Abstract: P301

Peer education improves skills and knowledge in nurses during a six-hours course on cardiopulmonary resuscitation after cardiac surgery

Authors:
R Di Cola¹, G Arlotta¹, C Gaetani¹, D Buralli¹, D D'antonio¹, L Verdicchio¹, F Balducci¹, A Mele², F Conti¹, M Calabrese¹, ME Antonucci¹, F Bevilacqua¹, S De Paulis¹, F Corsi¹, A Scapigliati³, ¹A. Gemelli University Hospital Foundation, Cardiovascular and Thoracic Science - Rome - Italy, ²University Campus Bio-Medico of Rome - Rome - Italy, ³Catholic University of the Sacred Heart, cardiovascular science - Rome - Italy,

Topic(s):
Acute Nursing Care

Citation:
Background
According to 2015 guidelines on Cardiac arrest Following Cardiac Surgery (CAFCS), Emergency Resternotomy (ERS) is a part of the treatment and requires a specific training.

Purpose
The aim of the study is to evaluate the efficacy of near peer education in nurses during a 6-hours course on CAFCS and ERS: the RESTE course.

Method
A multi-professional team (anaesthesiologist, ICU and OR nurses, surgeons and perfusionists) analysed and adapted current protocols on CAFCS and ERS to local resources and set up a 6-hours course including skill stations and scenarios. A cheap and effective sternal simulator was designed and tested. The near peer instructors were 2 ICU and 2 OR nurses, expert in cardiac surgery, guided by a cardiac anesthesiologist. Every teacher, except 2 OR nurses, were Italian Resuscitation Council Basic Life Support and Defibrillation instructors. 2 OR nurses were trained in teaching Emergency Resternotomy. Pre and post-course MCQ was administered to participants: difference in score was analysed with Wilcoxon signed-ranks test. CAFCS scenarios and pre and post skill stations were videotaped; time from ERS decision to chest reopening, time to first incision and time from incision to internal massage were assessed pre and post training. Data is presented as mean and standard deviation and paired t tests have been calculated. Candidates’ perception about course quality was investigated through a satisfaction survey by a 5-point Likert scale.

Results
32 ICU nurses attended the course. Content knowledge increased significantly after the course (85.9 % ± 9.7 vs 60 % ± 16.2; p < 0.001). Time from decision to chest reopening was significantly lower after skill station (256.1 ± 39 vs 372.8 ± 89.1 sec; p<0.001) as well as time to first incision (194.5 ± 57.4 vs 283.5 ± 77.7, p < 0.001) and time to internal massage (77 ± 16.9 vs 88.1 ± 20.1, p < 0.02). All candidates expressed high satisfaction with respect to course relevance and methodology (4.87 ± 0.3).

Conclusions
Near peer education in a 6-hours course on resuscitation in CAFCS and ERS demonstrated to be feasible, appreciated and effective in skill and knowledge acquisition. Larger implementation is needed to confirm our preliminary results.