

# Urinary Tract Infection Prevalence and Antibiotic Resistance A Retrospective Study in Basra Governorate, Iraq.

## **Abstract:**

Urinary tract infections (UTIs) is one of the most common infectious diseases, due to presence of bacteria in urine together with symptoms, and sometimes signs, of inflammation like frequent micturation, dysuria, pyuria, nocturia, fever, and haematuria, most commonly occurring in women. Antimicrobial agents are among the most frequently prescribed drugs for UTIS, in other hand the high consumption of often inappropriately prescribed antibiotics combined with crowding, multiple pathology and frequent uses of invasive devices are the major factors contributing to high level resistance. This retrospective study was designed to evaluate the prevalence of microorganisms in UTIs and the pattern of antimicrobial utilization and their susceptibility also the risk of difference in sex on UTIs in Basra, Iraq. The study was conducted at the urology wards in Al-Basra General Hospital, Al-Fayhaa General Hospital, Alsader Teaching Hospital and Al-Mowani General Hospital in Basra, Iraq, where the data collected after getting approval from the institutional ethical committee. Ninety patients were included and accepted. The sensitivity results from the files were further confirmed by reviewing the hospital laboratory archives. This study showed a high prevalence of UTIs in female compared to male. Among the culture positive, patients had *E. coli* (higher percent) and remaining had *Pseudomonas Spp.*, *Proteus Spp.*, *Klebsiella Spp.*, *Staphylococcus aureus* and *Streptococcus Spp.* infections. Regarding antibiotic sensitivity pattern, the pathogens showed more sensitivity to imipenem followed by amikacin and less frequency to ciprofloxacin, nitrofurantoin and amoxiclave, while the lowest sensitivity were shown in co-trimoxazole and cefotaxime. In conclusion *E.coli* is the most important cause of UTIs in Basra, Iraq with high prevalence ratio in females. Imipenem and amikacin are the first line drugs irrespective of the causative agent for UTIs., while cefotaxime and co-trimoxazole resistance are very high.