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Leprosy in Zimbabwe

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Summary In Zimbabwe, as in many countries in Africa, leprosy is an endemic disease. The known incidence is approximately 2 cases per 1,000 population and 350 new cases are seen annually.

Many factors have influenced the spread of the disease including the recent bush war but progress in control measures is being made.

Introduction

Zimbabwe covers an area of 390,757km² and is bordered by Zambia, Moçambique, South Africa and Botswana. The country is divided into five provincial areas: Manicaland, Mashonaland, Midlands, Matabeleland and Victoria (Fig. 1).

The last census was taken in 1969, and more recent estimates put the population at 6,625,000, comprising 5,750,000 Blacks, with the remainder Whites, Asians or Coloureds. The Blacks form two predominant groups, each stemming from separate ethnic origins. The numerically superior Shona were the original inhabitants of the area, and the Matebele an off-shoot of the Zulu nation of South Africa.

Situated between the Equator and the Tropic of Capricorn, Zimbabwe experiences a sub-tropical climate owing to the relatively high altitude. A dry season occurs between April and October, and the main rains, delivering a mean annual precipitation of 730.5 mm, fall between November and February.

Politically, the country was administered by the British South Africa Company from 1889 until 1922, when it became a British colony. As Southern Rhodesia it became a member of the ill-fated Federation of Rhodesia and Nyasaland from 1953 until 1963. Assuming the name Rhodesia until 1978, political events saw the change through Zimbabwe-Rhodesia to Zimbabwe, with attainment of legal independence in April 1980.

A bush war engulfed most of the country between 1973 and 1979. During this period, health services were severely disrupted and large numbers of the

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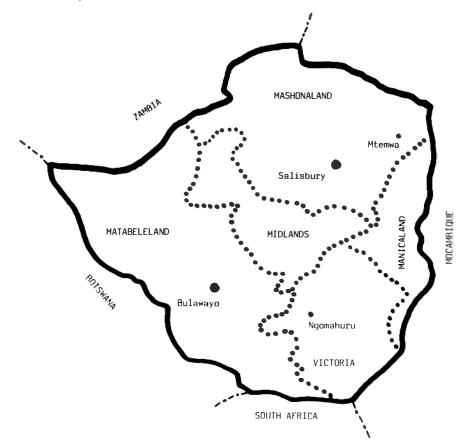


Figure 1. Zimbabwe, showing Provinces and sites of Mtemwa and Ngomahuru Hospitals.

Black population migrated to urban areas or were moved to 'protected villages'.¹ Many fled as refugees to neighbouring countries.

The major health problem is malnutrition and many diseases of microbiological aetiology are present. An expanded vaccination programme is currently being undertaken which hopefully will control, among others, measles and other childhood diseases. Malaria, schistosomiasis and many other parasitic diseases are common. Tuberculosis and typhoid are frequently seen and outbreaks of bubonic plague, cholera and anthrax have occurred.

Leprosy – historical review

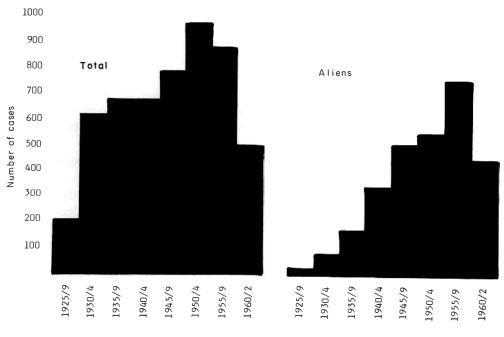
Leprosy is endemic in Zimbabwe. The earliest authenticated reference to the disease is found in the report of the Ministry of Health for 1903, where the District Surgeon for Bulawayo reported 'several cases of leprosy'.

Early statistics of known cases are highly erroneous and reflect the inhumanity of the Leprosy Repression Act of 1919³, and the associated regulations. This required that leprosy patients be detained in asylums and also made provision for legal action against any person 'harbouring a leper' and patients who escaped from an asylum. Undoubtedly, many patients remained in hiding being sheltered by their families and friends.

Two 'leper settlements' were established. One of these, at Ngomahuru in the Victoria District, is now a tuberculosis hospital, and the second, at Mtemwa, still houses 70 welfare patients to-day.

A total of 5,299 patients were admitted to these hospitals during the period 1925–1962. The number of aliens compared to indigenous cases is remarkable (Fig. 2). Many of these people were part of the immigrant labour force employed in mines and on farms and who lost their jobs as a result of the disability caused by the disease. Destitution forced them to seek the protection offered in the settlements. Another contributing factor to the high alien figure is that many were suffering from or incubating the disease when they left their countries of origin (Table 1).

Despite the anathema of the policy of enforced hospitalization, it did permit a statistical evaluation of the geographic distribution of the disease (Table 2),



Year of admission

Figure 2. Comparison of total and alien cases admitted to Mtemwa and Ngomahuru Hospitals 1925–62.

