

**Title: Evaluation of bacterial index leprosy patients treated at the Institute Lauro de Souza Lima in the year 2013**

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**Abstract**

Leprosy is a chronic infectious disease caused by *Mycobacterium leprae* (*M.leprae*) which manifests in different clinical forms depending on the cellular immune response of the host. It's considered a serious public health problem according to the World Health Organization (WHO) with an annual incidence of approximately 250.000 cases in worldwide. India has the largest number of cases and Brazil takes the second place in the ranking. *M. leprae* is a slow growing intracellular bacillus that affects mainly the skin and peripheral nerves, leading to few infiltrative lesions with discrete loss in sensitivity up to disseminated lesions with significant and disabling sequels. For treatment, the WHO recommends operational classification based on number of skin lesions; cases up to five lesions are considered paucibacillary and those with more than five are multibacillary. A smear is a scraping intradermal test that aids in the diagnosis of leprosy and, when positive, classifies the case as multibacillary, regardless of the number of injuries; negative when the case is classified as paucibacillary. The aim of this study was to evaluate the bacterial index for the prevalence between sexes, age and operational classification of paucibacillary or multibacillary. The results of the smear of 324 leprosy patients attended in 2013 at the clinic of the Instituto Lauro de Souza Lima, of both sexes and aged between 10 and 90 years were evaluated. Regarding gender, the highest prevalence of cases among men was 64.2% (n = 208) and between the ages of 46-60 years (40.86%, n = 85); in two cases (0.92%) patients were younger than 15 years (n = 208). Among females the most prevalent age group was 31-45 years, with 46.55% (n = 116); there were no reported cases in children under 15 years. The multibacillary was the one with the highest prevalence (61.54%) among males (n = 208), whereas in females (n = 116) sex was a higher prevalence of paucibacillary (51.72% ). The leprosy affects more men who are in the economically active age. The higher prevalence of multibacillary cases shows that the bacillus is in circulation, increasing the risk of new cases of the disease; paucibacillary cases do not transmit the infection. The detection of cases in children under 15 years shows a more intense exposure to the pathogen, especially in domestic environments.

**Key words:** bacterial index, diagnostic, leprosy, *Mycobacterium leprae*, smear.