Enhancing Frontline Staff Competence in Cardio-pulmonary Resuscitation (CPR)

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Introduction

A systematic team approach in responding patients’ arrest could improve patients’ chance of survival. However, high proportion of junior nurses and new surgeons due to rotation and turnover, team harmony and clinical competency in CPR are challenging. This program was then introduced to apply team resource management (TRM) in regular simulation practice of emergency critical condition.

Objectives

1. To enhance and ensure staff’s knowledge on CPR
2. To ensure staff are familiar with resuscitation equipment
3. To enhance staff related clinical competence through CPR Drills
4. To ensure staff safety and satisfaction
5. To ensure patients’ safety and service quality during the procedure
6. To optimize patients’ outcome after CPR

Methodology

1. Work with surgeons to revise and update the Department CPR guidelines.
2. Develop a systematic workflow for CPR Drills at different situations.
3. Design questionnaires to identify nurses’ knowledge in CPR.
4. Design satisfaction survey to evaluate nurses’ opinion.
5. Conduct staff education on CPR with demonstrations and practice on manikin.
6. Practice the main skills of TRM model which include communication skills such as call-out, ISBAR and check-back, leadership for decision making, tasks assignment and situation monitoring.
7. Conduct CPR drills at wards with surgeons, nurses and supporting staff.
8. Conduct debriefing by qualified CPR instructors.
9. Evaluate nurses’ CPR knowledge and their satisfaction.
Result
Nurse Satisfaction Survey: Total 50 nurses’ opinion had been received. After the program, nurses’ confidence in performing effective CPR has been increased from 74% to 98%. All nurses agreed that their knowledge, skills and confidence in performing CPR have been improved.
Knowledge Quiz on CPR: 44 pre and post program quiz on CPR knowledge for nurses were obtained and analyzed. Their marks have been increased from 5.9/10 to 7.1/10.
TRM strives to fully utilize all available resources information, equipment and human appropriately in this program to achieve optimizing the safety and efficiency of CPR. Besides a good understanding of the guideline and knowledge, performing an effective CPR requires practice, i.e., CPR Drills. Staff showed positive response to the program. Finally, they have more confidence in handling CPR to improve patient’s outcome and decrease morbidity.