

ANTIBIOTIC SUSCEPTIBILITY PROFILE OF BACTERIA RESPONSIBLE FOR URINARY TRACT INFECTION (UTI)

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ABSTRACT

The urinary tract infection is most commonly caused by gram-negative bacilli in the family Enterobacteriaceae and usually belongs to genera Escherichia, Proteus, Klebsiella, Enterobacter and Pseudomonas. The study was aimed to determine the antibiotic susceptibility profile of bacteria responsible for urinary tract infection (UTI). A total of 50 samples were collected from UTI patients attending urology clinic of Aminu Kano Teaching Hospital Kano for period of 6 month from December 2016 to May, 2017. Each of each urine sample was streaked using a sterilized platinum wire loop onto the surface of freshly prepared MacConkey and Nutrient agar plates for isolation and the isolates were identified using laboratory methods. Antibiotic susceptibility testing was conducted using Kirby-Bauer disc diffusion method. The result indicated that Escherichia coli are the most prevalent organism with total 47 occurrences accounting for 24.23%, followed by Staphylococcus aureus with total of 39 isolates (20.10), Klebsiella with 34 isolates (17.52), Pseudomonas aeruginosa with total of 29 isolates (14.95), then Proteus sp has 28 which accounted for 14.44% each while the least prevalent organisms is Staphylococcus epidermidis with 17 isolates (08.76%). Gentamicin, erythromycin and ciprofloxacin were found the most effective antibiotic for treatment of urinary tract infection. Statistical analysis of the result showed that there is considerable statistical difference in the activity of the antibiotics against the isolates at $p < 0.05$. Continue surveillance of resistant rate among bacteria isolates causing UTI is needed to ensure proper recommendation for the treatment of the disease.