



A PROSPECTIVE OBSERVATIONAL STUDY ON PRESCRIBING PATTERN IN THE TREATMENT OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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ABSTRACT

Background: Prescribing patterns in COPD are often inconsistent with published guidelines. This was a prospective study with an aim to analyse and evaluate the trends and patterns of prescribing drugs among COPD patients using Gold criteria as base

Objectives: The study aims to assess the drugs prescribed in Chronic obstructive pulmonary disease (COPD) using Gold guidelines.

Methodology: A prospective observational study was carried out involving in-patients of general medicine department of tertiary care teaching hospital for 6 months. The data of 80 patients were collected for the study in predefined forms from the medical case records and drug charts. The enrolled patients were observed from admission till discharge. Descriptive statistics were applied to the collected data and analysed using MS EXCEL. Results: 80 patients were evaluated of which most of the patients were males (72%) and females were (28%). Bronchodilators were mostly prescribed class of drugs (93.7%) followed by antibiotics (87.5%). 50% of patients were classified as having mMRC grade 3 dyspnoea

Conclusion: The present study concludes that symptomatic treatment. Many of the prescriptions were rational and in accordance with GOLD guidelines.

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INTRODUCTION

Chronic Obstructive Pulmonary Disease (COPD) is a lung disease characterized by chronic obstruction of lungs that interferes with normal airflow in bronchioles which is partially reversible¹. COPD was diagnosed by complications like chronic bronchitis, small airways disease (bronchiolitis) and emphysema which may vary among the affected individuals².

Treatment with drugs is primarily indicated for symptomatic relief, for prevention and treatment of exacerbations, and for improving health status. The Global initiative for chronic Obstructive Lung Disease (GOLD) has developed guidelines for various aspects of COPD management including pharmacotherapy³. The complexities of chronic obstructive pulmonary disease (COPD) require a comprehensive assessment for its management. The Global initiative for chronic Obstructive Lung Disease (GOLD) guidelines recommend using a combination of spirometry, symptoms and exacerbation history to classify patients into 4 categories (A, B, C, D) to guide treatment decisions along with a stepwise increase in therapy. For assessing symptoms, GOLD primarily recommends the use of the Modified Medical Research Council (mMRC) questionnaire or the COPD Assessment Test (CAT).

There is evidence that most of the prescriptions are not in accordance with

GOLD recommendations or other national guidelines resulting in high prescribing of ICS and exposing patients to more side effects.

Prescription pattern studies are drug utilization study which is an aid that mainly targets on prescribing and administering of drugs. They reduce abuse or misuse of drugs and promote the appropriate use of drugs⁵. chronic obstructive pulmonary disease (COPD), these ailments require long-term or even lifelong therapy which demands the appropriate use of medications to improve the outcome and better quality of life⁴. Bad prescribing habits lead to ineffective and unsafe treatment, exacerbation or prolongation of illness, distress and harm to the patient and higher costs. In this present study an attempt was made to study prescribing pattern followed in our study site with emphasis on prescribing behavior of physician.

MATERIALS AND METHODS

Study type: Prospective observational study

Study duration: six months

Study Area: The study will be conducted in the department of pulmonology in

Mallareddy Hospital located in Suraram, Hyderabad.

Sample size: 80

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Inclusion criteria

1. All the patients who are diagnosed with chronic obstructive pulmonary disease.
2. Age above 18 years.
3. Patients who are willing to participate in the study.

Exclusion criteria

1. Pregnant and lactating women.
2. Immune compromised patient.
3. pediatrics

Materials Used

1. Data collection form
2. Informed consent form
3. Questionnaires (CAT assessment, MRC dyspnea scale)

Patient data include: Patient OP number, age, symptoms, Impression, co morbid conditions, drugs prescribed along with dose and frequency

Data analysis: This data was analyzed by using Microsoft Excel and results were presented as percentage

RESULTS AND DISCUSSION

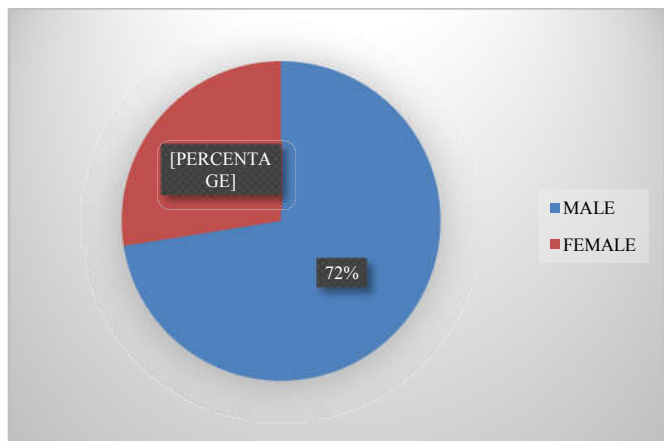


Fig 1 Gender wise distribution

Table 1 Number of patients based on their age groups

Age intervals	Male (n=58)	Female(n=22)	Percentage (n=80)
30 – 40	3(5.1%)	3(13.6%)	7.5%
41 – 50	8(13.7%)	7(31.8%)	18.75%
51 – 60	17(29.3%)	6(27.2%)	28.75%
61 – 70	25(43.1%)	1(4.5%)	32.5%
71 – 80	4(6.8%)	5 (22.7%)	11.25%
81 – 90	1(1.7%)	-	1.25%

