ABSTRACT

A total of 107 (71%) positive isolates were recovered from 150 clinical samples and 43 (28%) have no bacterial growth. However six bacterial strains were recovered from 107 isolates collected from various clinical specimen such as pus and urine (22.4%), sputum and throat CS (11.2%), wound (8.5%), blood CS (7.4%), HVS (4.6%) and ≤ 1% from double lumen, CSF and liver abscess. The samples were analyzed using standard microbiology technique by culturing of the clinical specimen onto nutrient agar, blood agar, MacConkey etc. Identification of micro organisms was done through standard biochemical test. Bacterial isolates were then cultured on mueller-hinton agar to identify the multidrug resistance bacterial strains through standard disk diffusion technique of modified Kirby-Bauer method as recommended by clinical and laboratory standards institute (CLSI). In a total of 107 positive samples 4 Gram negative multidrug resistant strains of *Pseudomonas aeruginosa* (29.9%), *Escherichia coli* (22.4%), *Klebsiella* spp. (24), *Acinetobacter* spp. (14%), and two gram positive multidrug resistant *Staphylococcus aureus* (13%), *enterococcus* spp. (10%) were recovered. The highest ratio of resistance has been observed in both gram positive and gram negative. Gram negative isolates were highly resistant to amoxicillin, kanamycin, sparfloxacin, cefixime, ceftriaxone, ceftazidime, cephradine, ampicillin and gram positive isolates were highly resistant to kanamycin, co-trimaxazole, imipenem, erythromycin, lincomycin, cephradine and sparfloxacin. The study results showed that there is critical scenario of emerging resistance in Lahore region. Practitioners and health care personnel's should adopt alternative policies to overcome such a hectic problem.