

Conclusion: Fosfomycin may be a valuable drug for treatment of inpatient UTIs. It is well tolerated, efficacious, and does not appear to predispose to CDI.

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Implementation of antimicrobial stewardship in a South African private healthcare setting



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Background: Antimicrobial resistance is a global concern and antimicrobial stewardship is suggested as an intervention that could slow the development of resistance. According to local as well as international studies inappropriate antimicrobials are prescribed in 50% of hospitalised patients. Antimicrobial surgical prophylaxis, combination therapy and prolonged therapy have been identified as areas where the appropriate use of antimicrobials could be improved.

Methods & Materials: Antimicrobial stewardship was introduced to all 52 Southern African hospitals in the group. As part of the antimicrobial stewardship initiative a guideline on the use of antimicrobials for surgical prophylaxis was compiled out of international references and consultation with local experts. The guideline was distributed to the hospitals and comment from local specialists was encouraged. A quarterly report was developed to measure antimicrobial utilisation as well as the impact of interventions in a comparable, uniform manner. The report determines progress and trends in the hospital groups as well as in individual hospitals and compares hospitals with the same size and case mix. One section of this report is dedicated to antimicrobials used inappropriately as surgical prophylaxis. The provided guideline was used to identify antimicrobials used inappropriately.

Results: Data had been collected from January 2010. The results of the last two financial years were compared. The average percentage surgical cases with inappropriate antimicrobial drug choice for prophylaxis decreased from 16.0% in the financial year April 2011 – March 2012 to 12.5% from April 2012 to March 2013. The first quarter of 2010 had 19% undesired antimicrobial drug choice for prophylaxis and it decreased to 10% in the third quarter of 2013.

Conclusion: The data indicated that certain antibiotics were more often prescribed inappropriately than others. It was also identified that ceftriaxone, a previously highly recommended drug in surgical prophylaxis, was still widely utilised despite the recent changes in international as well as local guidelines. Pharmacists managed to change with the guideline as reference, a number of these old prescribing habits.

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Evaluation of drug interactions in hospitalized patients and antimicrobials role assessment



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Background: Drug interactions are one the major problems of hospitalized patients leading to complications like, increase hospital stay, raise costs, morbidity and mortality. Number of drugs, patients' age, sex, hospital stay length, ward of the hospital, number of physicians involved, and concurrent diseases are some of the proposed parameters in drug interactions.

Methods & Materials: In this study we evaluated number and severity of drug interactions of patients orders in an educational hospital Tehran, Iran. Patients' medication, age, sex, hospital stay and ward were recorded. Drug interactions assessed by Multi-Drug Interaction Checker of Medscape 3.2.

Results: During the study period 10309 drug interactions were found in 1733 patients (mean 6 interactions in each patient). Among them 2289(22.2%) were minor, 7209(69.9%) were moderate and 811(7.9%) were serious. As we expected, increase in number of drugs resulted in increase of drug interactions. There were more interactions in cardiac, neurology and pulmonary wards. Most of drug interactions have seen regarding aspirin, heparin, nitroglycerin, ceftriaxone and captopril. Anti microbial drugs had an important role in drug interactions as more than 25% of drug interactions were related to them. Metronidazole, ceftriaxone and ciprofloxacin reported to show 95% of these interactions.

Conclusion: As it has been detected drug interactions indicated to be more than what imagined. Assessment of drug interaction during hospitalization is a matter of importance. Physicians should be aware of these interactions and prevention of them could result in less morbidity and mortality during hospitalization.

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