

SOME PRINCIPLES AND SUGGESTED METHODS OF LEPROSY CONTROL IN EASTERN UGANDA

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The two leprosy sanatoria at Kumi and Ongino at present serve approximately half the Protectorate of Uganda, the population comprising tribes of three distinct racial and language groups, each with a different traditional attitude towards leprosy and different social customs relevant to public health control of the disease. The institutions themselves lack many of the amenities essential to modern leprosy sanatoria—there are, for example, no proper hospital buildings, laboratory or infant creche. Plans for extension of the work into the preventive field have been made subject to the provision of these essentials.

Principles of Leprosy control in a primitive Community.

A leprosy sanatorium of itself can have no influence on the incidence of leprosy in the population it serves unless:—

- (a) The incidence is so low or the population so few that the vast majority of all infective cases can be accommodated in isolation from children.
- (b) The sanatorium becomes the centre for rural preventive work, organising surveys, examining contacts, providing outpatient dispensaries and mass treatment, and disseminating elementary propaganda. The purpose of all these measures is to ensure the isolation either at home (house or night segregation) or in the sanatorium, and the treatment of the infective case at the earliest possible time after recognition of the disease. It cannot be too strongly emphasised that mass treatment alone cannot accomplish this purpose.

It is essential to recognise that in such primitive communities as those with whom we work at Kumi, our first task is to **win their confidence**. If we fail, then the first case which becomes a casualty to injudicious administration of the sulphones will arouse universal hostility to the “White man’s medicine” and his methods. Our successes are forgotten, or ignored, it is our failures which influence public opinion. Not until the people have complete trust in us will they voluntarily practice house segregation, bring child contacts

for regular examination, attend surveys, and report for follow up checks after discharge. To establish such a degree of trust will take years of patient work in intimate contact with the people and their chiefs. For these reasons, it is considered inadvisable to follow the example of the Nigerian system of mass treatment (Garrett, 1951) which could be applied in Uganda only at the expense of neglecting the fundamental principles of preventive medicine. To summarise the practical differences:—

- i. There is no ostracism of the patient with leprosy in Uganda, as in Nigeria. There is therefore no social stigma compelling him to seek early treatment or to segregate himself, if necessary.
- ii. The people are less capable of taking the degree of responsibility necessary to ensure that illicit treatment and a black market in sulphones do not result.
- iii. The general preventive measures, particularly public health education, require much closer supervision by a European-led trained staff.
- iv. The communities are not organised in villages but live in scattered homesteads, so that the Segregation Village, so essential to the mass treatment scheme in Nigeria is not practicable. (Davey, 1940.)

The present situation.

Surveys indicate that in the area served by the Kumi sanatoria there are probably 40,000 cases of leprosy, 10% of which are lepromatous (Ross Innes, 1948). In the immediate vicinity of Kumi a number of intensive surveys have been carried out in small groups of the population and the results indicate an incidence of 47.5 per 1000. (Wheate, 1951.)

In the Mount Elgon area leprosy is rife in the densely populated fertile valleys.

In the North, a Nilotic tribal area, the incidence of leprosy is believed to be rapidly increasing, though statistical proof of this is lacking. We have, however, seen that lepromatous leprosy in Nilotics tends to be of a particularly virulent type, possibly due to a relatively low racial immunity; in addition there is evidence that some communities have a very high incidence—for example, in one school 135 children were examined and 33 were found to have early lesions, nearly all single minor tuberculoids. Similar school surveys in the West Nile District, another Nilotic area, have given the same results. (Hennessey, 1950.)

Three Methods of Rural Leprosy Control.

1. A MASS TREATMENT AND PREVENTIVE SERVICE WITHIN A RADIUS OF 20 TO 30 MILES OF THE LEPROSY INSTITUTION.

This scheme envisages a ring of five dispensaries, each situated 15 to 20 miles from Kumi, and each visited weekly by one member of the European staff and a team of African leprosy dressers. Each member of the European staff will then visit these by rota, so that particular duties, as well as those of general supervision, can be undertaken; the doctor will carry out routine examinations of patients at each dispensary every 6 weeks, the BELRA layworkers will organise surveys, follow up absentees and act as a liaison with the local chiefs at similar intervals. To operate to its fullest extent the scheme requires a permanent resident European staff of five, and its own motor transport.

Buildings will be constructed of the usual local materials by the people themselves, conveniently near to a Chief's Court. The Chief will then be able to assume responsibility for its maintenance and good order, and the official recognition of the scheme will be publicly demonstrated.

Mass Treatment will be given by the sulphones. In general, the choice of sulphone lies between DDS orally and aqueous sulphetrone by injection (Cochrane, 1951) and depends, not only on the tolerance of these particular people to DDS, but also on such factors as the popular reaction to tablets versus injections, ease of administration, cost, risks of abuse of tablets, etc. In this particular scheme, with close European supervision, DDS orally is elected, the dosage regimen being 100 to 600 mgms once weekly with due reduction after absences.

