SUMMARY

The incidence of nosocmial infections has been a persistent major problem in every institution where patient care is provided, world wide; million of patients developed such infections, resulting in several thousands of deaths and economic cost of several billions of dollars. Among only a few studies from developing countries, very high rates have been reported as an overall rate of particular medical services (***Abou Elela, 2008***).

The aim of the current study was to assess nurse's knowledge and practices related to infection control measures and to evaluate the impact of a designed infection control training program on nurse's knowledge and practices about infection control measures in ICU at Benha University Hospital. To fulfill the aim of the present study, the following research hypotheses were formulated:

H$_1$: There will be a significant statically differences between the pre program mean knowledge score of nurses who working in ICU as compare to their post program mean knowledge scores.

H$_2$: There will be a significant statically differences between the pre program mean practices score of nurses who working in ICU as compare to their post program mean practices scores.

H$_3$: There will be positive correlation between nurses' knowledge and practices scores.

The study was carried out on 40 nurses working in intensive care unit of Benha University. Age of the nurses ranged from 20 to 36 with a mean age of (27.0± 3.46 SD) years. Their years of experience ranged from less than 5 to 15 years with a mean of (7.025 ± 3.55 SD) years. The majority of the study group subjects were married (90.0 %), staff

nurses (75.0 %), with secondary education (65.0 %) and did not receiving any previous training (87.5 %).

Implementing this study required two tools:

1- Pre-/post-test questionnaire sheet was utilized for testing theoretical information related to infection control measures. It included: infection concept general infection control measures, e.g. hand washing, protective clothes

2- Observational checklist was utilized to assess nurses' performance level. It included practices related two infection control measures e.g. unit preparation, waste disposal, hand washing, protective clothes.

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.

- No statistical significance was found between knowledge and practice scores of the study subjects; Age with knowledge scores and practices scores of nurses at pre and post program implementation.

- No statistical significance was found between Years of experience with knowledge scores and practices scores of nurses at pre and post program implementation.

- There was not a relationship between nurse's knowledge and their practices scores.

- Generally, knowledge and practice mean scores of nurses were affected by marital status, job, education and previous training with high significant statistical differences. Specifically the mean knowledge scores of those single, staff nurses, secondary education and 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.