

Prevalence, knowledge, and practices related to needlestick injuries among third-year nursing students at the College of Nursing, Colombo

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Needle stick injuries (NSIs) occur when a needle accidentally punctures the skin, usually in healthcare settings. They are a major occupational hazard for healthcare workers and, nursing students are especially vulnerable due to limited knowledge, experience, and training. NSIs commonly occur during procedures like venipuncture and sharps disposal. Prevention is vital and includes using safer devices, proper disposal, adequate training, and adherence to post-exposure protocols. We aimed to describe the prevalence, knowledge and practices regarding NSIs among students in the College of Nursing, Colombo. A descriptive cross-sectional study was conducted on 116 third-year nursing students at the College of Nursing, Colombo using systematic sampling. A structured, validated, pre-tested, self-administered questionnaire was developed to obtain data. Data were subjected to analysis using both descriptive statistics and chi-square tests using SPSS statistical software version 27. Vast majority (96.6%, n=112) were female, with an average of 25.17 (SD=0.989). The prevalence of NSIs was 21.7% (n=24) with only 33.3% reporting the incident, and just 20.8% undergoing post-exposure prophylaxis. Mean knowledge score was 9.18% with most (56.9%) demonstrating poor knowledge regarding NSI prevention, particularly regarding post-exposure protocols (65.5% unaware of need for immediate washing and medical attention). Only 51.7% knew the correct reporting procedure. Regarding practice, 59.5% showed unsafe habits: 43% admitted to recapping needles, and 38% disposed of sharps improperly. Hepatitis B vaccination completion was reported by only 41.4%. No statistically significant associations were found between prior NSI experience and higher knowledge or practice scores. There is a high prevalence of NSI among nursing students in our setting. Knowledge and practices regarding prevention of NSI were poor. Regular training is recommended on prevention and post-exposure practices. Ensuring full vaccination against hepatitis B virus is recommended due to the risks of occupational exposure.

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