Towards the Rout of Tuberculosis in Rhodesia

BY

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PART I

THE TALLY, THE TASK AND THE TEAM

The Tally: Recent Trends in Incidence

In a previous paper (Shennan, 1960) an effort was made to trace the history of tuberculosis in Southern Rhodesia up to 1957. By that time the effect of the anti-tuberculous drugs had made itself felt through a profound reduction in case mortality from tuberculosis, but the number of cases reported annually continued to increase at an undiminished rate.

The subsequent six years have shown us the peak and early fall of tuberculosis notification rates (Table I and Fig. 1). It is likely that the figures represent a real reduction, since both notification and case-finding have improved in recent years. However, since the incidence in and around Salisbury and Bulawayo is known to have fallen considerably, it is quite possible that an increase is still occurring in the more

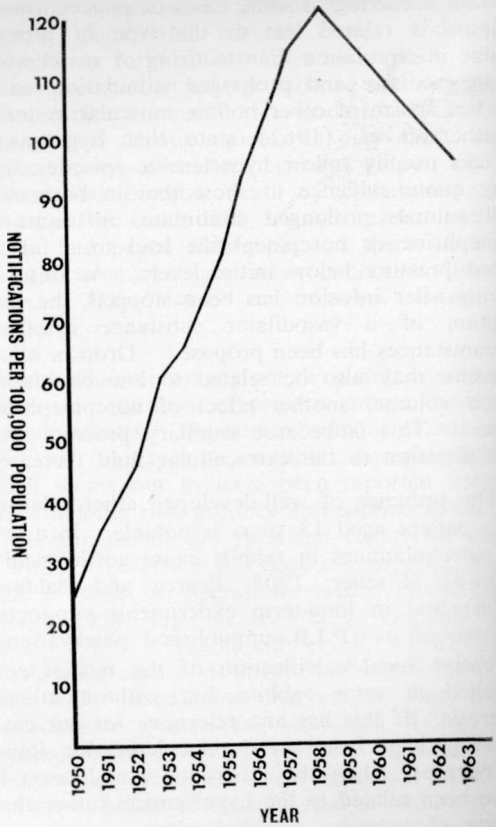
Table I

ANNUAL NOTIFICATIONS OF AFRICAN PULMONARY TUBERCULOSIS CASES, 1950-63

Year	Cases	Cases per 100,000 Population
1950	432	22.8
1951	724	36.0
1952	959	46.3
1953	1,282	61.3
1954	1,456	67.7
1955	1,825	82.2
1956	2,194	95.8
1957	2,513	106.9
1958	2,939	114.6
1959	3,177	120.1
1960	3,347	114.7
1961	3,250	109.8
1962	3,788	102.7
1963	3,608	95.7

FIGURE 1

ANNUAL NOTIFICATION RATES OF PULMONARY TUBERCULOSIS IN AFRICANS, 1950-1963



remote parts of the country. For the overall drop we can thank the anti-tuberculous drugs, and in the next few years we may expect a further contribution to the drop from the increasing amount of BCG-vaccination being done throughout the country.

THE TASK: BASIC AIMS IN TUBERCULOSIS POLICY

A modern anti-tuberculosis campaign must be founded on a simple two-pronged attack directed towards BCG-vaccination of the whole population on the one hand, and on the other towards continuous and prolonged chemotherapy of all active cases. In support of the second object an efficient and controlled treatment scheme is required: once this is established and working well with ill ("free-flow") patients seeking treatment, cases may be sought out and fed into it by means of contact-tracing and mass radiography.

Welfare work and occupational therapy are needed to encourage patients to remain under treatment, and propaganda measures complete the picture by keeping the public informed of the value of BCG-vaccination and mass radiography, and of the danger of active cases. For these services we are mainly dependent on RAPT and other voluntary organisations.

To carry out the whole task we need people of many different backgrounds who have to be united into a single body working effectively.

