, quoted in FCSMR November 1907, p. 502.

³⁷⁸ Prentice 8 December 1907, quoted in FCSMR March 1908, p. 118.

³⁷⁹ The Livingstonia News October 1909, p. 65; Nyasaland Protectorate, Report of Commissioner for 1912-1913, Cmd. 7050, pp. 22-23.

Although the Livingstonia doctors assisted the Government in the sleeping sickness campaign, they also criticised some of the Government policies. George Prentice especially attacked the policy of game protection, arguing that Government was placing the lives of wild animals ahead of the lives of people. By 1910, Prentice had become convinced that *Glossina morsitans* could spread human trypanosomniasis. The reason for his conviction was the case of Noah Chiporoporo, a mission teacher who had contracted sleeping sickness in Rhodesia, but had only been in areas where there was *G. morsitans*. Prentice treated Chiporoporo with arsenic and cinnamon, observing temporary improvement before collapse and death. Prentice demanded rapid and thorough investigation. If local tsetse would be found to be capable of transmitting sleeping sickness, he suggested, game should be exterminated in the tsetse areas. He also advocated economic reforms: the expansion of cotton-growing would in his opinion be effective in stopping the spreading of tsetse.380

Prentice repeatedly demanded free shooting zones in the tsetse areas. The experiments in 1915 proved however, that the shooting of game just scattered it to new directions, spreading the fly in the process.381 Although his strategy turned out to be ineffective, Prentice's efforts to try to combat sleeping sickness are noteworthy. His writings are the strongest medical critique of colonial policies that any Livingstonia doctors wrote between 1875 and 1914. Prentice's demands of thorough investigation on sleeping sickness were answered in 1911, when a Royal Commission led by tropical medicine authority Sir David Bruce was appointed to study sleeping sickness in Nyasaland.382

Another new concern for the Livingstonia medical missionaries was hookworm, or ankylostomiasis, a disease causing anaemia, debility and in worst cases, death. Hookworm was recognised in the early years of the century through microscopic research. This disease, caused by a parasitic worm, was especially endemic in the Karonga district, where Dr. Frank Innes found out in 1911 that it was far more common than previously suspected. Innes warned that the disease was threatening the workforce in European plantations,

³⁸⁰ Annual Report for 1910, pp. 27-29; The Livingstonia News August 1910, pp. 63-66; October 1910, pp. 73-

³⁸¹ McCracken 1982, p. 107.

³⁸² The Livingstonia News, October 1911, pp. 80-81.

where there was large concentration of people.383 He advocated more effective medical surveillance, hygiene lessons and the treatment of hookworm as a infectious disease, with appropriate quarantine methods. Innes believed that both hookworm and bilharziasis were preventable through effective legislation concerning village latrines and water supplies.384 His requests were partly answered in 1912-1913, when the Government launched an investigation regarding ankylostomiasis in North Nyasa district.385 Nevertheless, the advice of Innes was not heeded in a sufficient scale. Although there were latrine- building and well-clearing programmes from the 1930s, many rural areas in present-day Malawi are still lacking pit latrines.386

Although recently found tropical diseases attracted special attention from missionary doctors in the early 1900s, the bulk of medical mission work in Livingstonia remained very similar to the earlier practice. The Annual Reports from 1902 to 1914 suggest that the majority of the medical cases were still treated for fever, intestinal infections and chest diseases. Smallpox vaccinations remained important. In cases of smallpox epidemic, the missionaries worked together with the authorities in attempts to segregate the patients and confine the disease as much as possible. On surgical side, ulcers, abscesses, wounds inflicted by lions and leopards, and accidents remained common.387

Most notable improvement in surgery happened in the eye operations. Especially active in this field was Dr. Berkeley Robertson who had specialised in eye surgery before his appointment in 1906. He was stationed at Bandawe, where he could concentrate much on surgical work, as he was not a head of the station. Another reason was that the charging of fees had enabled him to concentrate more on serious cases, as noted previously. The results can be seen in the number of operations performed: in 1907 there were 84 surgical operations registered at Bandawe (out of 181 in all Livingstonia hospitals) and in 1908 over half of all the operations in Livingstonia were performed at Bandawe (138 out of 252). In 1909, there was notably less operations (41) partly because the majority of operable cataract cases in the neighbourhood were already dealt with. Berkeley Robertson,

³⁸³ The Livingstonia News, October 1911, pp. 79-80; King and King 1992., pp. 98-99.

^{384 &}quot;Hookworm", The Livingstonia News, April 1912, pp. 29-30; June 1912, p. 41.

³⁸⁵ Nyasaland Protectorate, Report of Commissioner for 1912-1913, Cmd. 7050, p. 23.

³⁸⁶ King and King 1992., p. 100.

³⁸⁷ Annual Report for 1905, pp. 10-12; Annual Report for 1909, p. 31; Annual Report for 1911, pp. 10-12;

who resigned for health reasons in 1910, gained reputation as "the man who makes blind people see".388 His successful practice suggests that the missionary doctors had good grounds for their demands for a more specialised practice within the mission work.

"Right gladly would I hand over every other branch of work to other hands and spend the remaining years of my missionary life healing the sick and preaching the Gospel.", wrote Rev. Dr. George Prentice, head of the Kasungu station, in 1913. Prentice described the medical missionary in Africa as a "three-gear-machine", working in medical, evangelistic and educational departments. In addition, in pioneer stations there was plenty of construction work. Despite this, at Kasungu Prentice managed to build an operating room in connection with the station hospital. There was also improvements in transport as motorcycles enabled the doctors to visit neighbouring districts in medico-evangelistic tours and to help their colleagues in difficult operations. Prentice described a successful ovariotomy operation he and Dr. Turner performed as an example what might be achieved if two surgeons could work together regularly and free to concentrate on medical work. Realistically, Prentice added that this could only be achieved if "some self-supporting agent volunteers" would become available.389 The fact that when such new agents arrived in 1914, they were sent to a new pioneering station 390, demonstrates how the different roles of medical missionary sometimes contradicted in each other. In practice, it was impossible to be at the same time a pioneer medical evangelist and a specialised missionary surgeon working in a central hospital.

The evangelistic work in permanent hospitals continued much in the same lines as in previous, temporary hospitals, although it was arguably more systematic. In the David Gordon Memorial Hospital, for example, there was a regular daily service for out-patients and two services for inpatients in the wards. The inpatients had also Gospels available in various vernaculars.391 Direct conversions as a result of medical work seem to have been

Annual Report for 1913, pp. 13-15.

³⁸⁸ Annual Reports for 1907-1909, Statistics No. VI; Report on Foreign Missions for 1910, p.116. When Robertson visited the Marambo district, where there were no resident medical missionaries, he observed that the people had a "striking willingness to submit to operation", suggesting that the reputation of mission doctors was widespread in that area. See Annual Report for 1909, p. 41.

³⁸⁹ Annual Report for 1913, pp. 23, 25.

³⁹⁰ Dr. Hubert Wilson and nurse Ruth Livingstone-Wilson, sent to Chitambo in 1914. Livingstonia Mission Staff-Book. NLS, ACC 7548 D. 73.

³⁹¹ Annual Report for 1910, p. 13; The Livingstonia News, February 1912, pp. 2-4.

rare. The medical missionaries however constantly stressed their hopes that some inward change would have happened in their patients by the time they left the hospital. When Dr. Turner described a particularly grateful and "good" patient who had been operated under chloroform, he concluded:

"...one rejoices to seek to turn the thought of gratitude from oneself to the Saviour Christ, of whom we hope her sojourn here will give her knowledge, and Who alone can bring Light and Life into her hopeless and sordid outlook..." 392

To what extent the medical missionary plan to utilise the patients' gratitude for physical healing towards "a healing of soul" through religious conversion found response, remains beyond the scope for this thesis.

6. Moral education as medicine: Idea of Christianity as a Cure

In previous chapters it has been demonstrated how one main problem for medical practice in Livingstonia arose from the fact that the doctors often had to work intensively on other mission departments in addition to their professional duties. This was especially true for those doctors who were ordained missionaries and often heads of mission stations as well. The prevailing policy was that evangelism, education and medicine were interdependent and formed the one Gospel.393

The result was that medicine was subordinate to evangelisation and that a medical missionary was expected to sacrifice at least some of his or her medical practice to the main cause of conversion and to the other branches of missionary endeavour. When Dr. Laws addressed the Edinburgh Medical Missionary Society students during his furlough in 1900, he drew upon his experiences, stressing the professional self-denial in the work of a medical missionary. For example, a missionary doctor might have to decline to perform a surgical operation in circumstances where the failure would endanger the mission work. On the other hand, a medical missionary might be required to partially neglect his medical

^{392 &}quot;How Shall They Hear?", The Livingstonia News, December 1909, p. 94.

³⁹³ See, for example, comments of Rev.Dr. James Chisholm in the Livingstonia News, April 1909, pp. 18-19.

profession and concentrate on other parts of work if necessary.394

In Livingstonia, the roles of a doctor and a priest merged more often than in many other missionary societies.395 The main mission cause, the conversion of the African and the consequent creation of the Christian Church, culture and society in Africa, and the schemes and means to further this cause, arguably included in themselves medicoscientific ideas and practices. Central concepts in this holistic evangelicism were the degeneration and regeneration of Africa and the Africans. As Rev. Dr. Walter Elmslie put it in discussing the subject of medical fees, "If any part of the work fails in regenerating the life and thought of those who are sunk in barbarism, it not only fails, but it militates against the success of other parts." 396 In the following chapter, the ideas of degeneration and regeneration in the Livingstonia missionary thought and their influence on mission policy are examined.

6.1. The African: Degeneration and Regeneration

The idea of "regenerating" Africa through civilisation and commerce and advancing it from backwardness and barbarity dates back to the late eighteenth and early nineteenth centuries, but the second half of the nineteenth century saw a marked change in approach. During this period, evolutionary theory made its impact upon the natural sciences, social theory, medicine and theology. In Scotland, its influence was especially strong. It has been argued that Darwinism had a more significant impact on the nineteenth-century Presbyterian Church than the Disruption of 1843.397 Along with the idea of evolutionary advance, the idea of evolutionary regression was introduced into scientific and medical thought. As Daniel Pick has demonstrated, a language of degeneration increasingly influenced wide segments of culture in the late nineteenth and early twentieth centuries. Evolutionary theory gave a scientific boost to the old ideas of linear evolution from savagery to civilisation, with African representing savagery and Europeans symbolising

³⁹⁴ The Aurora, August 1900, pp. 35-36.

³⁹⁵ Walls 1996, p. 26. Of the twenty-three doctors who worked in Livingstonia between 1875 and 1914, fourteen were also ordained ministers. See Appendix I.

^{396 &}quot;Medical Fees and Mission Work", The Livingstonia News, June 1909, pp. 41-43.

