

# Leptospirosis, a neglected tropical zoonotic disease of public health importance: Multi-sectorial prioritization to control through “One Health Approach in India: An integrative review”

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## Abstract

Negligence in healthcare system paves to become major cause for occurrence and recurrence of most infectious diseases. Leptospirosis is one among those neglected 17 tropical infections listed by WHO. Leptospirosis is epidemic in tropical country like India and prevalent throughout the nation. About 60% of human infections are of zoonotic origin and 75% of these infections are emerging and re-emerging. The pathogenic infection gets transmitted to humans by animals via infected water bodies (indirect transmission) or by direct contact with them. From the inferred data it can be concluded that people of different occupations namely irrigation/ agricultural people, sewage workers, fishermen, volunteers for natural disasters, people involved in fresh water sports are susceptible to indirect transmission. In case of direct/ indirect transmission via animals, veterinary healthcare service providers, butchers, animal caretakers, etc., are susceptible for acquiring the infection. Being zoonosis, the intervention or policy making for controlling the infection must be multi-sectorial and holistic. ‘One Health Concept’ is a holistic approach, which has been in practice dating back to Hippocrates period and now gaining popularity. The concept encompasses human, animal and environmental health equally and facilitates in controlling infection by either controlling two or all the factors. The study will review on imparting one health concept as a suitable approach for tackling against the Leptospirosis infection since this approach could possibly hinder the transmission cycle of the infection that is almost believed to be impossible to manage. This review extensively discusses about the major research gap that needs to be addressed immediately to apply one health approach to control leptospirosis and how to bring out relevant information with the limited available data. The key inference area of transmission and one health approach to control leptospiral infection is proposed and the repercussions discussed in detail.

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