

Abstract:

Background: Occupational contact with blood and body fluids poses a significant risk to healthcare workers. The aim of this systematic review is to investigate the epidemiology and risk factors affecting needlestick injuries (NSI) in healthcare personnel in Iran.

Methods: In March 2020, researchers studied six international databases such as Medline/PubMed, ProQuest, ISI/WOS, Scopus, Embase, and Google Scholar for English papers and two Iranian databases (MagIran and SID) for Persian papers. Joanna Briggs Institute (JBI) Critical Appraisal Checklist was used to assess quality of studies. The method of reporting was based on the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) statement.

Results: A total of 43 articles were included in the analysis. Results showed that females (OR = 1.30, 95 % CI 1.06-1.58, P value = 0.009), younger age (OR = 2.75, 95 % CI 2.27-3.33, P value < 0.001), rotated shift workers (OR = 2.16, 95 % CI 1.47-3.15, P value < 0.001), not attending training courses (OR = 1.30, 95 % CI 1.07-1.56, P value = 0.006), working in the surgery ward (OR = 1.83, 95 % CI 1.33-2.50, P value < 0.001), less work experience (OR = 1.43, 95 % CI 1.04-1.95, P value = 0.025) apposed a greater risk factors for NSI among healthcare workers.

Conclusion: Based on the results of this review, factors such as young age, less work experience, work shift, and female gender are considered as strong risk factors for NSI injury in Iran. Preventive measures including education programs can reduce the burden of NSI among healthcare personnel.

Reference:

Hassanipour S, Sepandi M, Tavakkol R, Jabbari M, Rabiei H, Malakoutikhah M, Fathalipour M, Pourtaghi G. Epidemiology and risk factors of needlestick injuries among healthcare workers in Iran: a systematic reviews and meta-analysis. *Environ Health Prev Med.* 2021 Apr 1;26(1):43. doi: 10.1186/s12199-021-00965-x. PMID: 33794759.