## THE MAKOGAI SANDWICH\*

The following is the procedure in Fiji regarding the distribution of maintenance doses of sulphone tablets to patients discharged from Makogai Leprosy Hospital as arrested, and their review.

Patients who have been discharged from the Leprosy Hospital, and are resident in Fiji, come under the provisions of the Leper (conditional discharge) Regulations which provide for their periodical examination and imposes on them a duty to report to the medical authorities at stated times for examination.

For the first three years after the date of their discharge from hospital they are seen every three months. For the next three years they are seen every six months, and after that they are examined annually as long as they remain in the Colony.

At each examination, in addition to the usual clinical scrutiny, a "slit smear" is taken on a microscope slide after each twelve

<sup>\*</sup> Extract from letter to Colonial Office from the Director of Medical Services, Suva, Fiji, dated 2.11.55.

months, and the slide is forwarded to the pathologist in the Central Laboratory in Suva for staining and examination. A copy of the report goes to the medical authority making the examination, and a copy is sent to the Central Leprosy Registry in Suva.

The Central Leprosy Registry maintains a full record of each discharged patient, and assumes the duty of tracing patients whereever they may be, and bringing them to review. In a population scattered over more than 100 islands, this is a task of some difficulty, but the success of the scheme is indicated by the fact that out of 511 patients discharged from hospital and assumed to be still living, only thirteen have become untraceable. And even these " untraceable " patients are not regarded as being wholly lost because continuous searching eventually finds them or establishes that they have died.

The treatment of discharged patients is now standardised at the exhibition of two tablets of "Avlosulfon" (DDS) weekly, giving a weekly dose of 0.2 grams. The tablets are issued in batches of 8 (one month's supply), and on starting this scheme it became at once apparent that one could not simply hand out to a patient 8 small tablets and expect him to take them home and swallow two a week. The question of packaging was important so as to secure that the tablets were ready for consumption on the recommended dates. Also, it was considered important to keep an unequivocal record both of the issue to the patient of a small quantity of sulphone, and of the issue to junior medical personnel of larger stocks of this drug. It was thought advisable to take steps to secure that junior medical staff should not have available to them, under conditions insusceptible of control, large stocks of drugs which might be used in the private illicit treatment of undisclosed leprosy.

The "Makogai Sandwich" was therefore devised and is manufactured in quantity by the junior staff of the Central Leprosy Registry. The Sandwiches are issued to medical staff in packages of 10 Sandwiches. Each Sandwich is serially numbered and a record is made of the issue of these numbers to a particular medical station. When medical staff see a discharged leprosy patient (and patients are instructed to report each month to their appropriate medical station), they issue that patient with one Sandwich. At the same time the medical station fills in the printed label which forms part of the Sandwich cover. This states the name, address and serial number of the patient to whom the drug is given, and also the answers to four questions aimed at revealing any toxic reaction to the exhibition of the drug. The patient is told to take the Sandwich away, and poke a stick through one hole on Sunday and swallow the tablet which comes out. This process is repeated every Sunday and Wednesday until the Sandwich is finished, when the patient returns to the medical station for re-examination and the issue of a new Sandwich. This process is continued for three years from the date of discharge, and the exhibition of sulphone is then to be discontinued. (This system is now in its third year).

We propose in the case of each patient who has taken sulphone in this way for three years, to leave a period of at least one year when no sulphones will be taken, so that an estimate can be made of the risk (if any) of recurrence of the disease if the maintenance dose of sulphone is stopped after three years.

The label from the "Makogai Sandwich" is returned by medical staff to the Registry and the information is incorporated into records.

- (I) A card is kept of each particular patient so as to see with what regularity each patient attends to receive his Sandwich. Continual scrutiny of these cards makes it possible to note any lapses, and to send out reminders to medical staff to get the patient in for re-issue of the drug.
- (2) A record is made of the issue of packets of Sandwiches to each medical station, and when it is observed, from this record, that a station's stock is exhausted from 50 per cent to 90 per cent, according to the distance from the Central Registry, and the estimated rate of consumption of Sandwiches, a new supply of Sandwiches is automatically sent out by the Registry to that station. Medical staff in the country, therefore, are relieved from the burden of attending to their stock in hand of sulphones.

In our experience with patients on the above *maintenance dose*. it has not been necessary to issue concurrent iron medication against anaemia.

Now that it has been shown, under the pragmatic test over almost three years, that the central control is effective, although known contacts of new cases of leprosy are examined when the case is discovered, we now propose to go on to the next stage in the control of leprosy; the follow-up of all family contacts over an extended period. This, of course, is an undertaking rather larger than that of the original Registry. It remains to be seen how far existing staff and facilities can bring this about. It is felt, however, with Rogers (Lancet, July 9th, 1955, page 80), that the survey of contacts is to be placed high among the desirable methods for the eradication of leprosy.