## The Global Situation of Leprosy Control at the Beginning of the 21st Century

In May 1991, the World Health Assembly adopted as an objective the "elimination of leprosy as a public health problem by the year 2000" (1), elimination being defined as a prevalence of less than 1 per 10,000 population. Ten years later, at the World Health Assembly in May 2001, it was claimed that this target had been attained at global level (2). The most recent statistics on registered and new cases reported at country level, published by WHO in January 2002 (3), showed totals of 597,232 registered cases and 719,330 new cases detected during the year 2000. Although these data take into account only those countries with more than 100 registered cases, the global prevalence of registered leprosy cases is now slightly below 1 per 10,000. This is indeed a great achievement, because it represents a reduction of 90% from the prevalence of 12 per 10,000 reported in 1985. Today, virtually all registered patients are treated by MDT, thanks to which a total of approximately 11 million patients have been cured. Altogether, 107 of the 122 countries considered to be endemic in 1985 have achieved the elimination target. Approximately 83 per cent of the registered cases live in only six countries-India, Brazil, Myanmar, Indonesia, Madagascar and Nepal.

In interpreting these data, however, the following points must be considered:

- the figures representing the situation at the global level take the global population as denominator, whereas leprosy is virtually absent from a number of (mainly the industrialized) countries;
- some countries had not reached the elimination target by the end of 2000, and may have difficulties reaching it by the year 2005;
- the figures mentioned represent the prevalence of registered cases. However, this can be very different from the actual prevalence, because coverage of the population by health services is far below 100 per cent in some countries, leading to gross under-detection in certain areas (4),

- and because, even when the population is reasonably well covered by the health services, there may be significant underor late detection ( $^{5,6}$ );
- it is obvious that leprosy remains an important problem in some countries with a registered prevalence less than 1 per 10,000, either at the national level because of gross under-detection, or in provinces or states within countries, in which the prevalence may remain high;
- the decrease of prevalence is attributable primarily to "cleaning" of the registers (discharge of cured or defaulting patients) and to shortening the duration of treatment, and is not a consequence of reduction of the transmission of Mycobacterium leprae;
- the number of new cases detected annually has remained quite stable during the last 15 years. It reached a maximum in 1998, and then slowly decreased in the course of the two following years. However, it is still significantly higher than it was five to ten years ago. The increase of the annual new-case detection-rate observed during the recent years may be attributed primarily to massive case-detection campaigns carried out in several endemic countries, most notably India, and to the expansion of geographical coverage by the leprosy services (7-9).

Leprosy is a disease of importance to the public health mainly because of the disabilities it causes. It has been estimated that, at the global level, there may be 3 million people with leprosy-related impairments and disabilities (10). For the year 2000, it was reported that 4 per cent of the newly detected patients for whom information was available presented with grade 2 disabilities (3). That proportion was smallest (3 per cent) in South-East Asia, but reached 9 per cent in that region when India was excluded. It was 11 per cent in Africa and 5 per cent in the Americas; however, no data were available from Brazil, where that proportion reached 7 per cent in 1998 (11). Although grade 1 disabilities are important, because patients with disabilities of this degree are at serious risk of developing more serious impairments, data are usually not available.

## LITERATURE CITED

- WORLD HEALTH ASSEMBLY. Leprosy Resolution WHA 44.9, Forty-fourth World Health Assembly, 13 May 1991.
- WORLD HEALTH ASSEMBLY. Press Release WHA 54/2, 16 May 2001.
- WORLD HEALTH ORGANIZATION. Weekly Epidemiological Record N° 1, 4 January 2002.
- MPUTU LUENGU BOYAU. Progrès vers l'Elimination de la Lèpre (rapport épidémiolgique 1999). Bureau National de la Lèpre République Démocratique du Congo.
- CHEN, X. S., LI, W. Z., JIANG, C. and YE, G. Y. Leprosy in China: delay in the detection of cases. Ann. Trop. Med. Parasitol. 94 (2000) 181–188.

- TIENDREBEOGO A, SOW, S. O., SAWADOGO, O, DEMBELE, M. S., OUEDRAOGO, K, BIDE, L. and MILLAN, J. Evaluation de l'elimination de la lepre au Burkina Faso. Acta Leprol. 11: 7–16, 1998.
- AL-QUBATI, Y and AL-DOBAI, A. B. Review of leprosy control activities in Yemen. Int. J. Lepr. 67 (1999) 150–153.
- DHARMSHAKTU, N. S., BARKAKATY, B. N., PAT-NAIK, P. K. and ARIF, M. A. Progress towards elimination of leprosy as a public health problem in India and role of modified leprosy elimination campaign. Lepr. Rev. 70 (1999) 430–439.
- WORLD HEALTH ORGANIZATION. Leprosy—global situation. Weekly Epidemiological Record, N° 28, 14 July 2000.
- WHO EXPERT COMMITTEE ON LEPROSY. World Health Organization, 1998. Tech. Rep. Ser. 874: 1–43.
- MINISTERIO DA SAUDE Programas e Projetos— Hanseniase—dados epidemiolgicos de 1998.