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ABSTRACT

Needlestick injury (NSI) is a serious occupational hazard against healthcare workers (HCWs) in a hospital setting with multiple implications, thus adherence to post-NSI management including follow-up protocol is crucial. This research was conducted to describe the distribution of NSI cases among HCWs working in Ministry of Health Malaysia (MOH)’s hospital in Selangor and adherence to a follow-up protocol, as well as the factors related to it. This was a cross-sectional quantitative study reviewing retrospectively all notified NSI cases in January-September 2016. Data were taken from Sharps Injury Surveillance (SIS) system and analyzed into descriptive and analytical statistics. There were 143 notified NSI cases. The majority of the cases were female (76.2%), Malay (60.1%), medical doctors (56.6%) and in a medical-based department.
(44.8%). The median age of NSI cases was 27 years old (IQR:5) and median years of employment was 1.5 (IQR:4.5). Most cases happened in a ward setting (58.7%) involving contaminated (95.8%) hypodermic needle (43.4%), occurred mostly during the procedure of drawing blood (23.1%). Only 86.7% of NSI cases were source-known and some were tested positive with blood borne pathogens. However, no occurrence of seroconversion among the injured HCWs detected. The overall adherence rate to the follow-up protocol was 72.3%. Multiple logistic regression yielded significant association between age, gender, department, device contamination, procedure conducted and source HBV status with adherence to follow-up of post-NSI protocol. Further comprehensive studies involving more determinants such as therapy-related factors and potential interventions are needed to optimize adherence rate to the follow-up protocol post-NSI.

**Keywords**: guideline adherence, needlestick injuries, health personnel, post-exposure prophylaxis, blood-borne pathogens

[Full text (PDF)]