

ANTIBIOTICS PRESCRIPTION PATTERNS IN SIX REGIONAL REFERRAL HOSPITALS IN UGANDA, 2016-2022



ABSTRACT

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Background:

Antibiotics have contributed to improved management of infectious diseases and reduced morbidity and mortality. However, Misuse and Overuse of antibiotics is linked to the development of Antimicrobial Resistance (AMR). We assessed antibiotic prescribing patterns in regional referral hospitals (RRHs) to inform public health Policy and programming.

Methods:

A retrospective cross-sectional study was conducted between 2016 and 2022 in six RRHs based on the World Health Organization (WHO) prescribing indicators. These hospitals were purposively selected, and a systematic random sampling technique was used to select prescriptions from six wards/departments in each hospital. Trend analysis was done using the Mann-Kendall test.

Results:

From 2016-2022, 89.6% of patients had at least one or more antibiotics prescribed in the six RRHs, for an average duration of 4.8(SD=2.1) days and only 7.2% of patients had a culture and sensitivity test done to guide patient care. A mean of, 1.6 (SD=1.3) antibiotics were prescribed per patient. Most (92.3%) of prescribed antibiotics were on the formulary list. During the study period, 66.8% of critical antibiotics were in stock. There was no significant trend in the percentage of patients prescribed at least one antibiotic (p-value=0.84) and no significant trend in the average number of antibiotics prescribed per patient (p-value = 0.850).

Conclusion:

There were high rates of prescribing antibiotics in this analysis, and the pattern was consistent over 5 years. There is a need to strengthen antimicrobial stewardship programs in hospitals in Uganda to promote the rational use of antibiotics.