Evaluation of antibiotic prescribing for ambulatory patients seeking primary dental care services in a Public Hospital in Ghana

## Title (required)

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# Abstract (required)

## Background

1 in 10 of all antibiotic prescriptions globally are for dental conditions with 80% of them being inappropriate making it a potential source of antimicrobial resistance. The study aims to evaluate antibiotic use among ambulatory patients seeking dental care services in a Public Hospital in Ghana.

#### Methods

A retrospective clinical audit was conducted by extracting the medical records of all patients seeking dental primary care at the ambulatory care clinic of Keta Municipal Hospital (KMH) from January 2020 to December 2020 using the hospital's electronic database. Descriptive statistics, bivariate and multivariate analysis were performed on the data collected.

### Results

1433 patient medical records were extracted from the hospital electronic data within the study period. The mean age of the patients identified was 39 years with almost two thirds being female. Over 90% of them were attended to by a dental nurse. 88.6% of the patients received antibiotics and 87.5% of antibiotics prescribed were non-compliant with Ghana Standard Treatment Guidelines. Again, three-quarters of the dental conditions were managed with dual antibiotics comprising of amoxicillin and metronidazole. Antibiotic prescription was associated with the age, gender, the type of prescriber and the type of dental condition diagnosed.

### Conclusion

There is a high usage of antibiotics for dental conditions managed at the outpatient section of the hospital. Development of local guidelines supported by education of dental clinician especially dental nurses on empiric selection of antibiotics for common dental conditions is a suitable target for AMS team to address in KMH.

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