# Leprosy: Breaking the chains of misconceptions and stigma.

## Paulo Silvey\*

Department of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, CO, USA

## Introduction

Leprosy is a chronic infectious disease caused by the bacterium *Mycobacterium leprae*. It primarily affects the skin, peripheral nerves, and mucous membranes. Contrary to popular belief, leprosy is not highly contagious. It is mainly transmitted through prolonged close contact with untreated individuals who have the disease. Additionally, around 95% of the world's population is naturally immune to leprosy, making transmission even less likely [1].

One of the most persistent misconceptions surrounding leprosy is that it causes body parts to fall off. In reality, leprosy primarily damages nerves, leading to loss of sensation and subsequent injuries that can go unnoticed. Without pain as a protective mechanism, individuals with leprosy may unintentionally harm themselves, resulting in secondary infections or injuries. These complications can lead to disfigurements and, in extreme cases, the loss of fingers, toes, or other extremities. However, proper medical care and early diagnosis can prevent such complications [2].

Leprosy can affect anyone, regardless of age, gender, or socioeconomic status. However, it is most prevalent in povertystricken communities with limited access to healthcare, clean water, and sanitation facilities. The disease thrives in conditions of overcrowding and poor nutrition, emphasizing the importance of addressing socioeconomic factors to control its spread.

Fortunately, significant progress has been made in the diagnosis and treatment of leprosy. Multidrug therapy (MDT) has revolutionized the management of the disease. MDT involves the simultaneous administration of three antibiotics-dapsone, rifampicin, and clofazimine for a fixed duration, usually six to twelve months [3]. This highly effective treatment regimen not only kills the bacteria but also reduces the risk of developing drug resistance.

Early detection and prompt treatment are crucial in preventing disability and reducing transmission. Efforts have been made to enhance leprosy awareness among healthcare providers and communities to ensure timely diagnosis [4]. Moreover, leprosy control programs, supported by governments and international organizations, provide free treatment and rehabilitation services to affected individuals. Beyond medical interventions, combating the stigma associated with leprosy remains a vital challenge. Historically, societies have marginalized individuals with leprosy, leading to isolation, discrimination, and psychological distress. These deeply entrenched prejudices can hinder affected individuals from seeking help and reintegrating into society even after successful treatment.

Education and awareness play a significant role in dispelling myths and breaking down societal barriers. Community education programs, sensitization campaigns, and the involvement of leprosy-affected individuals in advocacy efforts have been instrumental in challenging stereotypes and fostering inclusivity. The stories and voices of those who have experienced leprosy first hand serve as powerful tools to reshape public perception and combat stigma [5].

### Conclusion

Leprosy is a complex disease that continues to affect vulnerable populations worldwide. While significant progress has been made in its treatment and control, misconceptions and social stigma persist. By promoting accurate information, supporting medical advancements, and fostering inclusive communities, striving towards a world where leprosy is understood, compassionately managed, and ultimately eliminated.

### References

- 1. Cooke GS, Hill AV. Genetics of susceptibility to human infectious disease. Nat Rev Genet. 2001;2:967-77.
- 2. Roy S, McGuire W, Mascie-Taylor CG, et al. Tumor necrosis factor promoter polymorphism and susceptibility to lepromatous leprosy. J Infect Dis. 1997;176:530-32.
- 3. Malhotra D, Darvishi K, Sood S, et al. IL-10 promoter single nucleotide polymorphisms are significantly associated with resistance to leprosy. Hum Genet. 2005;118:295-300.
- 4. Shaw MA, Donaldson IJ, Collins A, et al. Association and linkage of leprosy phenotypes with HLA class II and tumour necrosis factor genes. Genes Immun. 2001;2:196-204.
- 5. Zhang FR, Huang W, Chen SM, et al. Genomewide association study of leprosy. N Engl J Med. 2009;361:2609-18.

Citation: Silvey P. Leprosy: Breaking the chains of misconceptions and stigma. J Bacteriol Infec Dis. 2023;7(2):139

<sup>\*</sup>Correspondence to: Paulo Silvey, Department of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, CO, USA, E mail: silveryp@colostate.edu Received: 05-Mar-2023, Manuscript No. AABID-23-97693; Editor assigned: 07-Mar-2023, PreQC No. AABID-23-97693 (PQ); Reviewed: 22-Mar-2023, QC No AABID-23-97693; Revised: 24-Mar-2023, QC No AABID-23-97693; Published: 31-Mar-2023, DOI:10.35841/aabid-7.2.139