

The prevalence of hospital-acquired infections in Southeast Asia (1990-2022)

ABSTRACT

Introduction: Hospital-acquired infections (HAIs) have continually affected the quality of hospital care. Despite medical interventions by healthcare personnel and improved healthcare facilities, the rates of morbidity and mortality due to HAIs is increasing. However, a systematic review of HAIs is lacking. Therefore, this systematic review aims to determine the prevalence rate, types, as well as causes of HAIs in Southeast Asian countries. **Methodology:** A systematic literature search was conducted on PubMed, Cochrane library, World Health Organization database–Index Medicus for South-East Asia Region (WHO-IMSEAR), and Google Scholar databases. The search period was from 1st January 1990 until 12th May 2022. The prevalence of HAIs and subgroups were calculated using MetaXL software. **Results:** The database search retrieved 3879 non-duplicate articles. After applying exclusion criteria, 31 articles with a total number of 47666 subjects were included and a total of 7658 cases of HAIs were recorded. The overall prevalence of HAIs in Southeast Asia was 21.6 % (95% CI: 15.5 – 29.1%) with heterogeneity statistics of $I^2 = 100\%$. Indonesia had the highest prevalence rate of 30.4% whereas Singapore had the lowest prevalence rate at 8.4%. **Conclusions:** This study revealed that the overall prevalence of HAIs was relatively high and the prevalence rate of each country was associated with socioeconomic status. Measures should be taken to examine and control the rates of HAIs in countries with high HAI prevalence.