00558 Mobile in Situ Code Simulation Improves Nurses' Resuscitation Performances and Confidence

Tan Hui Li, Goh Ming Jin Andy, Wu Jieling, Lu Han

Singapore General Hospital

Aims: Implement and demonstrate feasibility of in situ simulations to improve the knowledge, skills and confidence of nurses at performing code resuscitation, and rapid dissemination of resuscitation skills to clinical areas through the train-the-master trainer training.Timely and efficient resuscitation reduce time, improve effectiveness and increase the survival rate of patients.

Methodology: A mobile simulation-based training was implemented to assess nurses' code resuscitation performance at the medical-surgical units. Standardized briefing (5mins), simulation (20mins), debriefing (20mins), and follow-up (1-month) template was used for the in situ simulations training. An observational behavioral based evaluation tool and self-reported survey based on the New World Kirkpatrick Model's four levels of outcome measures were used to assess nurses' performance, engagement and self-confidence. Train-themaster trainer model was adopted to facilitate rapid dissemination of skills and knowledge on code resuscitation to the clinical areas.

Result: During the 5 pilot simulation runs, 15 nurses had performance accuracy rate of 57.1% to 63.6% with median of 41.5%. Post debriefs simulations, nurses' performance greatly improved with accuracy rate of 87% to 100% and median of 93%. Over the 1.5 years period (Jun 2016 to Mar 2018), 84 simulation runs were completed with 600 nurses' participations. 90% of the nurses rated increased in confidence level to perform and participate in code resuscitations. 78% rated strong improvement in competency while only 22% rated no difference to competency. Post debrief simulations, nurses' performance accuracy rate improved from 63.7% to 89.9% with median of 85.2%. 122 master trainers were trained using the train-the trainer approach.

Conclusion: The mobile in-site simulation using collaborative train-the master trainer model is a cost effective and efficient educational approach to achieve rapid dissemination of knowledge and skills. Nurses resuscitation performance and skills significantly improved without the need for an expensive simulation center. Compensation for training time is reduced with training occurring during work hours.