

## عنوان مقاله:

Antibiotic resistance and biofilm formation of *Pseudomonas aeruginosa* strains isolated from clinical samples in Kerman, Iran

## محل انتشار:

بیستمین کنگره بین المللی میکروب شناسی ایران (سال: 1398)

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## خلاصه مقاله:

Introduction and objectives: *P. aeruginosa* strains are common pathogens in hospitals as they have ubiquitous nature, ability to survive in moist environments and innate resistance to many antibiotics. The aim of this study was the survey of biofilm formation and drug resistance of *Pseudomonas aeruginosa* strains. Materials and methods: A total 15 isolates of *Pseudomonas aeruginosa* were isolated during April to June 2018 from different clinical samples obtained from hospitals in Kerman. All isolates were identified on the basis of their cultural, morphological and biochemical characters and antibiogram was evaluated by Kirby-Bauer's disk diffusion method as well as MIC against common antibiotics by CLSI2016 guide line. Cell surface hydrophobicity (CSH) test and biofilm formation on glass and polypropylene surfaces in shaking and static states were also performed. Results: 20 strains of *P.aeruginosa* were identified by characteristics as oxidase-positive, motile bacteria with production of a blue, red or brown pigment on King's medium. They were resistant to tetracycline (95%), Chloramphenicol (80%), Imipenem (75%), ceftizoxime (65%), norfloxacin (30%), and Gentamycin (15%). MICs were observed in different values. Maximum cell surface hydrophobicity was 81% about *P.aeruginosa* IAUK8717 was reported with maximum biofilm formation in shack and static states on glass and polypropylene. Conclusion: Antibacterial surveillance should be performed periodically to monitor the present resistance patterns of *P. aeruginosa* in different parts of local hospitals such as ICU. Finding accurate information about multidrug resistant strains of *P. aeruginosa* will allow us for better programming in .resistance interruption in the future

## کلمات کلیدی:

*Pseudomonas aeruginosa*, biofilm, Gentamycin

## لینک ثابت مقاله در پایگاه سیویلیکا:

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