

Commitment to reducing disability: the Brazilian experience

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In the last 20 years, Brazil has made great efforts to introduce the assessment and prevention of physical disabilities (POD) along with the wider decentralisation of leprosy control activities to primary health care level. The advances achieved on this front are due in considerable part to the support of the ILEP organisations that have worked in the country over this period. The Lauro de Souza Lima Reference Centre has been doing regular training in POD for 30 years as physiotherapists and occupational therapists increasingly became part of local teams of health professionals.^{1,2} In 1998, the National Programme report highlighted the significant impact that the MDT era had not only curing thousands of patients, but also prevented the deformities caused by the disease. This was a result of early diagnosis and the reduction of Grade 2 disability from 15% in 1987 to 7% in 1998.³

The current criteria to assess disability grade are shown in Table 1. Note that in Brazil Grade 1 includes reduced sensation in the eyes, which differs from WHO criteria.

The percentage of new cases assessed (Figure 1) since the inclusion of the disability grade indicator (0, 1 and 2) among newly diagnosed cases.

The new target of 35% reduction of Grade 2 disability per 100,000 inhabitants by 2015⁴

This indicator, applied to the general population, will show the effectiveness of early case detection and the magnitude of physical deformities caused by leprosy. This measure has political force behind it and can help to improve the quality of care offered to individuals affected by leprosy. The Grade 2 rate can be reduced, both as a result of the epidemiological trend of lower new case detection.

Table 1. Criteria for grading leprosy patients in Brazil

Grade	Criteria
Zero	No leprosy-related disability found (eyes, hands and feet)
One	Loss of sensation in eyes, hands or feet (not perception of 2 g monofilament)
Two	Eyes: lagophthalmus and/or ectropion; trichiasis; visual impairment (difficulty counting fingers from 6 m); hands and feet: visible damage (claw hand, drop foot, reabsorption of fingers or toes, wounds)

In 2007 the Ministry of Health considered using a target of a 30% reduction in percentage of Grade 2 disabilities among new cases from 2008 – 2011 in the national health plan, but a simulated study showed stagnation after the level of 7% was achieved. This indicator was therefore substituted by the detection rate in children. In addition, local experience shows that there are still many problems with the quality of the assessment of physical impairments and disabilities, which can lead to over-diagnosis of Grades 1 and 2, as well as their under-notification.

In order to update this information in the national information system for notifiable diseases (SINAN), a change in the grade coding was undertaken (Table 2).

Not all municipalities used the new form and, as a result, data from 2007 and 2008 should not be considered with the same confidence as the other data. The correction of these data can only be done at the local level although we have tried to adjust for this, as seen in Figure 3.

Figures 2 and 3 compare the percentage and the rate indicators of Grade 2 over the same period in Brazil. While the percentage indicator shows stabilisation, the rate shows a slight decrease, following the generally decreasing trend of new cases.

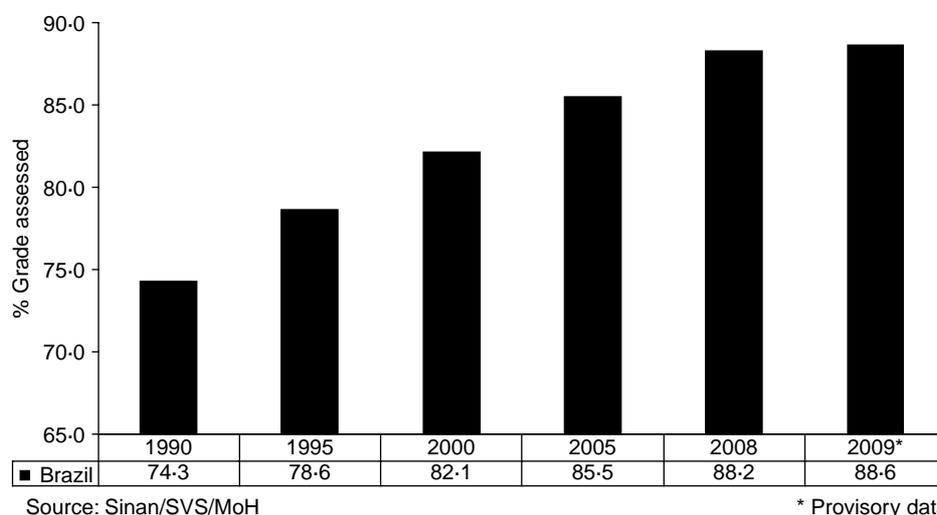
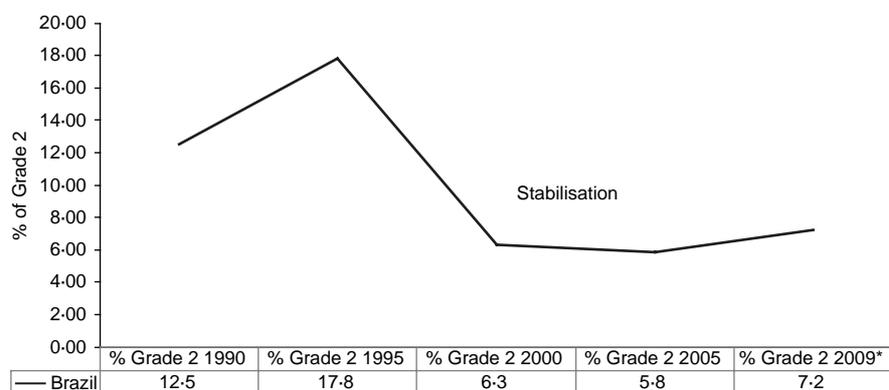


