

OP 3

Antibiotic utilization in general medical units in a tertiary care institution

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Objectives

To ascertain the use and appropriateness of antibiotics used in medical wards at a selected tertiary care institution using available national guidelines

Methods

A descriptive cross sectional study was carried out on the patients prescribed antibiotics in three general medical units. A random sample of patient records (n=543) over a period of 4 months was analyzed. The regimes were assessed for concordance with the guidelines of Sri Lanka Medical Association (SLMA) and the Health Sector Development Programme (HSDP).

Results

The commonest indications to prescribe antibiotics were lower respiratory tract infections (LRTI) (n=235,43%) and urinary tract infections (UTI) (n=60,11%). The commonest first antibiotic prescribed for LRTI was co-amoxiclav (n=98, 41.7%) which was given in combination in 18/98 (18.36%) of episodes, while ciprofloxacin was the first choice in 46.6% of UTIs. For LRTIs the prescribed antibiotics showed a greater concordance with HSDP guidelines (n=157, 66.8%) compared to SLMA guidelines (n=99, 42.1%). The concordance with SLMA guidelines for UTIs was only 23.3% (n=14). No statistically significant difference was found between individual unit practices. The antibiotic use in LRTI was incorrect due to inappropriate dose and route of the drug (n=20,8.5%), wrong choice of the drug (n=13,5.5%) and wrong combination of drugs (n=13,5.5%) according to the HSDP guidelines.

Conclusions

Antibiotic prescriptions need to be improved to optimize use and reduce development of resistance. Development and effective implementation of a National Antibiotic Policy would be a major step in ensuring appropriate use of antibiotics.