



# A Short Report on Status of Leprosy in India



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Submission: 📅 December 12, 2017; Published: 📅 January 22, 2018

## Abstract

Hansen's disease, known as leprosy in colloquial language has been able to maintain its prevalence in the Indian subcontinent due to the haggard socio-economic status, lack of awareness and multiple other predisposing factors. Leprosy has been found to suppress the immune system thereby accentuating the chance of secondary infections. Contrary to the long held prevalent notion that the disease is not very contagious but shows long term effects that may lead to permanent limb and nerve disfigurement. The chronic effects of the ailment also include loss of visual acuity along with deformed limbs. Despite the prevalence and emergence of substantial number of new cases of leprosy each year in most of the developed and developing nations, the disease has still not been identified as a major health problem. The major hurdle in tackling the disease is also stemmed from the under reporting of the ailment caused by the excommunication of the afflicted individuals. India accounts for a large chunk of the global burden of leprosy, contributing almost 3/5th of the newly documented cases per annum. Reemergence of leprosy has been evidenced due to development of resistance in the causative bacterial strain. Yet much has not been accomplished in developing therapeutic regimen to curb the rampage of this insidious enemy. The aim of this short communication aims at portraying the true scenario of leprosy and there by attract the attention of policy makers and implementers to take radical actions to eradicate the menace to public health.

## Introduction

Leprosy is one of the most prevalent neuromuscular disorders caused by several strains of Mycobacterium leprae. The disease has recently shown reemergence due to development of resistant strains. The gravity of the problem is being underplayed due to lack of proper infrastructure for reporting of cases and the social stigma associated with the disease, which hinders self-reporting. Large numbers of new cases of leprosy come up every year despite WHO and state run initiatives [1]. The situation made further grim by the presence of unofficial leper colonies resulting from boycott by the society. Multidrug therapy in children is not taken seriously resulting in deformities and secondary infections.

## Method

An online survey was performed to get information about the history, misconceptions, spread, treatment regime, stigma and related policies for disease control of leprosy. Different feasible diagnostic methods along with ways to mitigate the symptoms were also overviewed. Relapse and reaction cases of the disease were also compared [2]. Effectiveness of various multidrug regimens was also scrutinized. Socioeconomic rehabilitation of the affected masses by the Ministry of Health and Family Welfare was also noted.

## Findings

In India clinical trials for leprosy was initiated at the urban leprosy center at Delhi in 1986 when the country suffered from an epidemic of the dreaded disease marked with horrifying deformity

and when the very of idea "Multi Drug Therapy" was scoffed at. Later on with the rise in popularity in the use of antimicrobials along with widespread vaccination significant reduction in transmission of the disease was able to be achieved. The reduction in new incidences was seen most prominently in the age group of 1-12 years while consistent protection was achieved in the age group of 7-8 years, where a booster dose was seen required to maintain the protection [3,4]. From epidemiological point of view the results of the surveys indicate that vaccination was successful in controlling the disease and reducing the transmission of the disease amongst susceptible individuals. However, vaccination has been found to provide no substantial benefits in already infected patients. A rationale use of BCG as a preventive vaccine against leprosy was conducted based on cross-reacting antigens presence due reaction of vaccine with the Mycobacterium leprae strain [5]. The drug rifampicin single drug found to be the most effective in preventing leprosy in those individuals who have been exposed to family members with the disease and is already being trialed for the same in several countries. According to a recent study conducted by "The Leprosy Mission" in Bangladesh new leprosy cases in people who had been given a single dose of rifampicin were found to be 60 percent lower than those who had been given a placebo.

## Social Stigma

Social banishment has been a major discouragement in self reporting by effected person. Disfigurement and various hearsays

regarding the ailment instigate the local gentry to ostracize the afflicted individual, who is regarded a disgrace, unnatural and unacceptable being. Lack of knowledge and ignorance in the society goad these irrational beliefs [6]. The misconception regarding the disease that is still prevalent in the twenty first century is that the disease is highly contagious. Social seclusion of infected population can be evidenced from creation of colonies where such people were isolated in official terms. Though today there is no official decree pertaining to existence of leper colonies but the disgrace being faced have repressed people to isolate themselves in remote places and live the life of an outcast, denied the comforts of social life even in modern scenario. An account confirms the existence of several such colonies in different parts of India. It is also important to note that the direct family members of the contagion like children are also the victims of this social apathy.

### Rehabilitation

Broadly speaking, leprosy is not just a medical condition but a medico-socioeconomic condition. People are now aware of the social and economic complications of the disease. The moot point has now shifted to assuaging public fear regarding the disease in conjunction with maintaining concern to address the gravity of the disease. Improving economic productivity of leprosy patients has been the main objective behind rehabilitation efforts. More effort is required to rehabilitate leprosy patients with deformity than rehabilitating orthopedically handicapped or blind people due to the associated prejudice within a social setup. The initial step towards rehabilitating leprosy patients should be creating a receptive environment, which could be accomplished by The Ministry of Social Justice and Empowerment. The present schemes run by the government though improving are still dismal when compared to their counterpart deformity cases [7-12].

### Conclusion

According to WHO 16 million leprosy patients have been treated worldwide since the past 20 years. 96% out of the total new cases registered in 2016-17 were from countries outside Asia. Though there was significant rise in the number of newly diagnosed cases as reported from diagnostic laboratories; very few cases are registered due to lack in infrastructure and poor self reporting due to social excommunication. The Indian government had

disowned leprosy the status of being a major health problem since 2005 resulting in shift of focus and dwindling statistics to attract research and development. Adequate data is required to come to the government's attention and schemes to be implemented, which is lacking in case of leprosy. Disgrace and defame caused by social seclusion has incited effected individuals to ignore symptoms and those diagnosed choose to remain hidden making it further difficult to depict the facts and figures on leprosy. This short communication will help to enrich data pertaining to the disease and thereby compel the government to work in the direction with renewed interest.

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