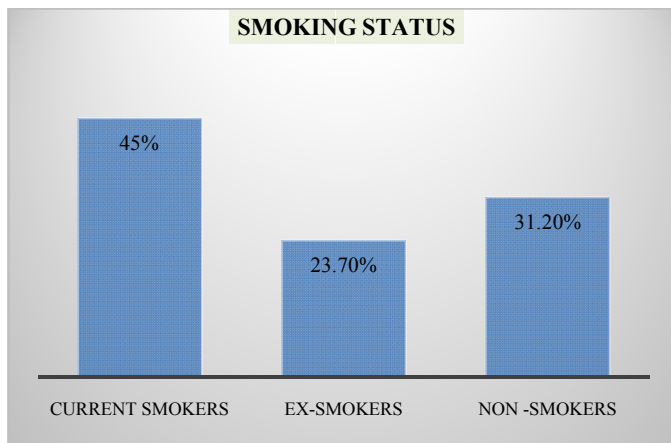


Fig 2 Distributing of patients based on smoking status Out of 80 patients, 45% were current smokers, 23.70% were ex- smokers and 31.20% were non smokers.

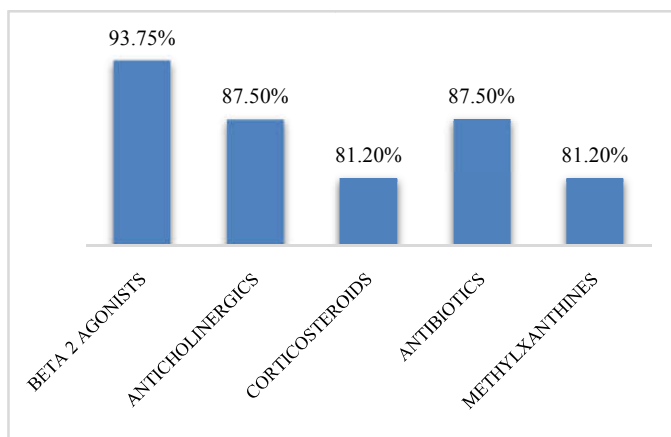


Fig 3 Different class of drugs prescribed for management of COPD

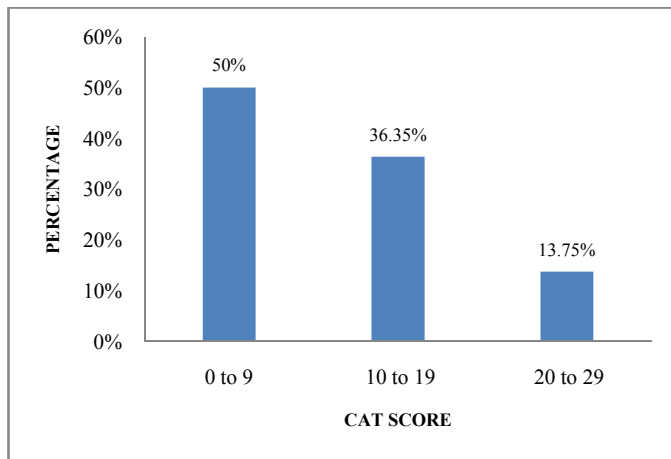


Fig 4 Distribution of patients based on cat scores

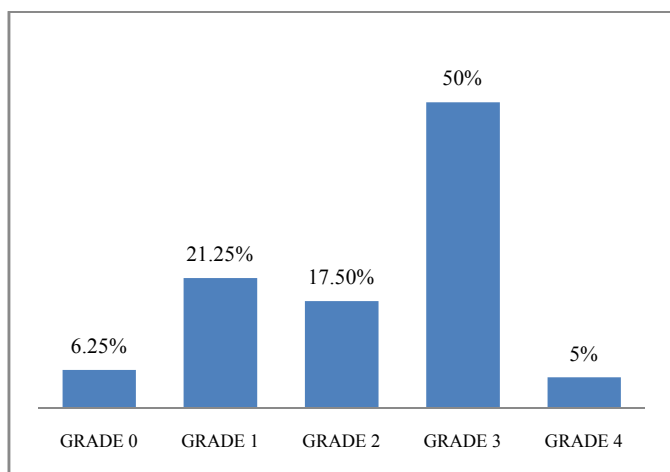


Fig 5 Distribution of patients based on mmrc scale grades

CONCLUSION

In this study, it was found that predominantly males were affected with COPD compared to females. The majority of the drugs were prescribed in accordance with the GOLD guidelines.

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