Nurses' Knowledge of Healthcare Associated Infections;

Surgical Site Infection and Ventilator Associated Pneumonia

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Abstract

Background: Surgical Site Infection (SSI) and Ventilator-Associated Pneumonia (VAP) are the most significant Healthcare Associated Infections (HAI) among other types of infections. Patients who have SSI or VAP are subjected to high mortality and morbidity incidents.

Aim: The aim of the current study is to assess the level of nurses' knowledge of HAIs specifically SSI and VAP, and to investigate the relationship between nurses' knowledge of SSI, VAP and selected socio-demographic characteristics and health-care setting characteristics.

Methodology: A descriptive cross-sectional correlation design was used in this study. One hundred and thirty nine nurses working at Intensive Care Units, Emergency Departments and surgical unit in four hospitals located in the Capital Amman, Jordan. **Results:** The mean of the total SSI knowledge scores of the nurses participated in this study is 2.22 out of nine (SD = 1.27, median = 2, range = 0 - 5); the overall nurses' knowledge level for the prevention of SSI was low. While, the mean of the VAP total knowledge scores of the nurses participated in this study is 3.59 out of ten (SD = 1.76, median = 4, range = 0 - 8); the total nurses' knowledge level for the prevention of VAP was moderate. The most significant predictors of the nurses' knowledge for SSI prevention were the attending training course / educational program about HAI, and

nurse to patient ratio in the department or unit, whereas for VAP prevention was the national competency exam, working area and existence of staff development unit in the hospital. There were no statistical significant correlations among the total SSI and VAP scores of knowledge and all continuous variables (Total number of beds in hospital, Number of beds in the department, Grade point average, Years of experience in the present department, Total years of experience after graduation, Total SSI knowledge, Total VAP knowledge).

Conclusions: The Jordanian nurses' knowledge of guidelines for SSI and VAP prevention seems inadequate. More efficient continuing educational programs should be carried out by the hospital to upgrade the evidence based knowledge and practices of nurses and to improve the health-care quality and safety.