	1925	1930	1935	1940	1945	1950	1955	1960	
Country	-29	-34	-39	_44	-49	-54	-59	-62	Total
Malawi	3	40	88	119	131	152	313	180	1,026
Moçambique	_	18	33	97	189	246	301	182	1,066
Zambia		21	46	107	159	114	93	48	588
Miscellaneous		_	3	3	19	37	36	16	114
Total	3	79	170	326	498	549	743	426	2,794

Table 1. Total alien admissions and countries of origin to Mtemwa and Ngomahuru Hospitals,1925-62

Table 2. Geographic distribution of cases admitted to Mtemwa and Ngomahuru Hospitals 1925-62

Province	1925 	1930 -34	1935 -39	1940 	1945 	1950 54	1955 - 59	$1960 \\ -62$	Total
TTOVINCE	2)	54	57		-+/	-54	-37	02	Total
Manicaland	8	41	65	50	77	111	117	59	528
Mashonaland N.	3	26	119	107	86	208	189	126	864
Mashonaland S.	185	266	185	136	172	195	171	55	1,365
Midlands	2	71	89	130	161	153	100	78	784
Matabeleland N.		9	68	50	66	56	99	88	436
Matabeleland S.		23	44	64	66	60	41	30	328
Victoria	10	191	106	141	145	186	148	67	994
Total	208	627	676	678	773	969	865	503	5,299

ages of onset and sex (Fig. 3) and types of presentation (Fig. 4). The latter is not necessarily a true picture, as many patients had probably suffered from the disease for long periods before admission and their clinical status had changed.

Numerous forms of treatment were used. Chaulmoogra oil, obtained from *Hydnocarpus kurzii* apparently showed encouraging results and the Forestry Department undertook experimental growth of the trees, a project which did not reach fruition.

Sulphetrone, and later dapsone, were introduced into Zimbabwe in the 1950s, and were spectacular in their success in the management of new and established cases. In the erroneous belief that these drugs would dramatically reduce the numbers of cases and that leprosy was no longer a problem, the Ministry of Health withdrew its support from Mtemwa in 1963. Many patients were discharged with no follow-up treatment. Other patients, many badly crippled and for whom no other home existed, remained at Mtemwa under the care of the Department of Social Welfare and were assisted by the Friends of Mtemwa, which later became the Rhodesia Leprosy Association.

A big step forward occurred in 1966 with the abandonment of compulsory hospitalization for all leprosy patients, and the establishment of out-patient treatment clinics. One such facility was the Tropical Diseases Unit at Harare Hospital in Salisbury, which was subsequently enlarged to accommodate 27 designated beds. Ngomahuru finally closed as a leprosy hospital in 1971, and the Leprosy Repression Act was repealed in 1974.

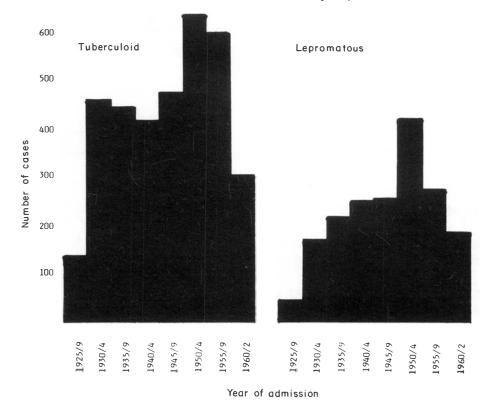


Figure 3. Type of presentation of patients admitted to Mtemwa and Ngomahuru Hospitals, 1925–62.

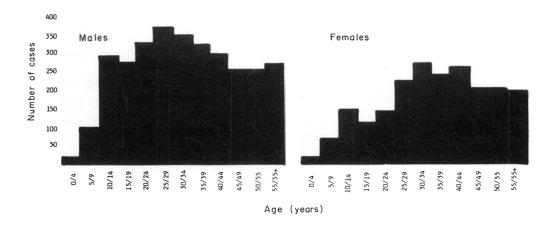


Figure 4. Sex and age of onset of symptoms of patients admitted to Mtemwa and Ngomahuru Hospitals, 1925–62.

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Year	Cases	Year	Cases	Year	Cases
1963	402	1969	228	1975	362
1964	290	1970	411	1976	334
1965	323	1971	467	1977	183
1966	233	1972	547	1978	240
1967	302	1973	445	1979	273
1968	397	1974	455	Total	5,892

Table	2	New	Cases	since	1962
I able	Э.	INCW	cases	since	1902

Leprosy – modern concepts

The numbers of new cases seen since 1962 are shown in Table 3. Undoubtedly, many more cases exist but various factors, including the bush war and failure to recognize symptoms, have contributed to their omission. A review² of 1,523 patients shows that in 31.1% the presenting prodromal symptoms were not skin lesions and that in 35.3% of those presenting with lesions diagnosis would be missed without whole-body examination. Known cases are indexed at Provincial Officer of Health level and regular leprosy review clinics are held in the more remote areas.

Now that the disease is more easily managed, and without the insidious methods of control previously used, many new cases come forward for treatment – often encouraged by family and friends. This trend must be actively pursued in view of the social and geographic upheaval experienced by the population during the war. Unnatural overcrowding in refugee camps and protected villages (established to denude large areas of the country of people who would otherwise feed and shelter guerrilla combatants) could lead to an upsurge in cases in future years.

With much of the overseas aid given since independence being used to redevelop rural areas, the Ministry of Health is training large numbers of community health workers who will play a vital role in early recognition of leprosy and channel patients towards treatment.

Leprosy has a wide geographic variation in Zimbabwe, and some areas produce considerably more patients than others. It is hoped that epidemiological studies currently being undertaken will elucidate this problem and provide a basis for future control measures.

References

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