³⁹⁷ Drummond and Bulloch 1974, p. 299. In the Disruption, approximately two-fifts of the Church of Scotland clergy broke away to form the Free Church of Scotland. The reason was mainly a political struggle over the relation of the church and civil authorities. See Mitchinson 1982, pp. 384-387.

civilisation.398

The scientific model of degeneration, popularised in Britain by the zoologist E.R. Lankester, was acceptable in religious circles, because it corresponded with the earlier religious model of the fall of the man.399 The work of Lankester was one of the scientific sources utilised by Professor Henry Drummond, the Free Church preacher, and a natural scientist, when he applied the concepts of evolutionary progress and decline to the spiritual realm in his influential book Natural Law in the Spiritual World, published in 1884. For Drummond, life was defined as the total of the functions resisting death. Similarly, spiritual life was the total of the functions resisting death. Man had the choice between Balance, Evolution and Degeneration, and in the long run, the only escape from the degeneration and destruction of the soul was through gradual evolution from lower to higher being.400 Ultimately, salvation was possible only by a process of a natural growth in Christian principle. For Drummond, a Christian was "an organism, in the centre of which is planted by the living God a living germ."401 Drummond was a key figure in Protestant intellectual circles in Scotland. Evolutionary thought in general and Drummond's ideas in particular, influenced a generation of Scottish missionaries, not least the medical men and women, who were to "regenerate" Central African societies.402

In the Duff Lectures for 1902, Rev. Dr. James Stewart, founder of Livingstonia and leader of the South African Lovedale Institution, presented his views of the past, present, and future of Africa and the African. According to Stewart, the African races were seen as "lagging behind in the general struggle of the nations, and almost fallen completely out of struggle". The chief reason for African backwardness was seen to be the lack of an advanced religion and moral vitality: "...the absence of definite religious beliefs indicate the absence of these moral forces which are chief powers in the progress of any individual race; without these, there comes the descent into mere animalism and fixed and hopeless

³⁹⁸ Cairns 1965, p. 89; Pick 1989, pp. 5, 20.

³⁹⁹ Pick 1989, pp. 216-217.

⁴⁰⁰ Drummond 1884, pp. 101-104, 117. Henry Drummond (1851-1897) was educated in the University of Edinburgh. He became Professor of Natural Science in the Free Church College, Glasgow, explorer and writer. *Natural Law in the Spiritual World* was one of his most popular books, selling over 100,000 copies. See *Who Was Who 1897-1916*, p. 209.

⁴⁰¹ Drummond 1884, p. 128.

⁴⁰² Of Drummond's influence see Elmslie 1901, pp. 257-258; Thompson 1995, p. 75. Drummond was also more directly connected to Livingstonia. He was for a time a member of the Livingstonia Sub-Committee and

barbarism."403 Regeneration would only be possible through the external help of the missions.

In Stewart's opinion, the "heathen humanity" of Africa was degraded, sunk in "discreditable practices" like polygamy and witchcraft. Such customs were not only violations against the Bible, but "unnatural" violations of Nature's laws. The degenerative process in Africa, however, was reversible: "Wherever Christian missions go, a reconstructive process begins...". This regenerative process was started by "...the planting of Christian moral ideas, which will then grow and stop the unnatural customs." The missionary aim was "...to introduce a new spirit into the lives of the people, which changes it...to the form of true and humane civilisation". For both mental faculties and muscular power, the keywords of regeneration were "vitality, activity and growth". To stand still was the beginning of retrogression: "atrophy being the penalty of non-activity or disuse." 404 For Stewart, Christianity could never be the cause of anything degenerative: "Christianity does not produce a degeneration of character." European atrocities in the Belgian Congo, therefore, were the work of false Christians. 405

Stewart was an optimist. He argued strongly against all theories that doomed the African to degeneration and death. He draw on historical examples of Jews and Britons to prove "how the fortunes of race change". He saw "some inherent vitality in the African race", although he admitted that some tribes and races might disappear in the evolutionary struggle. For Stewart, evolution was above all a social evolution, in which was essential to "build on humanity, strength and energy of character" as well as "devotion, duty... and public spirit".406 Character, and Christian character above all, would determine whether a nation would advance or decline spiritually, morally and physically.

It was Stewart's view that in contrast to physical evolution, social and individual moral evolution could progress very quickly. Therefore moral regeneration through the gospel of Jesus Christ, the work ethic and commerce could produce substantial progress in a

made a exploration journey for the African Lakes Company to the region in 1883. See Scott 1985, p. 49.

⁴⁰³ Stewart 1903, p. 14.

⁴⁰⁴ Ibid., pp. 294, 297-299.

⁴⁰⁵ Ibid. p. 311.

⁴⁰⁶ Stewart 1903, p. 361.

relatively short time. For Stewart, this was a convincing justification of missionary education. However, he saw a danger in an "imperfect education" which might act as "a retarding influence" on educated Africans, if they failed to realise the necessity of imperial control and white superiority, at least for the time being 407 His ideas in this respect were arguably quite acceptable to many governments of this imperial period.

For his part, in setting out his educational policy at the Livingstonia mission, Rev. Dr. Robert Laws defined education as "the cultivation of the moral, intellectual and physical powers". These three elements were inseparably intertwined, but the most important was the moral education based on the teaching of the Bible. For Laws, moral progress was an absolute necessity for intellectual and physical advancement without which the Africans under instruction would irreversibly "sink back" to their old, unsatisfactory village life. For him, this was an indisputable fact. It was a "question of means and results, as...with the use of quinine in the treatment of fever...". In Laws's experience, only those mission students who had accepted Christian moral values were useful in the advance of civilisation. For Laws, moreover, it was natural that the mental and physical progress would follow the moral: "... this is a true order of growth. We know of no more remarkable phenomenon among the natives, than the intellectual awakening which invariably follows the perception and reception of the spiritual truth...".408 After the spiritual awakening, the intellectual facilities would no longer "remain dormant".409 Moral growth would "invariably" lead to intellectual and physical progress, while moral degeneration would lead, equally invariably, to intellectual and physical decline. This confident assertion comprised the core of the Livingstonian missionary doctrine of degeneration and regeneration. Laws shared the views of his contemporary, Drummond. It was all a question of scientific evolutionary processes affecting soul, mind and body.

The missionaries scrutinising the African societies frequently saw signs of physical and moral degeneration. The report of Dr. George Prentice and Rev. Donald Fraser on their visits to the Senga villages unoccupied by missions, is a good example how sin and suffering were connected in the missionary mind:

⁴⁰⁷ Ibid. pp. 370-371.

^{408 &}quot;Native Education in British Central Africa", The Aurora, April 1897, pp. 9-10.

⁴⁰⁹ Ibid. Mental development caused by Christianity was also emphasised by Dr. Agnes Fraser: see Fraser A. 1914, p. 469.

"...they have built their villages amid unhealthy swamps, their physical surroundings showing their need of amelioration. When, however, we turn from the physical side, bad as this is, and consider their spiritual condition, their utter ignorance of the true God, of his way of salvation, and their contendness with their polluted lives and delight in evil, then their need is appalling." 410

The editor of the Aurora, in all probability Laws, compared the need to expand the mission to the heathen Senga with the need to awaken a man who is falling asleep in the snow and sinking deeper into torpor, sleep and death.411

6.2. "The Moral Diseases": Alcohol, polygamy, promiscuity and venereal disease

The most important degenerative impulses the Livingstonia medical missionaries perceived, with the exception of polygamy, were similar to those worrying their colleagues in industrialising and urbanisating Victorian Britain: "overindulgence" in alcohol and sex. It has been argued that the problem of "racial degeneration" in Britain was very much associated with medico-moral arguments concerning sexuality in both imperial and national levels. Race and sexuality were explicitly linked in the colonies as well as in the urban industrialising Britain. Especially alarming were the "dangerous" sexualities of blacks, working classes and the women. In the words of Ronald Hyam, the vigorous Purity Campaign, launched in the 1880s, was "an outburst of neurotic puritanism", enforcing a repressive new sex code, with widespread effects in late Victorian and Edwardian Britain.

Alcohol, in turn, was a special cause for concern in Scotland, in both medical and religious circles. During first half of the nineteenth century, with the widespread introduction of whisky from the Highlands, social problems involving alcohol were particularly acute in the newly industrialising Scotland. The consumption of distilled spirits increased 4 times between 1815 and 1840. It has been estimated that in 1841, one house in ten in Glasgow sold alcohol. As a reaction against excessive drinking and its association with crime,

^{410 &}quot;Need-opportunity- importunity", The Aurora, December 1898, pp. 41-42.

⁴¹¹ Ibid. Laws was the anonymous editor for the magazine and its successor, The Livingstonia News, except when on furlough.

poverty and disease, the Temperance Movement, started in 1829, grew dynamically in Scotland and then spread to England. The Free Church of Scotland was strongly connected with the movement.413 In the Temperance crusade, which was to last at least until the First World War, the Church and the medical profession joined forces. In 1896, for example, the Free Church Temperance Society's annual meeting was presided over by Professor Simpson, President of the Royal College of Physicians and Surgeons, Edinburgh. Intemperance was seen as "one of the greatest evils of our time - the source of much misery, disease and crime." 414 The temperance activists frequently emphasised the connection between drinking and disease, and were anxious to prove that habitual drunkenness became a disease destroying brain and body. From the medical point of view, it was difficult, however, to be precise as to when drinking became a disease. Nevertheless, the medical specialists confirmed the physiological damage caused by alcohol and agreed that the first step towards curing the condition was to stop drinking.415

Those medical missionaries, like Laws and George Steele, who worked in city missions and hospitals before their appointment to Livingstonia, formed their opinion of the effects of alcohol in city slums. Laws' biographer describes how the young medical student experienced "the sheer brutality" of the slums while in the service of Glasgow Medical Mission.416 Furthermore, missionaries on furlough in Scotland after several years' absence, observed how, despite the progress made in many fields "the curse of our nation - drink" was still strong.417 These experiences undoubtedly determined the policy of total abstinence, which characterised the Livingstonia missionaries.418

When a Scottish medical missionary met Central African native, the question of beer-drinking was one of the first sources of conflict. When Laws, for example, met a local chief on the shores of Lake Malawi shortly after the arrival of the pioneer missionary party: "...medicine was asked for a bad cough and large belly. When told to leave off

⁴¹² Hyam 1992, pp. 65-71; Vaughan 1991, pp. 129-133.

⁴¹³ Drummond and Bulloch 1974, pp. 28-29; Hamilton 1981, pp. 182, 218-220.

⁴¹⁴ FCSMR, May 1896, p. 121.

⁴¹⁵ See, for example, interview of Dr. Clouston, FCSMR, December 1896, p. 305.

⁴¹⁶ Elmslie 1901, pp. 257-259; Livingstone 1921, pp. 33-34. See also Chapter 3 above.

