

## Letters to the Editor

### **COMMENT: IMPLEMENTING MULTIDRUG THERAPY IN AREAS NOT COVERED BY THE HEALTH SERVICES—SOME EXPERIENCES FROM CHAD**

Sir,

After reading the article by Ahmed & El Tahir<sup>2</sup> in *Leprosy Review* we would like to share our experiences in Chad.

The Guéra Prefecture, located in central Chad, covers a population of 300,000 scattered over an area of 60,000 km<sup>2</sup>. Health services are poor, only 12 out of 32 designated health zones are covered by the health services. Even where health facilities exist, the quality of health care is often poor due to the lack of qualified staff. In addition to poor health service coverage, communications constitute a major problem. Large parts of the Prefecture are inaccessible during the rainy season.

The Guéra Leprosy and Disability Control Project (funded by The Leprosy Mission) has taken an active role in implementing multidrug therapy (MDT) within the framework of the National Leprosy Control Programme of Chad.<sup>1</sup> MDT was introduced in the Guéra in 1992. From 1992 to 1996, 545 patients (233 MB, 312 PB) have been put on MDT.

#### **Methods**

The introduction of MDT in the zones covered by the health services was completed in 1994. Extension of leprosy control to zones not covered by the health services commenced in 1995. This is done using an approach similar to the one described by Ahmed & El Tahir.<sup>2</sup> All the villages within a health zone are systematically visited on at least two occasions for health education about leprosy by a nonmedical worker who has been specifically trained for the task.

Meetings are held with the village headman and village elders. The following topics are addressed in the form of a guided discussion: signs and symptoms of leprosy, the availability of drugs that can cure the disease, and the importance of early detection and treatment. The village leaders are asked to encourage suspected cases to come forward and a list is established.

On a subsequent visit by the leprosy supervisor, the suspected cases are examined. Where the diagnosis is confirmed, a skin smear is done for classification and patients are put on MDT following the guidelines of the National Leprosy Control Programme.<sup>1</sup> Treatment is given in blister packs. If regular visits by the nonmedical worker are not possible, the village elders designate a person who keeps a small stock of MDT blister packs and is responsible for the monthly distribution. The leprosy supervisor visits the area about once every three months for a review of the patients and to verify that drugs have been taken correctly.

#### **Results**

In 1995–96 patients were put on treatment in six zones (Abrèche, Djilmi, Gassara, Katalok, Magnam and Mokofi), covering a population of approximately 45,000. A total of 133 villages were visited.

Eighty-one patients (20 MB, 61 PB) were put on MDT. Of these, 56 (69%) were new cases who had never been treated before (Table 1), 70% of all the patients were women (Table 2). Among the new

**Table 1.** Number of cases put on MDT in 1995 and 1996, all cases and new cases

	All cases			New cases			
	MB	PB	Total	MB	PB	Total	% of all
1995	13	39	52	9	24	33	63%
1996	7	22	59	5	18	23	79%
Total	20	61	81	14	42	56	69%

**Table 2.** Distribution of cases by gender

	All cases				New cases			
	MB	PB	Total	%	MB	PB	Total	%
Women	9	48	57	70%	7	36	43	77%
Men	11	13	24	30%	7	6	13	23%
Total	20	61	81		14	42	56	

**Table 3.** WHO disability grade among new cases

	MB	PB	Total	%
Grade 0	4	25	29	52%
Grade 1	0	4	4	7%
Grade 2	10	13	23	41%
Total	14	42	56	

**Table 4.** Duration of disease before diagnosis (new cases),  $n = 56$ 

<1 year	4	7%
1-5 years	21	38%
>5 years	31	55%

**Table 5.** Treatment completion rates (PB) and regularity (MB), 1995

	MB	PB
Put on MDT	13	39
Completed MDT (PB)		35
Regular (MB)	11	
% regular/completed	85%	90%

cases we found 5 children under 15 (2 MB, 3 PB). Twenty-three percent (41%) of the new cases had WHO Grade II disability on diagnosis (Table 3). Four (7%) reported that they had first noticed signs of leprosy less than a year before diagnosis, 21 (38%) had noticed the disease 1–5 years prior to diagnosis and 31 (55%) said they had been ill for more than 5 years (Table 4).

Of the 52 patients (13 MB, 39 PB) put on treatment in 1995, 35 (90%) of the PB cases have completed their treatment and 11 (85%) of the MB cases are regular, i.e. they have taken at least two out of three monthly doses (Table 5).

## Conclusions

Our results support Ahmet and El Tahir's<sup>2</sup> conclusion that involvement of community leaders in the field of leprosy is very important and that with their help MDT can effectively be implemented in areas where there is no health service coverage. This can be seen particularly in the high treatment completion rates and the low defaulter rates. However there are a number of striking differences:

The MB:PB ratios observed differ considerably (20% MB in Chad compared to 74% in Sudan). This may be accounted for in part by the fact that different classification systems (skin smear vs. clinical classification) were used.

There is a marked difference in the male:female ratios observed (44% women in Sudan compared to 70% in Chad). The relatively high proportion of women among our patients has been a constant feature in our programme since the introduction of MDT in 1992. We are not sure whether this reflects the epidemiological situation or must be attributed to other factors.

Disability rates among our patients are very high, with 41% of the new cases presenting WHO Grade II disabilities on diagnosis. This may be due to: the backlog of cases resulting from the unavailability of any treatment for leprosy for nearly two decades which leads to late detection; the fact that visible deformity, i.e. Grade II disability, is impossible to conceal from the community and, in consequence there is higher pressure for these patients to come forward; and the severe environmental conditions leading to the rapid development of secondary disability once nerve damage has occurred. We conclude that we need to intensify case-detection activities.

We are encouraged by the results and will maintain our commitment to making MDT available to all persons suffering from leprosy. However we feel that the approach described above is not without problems. By introducing MDT in areas not adequately covered by the health services we implicitly accept that we will not be able to provide treatment or care that goes beyond delivery of MDT. When complications do arise (in particular reactions and infection of wounds in insensitive hands or feet) they cannot be dealt with adequately. For any health worker who is concerned with the well-being of his patients and not only with drug delivery this experience can be very frustrating.

Considerable efforts must be made to reach these patients who live in isolated areas. At the same time we are effectively verticalizing some of our services. While this may be justified in the initial phase of MDT implementation, where caseloads are relatively high, it is hard to see how these vertical activities can be maintained as caseloads decrease. We are already facing a situation where the number of cases on MDT has halved in comparison to 1993 while the area effectively covered by the programme has more than doubled.

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## References

- <sup>1</sup> Gakaitangou F, Schäfer J. Guide technique pour la prise en charge des cas de lèpre, 1995.
- <sup>2</sup> Ahmed KM, El Tahir MS. Role of village leaders in the implementation of MDT for leprosy, Sudan. *Lepr Rev*, 1996; **67**: 39–46.