Antimicrobial susceptibility pattern of Enterobacteriaceae isolated at the French Medical Institute for Mothers and Children Kabul, Afghanistan

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Antibiotic resistance in enterobacteriaceae is a serious global concern. Enterobacteriaceae are responsible for a large proportion of serious, life-threatening infections and resistance to multiple antibiotics in these organisms is an increasing global public health problem. The quick emergence of resistant bacteria is happening worldwide, risking the efficacy of antibiotics. Execution of recommended steps, such as rapid diagnosis, implementation of antibiotic stewardship programs and better infection control measures, are likely to be effective to prevent the spread of ESBLs and other forms of resistance in enterobacteriaceae. The aim of this study was to determine the frequency of causative organisms belonging to enterobacteriaceae among patients who are suspected having bacterial infections and susceptibility pattern of the isolated bacteria for the commonly used antibiotics. A descriptive cross-sectional study was conducted. Records of all patients referred or admitted to FMIC and undergone for culture and sensitivity tests on their clinical samples, including blood, urine, sputum, pus, wound and exudates during January 2016 to December 2016 were reviewed. Data was entered and analyzed with the help of SPSS version 22.0. The approval for the data collection was obtained from the Ethical Review Committee of FMIC. A total of 2500 blood culture, 3600 urine and 3541 cases of pus and vagina were suspected bacterial infection. Total of 6048 cases of blood, urine and miscellaneous identified to be Gram negative bacteria, respectively. All isolated organism were highly resistant to commonly used empirical antibiotics for treatment of enterobacteriaceae like augmentin, cephalosporin, inappropriate use of antibiotics by physicians is leading to resistance, mortality and morbidity.

Biography
Mohammad Khalil Elaj is a Chief Resident at Department of Pathology, French Medical Institute for Mothers and Children, Kabul, Afghanistan. As a Clinician, he has rich experience of reporting microbiological cases all over Afghanistan and also possesses expertise on bone marrow aspiration, biopsy and FNAC procedure for individuals in different age groups. He is working in different specialties like: Hematology, Microbiology, Biochemistry and Cytology. He independently completed a research project entitled “Antibiotic Resistance and Susceptibility of Enterobacteriaceae among Individuals at a tertiary care hospital, Kabul, Afghanistan”.

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