

## **Effect of Educational Program on Nurses and Nurse Interns' Performance Regarding Advanced Cardiopulmonary Resuscitation**

### **ملخص البحث باللغة الانجليزية:**

**Background:** The Cardiopulmonary Resuscitation (CPR) is an essential skill for all healthcare professionals, especially nurses. It can be a lifesaver when applied by a competent and skilled person. The CPR procedure is a coordinated integration of chest compression-induced circulation, rescue airway and breathing management whereby priorities are determined by evidence from literature, practice, required professional and good training nurses.

**Aim of the study:** This study aimed to evaluate the effect of an educational program on nursing performance regarding advanced cardiopulmonary resuscitation (CPR).

**Research design:** A Quasi-Experimental study design with the pre-posttest intervention was used in this study.

**Setting:** The study conducted at Emergency Departments of Ain Shams University and Children Hospital affiliated to Ain Shams University Hospitals.

**Subject:** A purposive sample included all available staff nurses and the intern nurses and faculty students (100) from males and females 50 from Ain shams university hospital (20 males and 30 females) and (50 from Ain Shams children hospital (27 females and 23 males), who worked at the previously mentioned settings over a 6 months' period.

**Tools of Data Collection:** Data were collected by using two tools:

#### **I- Pre-designed questioner sheet:**

This tool is an Arabic interviewing sheet constructed by the researcher after reviewing related literature and content validated by experts. This tool was divided into two parts:

[1]. **Part one:** Demographic characteristics of the studied sample include: age, ranking, residence, years of experiences and qualification.

[2]. **Part two:** It concerned with nurses' knowledge regarding CPR, definition, indication, sequence, and assessment.

**II- An observation checklist:** it was translated into Arabic language by the researchers. It was used to assess nurses' practice regarding advanced CPR (for pediatric and adult). (Pre/posttests).

**Results:** The results of current study revealed that half of the study; one-third of them were in the age group of 20-25 years, Mean  $\pm$ SD (21.4 $\pm$ 2.8). Also, the majority of the studied sample were from urban areas, while almost all of them did not attend CPR training and more than half of both group did not observe CPR process. there was a statistical significant difference between nurses' knowledge related to definition and sequence of CPR throughout the intervention ( $p < 0.05$ ). There was a statistical significant difference between nurse's knowledge related to the indication of CPR throughout the

intervention ( $p < 0.05$ ). There was statistical significant difference between nurses total practice of CPR throughout the intervention ( $p < 0.05$ ).

**Conclusion:** In the light of the current study, it can be concluded that the educational program improves the knowledge and practices of the nursing staff regarding advanced CPR at the Emergency Department.

**Recommendations:**

- Frequent training courses should be provided for nurses to update their knowledge & practice regarding basic CPR for adult and pediatric.
- In-service education departments should make continuous training courses for the nurses about the new intervention related to knowledge & practice of basic CPR.
- There must be a periodical evaluation of nurse's practice regarding CPR in all departments of medical-surgical and pediatric critical care areas.
- Training refreshing courses about CPR is important to increase the retention of CPR knowledge for the nurses.
- Further researches should be conducted to investigate a new teaching method for improving nurses' knowledge and practice regarding CPR.