Figure 1. Percentage of new leprosy cases graded among total new cases in 1990, 1995, 2000, 2005, 2008 and 2009*.

Table 2. Examples of the SINAN notification forms used until 2006 and the new one from 2007 (variables and changes)

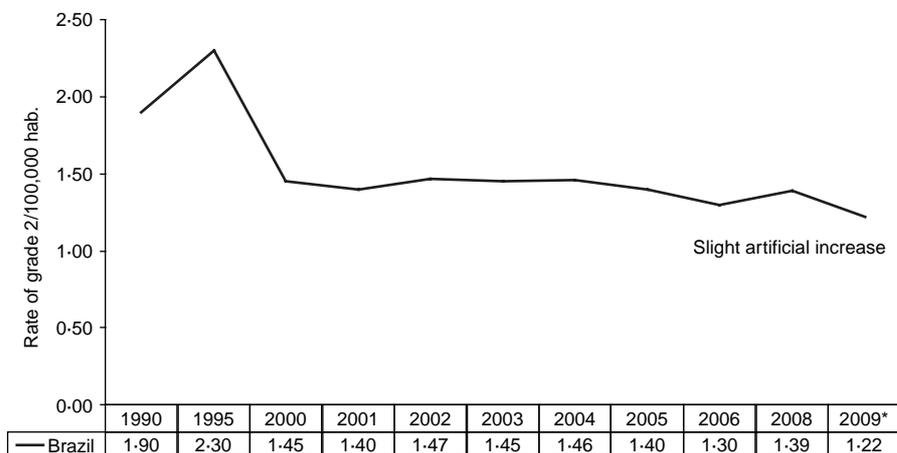
Data collection form up to 2006 (SINAN Windows item 30)	Data collection form after 2007 (SINAN Net versions 2.0 and 3.0 item 35)
1 - Grade 0	0 - Grade 0
2 - Grade I	1 - Grade I
3 - Grade II	2 - Grade II
4 - Grade III	3 - Not Graded
5 - Not Graded	
9 - Ignored	



Source: Sinan/SVS/MoH

* Provisory data

Figure 2. Percentage of new cases of leprosy presenting Grade 2 of disability, from 1990, 1995, 2000, 2005, and 2009* – Brazil.



Source: Sinan/SVS/MoH

* Provisory data

Figure 3. Rate of Grade 2 of disability among new cases of leprosy from 1990, 1995, 2000, 2005, 2006 to 2009* – Brazil.

In conclusion

The Brazilian experience shows stabilisation in trends and the beginning of an important reduction in the number of new cases; expansion of decentralisation, including the use of BCG vaccination; and patient grading. The new target will strengthen and intensify the surveillance of transmission *foci*, as indicated in the cluster areas. Brazil has already included the target of reducing the Grade 2 disability per 100,000 population among the main indicators of the National Hansen's Disease Programme. However, we continue to believe that the goal of a 35% reduction is a significant challenge for each country to reach, bearing in mind the characteristics of particular endemics and the lack of knowledge of the operational reality of this activity in each country. Early diagnosis is increasingly difficult in areas of low endemicity. This indicator can help in the advocacy for more case finding efforts. We emphasise the need for continued use of complementary indicators, especially the percentage of patients graded and percentage of new cases with Grade 2 among those assessed, for regional and local monitoring.⁵

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