

**A STUDY TO DETERMINE THE BASIS OF
ANTIBACTERIAL USE AT THE DEFENCE FORCES
MEMORIAL HOSPITAL**

**A research project in partial fulfillment for the award of Bachelor of Pharmacy
from Mount Kenya University**

UTIKU USERU

BPHARM/111/P01079

2014

ABSTRACT

Rational use of drugs require that patients receive medication appropriate to their clinical needs, in doses that meet their own individual requirements for an adequate period of time at the lowest cost to them and their community however it's been noted that there is a global problem of inappropriate antibacterial use. The general objective of this study was to determine the basis for antibacterial drugs use at the DFMH for the purpose of promoting rational drug use, improve safety, lower costs, and recommend areas that require further investigation. A retrospective cross-sectional study design was used to determine the basis of antibacterial use at the DFMH. The researcher collected data retrospectively for the period covering January to December 2013 from patient's prescription records and 48 healthcare professionals were also administered semi structured questionnaires. The target population was 9377 patients' prescription records and 48 healthcare professionals. Qualitative data was analysed by use of content analysis presented in a prose form. On the other hand, quantitative data was analysed by use of Statistical Package for Social Sciences (SPSS) version 20. Descriptive statistics such as percentages and frequencies were used to describe the characteristics of the target population. Data was then presented in graphs and tables. The study established that there is a Drug and Therapeutics Committee at DFMH and a formulary list or EML authorized for acquisition of medicines. Further, all medicines on the formulary list were identified by generic names (INN) and the formulary or EML medicines were based on those recommended in the STG. In addition, the study found that the hospital had STGs for infectious diseases for the most prevalent conditions. The study also revealed that the most commonly used antibiotics were Amoxicillin, Cefuroxime, Ofloxacin, Flucloxacillin, Metronidazole, Clarithromycin, Azithromycin, Cefadroxil, Levofloxacin and Tobramycin respectively. In relation to expenditure on antibacterial drugs, the study found that in 2013 the budgeted cost of antibiotics was 17.97%; however actual expenditure on Antibacterial drugs was 7.75% of the total drugs hospital budget. The study concluded that antibiotic prescribing at DFMH was mainly based on STGs and cost, and that Amoxicillin was the most prescribed drug in the hospital. Further it concluded that antibiotic expenditure comprised 7.75% of the total medicines budget in the hospital. The study recommends that the hospital should continue encouraging the use of the STGs in prescribing and to regularly revise the STGs according to WHO recommendations, it further suggests that comparative studies should be carried out in government hospitals in Kenya.