

The Antibiotic Resistance of *Pseudomonas* spp. Isolated from Different Wards of Shahid Rajai Hospital in Tonekabon, 2010-2011

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Abstract:

Background and Objective: A wide variety of opportunistic pathogens has been detected in hospital surfaces. Among these, *Pseudomonas* species are one of the leading causes of nosocomial infections, frequently found in hospital environments. The purpose of this study was identification of antimicrobial susceptibility of *Pseudomonas* spp. isolated from different Section of ShahidRajaeii hospital, Tonekabon.

Material and Methods: The samples (460) from different sections of Shahid Rajaeii hospital, were collected between December 2010 and June 2011. The identification of the strains was performed by using biochemical tests and API20NE (Biomérieux) ,and antimicrobial susceptibility of the isolates against different antibiotics was determined by disc diffusion test.

Results: Of 460, 61(13/26) strains of *Pseudomonas* are isolated from all the sources. The highest rate of *Pseudomonas* spp. is recorded in Surgery and ICU, while the lowest in Dialysis ward. Of 61 strains of *Pseudomonas*, 52 (85/25%) are belonged to *Pseudomonas aeruginosa*, six (9/83%) to *Pseudomonas stutzeri*, two (3/28%) to *Pseudomonas putida* and one (1/64%) to *Pseudomonas fluorescens*.

Conclusion: The environments of the hospital can be the vehicles of *Pseudomonas* spp. , therefore, both the patients and personnel should have extra attention to their personal hygiene to avoid *Pseudomonas* infection.

Keywords: Nosocomial Infections; *Pseudomonas*; Antibiotic Susceptibility