^{417 &}quot;Impressions of Home and the Way Out", The Aurora, June 1900, pp. 29-32.

⁴¹⁸ It was part of the medical examination of the missionary candidates to check whether they were total abstainers or not. According to Hamish McIntosh, Laws was so total abstainer in his youth that he may have refused to take clavet as prescribed medicine when suffering from smallpox. See Mcintosh 1993, pp. 7-8. In

drinking pombé the mention the word was enough to bring out at once the drunkard's opposition."419 Initially, the missionaries made no great difference between African beer and Scottish spirits: both were evil, and to be opposed.

One of the main objectives of Livingstonia and Blantyre Missions and the African Lakes Company, apart from fighting the slave trade, therefore, was to prevent traffic in liquor from spreading into Malawi regions from the coast. One reason and argument for the missionaries', and their Scottish supporters', strong opposition to the growing Portuguese influence from the South, and for their demands for British rule in Nyasaland in the late 1880s, was that the Portuguese were seen as sympathetic to the liquor trade.420

Beer remained a problem to the missionaries who eventually, nevertheless, had noticed differences in the influence of beer and spirits. Reporting on his tour in 'Ngoniland during 1894, Dr. George Steele wrote:

"The drinking of utshwara, or native beer, is seldom followed by the beastly intoxication we see at home. Yet, at the same time it is responsible for many a row, and is a grave danger to the native Church. A Christian native who has imbibed utshwara loses his distinguished mark, and becomes like other natives, noisy and foolish. The difficulty is, they say it is their food, and no doubt it is used to some extent as such. The natives say the late chief Mombera lived on beer and a little beef; the common native porridge he had ceased to eat. No wonder he died!"421

In Steele's opinion, the danger of beer was not mainly physical but moral: beer, for example, caused increasingly civilised African Christians to fall back into uncivilised paganism, and to behave stupidly instead of sensibly in accordance with the requirements of their European teachers.

There were further drawbacks to drink. Hostility to the missionary message was frequently associated with beer-drinking. When Elmslie toured the countryside in 1903, he was

Livingstonia Laws approved the use of alcohol as medicine, however.

⁴¹⁹ Robert Laws Diary Journal 20 January 1876. NLS, MS. 7907.

^{420 &}quot;Nyasa-land 'Hands Off' ". FCSMR, June 1889, pp. 170-171. Another reason for Presbyterian policy was the fear of the spread of Roman Catholicism. In due course, the imperial powers agreed to prohibit the selling of distilled spirits to the native population in Sub-Saharan Africa.

⁴²¹ FCSMR, December 1894, p. 285. There were several kinds of beer of various strenghts brewed among the different tribes of Nyasaland. Harry Johnston observed that beer was made at least from millet, eleusine (a small local grain), sorghum and maize. In addition, a strong drink was made from palm sap through fermentation. See Johnston 1897, pp. 436-437.

disappointed to notice that in some villages, the mission schools had been closed and the people were not receptive to the missionaries any more:

"We visited the place going to the lake, but found the people drunk, and they were on the same condition on our return. The only Christian in the place is overpowered by their evil, and we altogether failed to reawaken their interest in our work." 422

At the turn of the century, the missionaries saw a new alcoholic danger approaching, caused this time not by native custom or the liquor traders but by the imperial economy and the demand for labour in the mines of Southern Rhodesia. When the missionaries, together with the planters of the Protectorate, appealed to Lord Salisbury to prevent the labour migration from Nyasaland to Rhodesia, the first and foremost danger to the Africans was stated to be the influence of strong drink, to which the Central Africans were not accustomed.423 These appeals were to be in vain.

Although they failed to influence the Government labour policy, the Livingstonia missionaries observed also progress in their struggle against alcohol. In the areas where missionary influence was strong, the missionaries could happily report that the drinking habits had ceased or considerably lessened by the early 1900s. It seems that the missionaries used every opportunity to oppose beer-drinking, whether as preachers, teachers, doctors or, as in the case of Walter Elmslie, revered rain-makers, and that they had some success.424

A point of dispute between missionary and Protectorate administrator involved the respective attitudes towards beer. Rev. Donald Fraser complained of administrator and missionary at loggerheads on the issue when they should "make common cause against great social diseases". While Fraser incidentally stressed the adverse physical effect of excessive beer-drinking, his concern was not so much with the physical effect on the drinker as the moral effect on the society:

"It is patent to every one who has any acquaintance with native life that the cause of the great majority of faction fights, broken heads, murders and adultering is simply beer

⁴²² FCSMR, March 1903, p. 121.

^{423 &}quot;Petition to Lord Salisbury", The Aurora, February 1900, pp. 11-12.

⁴²⁴ The Aurora, June 1900, p. 26; FCSMR, November 1895, pp. 268-269. On Elmslie's status in 'Ngoniland see Thompson 1995, pp. 51-53.

drinking bouts...We do not urge the physical harm that is done by drunkenness, for it is nothing compared to the overindulgence in spirits. Native beer must be acknowledged to have considerable food properties, and while it may do serious harm to a drunkard, comparison with what we Europeans know to be the effects of whiskey and brandy decreases greatly our argument against beer."425

Instead of medical, Fraser stressed environmental arguments. Cultivation of beer crops, he argued, exhausted the soil. Furthermore, people moving away in their "quest for beer" were also moving away from "elevating influences" of the administrator, missionary and trader.426 Dr. Ernest Boxer commented that migration in Tongaland was healthy in terms of better sanitation and housing, but at the same time noted that the movement was often prompted by "...a desire to be rid of the constraint of a fast forming public opinion on the side of right against dancing, drinking, and such evils."427 Although the missionaries recognised that beer was, from medical point of view, not nearly as harmful as spirits, and, furthermore, was an important part of the indigenous diet, the idea of beer as a source of moral retardation, preventing elevation or causing a relapse, remained firmly in the missionary mind.

As Ronald Hyam has noted, Victorian missionaries all over the world saw an immense range of traditional activities as immoral and objectionable 428, and the medical missionaries of Livingstonia were no exception. However, published missionary journals and reports rarely went into more specific detail than the following excerpt from the report of Dr. Prentice and Rev. Fraser in 1898 from Sengaland:

"There is no need to speak of the abominations that are practiced among these people. Suffice to say that they live alone, knowing nothing of God, and full of deeds of darkness which seem always to flourish among an oppressed and isolated people." 429

Beer-drinking was often seen as the cause of many "degrading customs", the most abhorrent of which to the missionaries were associated with sex and sexuality. Reports on beer-drinking frequently referred to the "obscene dances" performed at the village celebrations. "This [dancing] is not the sort of thing to make good citizens, and many of

^{425 &}quot;The Government and Beer", The Aurora, June 1902, p. 72.

⁴²⁶ Thid

^{427 &}quot;The Scattering of the Tonga", The Aurora, December 1902, p. 100.

⁴²⁸ Hyam 1992, p.182.

⁴²⁹ The Aurora, August 1898, pp. 31-32.

the dances strike at the root of morality."430 The missionaries sought to keep their pupils, especially girls, away from the dances. Initiation rites, in particular, were seen as horrible, and the mission girls attending them were viewed as "polluted" and "tainted", having lost the physical and moral "cleanliness" achieved at mission schools. However, some missionaries gradually began to realise that the indigenous dances and rites were important social customs. Donald Fraser was the first Livingstonia missionary to put forward publicly the idea of creating Christian, morally acceptable initiation dances and rites for the young, which would, instead of simply trying to prohibit them, "save them from the contamination of pagan instruction".431

To what extent the missionaries were actually familiar with various initiation rites is uncertain. Harry Johnston's view was that no European had actually personally witnessed initiation ceremonies, but all their knowledge in the matter was based on "more or less trustworthy" African accounts. Johnston argued furthermore that the dances could hardly be called "wantonly indecent" and regarded African morality in general favourably comparable with European .432 The comparison between the missionaries' and Johnston's view on the matter of "decency" is analogous with Vaughan's notion of the two general European views on African sexuality. While to the missionaries African sexuality was "primitive", uncontrolled and excessive, Johnston regarded indigenous, pre-colonial African sexual mores and practices "innocent", but considered them to be in the danger of degeneration through European influence.433

The missionaries paid particular attention to the "moral health" of their pupils especially at the Overtoun Institution, a training centre and a boarding school established in 1894 to train African teachers, evangelists, skilled workmen, medical assistants, and in the girls' school, good Christian wives. Previously it has been mentioned how the housing conditions for pupils at the Institution were seen inadequate and unhealthy. Dr. Elmslie

⁴³⁰ The Aurora, December 1899, p. 47.

^{431 &}quot;Woman's Work in Nyasa-Land", FCSMR, September 1890, pp. 268-272; Fraser D. 1913, pp. 110-117. See also Fraser 1927, pp. 106-107.

⁴³² Johnston 1897, pp. 408-409. Although Johnston argued that the Central Afircan people in general were "much more free from real vice than... most European nations", he quoted an anonymous medical missionary who had worked among the Tonga, who had provided Johnston with information "...concerning the depravity prevalent among the young boys in the Atonga tribe of a character not even to be expressed in obscure Latin.". It is almost certain that this informant was one of the Livingstonia doctors, as Bandawe was the only medical mission station among the Tonga at the time. See Johnston 1897, footnotes for pp. 408-409.

reported also "immoral conduct" in January 1900, and expressed his fear that there was "a good deal of secret sin" in the Institution. He emphasised that one of the unhealthy locations was the boys' dormitories:

"I have before pointed out that [the dormitories] are dangerous to the physical health of the pupils, and these cases impress one with the sense that they are against the moral wellbeing of the boys. For warmth and because of lack of room, two and three boys have to sleep on one narrow bed. In this country and with native tendencies such as they are, this is very unwise and injurious. Separate beds ought to be provided..." 434

Apart from separate beds, Elmslie proposed other cures against homosexual practices resulting from "native tendencies", as will be seen below.

While sexual promiscuity was bad enough, with the abolition of slavery during the 1890s, polygamy became in all probability the most abhorrent of African customs to the Livingstonia missionaries. An article in the Aurora, almost certainly by Laws, explained why it was such a crucial issue to the missionaries:

"The law of marriage laid down by Christ is the law for His Church, for mankind for all time, and the marriage bond is as indissoluble as Christ has declared it to be...Christ' law of marriage is the foundation of the home and of the nation. The Christian home, begun by the marriage of a Christian man and a Christian woman, fitted for each other mentally, morally and physically is the nursery of the Church and its purity must be held inviolable." 435

In the light of such forceful assertion, it was impossible for the missionaries to accept polygamy. Although, in the same article, the writer admitted that the New Testament provides no specific rules for dealing with polygamy, he explained that Christ trusts the "common sense" of his followers to raise a "...pure Christian Church from among the impurities of polygamy and heathenism." Polygamy was seen to be essentially a women's question, to be solved by work among the girls and women.436 The Mission Council decided in 1899 that the first wife of a polygamist could be baptised without requiring her to leave her husband, but the polygamist and other wives were excluded until their union

⁴³³ Vaughan 1991, p. 129.

