

[Trends of Antibiotic Resistance among Uropathogens in Medical vs. Non-Medical Departments of Al-Shifa Medical Complex in Gaza Strip: A Retrospective, Cross-Sectional Study](#)

Antibiotic resistance is a growing global crisis, straining healthcare systems and leaving us with limited options to combat drug-resistant bacteria. This retrospective, cross-sectional study examines the prevalence of antibiotic resistance patterns among urinary tract infections (UTIs) in Al-Shifa Hospital's medical departments in comparison with non-medical departments using data from microbiology laboratory archives over a one-year period. From the examined urine cultures about 25% were obtained from internal medicine departments and double the number was obtained from non-medical departments. The positive rate was around 35% and about two-thirds of the samples were collected from female patients.

Among all departments, Enterobacteriaceae spp. were found to be the most frequently isolated uropathogens, accounting for 80% of cases. However, resistance rates varied depending on the specific organism and antibiotic used. For instance, E. coli showed a resistance rate of only 5% against meropenem, while amoxicillin-clavulanic acid exhibited a resistance rate exceeding 95%.

Importantly, the study revealed a significant disparity in resistance rates between medical and non-medical departments, specifically concerning third-generation cephalosporins. In internal medicine departments, resistance rates were alarmingly high, with cefotaxime, ceftriaxone, and ceftazidime showing resistance rates of 75%, 75% and 66.5% respectively. In contrast, non-medical departments displayed lower resistance rates, approximately 60%, 60% and 40%, respectively.

In summary, this research sheds light on the escalating problem of antibiotic resistance in UTIs and emphasizes the discrepancy in resistance rates between medical and non-medical departments. Urgent efforts are required to address this issue and find effective solutions to prevent the rise of untreatable bacterial infections.

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