CORRESPONDENCE

This department is for the publication of informal communications that are of interest because they are informative and stimulating, and for the discussion of controversial matters. The mandate of this JOURNAL is to disseminate information relating to leprosy in particular and also other mycobacterial diseases. Dissident comment or interpretation on published research is of course valid, but personality attacks on individuals would seem unnecessary. Political comments, valid or not, also are unwelcome. They might result in interference with the distribution of the JOURNAL and thus interfere with its prime purpose.

About Reactivation of the Anti-Hansenian Programs Through Early Detection of Patients and Systematic Multidrug Therapy

TO THE EDITOR:

Leprosy is characterized by a relatively long initial phase which, most of the time, manifests itself by dermatological symptoms. This is followed by an exceptionally slow-developing phase characterized by multineuritis, which can result in deformities and other sequelae which are largely responsible for making it a serious disease.

We think, therefore, that the initial stage of the disease in countries where it is highly prevalent is what should claim a major portion of the attention of the services and organizations involved in the anti-hansenian efforts.

For some 10 years now, the fight against leprosy has progressed and must have benefitted from an effective weapon: rifampin in multidrug therapy (MDT) according to the schedules recommended by the World Health Organization (WHO) in 1981. Still, it is necessary at all cost to reach the patients in time, that is, when they need a powerful bactericide capable of arresting the progress of the disease while it is still possible, particularly in the numerous borderline tuberculoid forms (more than 50% of registered patients) which have an awesome evolution.

In fact, the data collected from the most recent international conference on leprosy in Africa (Brazzaville, November 1989), sponsored by the WHO, show that only 27% of the patients in the Central African states and only 7% in West Africa get the benefit of MDT nearly 10 years after the WHO recommended MDT for the treatment of all hansenians. This situation is quite distressing.

The various epidemiological studies done recently by the Organization for the Coordination of the Fight Against Great Epidemics in Central Africa (OCEAC) in Cameroon, Congo, Gabon and Centrafrica have, unfortunately, confirmed the surveys done in recent years. In short, the real incidence of leprosy in those Central African countries reaches or exceeds 10‰ and the rates of detection revealed in these surveys are 3.6‰ for Gabon and rural Cameroon, and reach 8.4‰ in the Republic of Central Africa. Those rates of incidence and, more importantly, of detection obtained by the surveys with the methods of group sampling, following the techniques of the WHO, are extremely high and rather dismaying. They bring into question all of the strategies of the national services in the fight against Hansen's disease in those regions.

In short, the true number of existing patients with leprosy is at least twice that shown in the national records of "known patients." Real and effective liaison never did take place between the old specialized and mobile units, most of which no longer exist, and the horizontal structures of primary health care, theoretically in charge of carrying on the anti-hansenian programs. The present inadequacy of the antileprosy strug-

gle is unfortunate and serious. This situation signals the partial failure of the anti-hansenian strategy as practiced for about 15 years in French-speaking Africa, based on general health services. (We have already formulated similar proposals to this point in an article published in French in *Acta Leprologica* 7:351, 1991, 36 references.)

Given the complexity of the work to be done in the field, the logistical means needed, and the planning necessary for long-term action, it is imperative to set up a system of specific care, specialized, mobile and operational, under the direction of a physician, responsible at the national level not only for the technical operation of the system but also for the financial accounting of the various units. After a few years devoted to the detection and early treatment of thousands of cases, especially in rural zones, this system would complement and shore up the general health services until a progressive and effective transition can be contemplated, at a later date, to a plan that would eventually take complete control of an epidemic on the way to extinction. We have demonstrated elsewhere the major importance of this aggressive strategy.

We must emphasize that such anti-hansenian programs can be effective only if there is an increased awareness and complete motivation at each national level. Motivation is too often overlooked. In spite of their vertical approach, the success of these programs depends on the will to succeed of all responsible parties, be they political, administrative, private or parochial, and on vigorous action by all sanitary services. In the final analysis, the fight against leprosy, down to its least detail, is the business of all countries. It cannot remain the stereotypical effort of cumbersome structures that are impersonal, supernational, as if they are "part of the landscape," or of vague "help," and considered humanitarian for a disease that is perennial and immutable.

The constraints and method of operational and dynamic application of multidrug therapy have been amply studied and publicized. They need not be dwelt upon here. As for the necessary means, the funds now allotted by ILEP seem adequate, especially if they are assigned on a priority basis to the early treatment of leprosy, thus displacing the "charity budget" for cripples, as for instance in the Emmaus-Suisse aid to the antileprosy fight in Centrafrica, which may be taken as a model. The key idea here is that the care provider must go to the patient, not the other way around. That idea has been postulated already by Jamot, in his time.