⁴³⁴ Elmslie to Smith 31 January 1900. NLS, MS. 7883, 14.

^{435 &}quot;Polygamy", The Aurora, August 1899, pp. 25-27. Laws, the anonymous editor, went on furlough not until August 1899, so it is very likely he wrote the editorial to the issue published in 1 August. 436 Ibid.; Laws 1886, pp. 8-9.

was dissolved.437 With the spread of Christianity in Ngoniland in the 1890s, Dr. Elmslie was happy to report the break-up of polygamous marriages, with some men sending away as many as six wives.438 He paid no attention whatever, it appears, to any possible negative social, emotional and physical consequences caused by this development.

Initially, it was difficult, and not necessary for the missionaries to oppose polygamy from a specifically medical point of view. Objections were on Biblical grounds. Polygamy was seen morally destructive, however, reducing women's status and making a Christian family life impossible. Later, the statistics compiled by the missionaries and the imperial administration seemed to confirm that infant mortality was greater in polygamous families than in Christian families and this became a useful medico-scientific argument in the missionary propaganda.439

In their efforts to proscribe polygamy, cases like the following were especially disappointing from the missionary point of view: "One school teacher resigned his work, and since then has relapsed into polygamy, having induced a catechumen to become his second wife." 440 Such "relapses" back into heathenism were especially dangerous as they threatened the Christian family and the Christian society the missionaries were trying to create. "When once a man has lapsed into polygamy it is very seldom that he returns to a Christian profession", wrote Donald Fraser, who argued that this "lapse" was usually followed also by a return to beer-drinking and other evils. 441 In 1912, the mission adopted a policy demanding African church members to marry under the provisions of the Christian Native Marriage Ordinance, including the penalty of up to five years in gaol for relapsing into polygamy. 442

The missionaries' demands regarding monogamy were difficult for Africans to accept. In 1900, one missionary claimed that if the existing polygamous marriages could be dissolved by "a stroke of magic" without any problems, the country would be Christianised within a

⁴³⁷ Minutes of the Mission Council, 6 November 1899. NLS, MS. 7882, 100.

⁴³⁸ FCSMR, December 1896, pp. 294-295.

⁴³⁹ Fraser A. 1914, pp. 467-468; Fraser D. 1911, pp. 186-187; Fraser D. 1927, pp. 105-107. Dr. Fraser emphasised also the total abstinence of the Christian parents as one of the factors contibuting to the family health.

⁴⁴⁰ FCSMR, August 1898, p. 188.

⁴⁴¹ Fraser D. 1913, p. 251.

couple of days.443 The same writer pointed out that Islam was for Africans a much easier religion to accept in this respect. There were other dangers to moral health arising form the Islamic influence, he argued. This could be seen in the cases of young men with Christian education returning from the coast "...wrecked in their moral character, and using the profession of an ignorant, bastard Mohammedanism to stifle their consciences and palliate the degradation of their unclean lives ."444 These influences from the coast were the "impure diseases" associated with the "slave-dealing Arab" the traditional arch-enemy of the missionary. The most pathological form of this unhealthy influence was the venereal disease, syphilis or "the foulest of diseases" as the medical missionaries described it.

One Livingstonia medical missionary particularly hostile to Arabs was Rev. Dr. David Kerr-Cross, who as noted previously, attended the 1888-1889 "Arab War" at the north end of the lake as a non-combatant surgeon. In his last medical report before leaving missionary work at Karonga in 1896, he wrote:

"Impure diseases have abounded. The slave-dealing Arab, notwithstanding he is the most religious of men, is impure in all his ways. My experience is that, whenever a native comes under Arab influence, he degenerates; he becomes impure in his life, he becomes a sneerer, and is doubly as hard to influence for good." 445

Arabs were seen as responsible for syphilis among the Senga in the interior as well. Donald Fraser observed that it was introduced to the area by Arab traders.446 Although the missionary doctors had met venereal disease in Malawi regions since their arrival, generally they argued it had been rare except along the Arab and Swahili trade routes. Dr. William Scott reminisced that "specific diseases" had been rare among the Tonga in the early 1880's, and in the known cases, infection could be traced to Arab caravans.447

After the turn of the century, the emphasis shifted, from Arab immorality and its consequences to the sexual problems caused by migrant labour. Absence of men from their homes was seen to lead "...to the evil of concubinage on the part of the men and to that of

⁴⁴² McCracken 1977, p. 196.

^{443 &}quot;Wanted a New Religion", The Aurora, October 1900, p. 48. Although there was strong opposition against the missionaries' demands for monogamy (McCracken 1977, pp. 196-197), Hyam has observed that overall, the Christian marriages among Christians were most prevalent in Africa in Malawi. See Hyam 1992, p. 185.

^{444 &}quot;Wanted a New Religion", The Aurora, October 1900, p. 48.

⁴⁴⁵ Cross, quoted in FCSMR, December 1896, pp. 294-295.

⁴⁴⁶ FCSMR, March 1900, pp. 62-63.

unfaithfulness on the part of the women."448 Donald Fraser described how the unhealthy atmosphere of the Rhodesian gold-mines influenced the Ngoni youth: "...many a poor youth who had been kept clean by the comparative strictness of 'Ngoni morality, returned maimed and broken through the cheapness of sin there."449 In 1905, Walter Elmslie gave a markedly different testimony of the effects of imperial industry to Ngoni health, arguing that the Ngoni in Rhodesia worked "contentedly and profitably" and returned to their homes "unscathed physically or morally". 450

Incidentally, the missionaries also drew attention to the danger of degeneration to the Europeans caused by African "temptations". An anonymous writer in the Aurora described: "A man becomes decidedly better or worse in Africa; it usually produces a strong character or a wreck." The continent was seen as a ultimate test and a threat to the European's physical and moral health, and the most grave danger was seen to be "...alcohol...and other things we won't mention, for they are unmentionable...Many professed Christians and total abstainers...become mere wrecks of their former selves".451

Medical missionaries rarely reported their treatment of syphilis in detail. Before the introduction of Salvarsan in the 1910s, the medicines used were either mercury or arsenical compounds, all with harmful side effects, and at best only mildly effective. George Prentice described one case in 1899: "...a woman & child returned from Karonga suffering from a virulent attack. The child died; but the woman patient underwent a long course of treatment & is now the mother of a healthy child." 452 William Scott mentioned one case in the 1880s when increased treatment with mercury pills had disastrous results

⁴⁴⁷ Scott 1985, p. 54.

^{448 &}quot;Petition to Lord Salisbury", The Aurora, February 1900, pp. 11-12.

⁴⁴⁹ Fraser, quoted in FCSMR, March 1902, pp. 118-120.

^{450 &}quot;The annexation of Ngoniland, British Central Africa", FCSMR, February 1905, pp. 74-75. In this article, Elmslie strives to prove the good results of the annexation of the Northern Ngoniland to the Nyasaland Protectorate, which was mediated by the Livingstonia missionaries, for both the Ngoni and the imperial economy. Another reason for Elmslie's sympathetic attitude towards the BSAC may have been the fact that Rhodes' company had provided support for Livingstonia mission throughout the 1890s. See Fields 1985, pp.101-102.

^{451 &}quot;Impressions of Home and Way Out", The Aurora, June 1900, pp. 29-32. The writing style suggests that the writer was a medical missionary (probably Elmslie or Prentice, who had returned from furlough the year before), but this cannot be verified.

⁴⁵² Prentice to Smith 20 November 1899. NLS, MS. 7882, 122; Porter 1997, p. 452.

when the patient gave all the mercury to his wife.453 Therefore, in preference to actual medical intervention, the methods employed against such diseases, were social and prophylactic, in the form of religious evangelicism, moral education and social engineering in an attempt to create a "healthy" Christian family and society.

6.3. Creating a "Healthy Society" - Missionary plan for moral regeneration

The Livingstonia missionaries acknowledged that the best preparation for adulthood was the moral, mental and physical training of children. Whereas in Europe this was the duty of the parents and the state, in Nyasaland the missionaries considered this as the responsibility of the missions.454 From the start, the emphasis in missionary moral education was on the teaching of the Bible, upon which the "cultivation of moral powers" was based.455 Other approaches were used, however, especially in the boarding schools and the Overtoun Institution, where the pupils were under constant scrutiny. At the Institution in the highlands, the students were cut off from their lakeshore homes except for the holiday seasons, subjected to strict discipline, worked hard and were given very little or no spare time at all. The fact that some 40 per cent of the students left the Institution before graduation reveals some of the pressures put on them. 456 Despite close monitoring, and relentless activity, there was also anxiety over the general well-being of the pupils, as noted previously. Elmslie, who took charge of the Institution during Laws' furlough in 1899, criticised not only the dormitories, but also the over-concentration on bookwork on the grounds of moral and physical health:

"We cannot expect morality to be deepened by the present system of education. To have growing, wellfed youths, from 15 to 20 years of age, at books form 6.15 am till 8.30 pm, with only meal hours when lessons must be prepared, is most unwise. There ought to be hard manual labour half the day, not at road-cleaning & such like work, but at profitable & educative work...We are keeping the pupils here in unhygienic conditions which are inimical to their moral and physical wellbeing. The hard thing in dealing with these cases [of "immorality"] which come under our notice is that they are more to be pitied than

⁴⁵³ Scott 1985, p.54.

⁴⁵⁴ The Aurora, June 1901, p. 14.

^{455 &}quot;Native Education in British Central Africa", The Aurora, April 1897, pp. 9-10.

^{456 &}quot;The Educational Work at the Institution", The Aurora, August 1901, pp. 29-31; McCracken 1977, pp. 141-142.

spoken against, for there are instances of noble struggle against temptation."457

For Elmslie, carpentry and gardening were effective means of improving moral health. Elmslie and James Henderson, the headmaster, managed to arrange carpentry work, but the missionary in charge of the agricultural department opposed the idea of pupils in his department.458 Nevertheless, after a couple of months, Elmslie could report:

"The arrangement...whereby all class work is over at noon and the three hours from two till five o'clock given to manual labour has worked well. The benefits have been visible in the health and mental vigour of the pupils, not to speak of improved habits, and a new view of manual toil." 459

Physical labour was seen as a remedy against sexual promiscuity as well as mental and physical disease. The new arrangement also lessened the costs of education effectively. Furthermore, it epitomised the work ethic which was highly valued by the Scottish Presbyterians. In addition to practical manual work, drill and sports were also seen as useful for maintaining the physical, mental and moral health of the pupils.460

The education of girls was seen to be of special importance in creating a morally healthy Christian family. Donald Fraser described the education of girls in the Overtoun Institution in the following terms:

"Day by day the girls are being taught to habits of cleanliness and regularity. Some of them are making progress in education, but more important than that is the training in the domestic duties, and the forming of a pure and stable character." 461

Boarding schools for girls were founded early in mission stations, such as in Livlezi valley in the late 1880s, with Mrs. George Henry in charge. Cleanliness being next to godliness, physical cleanliness was the first requirement of mission schoolgirls. Mrs. Henry demanded that her pupils bathed in the river every morning before entering school.462 Next nakedness was tackled. The girls were taught sewing, and instructed to make dresses for themselves. In the beginning, the dresses were worn only on Sundays, but later the girls

⁴⁵⁷ Elmslie to Smith 31 January 1900. NLS, MS. 7883, 14.

