by the 1960's received increased attention and effort.

In a recent report on leprosy in China (Lepr. Rev. **51** [1980] 29–33), the late Dr. James Maxwell is credited with having estimated that there were two million cases of leprosy in China. However, in his textbook (*Leprosy, A Practical Textbook for use in China,* Shanghai, 1937, Chapter 1), he noted that if attention was directed to clearly evident leprosy, a reasonable estimate was probably about 300,000 cases. If one considered all cases, including early, not readily diagnosed instances, then the estimate might be one million cases. The estimate of one million cases was then, and continued to be, the usually given prevalent figure. Present workers in China say this was too high, perhaps thinking in terms of readily evident cases.

Pre-1950, it was generally held that Kwangtung Province, in the extreme south, had approximately 100,000 cases. The Kwangtung authorities agree that this was a reasonably correct estimate. Their estimate in 1980 was that there are now 40,000 instances. This is a significant decrease which is supported by the chart of the sequential annual incidence figures for 21 years. This decline in incidence is compatible with charts previously presented in this journal for other areas (Int. J. Lepr. **43** [1975] 145–148; **48** [1980] 71–73). It was indicated that a similar decline in leprosy has taken place in other provinces, notably Shantung, Kiangsi, and Fukien. In West China, leprosy work, which in China is generally the responsibility of the Provincial Health Services, has perhaps not been as effective as in these provinces. Attention is being paid to improve the overall efforts. It seems evident that persistent efforts are being made to control this disease and that there is, on the whole, a significant decline in incidence resulting from treatment abetted by improved and more uniform standards of living.

During the "Cultural Revolution" (1966–1976), there was much disruption in the medical work of the country but the leprosy workers managed to continue their efforts and the decline in leprosy incidence was unbroken. Perhaps the fear of leprosy and the opprobrium associated with the disease played a role in protecting the leprosy services.

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Rifampin 1200 mg Once Monthly Together With Daily Lamprene® and Dapsone in Treatment of Refactory Patients with Lepromatous Leprosy

To the Editor:

We found the paper by J. Languillon, S. J. Yawalkar, and A. C. McDougall, published in the March 1979 issue of your journal[1] interesting because it revealed for the first time the practical value of a once-monthly 1200 mg single dose rifampin schedule in the treatment of patients with lepromatous leprosy. The once-monthly rifampin administration, besides being effective and economical, facilitates patient compliance even for beggar patients. We therefore conducted through A.M.G. (India) International a trial with a triple-drug regimen, including a once-monthly 1200 mg rifampin schedule, in our leprosy facility, whose patients go out into the public for begging. This communication incorporates the results of this trial.

After screening 2400 patients, refactory patients with long-standing lepromatous leprosy suffering from recurrent lepra (ENL) reactions and not improving on 100 mg daily dapsone monotherapy (problem cases), were selected for this trial. The evaluable trial population comprised 73 pa-

tients ranging in age from 13 to 60 years and included 14 females. The patients received the following treatment:

1) Dapsone—100 mg orally once daily
2) Lamprene® (Geigy)—200 mg daily for the first 2 to 3 weeks, followed by 100 mg daily
3) Rifampin (Rimactane® Ciba)—1200 mg in a single oral dose given under supervision once monthly.

The trial population included one 13 year-old patient who received 600 mg (instead of 1200 mg) Rimactane® once monthly. The treatment was started when the routine blood and urine examinations revealed normal findings. The duration of the trial treatment was four months, and the patients were treated further with dapsone monotherapy.

Skin smears were taken for bacteriologic (BI) and morphologic (MI) indexes by the slit and scrape method each time from six selected sites, including the active lesions, fingers, and ear lobes. After averaging the scores of all the six smears taken from a patient at the same time, the mean BI and MI values thus obtained were recorded. The skin smears and clinical examinations were repeated at monthly intervals. The BI assessments were performed according to Ridley's scale.

Clinical improvement and bacteriologic regression indicated by decreases in the BI and MI of the skin smears were very satisfactory. Clinical improvement observed at the end of 4 months' treatment was marked in 53 (73%), moderate in 17 (23%), and poor in 3 (4%) patients. The MI averages of the skin smears reached zero in 60 patients and came near to zero, namely less than two, in the remaining 13 patients within 4 months' treatment. The average pretreatment BI of the skin smears was 4.5. Following 4 months' treatment with the aforementioned triple-drug regime, the average decrease in the BI of the skin smears was 1.6.

Although the trial population consisted of patients with refactory lepra reactions, the trial treatment was in general fairly well tolerated. The following adverse effects were reported in 12 of the 73 patients treated. Ten patients continued getting ENL reactions during the trial period, but these, being less severe than before, did not lead to interruption of the trial treatment. Another patient complained of joint pains and had ulnar neuritis. One patient has attacks of fever ("flu" syndrome?) lasting for 1 to 2 days each time after taking the monthly dose of rifampin. These attacks of fever were not accompanied by ENL and also did not interfere with the treatment. The trial treatment did not lead to anuria, oliguria, hemolytic anemia, thrombocytopenic purpura, dyspnea, or anaphylactic shock.

We found the aforementioned triple-drug regime (including a once-monthly 1200 mg rifampin schedule) very effective, reasonably safe, and fairly economical for treating our difficult cases of lepromatous leprosy. It provided a practical solution to our problem of treating wandering begging patients who return to the colony once a month.

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REFERENCES

1. Languillon, J., Yawalkar, S. J. and McDougall, A. C. Therapeutic effects of adding Rimactane® (Rifampicin) 450 mg daily or 1200 mg once monthly in a single dose to dapsone 50 mg daily in patients with lepromatous leprosy. Int. J. Lepr. **47** (1979) 37–43.