The practical goals to be reached in the field are: a) a systematic medical visit, at least annually, of rural and urban communities, particularly scholar communities, in the whole national territory involved; b) a careful investigation, repeated at regular intervals, of contacts of new cases (more than 50% of cases have a family history); c) treatment of patients with MDT in monthly sessions in urban zones and in regular monthly automobile rounds in rural or nomad zones, and that, regardless of the treatment scheme employed; d) eventual application of "starter" MDT treatment of cases of bacilli carriers, temporarily and freely hospitalized in sanitary settings; e) careful observation of treated patients, looking for relapses and early detection of crippling cases.

Note that the failure of the present methods used in the fight against leprosy is becoming more and more apparent. Many epidemiologists and field practitioners would like to see the implementation of vertical or mixed services, that is, in part specialized and mobile, to overcome certain tropical endemics (leprosy, trypanosomiasis, etc.) and to carry on antivectorial efforts in general. Right now a few countries are introducing or reinforcing such services to promote the success of their antileprosy programs. Among others, they are Tunisia, Togo, Benin, Zaire, Centrafrica, and other countries of Central Africa.

In conclusion, we stress the economic aspect of antileprosy campaigns which is now paramount since it is not at all certain that international or charitable organizations can carry the long-term burden of today's high care costs. It would be preferable to devote our resources on a priority basis to finance the rapid and early diagnosis and immediate treatment of leprosy, particularly in children where it is readily curable without serious and costly sequelae. The gains thus realized over the process of rehabilitation and surgery associated with more advanced

leprosy would be enormous. They could be reallocated to programs of diagnosis, treatment, follow up, and prevention of cases.

It is time for organizations and societies engaged in aid to leprosy patients to accept and facilitate the implementation of systematic, aggressive and permanent systems for combatting leprosy in its initial stage where we think it is possible to cure, in the decade of the 1990s, every patient, thanks to MDT, and to save that patient from the prejudice and stigma of leprosy in its advanced phase. Leprosy would then truly become a disease "like any other." Above all, the patients would really regain hope and dignity, with an effective and long-lasting cure.

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Modification of Multidrug Treatment of Leprosy in Vanuatu

TO THE EDITOR:

Side effects of leprosy treatment with dapsone are said to be uncommon ([2]), but we recently reported a very high incidence of the dapsone (DDS) or sulfone syndrome in Vanuatu ([4]).

During the years 1988 to 1991, 9 leprosy patients in Vanuatu developed the dapsone syndrome and 4 of them died. During this 4-year period only 37 patients were started on leprosy treatment, an incidence of the dapsone syndrome of 24% with a fatality rate of 11%. All of the patients were given multidrug therapy (MDT) of daily dapsone (100 mg) and clofazimine (50 mg) and monthly rifampin (600 mg) and clofazimine (300 mg).

We have discussed the possible reasons for a high incidence of reactions in Vanuatu ([4]). We thought the apparent increase in the number of dapsone reactions in Vanuatu since MDT was introduced was probably due to the high starting dose of 100 mg of dapsone, possibly enhanced by the combination with clofazimine and rifampin and also due to a genetic susceptibility of Melanesians.

Dapsone reactions are seen fairly frequently in Australian Aborigines (personal communication, Dr. J. C. Hargrave, 1991), and there have been several reports of dapsone reactions from Papua New Guinea (PNG). Two brothers in PNG both developed the dapsone syndrome during leprosy treatment ([1]), and a rash developed in 4.6% of a series of 108 new cases of leprosy treated with dapsone in Port Moresby, PNG ([3]). An increased incidence of dapsone reactions since the introduction of MDT has also been reported in non-Melanesians ([5]).

Because of these frequent reactions, we had proposed to admit all leprosy patients in Vanuatu for the first 2 months of treatment. As a result we thought reactions would be picked up earlier and treatment could then be stopped, hopefully lessening the severity and likelihood of fatal reactions. We had also decided to start dapsone in a dosage of 50 mg daily, and increase the dose after 1 month. It was later decided to stop using dapsone in paucibacillary cases and to substitute daily clofazimine in its place.

However, there has been another death from a dapsone reaction in Vanuatu in a multibacillary leprosy case: A 72-year-old woman was admitted to the Northern District Hospital in Santo on 31 March 1992 with heart failure. She was noted to have facial and ear swelling. Skin smears were positive and on 10 April 1992 she was started on MDT. Unfortunately she was given dapsone in a dose of 100 mg daily. On 14 May 1992 she became feverish and unwell. The family requested her discharge and she went home off all treatment. She was brought back to the hospital on 19 May 1992 deeply jaundiced. Steroids were started but she died 2 days later on 21 May 1992.