⁴⁵⁸ Elmslie to Smith 24 April 1900. NLS, MS. 7883, 35.

⁴⁵⁹ Elmslie to Smith 12 July 1900. NLS, MS. 7883, 112.

⁴⁶⁰ Ibid; Annual Report for 1903, p. 7; Sports in general were one of the "healthy customs" of Africans as the medical missionaries saw it: See The Livingstonia News, February 1911, pp. 22-23.

⁴⁶¹ FCSMR, December 1897, p. 287.

^{462 &}quot;Woman's Work in Nyasa-land", FCSMR, September 1890, pp. 268-272.

could earn their dresses by their work. In the sewing classes, the idea of the shame of being undressed was also introduced: "They are very much pleased, and I tell them we want to teach them to wear dresses always; that if they were in our country as they are here, they would be put in prison. They look perfectly amazed." 463 For the sake of moral health, the mission girls had to be clothed, made to feel the need of being clothed, and made ashamed of their nakedness. They had also to be separated from their naked heathen friends, if possible. Mrs. Henry described the transformation of a "good girl": "From a roaring, laughing-at-nothing native she became quiet and industrious, and mixed very little with her village friends." 464 With personal cleanliness ensured and nakedness overcome, domesticity was emphasised next.

"Christian life of a community may be fairly gauged by the condition of the homes composing it", was the view of Robert Laws.465 In addressing the Assembly of the Free Church in 1884, he observed that the "social condition" of the Central Africans was "low indeed", because of polygamy and lack of a "true family". Using the language of natural sciences, Laws pointed out that "If the molecule is represented by the family, the atom is represented by the individual". It was therefore the "spiritual molecular forces" which made Christian family and Church life so much more advanced than that of the heathen.466

The emphasis on the "condition of the homes" resulted at first in that the mission curriculum for girls included mostly sewing, washing and ironing, household work and bible studies. The aim was to produce morally, mentally and physically pure Christian wives and mothers, instead of "raw girls from a heathen home", who would match perfectly with the virtuous Christian men. At the turn of the century, with the number of Christians rapidly increasing, the missionaries could demand that the mission Christians should not marry heathens. Any Christian marrying by a heathen rite could be disciplined by suspension of Church membership or the delaying of baptism.467

^{463 &}quot;Woman's work in the Livingstonia Mission", FCSMR, December 1889, pp. 365-366.

^{464&}quot;Woman's Work in Nyasa-land", FCSMR, September 1890, pp. 268-272.

^{465 &}quot;Native Education in British Central Africa", The Aurora, December 1897, p. 41.

⁴⁶⁶ Laws, quoted in the Proceedings and Debates, 1884, pp. 102-105.

⁴⁶⁷ The Aurora, August 1899, pp. 25-27. The Scots missionaries kept strict control over access to full Church membership: progress from "hearer" to catechumen to baptized Church member took often four years or more.

The female missionaries in charge of the girls in the Overtoun Institution were often trained nurses as well as teachers, and they stressed the need to teach nursing skills and midwifery to the girls. This training was seen to be essential in reducing the great infant mortality in the villages, which was increasingly brought to the missionaries' attention at the turn of the century. As nurse and teacher Margaret McCallum wrote in 1900, the aim of the boarding-school was:

"...the making of strong, true women. There has to be eradication as well as education. At present, there is a great opening for the highest education the future mother can have in this land, i.e. nursing - but unfortunately no hospital in which to teach the girls." 468

Both non-medical and medical missionaries of the time saw uneducated mothers as "the worst enemies" of their children, for temporal as well as spiritual reasons.469

Despite the fact that to ensure Christian family life the need for the work among women was recognised from early on, some missionaries, particularly Agnes and Donald Fraser, claimed that not much was done in practice. Donald Fraser stated in 1906:

"Then there are the native women, on whose character the whole life of the Church depends. Home life has to be taught them: it is unknown in paganism. If they knew a little about sick-nursing, and about care for their little children, thousands of lives could be saved. And if they learned the sweet attractiveness of Jesus, how much purer and easier would be the Christian life of their husbands and children." 470

In 1910, Donald Fraser reported from the Loudon station that for the first time, a large organised missionary operation among the women had been launched: a selected group of girl-boarders received daily attention, Dr. Agnes Fraser conducted regular Mothers Prayer Meetings each Sabbath, and the missionary tours to villages included not only bible lessons but practical lessons on the care of sick.471 In 1912, missionaries held a special conference on women's work. It was proposed to develop an organised house to house visitation system, which would bring the missionaries into direct personal touch with the

See Fields 1985, p.111.

⁴⁶⁸ McCallum, quoted in The Aurora, February 1900, p. 10. As noted in previous chapter, there was some medical training "on the job" for the African nurses in the early 1900's, but the extent and contents of this education remain unclear.

⁴⁶⁹ See, for example, Dr. Turner, quoted in The Livingstonia News, April 1910, pp. 25-26.

^{470 &}quot;The Great Opportunity in Central Africa", FCSMR, October 1906, pp. 447-449.

home life of the women. Again it was emphasised that formal Bible classes were not enough, lessons on "...health - the care of the body, the feeding of children - their moral training, and simple lessons on cooking..." were necessary.472 Moral training was aimed at the eradication of "impure" heathen influences, such as indecent dancing, unacceptable sexual practices, beer-drinking and beer-brewing. Beer-brewing was traditionally women's work, and missionaries argued that it resulted in the neglect of children.473

The education of women was not the only missionary initiative for creating and advancing Christian family and home life. In Ngoniland, the Frasers saw the Christian family they were trying to create threatened by the labour recruitment to the southern mines. In the interests of moral well-being, they attempted to keep families in contact with men working in the South, with Donald Fraser even taking wives and children in his waggons to visit the husbands in the mines.474 Furthermore, in 1905, the Missionary Conference of British Central Africa made several recommendations to the Protectorate administration, including the "...discouragement of the continuance of single-roomed huts and common dormitories, and urged that in new settlements natives should be advised to build their houses so far apart that each family might be a separate unit."475 The splitting up of traditional villages into separate nuclear family units was regarded advisable for reasons of physical as well as moral hygiene. Previously, the missionaries had supported the introduction of hut tax as they regarded it would both encourage Africans to work for "self-improvement" and place a financial obstacle to polygamy. For Dr. Fraser, bringing the children under the same roof with their parents would help keep the children away from "foul dances" and beer-drinking. In comparison, common, unsupervised dormitories for young boys and girls were regarded as dangerous to moral health.476

During the 1890s Christianity became a popular movement in Nyasaland with an explosive growth of mission schools and converts, especially among the Tonga and the Ngoni.477 In

⁴⁷¹ The Livingstonia News, April 1910, pp. 28-29.

^{472 &}quot;Conference on women's work", The Livingstonia News, October 1912, pp. 70-71. Dr. Agnes Fraser was especially active in this field: she was later to write a book "Teaching Healthcraft to African Women" (London, 1935).

⁴⁷³ Fraser A. 1934, p. 200.

⁴⁷⁴ Fraser A. 1934, pp. 202-203.

^{475 &}quot;The Second Missionary Conference of British Central Africa", FCSMR, June 1905, pp. 265-266.

⁴⁷⁶ Fraser A. 1914, p. 457; Fields 1985, p. 108.

⁴⁷⁷ McCracken 1977, pp. 118-121.

Ngoniland, Elmslie excitedly reported the progress:

"It is wonderful how the good seed of morality and Christianity is growing in the hearts of many. It is an earnest of a wider & more plentiful harvest and such gleams of light keep us from sinking under the weight of the great mass of ignorance and wickedness still visible." 478

The supervision of the moral condition of the new converts required a growing emphasis on the first generation of African Christians. In 1897 the mission reported of the latest 534 baptised adults:

"All are, to our knowledge, total abstainers. No one, so far as we know, is fettered by the bonds of polygamy. And, during the period of probation (a year or more) each life will be subjected to the strictest scrutiny on the part of the elders, deacons and other native Christians, who have ways and means, which lie beyond our reach, of finding out all about the village life of the candidates." 479

The creation of a self-governing, self-supporting and self-extending African Church, which had long been the objective of the mission, 480 embraced per se the creation of an African Christian community, which would be able to take care of its own moral health. To ensure this, the missionaries considered it necessary to emphasise the feelings of sin, guilt, shame and fear. Frequently these feelings were linked to physical and mental sickness and health. The mission dispensary and hospital were logical places for emphasis. Dr. Prentice quoted with approval, therefore, the medical assistant Stefano Potifar Mujuzi's (Kaunda) address to the people waiting for smallpox vaccination:

"You have heard of this medicine. You know it is good. You are fleeing from a deadly disease, and you know that those who get this medicine escape. But listen while I tell you of another disease - the disease of the sin in the heart. A man who gets vaccinated escapes smallpox; but there are many other diseases, any one of which may kill him...But we can tell you of a safeguard against everything that would destroy the soul." 481

As the Christian communities grew, so did the pressure for tighter moral control. This can be seen in attitudes towards beer: according to Charles Stuart, in Ngoniland, the demand for total abstinence was introduced in 1896 - a resolution of local African Christians

⁴⁷⁸ Elmslie to Smith 24 June 1896. NLS, MS. 7879, 234.

⁴⁷⁹ The Christian, 24 November 1898, p. 14. Quoted in NLS, MS. 7906, 168.

^{480 &}quot;Native Education in British Central Africa", The Aurora, December 1897, p. 41.

⁴⁸¹ Quoted in FCSMR, January 1901, pp. 17-19.

themselves.482 Some Christian communities even went so far as to discuss whether a sweet, weak beer should be renounced, although it was not condemned by the missionaries.483 The missionaries were keen and proud to promote and stress such African initiatives. From the 1890s, therefore, African teachers and evangelists trained in the Overtoun Institution were seen to be essential to the Christian expansion. For Laws, they were to be "imitators of Christ's life (in practice the imitators of the missionaries who trained them), not representatives of intellectual doctrine." Laws regarded the Africans as great imitators, not thinkers. He considered that the African evangelists, "raised out of mud", would demonstrate their process of growth and change most effectively by their example:

"He wears cloth, and washes it. He does not drink beer, and has only one wife, yet his life is not miserable. He can read, and knows many things the other villagers do not...And his presence is a daily rebuke to drunkenness, obscene dancing, and all disorder...And soon his standard of righteousness is that to which the village will appeal. He speaks, too, of coming judgement, and heaven and hell." 484

According to Laws' view, cleanliness, both physical and moral, distinguished the missionaries' African disciples from "the muddy mass" from which they had been raised by missionary education. Now they were to do the same in their village communities.

