

## Priorities for leprosy research in Brazil

In the words of our dearly missed Professor Mario Rubens Montenegro, the dilemma of leprosy research is: there is no technology in countries where leprosy exist and there is no leprosy where technology is available. In spite of that, research centers abroad are interested in the disease, due to leprosy's peculiarities, which make it an useful model for the acquisition of further knowledge, specially in fields such as bacteriology, immunology, genetics and molecular biology. Thus, leprosy research may bring about important contributions not only to understanding of leprosy as well as to other infectious and non- infectious diseases. The continuity of leprosy research is important specially to Brazilian scientists, who have access to more abundant, varied and, for sure, better selected material. Furthermore, they are able to develop a more critical judgment about the results they obtain due to their daily relation with the natural history of the disease.

Today's Brazilian politics for the provisioning of resources for research favors centers equipped with more advanced technology, whose production can be published in prestigious European and American periodicals. This is all very good to these centers and its researchers, but would it be the best solution for the control of the endemic? Following an appraisal of the scientific production on leprosy in the last 30 years, especially after the emergence of new knowledge and technology in immunology, genetics and molecular biology, we observe that, some exceptions aside, these advances had little influence in the disease's control. Knowledge developed by researchers in pre-dapsone era still represents the basis for diagnosis and the most efficient therapy relay on three medicaments introduced between the 40's and the 70's. Furthermore, the most up-to-date procedures for disabilities prevention and correction were developed at the same period, especially by clinicians and surgeons.

Politicians would use the word "worrying" to define the leprosy endemic situation in Brazil; we would say it's dramatic. There is a gap between the official statistics of prevalence and the disease's incidence detected by leprologists in various regions of the country. The multiplication of new cases shows that, while multidrugtherapy is used everywhere,

multibacillar patients are still transmitting the infection. On the other hand, numbers do not reveal that the most critical neurological damages results from reactions developed during and after treatment. Thus, every day, more and more Brazilians are disabled by a curable disease, which could be prevented through well-know means.

Considering the situation, we should perfect the mechanisms of combat against leprosy. We need to know better the epidemiology of the disease specially the regional variations of the endemic. We need to reform the SUS structure and actions for diagnosis, treatment, contact surveillance, active search, prevention and treatment of disabilities; reinforce educational actions about the disease; stimulate research about new drugs or drug resistance. We also need to launch actions with more ambitious targets, such as serological tests or an effective vaccine.

These are ambitious goals and resources are scarce. Perhaps the way to face the limitations is a better management of existing funds for research; investments in multi-institutional projects which benefit from material and human resource already available in reference centers. We also should include in this effort the universities and foreign research centers willing to help.

This focused research would be an option for the time being; but it doesn't eliminate the continuity of basic research, whose results will allow us further advances in the knowledge and resolution of the disease.

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