Factors and outcomes in Severe Fever with Thrombocytopenia Syndrome (SFTS): A systematic review

ABSTRACT

Background: An emerging infectious zoonosis known as Severe Fever with Thrombocytopenia Syndrome (SFTS) is discovered mainly in Japan, South Korea and China. SFTS virus (SFTSV) which is recently recognised as bunyavirus is borne by ticks such as *Haemaphysalis longicornis*. It has the capabilities to spread as develop clusters and become a considerable public health threat as this virus could experience rapid evolution via gene mutation. Case fatality rate has been reported up to higher than 30%. The aim of this review is to determine the associated risk factors of SFTS and its outcome. *Materials and methods:* Literature search was conducted using online databases PubMed, ScienceDirect, and Scopus. A total of 517 records were identified from searches in PubMed, ScienceDirect, and Scopus. From the final exclusions, a total of 26 studies were included for final analysis. Results: Associated risk factors to getting SFTS infection include occupation, history of bite from a tick, biological susceptibility, and owning of domestic animal. Fatality rates apart from single case reports range from 15.1% to 50% and are contributed by various factors including delay in hospital admission, high viral load, older age group and presence of comorbid and complication. *Conclusion:* A seroprevalence study can be conducted amongst the high-risk occupation group such as farmers and agricultural workers, as well as testing cases where viral fever is suspected but available tests for other diseases turns out negative.