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## Research

### A Multispecialty Hospital Investigation Into Prescription Pattern And Drug Interaction For COPD Patients

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#### Abstract

Chronic obstructive pulmonary disease (COPD) is a lung disease that is characterized by a persistent blockage of airflow from the lungs. Drug utilization studies are also called as prescription pattern monitoring studies (PPMS) primarily concentrate on the prescription, dispensing, and administration of medications. The aim of the study is to optimize the drug therapy for the COPD patients in a multispecialty hospital by analyzing the drug prescribing pattern and by evaluating the drug interaction in the prescriptions. Based on study population, out of 150 patients, males were more susceptible to this disease than female. The average age of patients were found to be  $45.73 \pm 30.57$  years. The cases were analyzed based upon class of drugs prescribed, antibiotics, bronchodilators, antihistamines, mucolytic agent, nasal decongestants and corticosteroids were commonly prescribed. Out of which, 38.2% (n=104) antibiotics and 34.5% (n=94) bronchodilators were most commonly prescribed class of drugs. Clarithromycin, theophylline+ forgyln, montek LC, ambrodil, oxynoz and dexa were the commonly prescribed antibiotics, bronchodilators, antihistamines, mucolytic agents, nasal decongestants and corticosteroids respectively. Nearly 59 patients were given three drugs and 14 patients were given 4 drugs at a time which shows the practice of polypharmacy. The cases were also analysed for drug interaction which shows 32.7% (n=49) of minor, 27.3% (n=41) of monitor closely drug interactions respectively. The findings provide a valuable foundation for refining COPD interventions and highlight the necessity for vigilant monitoring of drug interactions during treatment.

**Keywords:** Chronic Obstructive Pulmonary Disease, Prescribing Pattern Monitoring Studies, Drug Interactions, Polypharmacy, Antibiotics, Bronchodilators, Antihistamines.