BACTERIAL PROFILE OF BACTEREMIA AND SEPTICEMIA AMONG CHILDREN UNDER FIVE YEARS VISITING KISII LEVEL 5 HOSPITAL IN KISII COUNTY, KENYA

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ABSTRACT

Bacteremia and septicemia in children is an important cause of mortality and morbidity. It is among the most common health-care associated infections. In recent years, bacteremia and septicemia infections in children less than five years have been on the increase due to infections that occur without localized signs or focus of infection, for example, typhoid and non-typhoid *Salmonella* infections that are a common cause of bacteremia or those infections whose localized signs develops later. These infections are treated using first line antibiotics such as Ampicillin, Chloramphenicol, and Nalixidic acid, Streptomycin, Sulfizoxasole, and Tetracycline. However, multi-drug resistance is an increasing problem. The aim of this study will be to describe the frequency of occurrence of etiological isolates of bacteremia and septicemia and their antimicrobial susceptibility patterns at Kisii hospital level 5 in Kisii County, Kenya. This cross-sectional study will be carried out at Kisii hospital level 5 for children below five years. In this study, about 150 patients will be enrolled. Blood collected will be cultured, sub cultured and isolates identified by standard conventional methods such as colonial morphology, Gram stain method, and confirmed by biochemical tests. The frequency of the various bacterial isolates will then be determined. The antimicrobial susceptibility of the isolates will be tested using the disk diffusion method according to Clinical and Laboratory Standard Institute. Data collected will be analyzed using appropriate biostatistical tools and will be used in future management of the bacteremia and septicemia infections.