The work of African evangelists and schoolteachers in remote villages was seen to be both challenging and dangerous: "They are, in the places where work is only being begun, in the midst of heathen surroundings, where the moral atmosphere is very largely an abnormal one of uncleanliness in thought, word and deed, even though the people may be friendly." 485 One danger lay in "relapse" by lonely teachers beyond the control of a Christian community. Another danger came, however, not from fragility but from fanaticism - from over-enthusiastic attacks against "immoral" customs. Elmslie reported a case of African teachers unsuccessfully attempting to get the police to stop the village dances by force:

"So unremittingly hard can teachers be on polygamy, beer and dancing that these form the main feature of their preaching; and so incensed were the chiefs and the people that when

⁴⁸² FCSMR, July 1897, pp. 168-169.

⁴⁸³ The Livingstonia News, December 1910, p. 92.

^{484 &}quot;Native Preachers", The Aurora, October 1898, pp. 33-34.

^{485 &}quot;Village Schools and their Work", The Livingstonia News, August 1910, pp. 66-67.

the commissioner met the Marambo chiefs, they asked him if it were permissable to dance in their villages. He of course said no one would stop them, and so there has been a great resuscitation of heathen customs. The antidote to this is to pour into them the Word of God, in school, class, and meeting; preaching Christ, and leaving their practices alone. But it showed us that it is important to put only tried and intelligently devoted teachers in new districts." 486

The missionary indoctrination to which the teachers were subjected, with the heavy concentration on the evil of "moral diseases" sometimes resulted in a zealous Christianity that in practice to the African recipients seemed often to represent simply the abolition of beer, polygamy and dancing. The negative reaction this provoked is quite understandable. In many villages the African teachers were not welcomed, sometimes they were even driven away.487

There is evidence that the idea of moral disease was, to some extent, adapted by the African Christians in their preaching, and not only as a metaphor, as the following extract from an evangelist's diary, quoted in the Monthly Record, suggests:

"Then on the Sabbath, after the meeting was over, we went to the village...on the way we met a wicked man who was a polygamist...One of us said to him: "How are you getting on with your terrible sickness?" The man said, "I have never felt any pain in my body all these days" "No, you are very sick indeed, and are at the point of death if you don't own quickly to the Physician." "What about your friends?" asked the man, "We were once in the same position as you are, but as soon as we heard there is great Physician, who is willing to save those who are terribly ill, we ran to Him and asked Him to heal us. To-day we are getting better, and are not so bad as you are." ... The man stood up with somewhat a glad face. He went home and dismissed all his wives save the first one." 488

Missionary sources in cases like above must be viewed with caution regarding the interpretations of actions and attitudes of the Africans, but the story above, true or invented, highlights again the concept of moral disease in Christian thought, word and deed. The connection between morality, health and disease was familiar to indigenous medical tradition: among some tribes, for example, chances to survive from smallpox were regarded to depend on a person's moral condition. The idea of the Great Physician propagated by the medical missionaries could be in this context very effective, especially as new diseases were spreading at the turn of the century, causing anxiety and uncertainty.

⁴⁸⁶ FCSMR, April 1907, p. 169.

⁴⁸⁷ FCSMR, December 1894, p. 285; March 1903, p. 121; March 1904, p. 116.

Dr. Cross noted that in Karonga district, the people addressed God as the great doctor - njanga ngurumba, and remarked that his own religious evangelism was practically replaced by medical and educational work.489

However, evangelism, medicine and education were mostly regarded as Rev. Dr. James Chisholm did, as different but inseparable aspects of the supreme effort to establish the Kingdom of God in Africa. In this respect it was the results that counted in deciding which aspect to utilise and promote: "Such an aim includes every method we can get under the native and help him to rise 'unto a full grown man, unto the measure of the stature of the fullness of Christ." 490

Missionary effort in Livingstonia, therefore, included the care of the body, mind and spirit. Arguably, the mind was treated least of the three: although the missionaries pointed out the need to treat the mentally ill, they tried to get the Government to take the responsibility. Medical mission sources from the period 1875-1914 rarely mention treatment of mental illnesses. It is however noteworthy that some medical missionaries regarded their indigenous colleagues and their influence mentally unhealthy, "psychopathic" in the words of Dr. Fraser.491

In assessing the impact and effect of missionary work in Mwenzo, James Chisholm diagnosed the mental, physical and moral condition of the heathen ten years earlier:

"Their knowledge of spiritual things was an Egyptian darkness made visible by sacrifices and superstitions, their mental equipment was limited to knowledge acquired in the maintaining of a human life under the most primitive conditions, and their care of the body and its environment was such that one wondered how even so many remained to testify to the law of the survival of the fittest...Their wild orgies of drunkenness and obscene dancing may perhaps be looked upon as symptoms of dissatisfaction with their condition,

^{488 &}quot;Extract from a Native Evangelist's Diary". FCSMR, April 1905, p. 172.

⁴⁸⁹ Karonga Report for 1895. NLS, MS. 7879, 43. King and King 1992., p. 56. The Kings quote here Kerr Cross's statement from 1895 on the belief regarding smallpox's nature as a moral disease, shared by Ngoni, Tonga, Tumbuka and Chewa tribes, "whereas on the other hand, if the village does not possess a good moral tone but is given to adultery and other sins, the smitten ones will die both young and old."
490 Annual Report for 1909, p. 46.

⁴⁹¹ Fraser A. 1934, pp. 192-194; McCulloch 1995, p.13. McCulloch notes that the mission hospitals in Nyasaland had consistently refused to admit patients regarded as mad. This was probably due to practical reasons: there was little the medical missionaries considered they were able to do to the mentally ill, who would take their time and resources from patients that could be aided more effectively. In a similar fashion, many cases which were deemed fatal, were sent home to die.

and a blind grouping after some soul-satisfying pleasure."492

Chisholm's attitude was perhaps slightly more sympathetic towards "immoral customs" than the missionary doctors of the older generation, but not much. If drinking and dancing were not diseases as such, they were unhealthy expressions of mental and physical distress.

To Chisholm, the positive social results of ten years of missionary activity in Mwenzo were the rejection of "evil practices", the lessening of superstition and fear and the fostering of "a brighter and nobler outlook upon life". The station had expanded from scratch to 267 Church members and 136 schools with over 7,000 pupils.493 At an individual level, in his view, the moral progress could be noticed as physical change, especially in older people:

"While the young are the hope of the future, it is in some ways more gratifying to us to see the older people renounce the evils of heathenism and entering into the peace and joy of Christian life. It is marvellous to see the change it makes even in their outward expression, and we are glad and proud to be ambassadors with such a message." 494

As Megan Vaughan has noted, in the medical missionary discourse concerning the Africans, the connection between physical and moral spiritual change for the better was frequently stressed. Vaughan compares interestingly the medical missionaries' view stressing the healthy influences of Christianity with the more secular views of the Government doctors, who argued that many medical problems actually resulted from the break-up of the traditional habits and customs. 495 Although the regenerative evolutionary process of moral growth was not always immediately visible to the Livingstonia missionaries, for them it could be verified over time. Comparison between the old and the new, and perceiving the process of "growth", especially after the turn of the century, was a frequent means by which the missionaries "proved" the good results of their attempts to utilise Christian morality as prophylactic medicine.496

⁴⁹² Annual Report for 1909, p. 46.

⁴⁹³ Ibid., p. 47.

⁴⁹⁴ Chisholm, quoted in FCSMR, January 1908, p. 24.

⁴⁹⁵ Vaughan 1991, p.64..

⁴⁹⁶ See, for example, FCSMR, August 1891, pp. 241-243.

7. Conclusion: Combining the Medical with the Moral - the Medical Missionary Agenda in Livingstonia

The Livingstonia mission, led by Robert Laws, aimed at a comprehensive programme of group and individual "regeneration" and creation of an African Church. The pragmatism of the Scottish Presbyterians with its emphasis on wide-ranging social and economic change in conjunction with spiritual evangelism, was crucial to this programme. At the same time medico-scientific ideas concerning moral health, disease, evolution and survival, along with spiritual ideas of sin and redemption hand in hand with secular ideas of regeneration through hard work and "legitimate" commerce, were also integral parts of the ideological conviction underpinning missionary activity in Livingstonia. Medical mission work has to be understood in this context, as a part of a larger programme of moral, mental and physical regeneration.

The role of a medical missionary in this programme was not always uncomplicated. The medical missionary tradition in late-nineteenth century Scotland, which was largely based on experiences in India, stressed the independent professionalism of a missionary doctor, and especially surgery, as the doctors' main tool for proving the technical superiority of Western medicine as well as the moral superiority of Christian care for the sick. The reality in African pioneering field such as in Livingstonia, was often that there were no resources for large-scale, specialised medical work as there were no hospitals, staff or equipment. In addition, the medical missionary was expected to take part of the work in other mission departments as well. For many doctors, especially those with strong professional ambitions, this was a serious disappointment. In comparison, those doctors who, like Laws, had studied intensively both medicine and theology, and prepared specifically for the dual role of missionary minister and doctor, had less difficulties in limiting their work as physicians.

The main motivation for a medical missionary career seems to have been religious awakening and a sense of personal missionary call, often experienced in childhood or teens. Through the medical mission work, it was possible to attempt to imitate Christ as a

healer of both body and soul. The ultimate aim for many evangelical medical missionaries seems to have been to become as Christ-like as possible in their personal lives, thus earning personal salvation, as well as the respect of fellow-men. In addition, romantic expectations of adventure in Africa as well as professional interest in the new, "heroic" tropical medicine, played their parts in raising interest towards medical mission work in Central Africa. Early medical missionaries came mainly from modest backgrounds, but after the turn of the century, the new recruits were increasingly middle-class, often children of the manse or even second-generation missionaries. Although those medical missionaries who came from the lower classes experienced also social and material progress through their career, it seems that the perceived spiritual elevation, contemporary respect and expected return in the Kingdom Come were the main rewarding elements explaining their choice.

