

Knowledge, attitude and practice of critical nurses towards prevention of medical device – related pressure injury in a tertiary hospital: A cross-sectional study

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ABSTRACT

Introduction: Medical device-related pressure injury (MDRPI) is a significant concern in critical care due to increased use of life-support devices. MDRPI proven to cause patient discomfort, prolonged hospital stays, and increased healthcare costs. Critical care nurses are crucial in preventing MDRPI through effective care practices. Understanding their knowledge, attitude, and practice (KAP) towards MDRPI prevention is essential to improving patient outcomes. Aim: To determine the level of knowledge, attitude and practice of critical care nurses and its associations towards prevention of MDRPI. **Materials and Methods:** Descriptive cross-sectional design with universal sampling method was employed. Self-administered MDRPI-KAPQ and MDRPI-KQ questionnaires were used. A total of 231 critical care nurses from adult, paediatric and neonatal critical settings in a tertiary hospital participated in the study. **Results:** The overall mean scores of knowledge and practice were unsatisfactory, 22.79 (3.14), 58.26 (10.55) respectively, with satisfactory attitude mean scores 42.08 (3.98). There was a positive significant association between attitude and gender, age group, level of education ($p < .05$) and post basic ($p < .001$). A positive significant relationship was found between knowledge and attitude, attitude and practice ($p < .001$), knowledge and practice ($p < .05$). While holding other variables constant, attitude was a significant predictor for practice; accounted 28.8% of the variance in practice. For every 1-unit increase in the attitude score, the practice score is expected to increase by 1.377 units ($t = 8.599$, $p < .001$). **Conclusion:** The findings emphasize the need for targeted interventions to improve nurses' attitudes toward MDRPI prevention. While knowledge is fundamental, changing perceptions and attitudes could lead to more consistent preventive practices. Further research could explore additional factors, such as organizational culture, workload, and leadership, which might account for the remaining unexplained variance in nurses' practice behaviors.