THE TEAM: TUBERCULOSIS ORGANISATION IN RHODESIA

The tuberculosis service has grown up in a somewhat haphazard manner from the two separate sides of the health service, the preventive and the curative. There is perhaps no other field in which these two are so intimately linked. Our organisation is therefore quite different from that of the chest clinic service in the United Kingdom, where the chest physician takes charge of all preventive and curative tuberculosis work in his area.

Organised tuberculosis work is thus based largely on mutual co-operation rather than on any chain of authority. In fact, those engaged in it are under the administration of such widely diverse parallel bodies as the provincial medical officers of health, the medical superintendents, the leprologist and the headquarters tuberculosis specialist. In addition, a number of non-government bodies are inspanned into the national tuberculosis programme; here again co-operation is the only hope of success. Fortunately this presents few difficulties in our existing set-up and the system works well.

It is convenient to divide the tuberculosis service for descriptive purposes into individual jobs as if each were separate, though in practice one person may do two or three of them.

Central Co-ordination

At headquarters there is a tuberculosis specialist who acts as adviser to the secretary for health on tuberculosis policy. He determines the general direction in which anti-tuberculosis work is to advance within its budget. He co-ordinates work throughout the country, particularly between the preventive and curative sides, and determines what standardised procedures shall be used—for instance, the routine for transfer of patients. He initiates research as far as possible. It is his duty to keep abreast of the literature and to ensure that the country is using the finance available in such a way as to cause the quickest possible drop in the prevalence of tuberculosis.

The Curative Service

In each province there is a tuberculosis officer whose concern is with the curative side of the service. He has his own central tuberculosis unit and also visits all the hospitals treating tuberculosis patients in his province regularly. On these visits he may be consulted about particular patients, and he also advises on administrative procedures to ensure that such matters as notification, the advising of absconders to the provincial MOH, transfers and the keeping of out-patient books are carried out correctly. He is responsible for the clinical care of all out-patients, though he may in some cases delegate the regular holding of a review clinic to a local doctor if the latter is able to undertake the task.

A large proportion of the care of tuberculosis in-patients falls on the medical superintendents and medical officers of general and district hospitals, most of which have tuberculosis units either on the premises or in a dependent rural hospital. Mission hospitals, RAPT and several of the larger municipalities also take a considerable share of this work.

The Preventive Service

The four provincial medical officers of health, one of whom controls two provinces, are responsible, amongst their other duties, for certain vital aspects of tuberculosis work. All BCG

vaccinations are done by their staff. They have to arrange as far as practicable for the X-ray examination of contacts. Absconders from hospital have to be traced and returned. In connection with out-patient treatment, the PMOH and his staff have to keep records of all out-patients and ensure that they report back for treatment and for review at the correct times or soon after. A representative attends every out-patient review session, and all general, district, rural and mission hospitals acting as out-patient treatment centres are visited at least once a month to check on any defaulters from treatment. The PMOHs are in the process of building up comprehensive provincial card-index registers of all tuberculosis patients to ensure overall control. In their offices, also, statistical data such as notifications are collected and analysed. When one of the two mobile radiography units is in a province the PMOH becomes responsible for its administration. He also has to arrange its itinerary, see that its presence is advertised, arrange for the reading of the films and provide transport for subjects who require investigation.

The Cities

Salisbury and Bulawayo municipalities are entirely autonomous for tuberculosis work under their own medical officers of health. This is proper since their health services are naturally well in advance of the country as a whole and their tuberculosis incidence is already greatly reduced. Liaison is therefore only necessary with them over such matters as expenditure of Government funds and the disposal of patients to places outside the cities.

Summary

Recent notification figures, taken with other factors, indicate that there has been a true reduction in the overall incidence rate of tuberculosis cases coming for treatment since 1959. This reduction may, however, be due to the marked fall in the central areas and may not affect the less developed outlying parts.

Our overall policy is to vaccinate as widely as possible against tuberculosis and to discover as many cases as we can and give them prolonged continuous drug treatment.

The medical personnel particularly involved in tuberculosis work include a staff of tuberculosis officers on the curative side and the medical officers of health on the preventive side.

(To be continued)