Cost is being met by the African Local Government by an annual grant, provisionally agreed at £500 per annum. This includes the running costs of motor transport.

Numbers treated will average 200 at each dispensary, as a minimum. This means that the per capita cost is 10 shillings per annum for 1000 patients, excluding the cost of the drugs. In addition out patient treatment will be available at the sanatoria.

Policy. As far as vacancies permit all children will be admitted to the Children's Sanatorium at Kumi and all lepromatous adults to the Ongino Sanatorium. Earlier diagnosis is the certain outcome of the African's willingness to attend a dispensary long before he is prepared to risk domestic instability from seeking admission to an institution. Distances between centres of treatment are such that no case of active leprosy in the area covered cannot attend. This

scheme is therefore the most practicable means of demonstrating that leprosy can be controlled and so of encouraging a sane and realistic attitude to the public health problem it now presents to the country.

2. THE RURAL PREVENTIVE UNIT.

This is planned to cover a tribal area remote from the existing leprosy institution, which will share responsibility for its organisation with the Government Medical Service in that District. It will be financed entirely by local African funds.

The scheme comprises:—

1. A staff of one European in charge of a number of African leprosy dressers and nurses, clerk, driver, etc.
2. A Central Unit, consisting of dispensary, office, stores and ward for the treatment of patients requiring temporary hospitalisation. This ward is a useful adjunct to the Government Hospital where there are objections to the treatment of leprosy patients in the general wards.
3. Five dispensaries to be visited weekly by the European in charge and a travelling team, fulfilling the same functions of providing mass treatment by sulphones and undertaking general preventive measures as outlined above.

Administration. Close liaison between the Government Medical Authorities and the leprologist at Kumi is essential. The transfer of cases requiring admission to the sanatorium, and, conversely, those no longer needing residential treatment, must be smoothly arranged.

The Central Unit is so planned and situated as to be capable of development into a small leprosarium if future needs so require.

Cost.

1. Capital Expenditure on permanent buildings (the Central Unit, houses for European and African Staff) will amount to at least £10,000. Motor transport must also be provided.
2. Recurrent Expenditure, including the salaries of both European and African staff, drugs and medical equipment, running costs and depreciation of the motor vehicle will be about £3,600. On a basis, as in Scheme 1, of 200 patients per treatment centre, this represents £3 per capita. It is, however, obvious that the scheme is elastic and can cater for many more than 200 patients per dispensary, with the additional cost only of the drugs given and perhaps the salary of one African dresser per 500 additional patients.

3. THE " SATELLITE SETTLEMENT."

This is a modification to meet particular local needs of the Nigerian Segregation Village and is being operated in a Nilotic tribal district, 200 miles from Kumi. This tribe has recently passed Local Government legislation requiring the house isolation of every case of leprosy certified by a Medical Officer to be infectious. The strong clan loyalty and absence of social stigma attaching to leprosy among these people fortunately preclude the possibility of results all too well known in other countries practising compulsory isolation.

The patients who have to comply with this bye-law have only one means of obtaining treatment, namely the Kumi Sanatoria, 200 miles away and the demand has far exceeded the supply of available accommodation and funds. The " Satellite Settlement " is an attempt on the part of the Local African Authority to provide an additional treatment centre. Initially, it will cater for only 30 resident lepomatous cases. It will be under the direct control of the Government Medical Officer in that district, who will provide the African medical staff required. In conjunction with the Settlement, several rural Government dispensaries are treating cases of leprosy as outpatients. This scheme is still in embryo. Ultimately, it is planned that a European Leprosy Control Officer be appointed to assist the Government Medical Officer in mass treatment and preventive measures and that its African medical staff be given a thorough training in leprosy at Kumi. A Rural Preventive Unit, basically similar to that already described will then emerge, having as its centre an established small leprosarium instead of a dispensary-cum-ward, and utilising the existing Government dispensary service instead of creating its own.

It should be emphasised that such a scheme is possible only because of the great public demand for leprosy treatment centres nearer than 200 miles away. These people have been aroused to the menace of this disease in their midst; they will tolerate neither inactivity on the part of the European medical authorities nor abuses on that of their African subordinates. A looser degree of European supervision is therefore safe, but it is advisable to use aqueous sulphetrone as the mass therapeutic agent in this instance.

The cost of this scheme is shared between the Government Medical Service and the African Local Authority, the former providing African medical personnel and drugs, the latter building the Settlement and meeting its maintenance costs.

SUMMARY

Three methods of rural leprosy control, based on a leprosy

sanatorium, are described. Each is organised to meet the varying needs and conditions of different parts of Uganda. The common factors between them and the principles upon which they are planned are:—

1. Mass treatment, to be effective, must be accompanied by general preventive measures.
2. Provision for the isolation of the infective case, the most important of these preventive measures.
3. Full time European supervision is essential in all but an embryo scheme.
4. The acceptance by the African Local Authority of financial responsibility for the schemes.
5. Close co-operation between the Government Medical Service and the parent leprosy institution.

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