

Resistance to antibiotics in uropathogenic bacteria isolated in patients attending Kenyatta University Health Clinic, Nairobi.

[Kimando JM](#), [Okemo PO](#), [Njagi EN](#)

OBJECTIVE:

To determine the aetiological bacterial agents of urinary tract infections, within communities in Kenyatta University, and current resistance levels to commonly available therapeutic agents.

DESIGN:

Cross-sectional survey research design.

SETTING:

Kenyatta University Health Services Clinic, Nairobi.

SUBJECTS:

Outpatients with symptoms of urinary tract infection within the six months study duration were observed.

RESULTS:

Females were particularly prone to have confirmed cases of UTI. *Escherichia coli* were the principle aetiological agent accounting for 61.7% of the isolates. Other bacterial agents were *Enterobacter agglomerans* (18.7%), *Citrobacter diversus* (4%), *Klebsiella pneumoniae* (3.3%), *Proteus spp.* (2.1%), *Pseudomonas spp.* (0.1%), *Staphylococcus saprophyticus* (9.3%), and *Streptococcus faecalis* (0.7%). Over 60% of the Gram negative bacterial isolates were resistant to cotrimoxazole and ampicillin, 39% resistant to augmentin and 25% were resistant to nalidixic acid. The ceftazidime was the most efficacious antimicrobial with an *Escherichia coli* resistance level of 2.2% ($P=0.05$). Resistance to nitrofurantoin, gentamicin, cefuroxime, norfloxacin and ciprofloxacin was demonstrated in less than 15% of the bacterial isolates.

CONCLUSION:

The cephalosporins, fluoroquinolones, nitrofurantoin and gentamicin have good efficacy against the uropathogenic bacteria and may be good therapeutic choices when culture results are unavailable. High resistance levels exist against cotrimoxazole, ampicillin, augmentin, and nalidixic acid. These later antibiotics should therefore be used against the uropathogenic bacteria with caution.