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# Minimizing potential resistance among bacteria causing urinary tract infection

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Urinary tract infection (UTI) represents the commonest genitourinary diseases particularly in developing countries. Moreover the emergence of multi-drug resistance among the strains causing UTI is a great cause of concern. Furthermore, UTIs are particularly important because their occurrence may be associated with some congenital abnormality of urinary tract which may lead to recurrent infections causing damage to the urinary tract. Thus, prevention is the best strategy for avoiding complications.

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he report by Ghorbani et al., in their work "Alterations in antibiotic susceptibility of urinary tract infection pathogens" from Ahvaz is important and timely.

Urinary tract infection (UTI) represents the commonest genitourinary diseases particularly in developing countries. Moreover the emergence of multi-drug resistance among the strains causing UTI is a great cause of concern (1, 2). Furthermore, UTIs are particularly important because their occurrence may be associated with some congenital abnormality of urinary tract which may lead to recurrent infections causing damage to the urinary tract (3, 4). So, prevention is the best strategy for avoiding complications. Ghorbani et al. (5) conducted a study to assess the antibiotic susceptibility pattern of uropathogens like E. coli which also showed its resistance to Ampicillin. The widespread occurrence of antibiotic resistant bacteria in developing countries, including Iran, necessitated the continuous monitoring of these bacteria for their susceptibility pattern to various antibiotics. This study will be of help in taking decision to make the proper regional treatment regimen in order to combat multidrug resistance bacteria particularly E. coli, at least in

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that part (Ahvaz) of the Iran.

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## References

1. Sibi G, Devi A, Fouzia K, Patil B. Prevalence, Microbiologic Profile of Urinary Tract Infection and its Treatment with Trimethoprim in Diabetic Patients. Research Journal of Microbiology. 2011;6.

2. Kalantar E, Lornejad H, Reshadmanesh N. Prevalence of urinary tract pathogens and antimicrobial susceptibility patterns in children at hospitals in Iran. Iranian Journal of Clinical Infectious Diseases. 2008;3(3).

3. Ahsan B, Beiranvand S, Abdulmaleki N, Mohamadi H, Kalantar E. A surveillance study of antimicrobial susceptibility in 11 hospitals in Kurdistan Province. African Journal of Microbiology Research. 2011;5(20):3157-61.

4. Kolawole A, Kolawole O, Kandaki-Olukemi Y, Babatunde S, Durowade K, Kolawole C. Prevalence of urinary tract infections (UTI) among patients attending Dalhatu Araf Specialist Hospital, Lafia, Nasarawa State, Nigeria. Int J Medicinal Med Sci. 2009;1(5):163-7.

5. Ghorbani A, Ehsanpour A, Roshanzamir N, Omidvar B. Alterations in antibiotic susceptibility of urinary tract infection pathogens. Journal of Nephropathology. 2012;1(1).