

Investigating the Performance of the Matrons in the Infection Control Programs in Hospitals Related to University of Medical Sciences of Kurdistan in 2010

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ABSTRACT

Background: Nosocomial infections are one of the factors threatening the patients and staff. The infection rate in each country is different. Annually, In the United States, two million people are being infected to these infections resulting in 90 thousand deaths with relating costs estimated about 4.5 to 7.5 million dollars in a year. In Iran, these infections have been reported to be about 1.9 to 25 percent. Therefore, matrons of health centers need greater attention to controlling these infections. The purpose of this study is to determine the performance of matrons in performing infection control programs at hospitals of Kurdistan province in 2007.

Methodology: This study is descriptive - analytic study and more cross sectional. The studied population was consisted from 120 matrons of hospitals of Kurdistan's University of Medical Sciences that 114 of them cooperated in this study. Data were collected using questionnaires containing two sets of questions: demographic characteristics of two samples and performance; and then were analyzed by SPSS software. Descriptive and inferential statistics were used to achieve the research objectives.

Results: Findings showed that, in the field of infection control programs, 53% of matrons have good performance, 13% have relatively good performance, and 13% and had an undesirable performance. Among the individual variables in this study, there was relationship between the performance of matrons and the type of disinfecting and decontamination of equipment; between the type of materials and sector's equipment to infection control facilities; and between the education level and compliance with precautions. The results also showed that, there is a direct relationship (5%) between infection control courses and infection control trainings.

Conclusion: according to the results, 34% had undesirable performance in implementing infection control programs, which its affecting factors should be considered, and according to the effect of training on infection control programs, matrons can reduce the incidence of these infections with developing training programs for nurses.

KEYWORDS: matron, nosocomial infections, infection control programs.

INTRODUCTION

In the health care organizations, the duty of matrons is to provide optimal care for patients. In the evaluation of cares, one of the most notable factors is the rate of nosocomial infections [1].

Nosocomial infection is the infection that occurs 48 to 72 hours after hospital admission while in the accepting time, the person neither has the obvious symptoms of the infection nor was in the incubation period [2]. These infections, undoubtedly, are one of the major problems of health and medical centers all around the world. Plowman, during the study in England was reported that, the patients who infected to nosocomial infections after admission were hospitalized for 2.5 times more than usual time and suffered from 3 times more than usual costs and even more medical care costs after release [3]. The occurrence of these infections is different in each country. Annually, In the United States, two million people are being infected to these infections resulting in 90 thousand deaths i.e. one in every six, and with relating costs estimated about 4.5 to 7.5 million dollars in a year. [4]. In Iran, these infections have been reported to be about 1.9 to 25 percent [5].

In addition to the exorbitant fees of these infections, there are spiritual damages such as pain, separation from family, mental disorders due to long time hospitalization [6].

Nosocomial infections also threaten the healthcare – medical staff. Being infected transmissible diseases or various pathogens can cause disease transmission to the other staff, patients and can sometimes lead to the epidemic. Therefore, developing an active program for surveillance; prevention and control of nosocomial infections in hospital as infection control committee is required [7].

Nurses as the most active members of the medical team, have the most contact with patients and consequently, have a significant role in the prevention and control of nosocomial infections. Therefore, matrons have an important

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role in reducing nosocomial infections by controlling and monitoring the implementation of adopted regulation. They can reduce nosocomial infections by 50% through having an active role in the committee of infection control and implementing its decisions and in compliance with the activities such as controlling and supervising departments, providing clean disposable equipment for staff and patients, strict control on washing hands as an important part of infection control system, developing training programs for the staff and patients, establishing health dossiers for medical care staff and following-up suspected cases, participating in the buildings' reviewing affairs [8].

Management is coordinating resources through planning, organizing, directing, and monitoring to achieve the goals [9]. In this respect, control is considered as one of the most important tasks of management so that some management scholars believe that, good management depends on effective control system. Effective control improves cooperation, creates a sense of responsibility, self-control, auto-regulation, and increases motivation and job satisfaction. Matrons should not consider control as success or failure determination tool, but they must benefit this as a tool to achieve organizational goals, and personal and professional development [10].

Given the importance of nosocomial infections in increasing the costs, causing inability and physical-spiritual damages, and the role of matrons in its prevention, we decided to investigate the performance of matrons in implementing infection control programs to use the obtained results in order to reduce nosocomial infections, disability costs and related physical-spiritual damages to ultimately, promote the quality of nursing service.

2. METHODOLOGY AND DATA

This study is descriptive - analytic study, which investigates the performance of matrons in infection control programs in the hospitals of Kurdistan's university of medical sciences. The research environment was consisted from all hospitals of Kurdistan's university of medical sciences. Sampling method was through census and questionnaires were given to all 120 matrons that, 114 of them had completed questionnaires.

Data collection tool was questionnaires, which, were completed by the units subject to this study. The questionnaires contain two parts: first, containing the demographic data (sex, marital status, age, education, matrons' history, infection control courses, and management courses) and 46 questions about the performance of matrons in infection control programs. Validity and reliability of the questionnaire obtained by content validity and re-test ($r=0.95$), respectively. Data analysis performed using SPSS software and descriptive statistics tests. In addition, hi-square and Fisher's exact test were conducted to test the statistical hypotheses.

3. RESULTS

Findings showed that, samples were composed from 64% of women and 36% of men. Subjects have a mean age SD of (39.9 + 5.83) years and mean managerial experience SD of (5.93 + 7.6) years.

The results also showed that, the majority of matrons (83.3%) were married and 16.7% were unmarried. Education level of the majority of subjects (98.2%) was bachelor degree and two had master degree (1.8%).

Almost more than half of the matrons (59 persons, 51.8%) were passed infection control course and the remaining 55 persons (48.2%) were not.

The results showed that, from 114 studied matrons, the majority of them (72 persons, 63.2%) did not passed management training courses i.e. only 42 cases (36.8%) had passed the management course.

4. CONCLUSION

Analysis of findings of this study obtained by investigating demographic characteristics of matrons, their performance in infection control programs, and the relationship between performance and their demographic characteristics.

In this study, female matrons were 64%, married were 83.3%, and matrons with bachelor degree were 98.2%. Shakarniya quoted Douglas (1996) state that, most of nurses are women and about 70% are married. Moreover, results show that, most of patrons have attended infection control training (51.8%), whereas only 36.8% had completed management course.

More than one third of the subjects (36%) were in the age group of 30-34 years and the lowest percentage of people was in the age group of 50-54. The highest percentage of persons (30%) has 11-15 of work experience and the lowest percentage of persons (4%) has 26 to 30 years work experience. The average of subjects' age was 36 years and standard deviation was 5.8. The average of work experience was 13 years with a standard deviation of

6.39. Shakrniya quoted Douglas (1996) also reported that, the percentage of working nurses with the age of 35 to 49 years is increasing.

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