Leprosy figures: no time for self-complacency

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Every year WHO publishes a leprosy update, containing the data reported by the endemic countries. Collecting and compiling these data represents a huge effort for which the Leprosy Unit of WHO must be congratulated and thanked.

The number of newly detected patients globally reported was 228,753 in 2010. This is a 6.6% decrease compared to 2009. The case detection rate was 3.9 per 100,000 population in 2010, against 4.2 in 2009.

One should, however, note the limitations when trying to analyse and interpret global figures. First, not all countries reported data. For 2010, 130 countries reported data, as compared to 141 countries in 2009. However, the missing countries in this year issue contributed about 2600 patients last year. Therefore, global figures have not changed significantly.

The second, important limitation, concerns the completeness and the reliability of the data reported by the countries. In Brazil, for instance, people in charge at national level usually take a long time to present final data.

Thirdly, not all the new patients are diagnosed in all endemic countries. The importance of the under-diagnosis may vary between countries, and from one year to the next. Thus detection figures are not incidence figures. Trends of detection can give a good idea of incidence trends if operational factors are stable and under control. It therefore is difficult, and even dangerous, to try and analyse trends without an in-depth knowledge of all the operational factors affecting the situation in each country.

Finally, global data are significantly influenced by countries reporting large numbers of patients: first India, which reported 55% of the patients detected in 2010, followed by Brazil with 15% and Indonesia with 7%. The influence of other countries on global figures is limited.

Keeping these limitations in mind, what can we say?

At the beginning of the year 2011 there were about 192,000 leprosy patients registered for treatment in the world, and 228,474 new patients have been detected in 2010. Two-thirds of these new patients come from South-East Asia. It is also The South-East Asian Region which
has the highest case detection rate, followed by the Americas, and Africa. The Eastern Mediterranean and Western Pacific Regions come far behind.

Seventeen countries reported more than 1000 new cases in 2010. Angola, which had disappeared from the list last year, is back with 1076 new cases. Those 17 countries are responsible for 94·4% of the global detection figures. In these countries, case detection rates range from 0·1 new case per 100,000 population in China, to 17·5 in Brazil. India and Nepal come second, followed by Indonesia. Brazil alone, which is the only American country in this list of 17, detects more new patients than the whole of Africa.

There are, however, countries where the leprosy problem is much more important than in these 17 so called ‘most endemic countries’ but, because of their small population, their impact on global figures is marginal. Last year Kiribati had a case detection rate of 185·6 per 100,000 population. That is 10 times more than Brazil. In Marshall Island it was 183, in Micronesia 108, and in the Comoros Islands 56 per 100,000 population.

Among the 17 countries with more than 1000 new cases, the number of newly detected cases decreased with 5·6%. It is in Nepal, where detection figures had been relatively stable for the last 4 years, that the decrease was highest (29% less patients than in 2009). In Bangladesh, China and Tanzania also, the decrease in detection was more than 10% in 2010. On the other hand, detection figures increased with more than 10% in Angola, the Philippines and Sudan. Such important and sudden changes are most probably due to operational factors. Another possibility for these changes could be the incompleteness of some reported data.

The MB proportion varies from 40·9% in Brazil (down from 56·9% in 2009) to 93·9% in the Philippines. The reason for this sudden drop of the MB proportion in Brazil, coupled with a 7·2% decrease in case detection, is unclear.

The female proportion is less than 50% in 16 of the 17 countries. In most countries it was similar to that of 2009. Notable exceptions are Ethiopia, which rose from an exceptionally low 6·5% in 2009 (a reporting mistake?) to 29·5% in 2010. It also significantly increased in Nepal, from 33·7% to 40·2%. Information on the female proportion was not reported for Angola.

The child proportion was very stable in most countries, albeit at different levels. It was above 10% in DR Congo, Indonesia and Madagascar, denoting active and recent transmission. In Nepal, it increased progressively from 3·3% in 2007 to 8·0% in 2010. In Sudan, it increased from 2·7% in 2006 to 8·2% in 2010.

The proportion of newly detected patients with Grade 2 disabilities was higher than 20% in China, Madagascar and Sudan. It is rising in nine of the 17 countries. No information was reported for Angola. Although still very low, it progressively increased over the years in India (from 2·2% in 2006 to 3·1% in 2010). This indicator is very interesting, because it is an indirect indicator of timely or late detection. A slowly increasing trend is also seen in Indonesia (from 7·8% in 2006 to 10·7% in 2010) and Mozambique (from 9·5% to 12·8%). The increase was much sharper in Madagascar, from 11·2% in 2006 to 21·6% in 2010. In Sudan, it has increased sharply since 2008, maybe due to the inclusion of data from southern Sudan. The proportion of new patients with Grade 2 disabilities was above 20% in three (China, Madagascar and Sudan) and more than 10% in 10 of the 17 most endemic countries, certainly showing a problem of late detection.

Cure rates, or treatment completion rates, were reported for only eight of the 17 countries and were missing for all the African countries, except Mozambique. This is rather strange because we know that, for some of these countries, the information is available at national
level. This treatment completion rate was below 75% for MB and/or PB patients in 12 of 51 countries reporting cure rates.

Conclusions

Although detection figures continue to decrease at global level, in most endemic countries transmission is far from being interrupted. The detection delay seems to increase in a number of countries, with the danger that at term, slowly declining trends could be reversed. There is a continuing need to improve data collection and monitoring of trends at country level.

Reference