

Background:

Sepsis ; a dysregulated systemic immune response is caused by the presence of pathogenic microorganisms and or their toxins in the blood stream. The timing of clinical interventions is essential to the survival of the septic patient. Early identification of sepsis with the appropriate treatment significantly increases the chances that the patient will survive. An antecedent infection usually serves as a source of sepsis and common sites of infection are the urinary-tract, respiratory tract and abdomen. Elderly patients are more susceptible to sepsis and have less physiologic reserve to tolerate the insult from infections and are likely to have atypical presentations.

Aim :

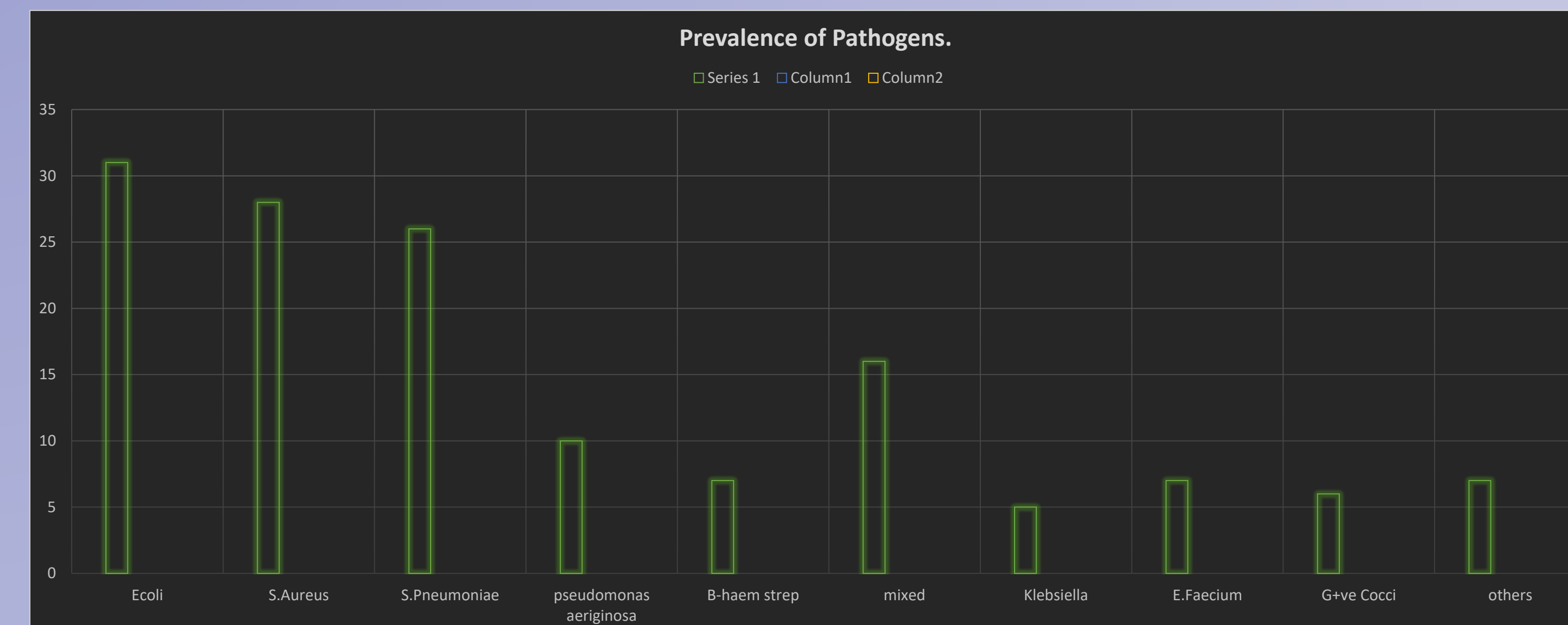
Our aim was to search for the most common prevalence of pathogens that are associated with sepsis and the increased rate of ICU admissions of patients.

Method:

This study analysed data of all patients admitted from the Emergency Department (ED) for sepsis and reviewed specifically the prevalence of pathogens that are associated with sepsis and increased rate of ICU admissions of patients.

The retrospective study was carried out between the periods of September-2017 to February-2018 on 149 patients that were admitted due to Sepsis. Charts were analysed and data collected recording them on a excel spreadsheet.

