00089 Effects of an in-service Programme on Inpatient Nurses' Chest Drain Management Knowledge: A Randomized Control Trial Study.

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Aims: The aim of the study was to examine the effectiveness of an in-service educational programme on the knowledge and confidence levels of inpatient nurses in chest drain management and care.

Methodology: This was a randomized controlled trial (RCT). Sixty-five inpatient nurses were randomly assigned to the control or intervention group. Participants of the intervention group received a 1-hour long in-service educational programme conducted by a respiratoryspecialized Advanced Practice Nurse. Pre-tests and post-tests were conducted using a 40-item questionnaire. Various parametric tests in SPSS 20.0 were used.

Result: The mean age of our participants was 29.14 years old. More than three-quarter (88.9%) of inpatient nurses possessed an unsatisfactory knowledge level in the management of chest drains. There was a significant difference in mean post-test knowledge ($t = 6.57$; 95% CI 12.57 to 23.59; $p \leqslant 0.05$) and confidence scores ($t = 3.40$; 95% CI 0.30 to 1.18; $p = 0.001$) between the control and intervention groups. Our study showed that the educational in-service was beneficial. This was similar to a recent RCT study by Yoshimura et.al. (2012) who initiated a simulation training program for medical interns.

Conclusion: Knowledge is vital for assessments and observations which are central to reducing risks and complications. Poor knowledge on the underpinning principles of chest drainage coupled with variations in practice suggest a need for an education-based interventional study which no prior study has conducted.

This study has reinforced the need for timely education to disseminate updated clinical knowledge on top of the existing British Thoracic Society (BTS) guidelines. Future studies ought to consider involving simulation in order to enhance the learning process especially for the complex management of chest drains.