Leprosy on the Rise in India: Need to Adopt Enhanced Strategy for its Control

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Leprosy is believed to be one of the oldest recorded diseases, with references dating back to Biblical times and medical evidence from skeletons indicating it originated in India in around 2000 BC. Leprosy is a chronic disease caused by a bacillus, Mycobacterium leprae, an acid-fast, rod-shaped bacillus. M. leprae multiplies very slowly and the incubation period of the disease is about five years. Symptoms can take as long as 20 years to appear. Leprosy is not highly infectious. It is transmitted via droplets, from the nose and mouth, during close and frequent contacts with untreated cases. Untreated, leprosy can cause progressive and permanent damage to the skin, nerves, limbs and eyes. Early diagnosis and treatment with Multidrug Therapy (MDT) remains the key in eliminating the disease as a public health concern, as per the World Health Organization.

Current Leprosy Scenario in India

India officially eliminated leprosy nine years ago, but reports now suggest that the cases of leprosy are going up, especially in urban areas. India accounts for 58 percent of newly diagnosed leprosy cases in the world, according to the World Health Organization [1]. As shown in Figure 1, a total of 1.35 lakh new cases were detected during the year 2012-13, which gives Annual New Case Detection Rate (ANCDR) of 10.78 per 100,000 population. This shows increase in ANCDR of 4.15% from 2011-12 (10.35). The prevalence rate (PR) was 0.73 per 10,000 population with child case rate of 1.07 per 1,00,000 population [2]. It was reported that 33 States/Union Territory (UT) have achieved elimination of leprosy with a PR less than 1 per 10,000 populations except 1 state and 1 UT. The 3 states that had achieved elimination showed an alarming rise in the PR level above 1. Also Proportion of Child cases was more than 10% of new cases detected in 12 States/UTs.

As on 31st March 2013, 87 districts had ANCDR above 20 per 10,000 population while the number of districts with PR > 1 has gone up from 98 to 121 (Figures 2-4). Grade II disability rate > 2/million population has been reported in 304 districts (46.84%). A record 92.5% of newly detected cases were released as cured with multidrug therapy during 2012-13. Government statistics under estimate the extent of leprosy according to research organizations, NGOs and some medical personnel who argue that leprosy cases are on the rise [3]. The disease has returned in greater numbers in some of India’s poorest states including Uttar Pradesh, Maharashtra and Bihar.

India has declared that it has leprosy under control, but the
numbers are showing a slow but clear rise in new cases. Officially, the National Leprosy Eradication Programme puts the current PR at 0.73 per 10,000 populations, higher than previous year which was 0.68. A closer look at the data, however, shows that many states still have a very high prevalence of the disease, some even crossing the World Health Organization’s standard for eliminating leprosy. Children, who are most susceptible to the mycobacterium, are indicators of whether a disease has spread in a neighborhood. In 9 states/UTs more than 10% of new cases detected were children [4]. A high child proportion may be a sign of active and recent transmission of the disease. It is thus an important epidemiological indicator [5].

According to World Health Organization, new cases have increased in the past two years in India in tandem with an uptick in relapses in previously treated patients. Now the number of new cases detected were children [4]. While officials attribute this to leprosy staff, improve the participation of affected persons in leprosy services and mitigate the stigma associated with leprosy. The enhanced global strategy set as a target for 2015 the reduction of new cases with visible deformity or grade 2 disabilities (G2D) per 100 000 people by 35% compared to the G2D rate of 2010. There is a continuing need to improve data collection and monitoring of trends at local level as well as at country level. There is also a need to adopt local problem-specific strategies at state/district levels to address diverse factors influencing the leprosy situation in India. These complementary approaches are essential to achieve further reduction of the disease burden due to leprosy in accordance with the enhanced global strategy and as per the recommendations of WHO expert committee on leprosy [8].

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**Figure 4:** District wise trend of ANCDR of leprosy in India.