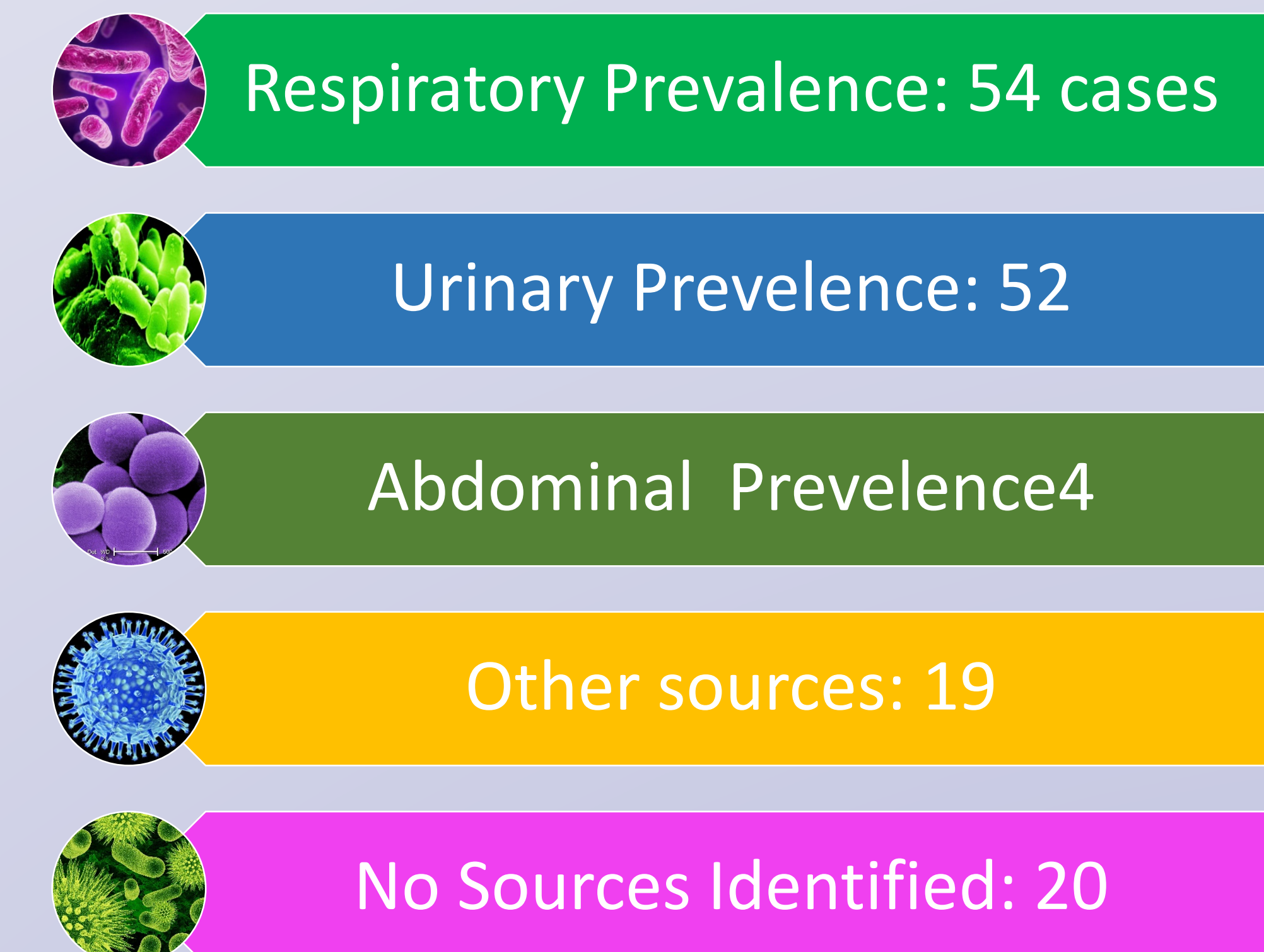
Data:



There were 75 ICU admissions from the ED and their blood cultures isolated: E.coli:21(28%, CI 21:75), Staph Aureus: 19(25.3%,CI19:75), Strep Pneumoniae:17(22.6%,CI17:75) Mixed:10(13.3%,CI10:75), Pseudomonas Aeruginosa:5(6%,CI5:75), B-haemolytic group B:3(4%,CI3:75). The most prescribed antibiotic was Tazocin 57, Augmentin 42, Gentamycin 17, Clindamycin 4 and others 21. (Remove and replace with graph)



Results:



Discussions and Conclusion:

Bacteria (gram-positive and gram-negative) are identified as the causative organism in approximately 90% of cases. The frequency of gram-positive sepsis mainly caused by S.Aureus, coagulase-ve, staphylococci, enterococci, and streptococci has surpassed that of gram-negative sepsis mainly caused by Enterobacteriaceae, especially Escherichia coli and Klebsiella pneumoniae. **E coli are the most prevalent pathogen causing sepsis. 75% of cases of sepsis arose because of community-acquired infection.**

Resistance patterns of organisms were noted such as MRSA & VRE's thus control of nosocomial antimicrobial-resistant bacteria must continue to be a strategic priority. A significant number of E coli isolates that are now resistant to Amoxicillin/Clavulanic acid (Augmentin) and Extended-spectrum beta-lactamase-producing Enterobacteriaceae maybe the reason for increased use of Piperacilin-Tazobactam.

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References:

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2. Ahrens T, Tuggle D. Surviving severe sepsis: early recognition and treatment. Crit Care Nurse. October 2004;24(suppl):2-13.
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