Editorial

Leprosy elimination strategy

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Leprosy still remains an important health problem in about 80 countries of Asia, Africa and Latin America. An important epidemiological factor is that leprosy is very disproportionately distributed: 80% of the problem being limited to only five countries and 92% to just 25 countries. The World Health Organization-recommended standard multidrug therapy (MDT) against leprosy was introduced in the 1980s and has since been extremely effective against the disease. The number of registered cases worldwide fell from 5.4 million in 1985 to 1.7 million in 1994, the global cumulative MDT coverage of registered patients was at 89%, and the cumulative relapse rates have been low at around 1%. Experiences based on many thousands of patients treated with MDT over the past decade indicate extremely low relapse rates (cumulative relapse rates around 1%).

The significant progress made in leprosy control enabled the World Health Assembly in 1991 to set a goal for eliminating leprosy as a public health problem by the year 2000. Elimination was defined as less than one case per 10,000 population. The strategy to that end envisaged identifying and treating with MDT about five million cases of leprosy from 1994 to the year 2000. Most previously highly endemic countries have now reached elimination and those few that remain are very close to eliminating the disease. However, pockets of high endemicity still remain in some areas of Angola, Brazil, Central African Republic, Democratic Republic of Congo, India, Madagascar, Mozambique, Nepal, and the United Republic of Tanzania. The global registered prevalence of leprosy at the beginning of 2006 stood at 219,826 cases, while the number of new cases detected during 2005 was 296,499 (excluding the small number of cases in Europe). The number of new cases detected globally has fallen by more than 111,000 cases (a 27% decrease) during 2005 compared with 2004. During the past four years, the global number of new cases detected has continued to decrease dramatically, by about 20% per year. The largest numbers of registered cases are in India, Brazil, Indonesia, and Myanmar at 995,285, 223,539, 70,961, and 56,410, respectively. The highest prevalences per 10,000 population are in Brazil, Myanmar, Chad, and India at 14.30, 12.98, 12.43, and 11.34, respectively.

Special Action Projects for the Elimination of Leprosy (SAPEL) have been launched to increase MDT coverage in hard-to-reach areas. SAPEL, together with other campaigns being conducted to identify
undetected highly infectious cases, is likely lead to the realization of the Hanoi Declaration. The Global Strategy for further reducing the leprosy burden and sustaining leprosy control activities (2006-2010) has been widely welcomed and approved. The overall goal is to provide access to quality leprosy services for all affected communities following the principles of equity and social justice. A new emphasis is given here to the need for an effective referral system, as part of an integrated program. Good communication between all involved in the management of a patient with leprosy or leprosy-related complications is essential. The promotion of self-reporting has become crucial to case detection, as case-finding campaigns become less and less cost-effective. The main thrust of the leprosy elimination strategy is to:

- expand MDT services to all health facilities.
- ensure that all existing and new cases are given appropriate MDT regimens.
- encourage all patients to take treatment regularly and completely.
- promote awareness in the community on leprosy so that individuals with suspicious lesions will report voluntarily for diagnosis and treatment.
- set targets and time table for activities and make all efforts to achieve them.
- keep good records of all activities in order to monitor the progress towards elimination.

Access to information, diagnosis and treatment with MDT remain key elements in the strategy to eliminate the disease as a public health problem. Today, the diagnosis and treatment of leprosy is easy and most endemic countries are striving to fully integrate leprosy services into existing general health services. This is especially important for those under-served and marginalized communities most at risk from leprosy, often the poorest of the poor. In India, the process was undertaken with the assistance of World Bank in a phased manner. The results of this project emphasize the need for reorientation training of Medical Officers, better MDT stock management and decentralized management of cases up to sub-centre level. Similarly, staff in the health services needs to be familiar with what is being done in the locality, and know how and where to refer people who need these services.

It is important to identify and remove barriers that may prevent new cases from coming forward. Information campaigns about leprosy in high risk areas are critical so that patients and their families, who are not accepted by their communities, are encouraged to receive treatment. The procedures for establishing the diagnosis of leprosy remain firmly linked to the cardinal signs of the disease, but the accuracy of diagnosis must be monitored. MDT treatment has been made available by WHO free of charge to all patients worldwide since 1995, and provides a simple yet highly effective cure for all types of leprosy.

The most effective way of preventing disabilities in leprosy, as well as preventing further transmission of the disease, lies in early diagnosis and treatment with MDT. The Guidelines suggest a greater emphasis
on the assessment of disability at diagnosis, so that those at particular risk can be recognized and managed appropriately. Rehabilitation may include a medical component (such as reconstructive surgery) but its scope is much broader. Socio-economic rehabilitation (for example, vocational training or a small loan) is also equally important.

Sequencing the genome of *Mycobacterium leprae* has been a major biological advance and will open up new possibilities for research especially in the therapeutic domain. New treatments for leprosy reactions are needed and the optimal length of multidrug therapy requires further research.

**References**