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EVALUATION OF CEFTRIAXONE USE AND STEWARDSHIP AMONG INPATIENT MEDICAL AND SURGICAL WARDS AT KARATINA SUB COUNTY HOSPITAL: A MIXED METHOD STUDY

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*Background/problem statement:* Ceftriaxone has been valuable in treating life threatening conditions however overuse and misuse and the advent of antimicrobial resistance that is a global threat increases, morbidity, mortality and cost of healthcare necessitating stewardship efforts. However, there is a paucity locally and of contextual data on the appropriateness of use and stewardship efforts. This study aimed to evaluate the; ceftriaxone prescription patterns and appropriateness, the healthcare providers (HCP) knowledge, attitudes, and practices (KAP) on ceftriaxone use and to evaluate the antimicrobial stewardship (AMS) program at Karatina Sub County Hospital.

*Methods:* This mixed-method cross-sectional study collected quantitative data on ceftriaxone use from randomly selected files of patients admitted between January 1 and December 31, 2022, using a preformulated data abstraction form and surveyed HCPs to assess their KAPs towards ceftriaxone use. Quantitative data was analysed using SPSS 21.0. Qualitative data was collected through semi-structured interviews with AMS Committee members to assess the AMS

program implementation and analysed using framework analysis guided by the Weiss theory-based Model.

*Results:* A total of 337 patient records were reviewed, 51 healthcare providers and 6 AMS committee members participated in the survey and interviews respectively. Analysis revealed appropriate prescribing practices including an overall appropriateness of 68%, and adequate knowledge among HCWs regarding appropriate prescribing practices. The stewardship committee identified strategies taken to improve prescribing practices of ceftriaxone as well as the challenges during implementation.

*Conclusion and Recommendations:* Our study found that Ceftriaxone prescribing practices were appropriate which indicates good stewardship of ceftriaxone at the facility. We recommend enhanced and consolidated adoption of existing guidelines, Continued HCP education and monitoring of prescribing practices. Further studies to confirm the findings in other healthcare facilities are also needed.

## Oral Presentation