The role of student missionary movement in the Scottish Universities, along with home medical missions, was especially important for many medical students in preparation for Livingstonia. The missionary nurses came from more diverse backgrounds, some had a long hospital career behind them, others were relatively inexperienced. Professor Henry Drummond was an important figure in the student mission movement in the 1880s and 1890s, and his interpretation of the ideas of evolution, degeneration and regeneration in the moral/spiritual as well as physical life were arguably especially influential in the medical missionary home base. Although the medical missionaries shared many of the ideas and fears of degeneration that were troubling their secular colleagues in Europe, they did not believe that races, societies, or individuals would be hopelessly doomed to degeneration and extinction. In their opinion, moral evolution, following natural laws in the spiritual realm, could proceed almost miraculously, once spiritual awakening had taken place. This phenomenon was not mystical, but a result of natural laws, although not always empirically demonstrable. Regeneration and salvation through Gospel were always possibilities, which legitimised the missionary endeavour to them.

Another important factor in the development of the programme of "moral regeneration" was the medical missionaries' experience of the "moral diseases" connected with alcoholism, crime and prostitution they encountered in the home mission field. They continued their Christian medical crusade against alcohol, promiscuity and venereal

disease in Livingstonia, noticing only gradually the various social and cultural differences between Scotland and Nyasaland.

In the Livingstonia missionary doctrine, beer-drinking, polygamy and sexual promiscuity were not only sins or vices, but moral diseases, which could endanger the entire regeneration process: the "fallen" would regress to heathen barbarism, morally, mentally and physically. These moral diseases proved often problematic from a "purely" medical point of view, however. Beer had an important part in the local diet and it proved to be far less physically dangerous than spirits. Although the medical missionaries argued that the children of polygamous families suffered more from illness than those of the monogamous families, and blamed the traditional village housing for being unhealthy in both physical and moral respects, there was little direct evidence on the physical hazards of polygamy. Against syphilis, which was one real physical disease that could be connected to sexual "immorality", the medical missionaries did not have effective medicines. In addition, venereal disease was more frequently connected to Muslim or European influence than to pagan customs. Therefore, the methods employed against the "moral diseases", were prophylactic, in the form of moral education and social engineering. The programme of moral regeneration, which was underpinned by medicine and medical thinking, involved all main aspects of missionary work: evangelisation, education and medicine.

The programme of regeneration was intended to proceed at three levels. First, through the education of the young in mission schools and the Overtoun Institution, where both physical and moral cleanliness were emphasised. Second, through the establishment of Christian monogamous nuclear families through Christian marriage and restructuring of traditional villages. Third, through the creation of a self-supporting and self-controlling African church and Christian society, which would ultimately be capable of taking care of its moral health without missionary supervision.

Although the understanding of the regeneration programme is crucial to the understanding of the medical mission work in Livingstonia and its place in the entire mission enterprise, the actual medical fieldwork in the mission had other, more practical concerns. Most of the day-to-day medical work had little to do directly with the regeneration programme. In the early mission period (1875-c.1900), and especially during the first ten years of the mission,

the health of the European missionaries and above all the danger of malarial fevers were the main concerns for medical missionaries. In the selection of mission sites, medical opinion, based on miasma theories until the late 1890s, weighed heavily. Long before the role of mosquitoes as transmitters of malaria was suspected, the missionaries noticed that the staff located at hill stations remained noticeably free from malaria. With the exception of the highland stations in Ngoniland, all pioneer mission stations suffered heavily from malaria and blackwater fever. Quinine was the "sheet anchor" against malaria, but theories and practices regarding its use varied considerably among the doctors. From the 1890s onwards the importance of housing and better leave conditions were stressed, and after the turn of the century, increasing attention was given to the danger of mosquitoes. The early history of the Overtoun Institution shows that the missionaries' health was secured early on, but it took several years before the African pupils were properly housed against cold climate, which was "healthy" as regards malaria but unhealthy for pneumonia and other chest afflictions. The Livingstonia medical missionaries played an important part in securing the missionary presence in Northern Malawi, providing medical aid not only for missionaries and their families but to all Europeans in the region. The health of the European population of Nyasaland improved considerably after the turn of the century, and as more Government doctors were appointed the medical missionaries could concentrate more on their African practice.

In the early period, medical practice among the Africans served at first the purpose of proving the goodwill, and the healing skill of the missionaries. The main target group were the African leaders, who the missionaries approached as medical advisors. In this, the medical department was largely successful, among the Yao as well as the Tonga, Ngoni and Ngonde. Although the medical missionaries felt their presence was opposed by local healers, its seems that the indigenous medical culture was relatively open and had room for new specialists. Missionaries were quickly recognised for their skills in dentistry and basic surgery. Minor operations played an important part in the missionary tours, during which they spread their influence beyond their bases. After the improvements in roads and introduction of bicycles and motorcycles in the early 1900s, the medical missionaries' touring and emergency aid possibilities increased considerably.

The role of chloroform operations, which the missionaries themselves frequently stressed,

was arguably strong in creating initial reputation for missionary medicine, but in everyday practice, complicated operations were rare, not least because of the missionaries' reluctance to undertake risky operations which might endanger their position, especially if they were among a new tribe. Vaccinations against smallpox, in turn, were of use to greater number of people, and for this skill the missionaries were especially widely recognised during the 1880s and the 1890s. Smallpox was previously known to many tribes, and vaccination procedures were readily accepted. It can be argued that smallpox was the most serious disease the medical missionaries could effectively prevent in proper conditions.

Less successful were the initial missionary attempts to attack African medical and religious customs through medical agency. The Africans readily accepted medical missionaries as an addition to their existing medical framework, but continued to consult indigenous practitioners as well. The experiences of Walter Elmslie in Ngoniland suggest that he was accepted as one medical specialist among the many, who was consulted much as the Ngoni wished. Although medical missionaries took the credit for the abolishment of the poison ordeal among the Tonga, for example, it was probably more due to other factors among the tribe than the beneficial example of the "superior" western medicine. Eventually some medical missionaries, like Elmslie, came to a conclusion that the free treatment the missionaries originally regarded as their duty and a proof for their "unselfish goodwill", actually undermined the appreciation of the medical work. Thereby they advocated the charging of medical fees, which in their opinion would also be morally healthy for their patients, who would otherwise "go idle".

Relationships between medical missionaries and their patients had many potential sources of conflict. Missionaries generally expected their patients to explain their ailments clearly, obey the doctor's orders meticulously, not to trouble the doctor for "trivial" aches and be grateful towards the doctor and the Christianity he represented. This gratefulness was meant to be utilised for healing of the soul, which meant conversion and moral regeneration through Christian society supervised by the missionaries. This ideal was arguably rarely, if ever, realised as such. In reality, the frustrated doctors often ended up accusing some of their patients as "begging medicine-eaters" who had no respect for them. In comparison, practice among the influential chiefs during the pioneer days was felt to be

diplomatically valuable but risky for the doctors' status and even life. In these cases doctors often refused to treat patients if they were not sure of the success, even if the patients showed strong faith in the doctors.

One central problem in the doctor-patient relationship arose from the lack of common language. Even if the doctor had learned sufficiently local languages to converse easily with the patients, a specific understanding of illness must have been problematic. The doctor would not recognise the African terms of illness or traditional medical concepts, and would easily label them as "ignorance and superstition". The patient in turn would have difficulty in understanding many western medical ideas such as medicine that has to be taken regularly in small doses. In many cases the doctors prescribed simple medicines such as mixtures for cold or cough, or indigestion, after a few minutes' discussion with the patient. The efficacy of such practice was not great, especially as the missionaries had little effective medicines against more serious illnesses like pneumonia or syphilis. It is not surprising, therefore, that many medical missionaries were disappointed with their practice with outpatients in the mission dispensary, and sought to build a hospital as soon as possible, to be able to concentrate on the more "serious" medical and surgical work.

The demand for hospitals dominated missionary doctors' reports throughout the 1890s and the early 1900s. Although practically every medical missionary recognised the need for permanent hospitals, it took years before any hospital plans were realised. It can be argued that the hospital question highlighted the differences between the older missionary doctors like Laws and Elmslie and younger, medically more ambitious recruits such as George Prentice. The older doctors and Laws above all, regarded medicine as one of the many tools the mission required, and were more ready to put medical interests aside if necessary, while the younger doctors, who had more medical training and usually less theological education, wanted to specialise in medicine as much as possible in their work. Laws' first priority during the 1890s was the building of a central mission institution for advanced education of the African Christians, and this policy influenced also the medical development of the mission. The Overtoun Institution eventually included the central hospital of the mission, which provided medical care at first primarily for the missionaries and their pupils, and later, after the opening of the David Gordon Memorial Hospital in 1911, became the main medical centre for Northern Malawi. The doctors in other stations

had to do with more modest hospitals, whose operation was often hampered by constant changes in staff.

Though the resources for surgical work were perhaps the most disappointing for recently appointed missionary doctors, surgery remained a strong speciality of missionary medicine in Livingstonia throughout the period under study. It can be argued that in surgery the medical missionaries ultimately felt they were the most successful. Especially cataract operations were a strong demonstration for the surgical skill of the missionaries. In addition, such operations with almost instant beneficial effects could be seen similarly as "miraculous" (or "magical") and "Christlike", satisfying both indigenous and missionary frames of mind. The bulk of the surgical work was however more modest or slow: dentistry and treatment of ulcers and abscesses. Obstetrics remained an important part of medical mission work, although it seems that missionaries were usually consulted only in complicated cases. The popular claims that "African superstitions" would prevent all surgical work and especially obstetrics, were exaggerated. To submit to a alien operation required the patients' trust which would often be obtained only after the doctor had spent some years in the area, learned the language and gained reputation for successful practice.

Operations requiring anaesthetics and prolonged stay in hospital remained relatively rare even after the introduction of permanent mission hospitals in the early 1900s, but gradually more complicated operations were performed, especially after the opening of the David Gordon Memorial Hospital, which had a modern operating theatre, trained staff, running water and electricity. Among the hospital inpatients, the evengelisation aspect of medical work could be stressed more than in outpatient dispensaries, which was a useful argument for hospitals. Daily services were held in the wards and those patients who could read were provided with Christian literature. The hospital ward was regarded as an ideal place for approaching a patient spiritually after curing her physically. In this respect, it was better if the patient remained in hospital for a relatively long time. This missionary point of view did not have to conflict with secular medical opinion, as in many cases it could be stated that it was advisable for a patient to remain under observation for a while.

The African medical assistants, first taught on the job and after the turn of the century, trained in the Overtoun Institution, had a crucial role in the medical mission schemes in

Livingstonia. They took the "trivial" part of the medical work, enabling doctors to concentrate on more "serious" cases, and their assistance made more challenging operations possible. In addition, they were invaluable in approaching the people because of their mastery of local languages and knowledge of Christian principles as well as western medicine. Therefore, the missionaries emphasised the "Christian character" in choosing their students. In this character, obedience and loyalty towards missionaries were deemed crucial. The interests and expectations of medical missionaries and their assistants did not always meet, but their co-operation was an important development in the medical practice during the early 1900s, both in medical and evangelistic respects. Some assistants took part in the missionary scheme, while others preferred leaving the mission for secular medical practice, using their new skills independently. To what extent they adapted the programme of moral regeneration, remains a question.

