

## Letter to the Editor

### **CHALLENGES IN PREVENTING DISABILITIES AMONG CHILDREN AFFECTED BY LEPROSY: FINDINGS FROM A REFERRAL HOSPITAL IN NORTH INDIA**

Despite the emphasis on disability and child proportion as important epidemiological indicators in the WHO operational guidelines,<sup>1</sup> the frequency of disabilities in children with leprosy in India is unacceptable and poses a major challenge to the society and leprosy services. We describe leprosy-related disabilities in children seen at a leprosy referral hospital in north India and highlight possible solutions.

The Leprosy Mission Community Hospital located in the north-eastern part of Delhi and established in 1984, is a popular referral hospital for leprosy. During 2009–2012, 94 children below 15 years of age were diagnosed with leprosy of which nine had WHO Grade 1 disability and 23 had Grade 2 disability. The disability rates increased with age, and there were no gender differences. The main findings are shown in the Table below.

Of those with Grade 2 disability, 12 were from Delhi itself, three had intrafamilial contact, 10 had < 6 skin lesions, 23 had > 1 nerve lesion, seven had reactions, and 21 had B.I. < 1. These disability rates in young children are worrying as they reflect long delays in reporting and diagnosis of leprosy, highlighting a failure of the health services system and gaps in our approach to involve the communities more actively. When a child suspected of leprosy is brought to a health centre with visible disability, it constitutes not merely a medical problem but also has psychosocial and economic consequences. That this continues to when MDT is freely available at any integrated health centre requires urgent action. The affected children should have been noticed and prompt action taken by the parents as well as by the teachers, given the multiple skin and nerve lesions. This calls for a different strategy in the IEC (Information, Education and Communication) programmes with more emphasis on educating the children as well as teachers and parents. Children cannot be expected to go on their own to a health facility and parents need to find the time and resources to seek treatment. The lack of child MDT blister packs in some health centres can be easily remedied. Proper supervision of the medical and other health personnel will avoid misdiagnosis leading to inevitable delay. Any amount of medical care is futile when the children are not brought to the treatment centre early enough before irreversible damage occurs.

The current oversimplified method of diagnosis based on skin lesions alone, leads to missing many multibacillary cases.<sup>2</sup> The guidelines must be changed to include nerve palpation and identifying nerve lesions for at least ulnar, median and lateral popliteal. Dependence on voluntary reporting alone at integrated centres has shown to be inadequate to detect early cases of leprosy, especially among children.<sup>3,4</sup> There is a great need for re-starting school surveys, voluntary health check up and screening camps which can help us to go a step beyond and detect those early cases before they develop irreversible consequences. The need for stronger community participation becomes an absolute necessity in solving this problem. The involvement of people affected by leprosy, especially young people, can be a strong force in the IEC programmes at schools and other popular venues. Health

**Table 1.** WHO Grade of Disability among Children

Characteristic	Grade of Disability: No. (%)			Total
	0	1	2	
<b>Residence</b>				
Delhi	41 (70.7)	5 (8.6)	12 (20.7)	58
Outside Delhi	21 (58.3)	4 (11.1)	11 (30.6)	36
<b>Household Contact</b>				
None	45 (63.4)	6 (8.5)	20 (28.1)	71
Intrafamilial	14 (70.0)	3 (15.0)	3 (15.0)	20
Extrafamilial	3 (100.0)	0 (0.0)	0 (0.0)	3
<b>Skin Lesions</b>				
0–5	38 (73.1)	4 (7.7)	10 (19.2)	52
6–10	12 (66.7)	0 (0.0)	6 (33.3)	18
> 10	12 (50.0)	5 (20.8)	7 (29.2)	24
<b>Nerve Lesions</b>				
0	9 (100.0)	0 (0.0)	0 (0.0)	9
1	10 (100.0)	0 (0.0)	0 (0.0)	10
> 1	43 (57.3)	9 (12.0)	23 (30.7)	75
<b>Type of Leprosy</b>				
Indet.	1 (100.0)	0 (0.0)	0 (0.0)	1
TT	7 (100.0)	0 (0.0)	0 (0.0)	7
BT	43 (60.6)	7 (9.9)	21 (29.6)	71
BL	7 (77.8)	1 (11.1)	1 (11.1)	9
LL	3 (100.0)	0 (0.0)	0 (0.0)	3
PNL	1 (33.3)	1 (33.3)	1 (33.3)	3
<b>Reactions</b>				
Nil	50 (73.6)	2 (2.9)	16 (23.5)	68
Yes	12 (46.2)	7 (26.9)	7 (26.9)	26
<b>Bacterial Index</b>				
< 1	51 (63.8)	8 (10.0)	21 (26.2)	80
1.00–2.99	3 (75.0)	0 (0.0)	1 (25.0)	4
3.00–3.99	6 (85.7)	0 (0.0)	1 (14.3)	7
4.00 & more	2 (66.7)	1 (33.3)	0 (0.0)	3

professionals can help in better education of the community and especially in the family of leprosy-affected people to monitor the contacts and initiate prompt treatment.

\*Consultant Dermatologist, TLM Community Hospital,  
Shahdara, Delhi

MEENU SETHI\*

\*\*Research Coordinator, TLM Community Hospital,  
Shahdara, Delhi

P S S RAO\*\*

## References

- Disability Prevention and medical rehabilitation 2007-Operational guidelines, Published by Central Leprosy Division, Government of India, New Delhi, 2007, vi
- Mehndiratta RC, Patnaik A, John O, Rao PS. Does nerve examination improve diagnostic efficacy of the WHO classification of leprosy? *Indian J Dermatol Venereol Leprol*, 2008; **74**: 327–330.
- Horo I, Rao PS, Nanda NK, Abraham S. Childhood leprosy: profiles from a leprosy referral hospital in West Bengal, India. *Indian J Lepr*, 2010; **82**: 33–37.
- Pandey A, Rathod H. Integration of leprosy into GHS in India: a follow up study (2006–2007). *Lepr Rev*, 2010; **81**: 306–317.