

280: DRUG UTILIZATION OF CO-AMOXICLAV, CIPROFLOXACIN, CEFTAZIDIME AND CEPHALEXIN AMONG PHILHEALTH-ACCREDITED TERTIARY HOSPITALS IN SELECTED REGIONS IN THE PHILIPPINES

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Objective:

To determine the baseline antibiotic (co-amoxiclav, ciprofloxacin, ceftazidime and cephalexin) prescription and utilization patterns in PhilHealth-accredited tertiary hospitals in selected regions of the Philippines.

Method:

A cross sectional study involving 1692 charts from 24 different tertiary hospitals of selected regions across the Philippines. Data were gathered for a study period of nine months evaluating four (4) antibiotics: co-amoxiclav, ciprofloxacin, ceftazidime, and cephalexin.

Hospitals were randomly chosen from a list generated by the Accreditation Department of Philippine Health Insurance Corporation (PHIC) with the following inclusion criteria: a tertiary hospital, PHIC - accredited and must be willing to participate for the entire duration of the study. Antibiotic utilization review was accomplished by abstracting patients' medical records in the selected hospitals. Outcome indicators evaluated are utilization rates and appropriateness assessments for the four antibiotics of interests (prescriptions, indications, dosages, routes of administrations, contraindications) with average number of drugs prescribed per patient and percentage of compliance with Generics Act.

Results:

A total of 1935 encounters of antibiotic use were observed in all charts reviewed. Highest antibiotic utilized in all cases reviewed was cephalexin at forty-seven percent (47%) followed by ciprofloxacin at twenty five percent. Cephalosporins (cephalexin and ceftazidime) were commonly utilized in government hospitals at 76% and 64% respectively. While ciprofloxacin and co-amoxiclav was popular in private hospitals with overall utilization rates noted at 62% and 68%. Comparison of appropriateness assessments of antibiotic utilization for all four drugs showed a generally low trend when compared to a standard threshold initially set at 80%. Across four antibiotics, cephalexin utilization had the lowest documented appropriateness for its indication both in private and government hospitals (25% and 4%, respectively, $p < 0.05$). Overall, an average of five drugs was prescribed for every patient admitted in government hospitals while an average of seven drugs for patients admitted in private hospitals. Sixty-two percent of drug encounters from all charts reviewed were compliant with the Generic Law with the majority of generic prescriptions (75%) came from government hospitals and only thirty six percent of all private institutions prescribe in generic form.

Conclusion:

Co-amoxiclav, ciprofloxacin, ceftazidime and cephalexin were all inappropriately utilized in both government and private tertiary hospitals across the selected regions of the Philippines. The four antibiotics are among the commonly prescribed drugs in the Philippines and results of the study confirmed inappropriate use which has many implications. Increasing antibiotic resistance and increasing cost are two among the many reasons why quality assurance activities are warranted within all institutions.