Determinants of snakebite mortality in Asia: A systematic review

Abstract

This systemic review summarizes the evidence exploring the determinants of mortality due to snakebite envenomation in Asia. The database PubMed, Web of Science and Science Direct were searched to identify the relevant literatures concerning mortality due to snakebites mortality in Asia. All the articles chosen were critically appraised for its quality using a mixed-method assessment tool by two independent reviewers with discrepancies sorted by a third person. A total of 7 studies were included in the final analysis which was 3 cross-sectional studies, 2 case reports, 1 observation prospective study and 1 randomized control trial study. Two studies were conducted in India and two studies in Sri Lanka while one study was conducted in Taiwan, Vietnam and Nepal respectively. The cases of snakebite victims were retrieved from the year of 1987 until 2017. In total, there were 762 cases of snakebite victims recorded, with 61 of those victims succumbed to death. From the final total of 7 studies, 4 of the studies showed snakebites mortality were related to delayed treatment access and 3 studies due to suboptimal care. Mortality and morbidity can be reduced if there is a quick access for victims to emergency medical care, rapid transfer time to hospital and receiving immediate optimal medical treatment from trained medical staff once in the hospital or dispensary.