

Summary

Critical care nursing is that specialty within nursing that deals specifically with human responses to life-threatening problems. A critical care nurse is a licensed professional nurse who is responsible for ensuring that all critically ill patients and their families receive optimal care. Therefore, a need was felt to in-service training program to improve nurses knowledge and performance to produce a best of care to critically ill patients.

The aim of the present study was to examine the impact of a designed teaching protocol on nurses knowledge and practices as regards the emergency care of critically ill patients.

To fulfill the aim of the present study, the following research hypothesis were formulated:

- H₁:** The mean post teaching protocol knowledge scores of nurses providing care for critically ill patients at intensive care units will be higher than their pre knowledge mean scores.
- H₂:** The mean post teaching protocol practice scores of nurses providing care for critically ill patients at intensive care units will be higher than their pre practice mean scores.
- H₃:** There will be a positive correlation between nurses knowledge and practice scores.

The study was carried out on 60 nurses working in intensive care units of both benha university and teaching hospitals. Age of the nurses ranged from less than 25 to 35 with a mean age of $(24.5 \pm 3.51 \text{ SD})$ years. Their years of experience ranged from less than 5 to 15 years with a mean of $(2.77 \pm 2.58 \text{ SD})$ years. The majority of the study group subjects were

married (53.3%), staff nurses (88.3%), without off spring's (56.7%), with secondary education (66.6%) and did not receiving any previous training (78.3%).

Implementing this study required two tools:

- 1- Pre-/post-test questionnaire sheet was utilized for testing theoretical information related to the emergency care of critically ill patients. It included: connecting patients to cardiac monitoring, oxygen therapy, Nebulizer sessions, auscultation of chest sounds, tracheobronchial suctioning, recording a 12-lead ECG,CPR,CVP, care of patient on ventilator, arterial blood sampling, crush truly, emergency medications, emergency investigations, sudden cardiac arrest and assessment of unconscious patient through Glasgow coma scale. (Appendix III).
- 2- Observational checklist was utilized to assess nurses performance level. It included maintenance of cardiac cycle through recording a 12-lead ECG, Cardiac monitoring, maintenance of adequate ventilation through oxygen therapy, nebulizer session, suctioning, auscultation of chest sounds, management of sudden cardiac arrest through CPR, Defibrillation, emergency medications and emergency cart. (appendix IV).

Educational program: According to literature review, objectives and nurses assessment data of the study the needed knowledge and practices needed were tailored.

The main findings of this study were :

- Nurses knowledge and performance were unsatisfactory before the program implementation.

- After the program implementation, there was a significant improvement in the knowledge and performance items. This improvement declined by time.
- Age was positively correlated with knowledge scores of nurses with a statistically significant differences after three months of program implementation with p-values <0.05 .
- Age was positively correlated with practice scores of nurses with a highly statistical significant differences after one, two and three months of program implementation with p-values of <0.001 .
- Years of experience were positively correlated with knowledge scores of nurses a highly statistical significant immediately post, after one, two and three months of program implementation with p-values of <0.01 , 0.001 .
- Years of experience were positively correlated with practice scores of nurses a highly statistical significant after one, two and three months of program implementation with p-values of <0.001 .
- There was a direct relationship between nurse's knowledge and their practice scores.
- Generally, knowledge and practice mean scores of nurses were affected by marital status, job, off springs, education and previous training with high significant statistical differences. Specifically the mean knowledge scores of those single, without off springs, staff nurses, secondary education and doesn't obtain a previous training courses were higher than others. But contrarily the mean practice scores of those

single, Head nurses, Bachelor degree, and obtained a previous training courses were higher than others.