Elevated prevalence of multidrug-resistant *Pseudomonas aeruginosa* in Shiraz Amir-al-momenin burn hospital

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**ABSTRACT**

**Introduction:** *Pseudomonas aeruginosa*, a leading nosocomial pathogen which can cause vast range of infections in surgical sites and other fulminant infections such as sepsis. Multidrug resistant (MDR) *P. aeruginosa* strains make treatment of this infectious harder. Knowing the pattern of isolates in each center will be helpful to manage treatment of patients and control the infection more properly.

**Materials and Methods:** The study was performed at Burn and Wound Healing research center on *P. aeruginosa* isolates from burn samples (wound, sputum, pus and urine) of hospitalized patients at Amir-al-momenin Hospital among January 2015 to January 2016. *Pseudomonas aeruginosa* isolates were detected by routine standard microbiological techniques. Susceptibility pattern of confirmed isolates by disk diffusion test on Muller-Hinton medium and was carried out matching to the Clinical Laboratory Standard Institute (CLSI) guidelines.

**Results:** Out of 33 samples of *P. aeruginosa* was isolated from samples during study time. According to the pattern results the most isolates were most resistant to co-amoxiclav (75.8%), cefotaxime (93.3%), azithromycin (87.9%), gentamicin, ceftazidime, doripenem, imipenem (81.8%) and ciprofloxacin, levofloxacin (78.8%).

**Conclusion:** The high incidence of antibiotic resistant *P. aeruginosa* isolates in our hospital warrants for the judicial use of antibiotics and application of infection control measures to avoid therapeutic crisis resulting from multidrug-resistant isolates such as *P. aeruginosa*.