

Antibiotic Sensitivity Patterns of Bacterial Pathogens Associated with Urinary Tract Infections in Three General Hospitals in Lagos, Nigeria

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ABSTRACT This study was carried out to identify the common bacterial pathogens associated with urinary tract infections and their susceptibility patterns to common antimicrobial agents. One hundred (100) clean catch midstream urine samples from patients attending three different hospitals in Lagos, Nigeria were analyzed. A standard microbiologic procedure was used to culture the urine and the identification was done using appropriate biochemical tests. Antibiotic sensitivity of the isolates was determined using the disk diffusion technique on the Mueller-Hinton agar. Out of the one hundred (100) samples analyzed, 74 yielded significant bacteriuria and out of these, 83.79 percent were Gram negative bacteria. The most prevalent isolate identified were *Klebsiella pneumoniae* (40.54%), followed by *Escherichia coli* (35.14%), *Staphylococcus aureus* (16.22%), *Enterobacter spp* (5.40%) and *Proteus* (2.70%). The bacterial isolates were more sensitive to Nitrofurantoin with percentage sensitivity of 76.67 percent, 73.1 percent, 58.3 percent and 50.0 percent for *Klebsiella pneumoniae*, *Escherichia coli*, *Staphylococcus aureus*, and *Enterobacter spp* respectively, but resistance to Amoxicillin, Cloxacillin and Augmentin was quite high. One hundred (100%) percent resistance was recorded for Lincomycin, Oxacillin, Cotrimoxazole, Tetracycline, and Nalidixic acid. In the present study, Nitrofurantoin was the most effective therapeutic agent against bacterial pathogens causing UTI.