After the turn of the century, there was a marked change in the medical missionaries' view of illness in Malawi. This was in part due to the spreading of new diseases, notably jigger, tuberculosis and sleeping sickness, to the region. Another reason was that with the new discipline of tropical medicine, diseases like tick fever and ankylostomiasis, endemic in the country, were "found". The medical missionaries followed closely developments in medical science, and the younger doctors took courses on tropical medicine while on furlough in Britain. Microscope (first brought to the country by Laws in the 1880s) became an essential diagnostic tool for missionary doctors. The development in therapeutics did not match the development in diagnostics: for illnesses like sleeping sickness and tick fever the medical missionaries had no cure. Against sleeping sickness the missionaries, George Prentice in particular, advocated various methods of control and containment, blaming also Government policies for the spreading of the disease.

With regard to other health problems, however, the missionaries did not specifically blame Government or imperial economy, at least publicly, although they recognised the role of mining industry in the spreading of tuberculosis in Nyasaland, for example. The medical missionaries co-operated with government authorities against sleeping sickness and smallpox, in particular, and had also ties with European companies and settlers. It seems that they saw the economic and ecological changes caused by colonialism either not particularly harmful for public health, or, to some extent, inevitable. What they clearly

recognised, however, was the need for more medical resources: hospitals, dispensaries, education on preventive medicine, hygiene and sanitation reforms, treatment for mentally ill and so on. Although some of their demands, such as sleeping sickness investigations and the establishment of mental hospitals, were answered, most of their requests for more medical work from the Government's part were frequently thwarted by the reality of public finances.

John Iliffe has argued that the early decades of the 1900s witnessed a change in the Christian missionary charity activity in Africa, with growing emphasis on material aid instead of only spiritual salvation. Action was stressed more than words, healing was increasingly preferred to preaching. To Iliffe, this change is exemplified by the career of Albert Schweitzer, who started his work in Gabon in 1913.497 In Livingstonia, similar trends can be pointed out in the ideas and activities of younger doctors, appointed from the 1890s, who emphasised the role of medical agency as a specialised mission department which should be given more resources and attention for its own sake. It has been argued that the missionaries of the younger generation, both clerical and medical, appointed from the 1890s onwards, were also generally more tolerant and liberal in their attitudes towards African society and custom. It seems that in the attitudes towards "moral diseases" there was change as well. Although Donald and Agnes Fraser, for example, spoke of social diseases and condemned beer-drinking, "immoral" dances and polygamy, they regarded them as unacceptable customs, that could be changed gradually, rather than severe diseases that should be eradicated immediately.498

However, medical work in Livingstonia throughout the period studied, was inseparably connected to evangelicism, education and the comprehensive regeneration programme aiming at moral, mental and physical "elevation" of African people and societies. Many of the problems and complexities of medical mission work arguably arose from the complexities and contradictions within the programme itself. Combining medicine with Christian morality and medical profession with the clerical were essential to medical missionary thinking and activity in Livingstonia, but combining these elements was not always easy or logical. After the turn of the century, the increasingly specialised

⁴⁹⁷ Iliffe 1987, pp. 195-196.

⁴⁹⁸ See, for example, Fraser D. 1927, p. 104.

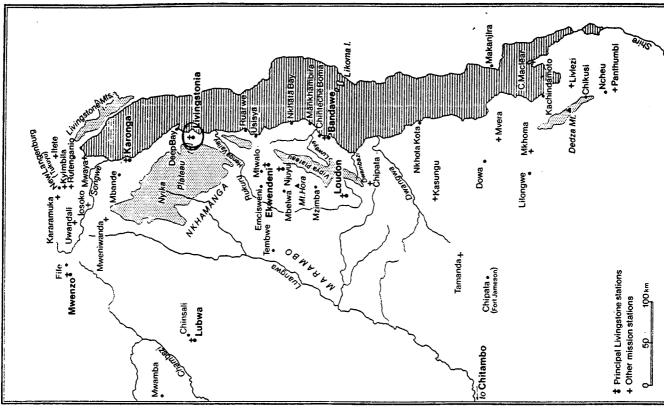
missionary doctors fitted less comfortably in the traditional dual role of physician and priest. In the argument over permanent hospitals, younger doctors challenged the old doctrine which emphasised the role of medicine in securing the missionaries' presence and influence in the country for the evangelical and educational enterprise, demanding more independent and sophisticated practice that would enable the treatment of more challenging and complicated cases.

To what extent the missionary programme of regeneration, and its medical element, found response among African societies, and how the interaction between the missionaries and Africans developed in this respect, is an interesting question that cannot be properly investigated in this thesis. It seems safe to say the responses were varied. How, for example, the Africans interpreted the missionary ideas of moral disease and medicine, which arguably could provide common ground for both Christian, western medical thinking and indigenous medical cultures? General ideas of moral and social diseases were not alien to African societies, but specific pathologisation of beer-drinking, for example, seems to have been hard to comprehend. Although some of the African church members became puritan zealots, the missionaries' prejudiced attacks on African tradition provoked resistance even among Overtoun Institution students. As McCracken has pointed out, some of the most talented Institution students defended polygamy and dancing, secretly if not openly. Some eventually broke off their connection with Livingstonia and established themselves as independent African churchmen.499 In all probability they did not consider polygamy, for example, as a moral or social disease, and refused to take part in the "remedial" practice of the missionaries. A thorough study of the effects of the encounter between Livingstonia medical missionaries and Africans, regarding the actual results and changes in indigenous societies as well as in missionary circles, requires much more attention to African points of view, contexts and sources than has been possible in this thesis.



HODESIA

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Map 2. The Livingstonia mission: sphere of influence

Appendix I: Missionary doctors and nurses appointed to Livingstonia Mission, 1875-1914

Name, medical degree(s)	University/Hospital	Period of service
1.Rev. Robert Laws, M.D.	Aberdeen	Appointed 1875, head of mission from 1877
2.Rev. William Black, M.B.,	C.M. Glasgow F.C. Stipendiate	App. 1875, died 1877 (malarial fever)
3. Rev. James Stewart	Glasgow	In charge 1876-77 (then returned to Lovedale)
3. Jane E. Waterston	Glasgow/Dublin	1879-80 (resigned)
4.Rev. Robert Hannington, M.B., C.M.		1881-82 (invalided)
5. William Scott M.B.,C.M.	Aberdeen	1883-85 (Resigned/invalided for B.W.fever)
6. Rev. Walter A. Elmslie M.B., C.M.	Aberdeen	1884 Ordained 1897.
7. Rev. David Kerr Cross M.B., C.M.	Glasgow	1885-97 (resigned and joined the Administration)
8. Rev. George Henry M.B, C.M.		1887-93 (died of blackwater fever)
9. Rev.George Steele M.B., C.M.	Glasgow	1890-95 (died of B.W. fever)
10. Rev. David Fotheringham M.B., C.M.	n Glasgow	1890-93 (resigned)
11. Rev. George Prentice L.R.C.S.P. (& D.T.M.)	Edinburgh	1894 Ordained 1899.
12. Rev. J.C. Ramsay L.R.C.S.P.	Edinburgh	1896-98 (invalided, B.W. fever)
13. A.W. Roby-Fletcher M.B., C.M.	Edinburgh	1897-98 (died of fever)

14. Margaret McCallum		1897 Married Charles Stuart in 1900.
15. Maria Jackson		1897 Married Malcolm Moffat in 1899.
16. Robert Scott M.B.,C.M.	Glasgow	1898-1900 (resigned)
17. Rev. Frank Innes M.B., C.M., D.T.M.	Aberdeen	1899 Ordained 1903.
18. Rev. James Chisholm L.R.C.P.S., D.T.M.	Edinburgh (Liverpool)	1900 Ordained 1905.
19. Ernest A. Boxer L.R.C.P.S.	Edinburgh	1900-05. (resigned)
20. Agnes Fraser M.B., C.M.	Glasgow	1901-, not appointed, went as missionary's wife
21. Mary J.Fleming		1900-03. (Resigned on health grounds)
22. Miss J. Martin (Honorary nurse)		1900-09. (Retired)
23. Winifred Knight		1901-05. (Married Dr. Boxer 1903, died 1905)
24. Mary Henderson Qualified medical & surgio	Glasgow al nurse, 3 years course at B	1904 arnhill, Glasgow.
25. Alexander Brown M.B., Ch.B., D.T.M.	Aberdeen (Liverpool)	1905-12. (Resigned, asked transfer to India)
26. Mary Ballantyne Certified nurse, Royal Infi	Edinburgh rmary, Edinburgh.	1905
27. Berkeley Robertson M.B., C.M.	Glasgow Ophthalmic Institution	1906-09. (Resigned for health reasons)
28. Rev. William Turner M.B., C.M., D.T.M.	Glasgow	1906
29. Elizabeth Cole Certified nurse, Western In	Glasgow nfirmary, Glasgow.	1909

30. Ruth Livingstone-Wilson Certified nurse.

1914-.

31. Hubert Wilson

Cambridge, Glasgow

1914-.

M.B., C.M., D.T.M.

Abbreviations:

C.M.

Master in Surgery

D.T.M.

Diploma of Tropical Medicine

L.R.C.P.S.

Licentiate of Royal College of Physicians and Surgeons

M.B.

Bachelor of Medicine

M.D.

Doctor of Medicine

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Appendix II: Case analysis by Dr. George Henry of medical and surgical cases treated for the first time during January-November 1889 in Livlezi Valley.

Medical cases

TOTAL

Fever	351	Neurotic Affections	23
Diarrhoea	331	Indigestion	18
Catarrh and Bronchitis	232	Epilepsy	8
Rheumatism	164	Paralysis	2
Colic	136	Dropsy	3
Palpitation and other Heart		Pleurisy	1
affections	45	Phthisis	1
Dysentery	41	Child-birth	1
Constipation	32	TOTAL	933
Surgical Cases Ulcers and Abscesses	398	Burns	8
Skin Diseases	208	Bruises	7
Itch	47	Swollen Joints	7
Leprosy	2	Odema	6
Eye cases	118	Toothache	9
Wounds and Cuts	63	Teeth extracted	3
Bites by Leopards	2	Sprains	4
Ear cases	34	Hernia	2
Inflamed Glands	14	Piles	2

TOTAL MEDICAL AND SURGICAL CASES 2322

____ 1389

Source: Report on Foreign Missions of the Free Church of Scotland for 1889, p. 58.

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Letters from Livingstonia to the secretaries of Foreign Missions Committee of the Free Church of Scotland, 1874-1914

Letters from missionaries and others to Dr. Laws, 1875-1900

Livingstonia Staff-book

Material, mostly printed, concerning Nyasaland 1875-1903

Minute book of the sub-committee of the Livingstonia Mission, 1871-90 and 1894-1895

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