Prevalence of nosocomial infections and the frequency of microorganisms in the medical units of Ayatollah Rouhani Hospital in Babol during 2011-2016

Nasirae Ebrahim1*; Mahichi Fatemeh2

1. Supervisor Infection control, MSc health services management, Babol University of Medical Sciences, Iran
2. MS Midwife, MSC Mathematics, Babol University of Medical Sciences, Iran

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ABSTRACT

Introduction: Nosocomial infections increase the length of stay, mortality and cost in a hospital. The aim of this study was to determine the prevalence of nosocomial infections and the frequency of microorganisms in Ayatollah Rouhani Hospital of Babol during 2011-2016.

Materials and Methods: This retrospective, descriptive and analytical study was conducted on 100,172 patients admitted in this hospital during 2011-2016. Data were collected based on Ministry of Health No. 2, and their infection was examined and confirmed by an infectious disease specialist. The frequency of nosocomial infections was 2995 cases (2.98%) of all hospitalized patients (100,172) in all units. The infection of pulmonary, urinary, surgical wound and blood was 32.3%, 30.6%, 11.08%, 3.73%, and the frequency of microorganisms such as Pseudomonas, Candida, E.coli, Acinetobacter, Enterobacter and Staph aureus was 24%, 23%, 19.5%, 18.9%, 17%, 2.4%, respectively. Data were analyzed using SPSS 20 and a significant relationship was found between infection and type of microorganisms (p-value = 0.01).

Results: The most cases of infection are pulmonary, urinary, surgical wound, blood and most microorganisms are Pseudomonas, Candida, Acinetobacter, E.coli and Staph aureus respectively.

Conclusion: It is recommended the nurses to wash their hands for reducing the nosocomial infections, especially in intensive unit with one patient and observe the aseptic tips for treatment procedures (catheterization, tracheostomy, venipuncture and so on).