

Determining of resistance and sensitivity of *Pseudomonas aeruginosa* in Iran in 2010-2011

N. Shahini¹, N. Shahini^{2,*}, S. Ala²

¹Student Research Committee and the Student Committee of Gorgan University of Medical Sciences, Golestan University of Medical Sciences, Golestan, Iran

²Department of clinical pharmacy, School of pharmacy, Mazandaran University of medical sciences, Mazandaran, Iran

Background and Aims: *Pseudomonas Aeruginosa* ,as a common factor of nosocomial infections, has had increasing Antibiotic resistant in recent years so that we are seeing strains with multiple resistant .Therefore it 's important to determine antibiotic sensitivity that can help the choice of initial antimicrobial therapy.

Methods: In this study, 70 articles related to resistance and susceptibility pattern of *Pseudomonas* were used from cities of Tehran, Mashhad, Shiraz, Kerman, Bandar Abbas, Uremia during the 2010-2011 years. Appropriate papers were Purified and compared with related articles in US and findings were recorded.

Results: In Tehran, the greatest resistance was observed with Trimethoprim (100%), ceftazidime (80%). While imipenem (60%) and cefepime (52%) had least resistance. In Shiraz, more resistant for clavunic acid (69.2 %) and highest sensitivity for Imipenem (50%). In Mashhad, amoxicillin (100%) , ampicillin (100%) and tetracycline (100%) had highest resistance but the highest sensitivity was seen with Gentamicin (15%), Ciprofloxacin (40 %) and imipenem (20%). The highest rate of resistance was observed in Kerman with ampicillin (100%) and ticarcillin (100%). In Bandar Abbas the highest resistance by Carbenicillin (90%), Tobramycin and co-trimoxazole and the least resistance to ciprofloxacin (45%) .In Urmia, resistance to cefotaxime was more than other antibiotics and resistance to imipenem and Ciprofloxacin were reported less than others. Minimum resistance to *Pseudomonas* in America related to imipenem (15%) Ciprofloxacin (20%) and the most resistant to gentamicin (50%).

Conclusions: In large cities, resistance was higher than small cities that are similar to advanced countries such as America. Probably due to easier availability of antibiotics in the larger cities. Overall there is the lowest resistance to Imipenem and Ciprofloxacin

Keywords: Resistance; *Pseudomonas Aeruginos*; Iran