

Knowledge of nurses on peripheral intravascular cannula-site infections and its associated factors

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Improper Peripheral Intravascular Cannulation (PIC) or maintenance of that would result in peripheral intravascular cannula-site infections (PICI). Since nurses play a key role in insertion, maintenance and removal of PIC, an examination of their knowledge about PICI is important in providing optimal care to patients with PIC. This study is aimed at assessing nurses' knowledge of PICI and to determine its associated factors. This was a descriptive cross-sectional survey conducted from March to June 2019 among 250 nurses employed in medical wards at the National Hospital of Sri Lanka (NHSL). Data were collected using a pre-tested, content-validated, self-reported questionnaire which consists of 20 items divided in to three main domains, namely, cannula insertion, cannula maintenance and prevention of PICI. Nurses who had ≥ 1 year of experience in relevant practice were participated voluntarily after signing informed consents. The response rate was 92.4%. Most of the nurses were females (88.3 %) and were aged between 25-30 years (73.6%). Most of them had 2-5 years of experience in nursing (79.7%) and in medical wards (85.3%). Nurses' overall knowledge on PICI was 47.6 ± 14.8 (range 0-80). The knowledge on cannula insertion, cannula maintenance, and prevention of PICI were 43.9 ± 16.8 , 46.5 ± 29.9 , 51.9 ± 22.8 respectively. Younger nurses (<30 vs. >30 years) and less experienced (<5 vs. >5 years) nurses in nursing and medical wards, diploma nurses and grade III nurses had significantly higher knowledge on PICI (<0.001). In conclusion, nurses' knowledge on PICI was found to be unsatisfactory. Nurses' knowledge seems to depend on duration of their basic academic qualification and exposure to the service and clinical field. Appropriate in-service educational sessions would be beneficial to refresh and improve their knowledge on PICI.

Keywords: hospital nurses, peripheral intravascular cannulation and infection prevention

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