

ABSTRACT

This study aimed to describe Intensive Care Unit (ICU) nurses' knowledge of pressure injury prevention and management to identify gaps in knowledge. The intention was also to make recommendations for clinical practice and education of ICU nurses. The setting of the study was four adult ICUs at a university-affiliated public hospital in Johannesburg. Included were: multi-disciplinary ICU, trauma ICU, neurosurgical ICU and cardiothoracic ICU.

A non-experimental, descriptive, quantitative and cross-sectional survey design was used to describe the ICU nurses knowledge of pressure injury prevention and management. The final sample comprised 101 respondents for the study. Data were collected from ICU nurses using a validated questionnaire developed initially by Beeckman *et al.* (2010) and revised by Manderlier *et al.* (2017). Data was analysed using descriptive and inferential statistical tests using the Shapiro Wilk test, univariate and multivariate linear regression and Cronbach alpha coefficient tests. Testing was done on the 5% level of significance.

Of the 101 (n = 110) surveys distributed, the overall mean total score was 42.16% (SD 12.09). A score of 15/25 (60%) indicates an adequate knowledge of pressure injuries (Beeckman *et al.*, 2010). Furthermore, in this current study, only 6 (out of 110) respondents scored 60% and above. These findings suggest that ICU nurses cannot contribute effectively to the prevention of pressure injuries.

The lowest scores were found in Theme five (*prevention of pressure injuries*) and Theme two (*classification and observation*) with scores of 25.0% (M = 2, IQR = 1-3, 8 items) and 39.5% (M = 1.58; SD = 1.06, 4 items), respectively. The highest scores were found in Theme three (*risk assessment*) and Theme Four (*nutrition*) with scores of 100.0% (M = 2; IQ 1-2; 3 items) and 50.0% (M=1.51; SD = 0.84; 2 items). The fact that ICU nurses lack knowledge of prevention measures and classification and observation of stages may indicate that they may not be able to use risk assessment tools effectively in clinical practice.

Some factors were statistically significant to predict appropriate prevention of pressure injuries management, included a higher level of education (14.00; 95% CI 2.90-25.11; p = 0.014), seniority of ICU nurses position (15.58; 95% CI 2.92-28.24; p = 0.016) and years of experience (6.38; 95% CI 9.70-5.45; p = 0.039). Some studies have consistently shown that educational interventions have led to a statistically significant increase in pressure injury knowledge scores.

This study concludes that improving training and providing ICU nurses with adequate information about current strategies and evidence-based practices to prevent pressure injuries could strengthen their contribution to patient safety. Recommendations are made for the clinical practice and education of intensive care nurses.

Keywords: pressure injury, prevention and management, ICU nurses knowledge