

DIAGNOSTIC ACCURACY IN THE GENERAL HEALTH CARE SYSTEM: VALIDATION PROPOSAL FOR INDIVIDUALS UNDER 15 YEARS OF AGE

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PILOT PROJECT IN 5 STATES OF THE NORTH, NORTHEAST AND CENTER-WEST REGIONS

When multidrugtherapy (MDT) was introduced, there was, at the beginning, a great reduction of prevalence of known cases all over the world, although detection rates of new cases have not been affected, in most endemic countries. The chain of transmission of the *Mycobacterium leprae* remains the same, showing that the real leprosy control needs permanent actions to guarantee an early diagnosis of cases and their treatment. The healing strategy of leprosy cases known did not reduce transmission and the disease load as expected.

In the last years, Brazil has presented a constant detection coefficient, despite all efforts of the three spheres of Government to reduce it. The great number of patients accumulated along the years, resulting from the health care system fragilities, associated with several internal migration flows, might have contributed to the present situation, after a large prevalence reduction, due to the introduction of multidrugtherapy. It is also well known that the validity of diagnostic procedures may have an influence on the detection rate, adding new cases, inappropriately.

In the last six years (2001–2006), the average number of new cases detected in Brazil was 47,400 per year, being 4,000 the average number of detection cases per year in children under 15 years of age, which represents 8% of the total number. The high number of new cases among people under 15 needs to be analyzed in several contexts that reflect the present situation of this endemic disease in Brazil.

Thus, the National Leprosy Control Program (PNCH) of the Ministry of Health has been using the detection coefficient of new cases in children under 15 to monitor this endemic disease and define areas of priority.

The high detection coefficient among children under 15 indicates recent transmission through active sources of this disease. The intradomiliary environment is im-

portant and it is necessary to reach a minimum expected percentage of contact exams for early detection of transmitting cases, through this activity.

Some regions have high coefficients in this age group, diverging from the rest of the country, indicating the existence of multibacillary patients that maintain the chain of transmission of this disease, causing an early outbreak among the under-15 age group. These regions need to intensify the control actions and to adopt their own strategies, according to their reality.

The Pan American Health Organization (PAHO) has recommended that the maintenance of the detection of new cases be validated on a non-stop basis, as part of the monitoring strategy. This is reinforced among this age group, especially because there might be greater difficulties in diagnosing this disease. Such difficulties have not been confirmed in two validations in a row, occurred, recently, in India, and supported by the World Health Organization (WHO).

Complying with this recommendation, the Ministry of Health, together with the PAHO, requested the National Reference Center – Instituto Lauro de Souza Lima, to execute a validation exercise in the capitals of 23 States of Brazil. During this validation exercise, one of the conclusions reached was that 20.8% of the cases among the individuals under 15 of age were, in fact, non-leprosy cases. This percentage was a little more than twice the number of cases among adults (9.5%). Then, it was recommended that this exercise be periodically repeated, besides including activities in the priority districts.

Therefore, the exercise of diagnostic validation of new cases among children under 15 years was defined to be carried out as the pilot project in the 5 most endemic States of the North, Northeast and Center-West regions, based on the studies of validation performed, previously, not only in India, but also in Brazil (PAHO/WHO).

According to the recommendation of the PNHC, in order to integrate the leprosy diagnosis into the general health care system, on clinical bases, this study aims at validating the leprosy diagnostic procedures in new cases of individuals under 15 years of age, that have recently initiated treatment in the 5 most endemic districts of each of the 5 most endemic States of Brazil. With this, it is expected that the study does not be restricted to the regions where the diagnosis is more specialized, as in the capitals, and that it provides a validation of the cases originating from the general health care system.

The model used in the studies previously mentioned and that will be applied in this study is based on the comparison of the diagnosis made by the health unit, that must be confirmed by two experienced validators. The cases analyzed should have begun treatment, at least, three months prior to the validators' visitation.

The States selected were: Pará, Maranhão, Pernambuco, Bahia and Mato Grosso.

Later, the data will be consolidated and analyzed statistically. The results of this study will provide complementary information that will allow the improvement of the control and monitoring of this endemic disease.