

PROTECTIVE FOOTWEAR FOR LEPROSY PATIENTS WITH SOLE SENSORY LOSS OR ULCERATION OF THE FOOT

Sir,

For many years it has been accepted that the management of patients with sole sensory loss and/or ulceration of the foot must include the wearing of suitable protective footwear, usually on a lifetime basis. This advice appears in publications from the World Health Organisation^{1,2} and is included in recent guidelines from the International Federation of Anti-Leprosy Association (ILEP): *Prevention of Disability. Guidelines for Leprosy Control Programmes*.³ At the recent 14th International Leprosy Congress in Orlando, Florida⁴ a number of papers supported this view and many different types of protective footwear were on display.

In this Institute, the need for protective footwear has long been recognized and our staff includes a full-time shoemaker with appropriate tools and equipment. During the past 10 years, we have attempted to provide a pair of shoes made from microcellular rubber, tyre soles and soft leather straps, for all patients with significant sole sensory loss or ulceration of the foot. They have been instructed in the proper care and use of the shoes and on the need to report back when repair is needed, as also on the self-care of their feet, essentially as described in the above ILEP document.

We have recently reviewed our results with regard to footwear, with particular attention to the provision of 158 pairs of shoes during the past 4 years, including the necessary repair services. The results have been far from satisfactory. Enquiries amongst our health staff and social workers have revealed that many patients do not wear the shoes once they leave hospital, whilst others wear them for a short time and then discard them, or fail to report back when repair is obviously needed. Our re-admission rate for foot ulceration is high, doubtless related to deficiencies in self-care and the proper use of shoes. Interestingly enough, however, there are a number of patients who, from their own account and from the observations of field workers, have used the shoes as directed, thus suggesting that footwear does not give protection under all circumstances.

We have discussed the possible reasons for these disappointing results with staff members and come to the conclusion that there are, at least in this part of India, a number of factors which seriously undermine the potential effectiveness of the advised strategy. These include:

Design. The 'MCR design' has been shown to be technically satisfactory in many parts of India and elsewhere, but the use of such shoes in a village is unusual in that they do not resemble

footwear which is locally available, thus tending to identify people as leprosy patients. Closely allied to this is the next factor.

Customs, traditions. In general, people in villages in India do not wear shoes of any kind and in the case of females, the wearing of shoes in front of elders is unacceptable. Furthermore, women spend a great deal of the day around, or in the house, where shoes are never worn.

Occupation. Because 76% of the Indian population lives in villages⁵ and many work with rice, paddy, sugarcane or other crops, where they are frequently ankle-deep in muddy water, it is unrealistic to advise patients to wear protective footwear under such circumstances.

Maintenance and repair. Under the rough conditions of village life and the distances many of our patients have to walk from their house to any health facility, standard MCR shoes do not last more than 6 months in this area, often less. Apart from the distances and transport costs which may be involved, repair or replacement of shoes involves delay and possibly the need for a second visit.

'Release from treatment'. The release of patients from treatment following satisfactory courses of multiple drug therapy of relatively short duration has, understandably, given many of them the impression that the disease is cured and that further self-care and follow-up are unnecessary; they become overconfident and tend to forget or ignore the advice we have given concerning foot inspection, soaking and the use of protective footwear.

As seen in this area and from this Institute, we reluctantly conclude that the advised policy of providing protective footwear to patients in need and of ensuring that they continue to use it on a long-term basis is both unsuccessful and unrealistic. Our impression is that it works no better in other parts of this State. Furthermore, the experience of those who have taken part in successive Independent Evaluations of the National Leprosy Eradication Programme in India⁶ confirms that many patients are still being admitted, at considerable cost, to Temporary Hospitalization Wards (there are nearly 300 of them in the country) or other medical facilities for recurrent ulceration, but without an effective programme for the provision of protective footwear. We judge the problem to lie mainly with the strategy and the providers, rather than with the patient, but it is disconcerting to record that no obvious solution seems to be forthcoming. Better results might be obtained by markedly increasing the input of time, effort and money but, as shown by Becx-Bleumink, based on experience in Ethiopia,⁷ it is extremely doubtful if this would be justifiable. This is certainly likely to be the case in India, where many thousands of patients are still in need of multiple drug therapy. Meanwhile, we are investigating the potential of an intensified programme of education of patients in self-care and the identification of measures which can be taken at village level, such as the use of zinc oxide plaster for wounds, cracks and ulcers,^{8,9} to minimize further damage to the insensitive or ulcerated foot. We would welcome an exchange of views from others who have encountered similar problems in rural communities.

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