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Theme: Medicine utilisation research in Africa influencing patient care and policy

Title: ANTIBIOTIC PRESCRIBING PATTERNS AT A REFERRAL HOSPITAL IN KENYA: A POINT PREVALENCE SURVEY

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Background: Antibiotics are important in prevention and treatment of infections and the reduction in associated morbidity and mortality. Inappropriate use can lead to antimicrobial resistance, rendering them ineffective. Studies have shown variations in antibiotic prescribing patterns across different patient populations within the same hospital.

Objectives: Our study aimed at establishing the prevalence and patterns of antibiotic use in a referral hospital in Kenya, with the aim of using the data for quality improvement.

Methods: A point prevalence survey was conducted at a referral hospital in Kenya in April 2017. All patients who received antibiotics were recruited from all departments. Descriptive and inferential data analysis was done to establish the patterns of antibiotic use and the associations between variables. Ethical approval was obtained from the Kenyatta National Hospital/ University of Nairobi Research and Ethics Committee.

Results: A hundred and seventy nine patients were enrolled in the study. The prevalence of antibiotic prescribing was 54.7%. The highest prevalence of antibiotic prescribing was found in critical care unit and isolation ward, both at 100%. Obstetrics and gynecology department had the least prevalence at 20.8%. Penicillins (46.9%) followed by cephalosporins (44.7%) were the most prescribed antibiotic classes. A larger proportion of antibiotic prescribing was for treatment (75.4%) as compared to prophylaxis (29.0%). Majority (76.9%, n=52) of the patients on surgical prophylaxis were on prolonged duration (>1 day). Empiric prescribing accounted for 82.6% of the total antibiotic encounters while targeted treatment was recorded in 17.4%.

Conclusions: The study identified several areas for potential improvement in antibiotic prescribing such as the high prevalence of inpatient antibiotic use, prolonged duration of antibiotic use in surgical prophylaxis, extensive prescribing of broad spectrum agents such as ceftriaxone and the low prevalence of targeted antibiotic prescribing.

