ABSTRACT

The present study was conducted at Mayo Hospital Lahore from October 2011-May 2012 to isolate the coliform bacilli from various clinical samples and to evaluate their resistance pattern to various commercially available drugs. A total of 250 clinical samples were collected from Mayo Hospital, Lahore, Punjab Institute of Cardiology and CMH Hospital Lahore and were processed at Mayo Hospital Microbiology Diagnostic and Research Laboratory, Lahore. Culturing was done and biochemical tests were performed to identify the Enterobacteriaceae isolates. Among 250 clinical samples, 120 (48%) bacterial isolates were recovered. The most common pathogen recovered was *Escherichia coli* 79 (65.8%) followed by *Klebsiella* 27 (22.5%) and *Proteus* 14 (11.7%). Most of the isolates were found in Urine samples (43.33%). Kirby-Bauer disc diffusion method was used to determine the susceptibility pattern of these pathogens to 17 commercially available drugs. Thus in vitro study showed that Gram negative bacteria, *E.coli*, *Klebsiella*, and *Proteus* were found more sensitive to Meropenem, Imipenem, Amikacin and Tazobactum and were highly resistant to Augmentin, Ciprofloxacin, Penicillin, Tetracycline, Cefoparazone and Ceftazidime. This study concluded that all health care prescribers must know about the rational use of antimicrobial agents and they must educate the community about the dangers of misuse or overuse of antibiotics.