**BACKGROUND & SIGNIFICANCE**

Chronic Obstructive Pulmonary Disease (COPD) is a leading cause of morbidity and mortality and the only leading cause of death that continues to increase in prevalence. In 2007, the estimated total annual costs exceeded $42.6 billion ($26.7 billion accounts for direct healthcare costs). Smoking, the greatest risk factor for COPD which accounts for >85% of cases, differs among males and females and also across different races. There is evidence that even after controlling for case-mix and risk factors, variation exists in COPD treatment and outcomes for COPD across geographic regions. Also geographic variation exists for the use of spirometry.

**RESEARCH OBJECTIVES**

To determine the utilization pattern of drugs used for COPD in ambulatory care settings.

To assess the variation in the use of first line of therapy across sex, race and geographic region.

**METHODS**

**Study design:** A retrospective cross-sectional study

**Data source:**
National Ambulatory Medical Care Survey (NAMCS) 2006 and only outpatient component of the National Hospital Ambulatory Medical Care Survey (NHAMCS) 2006 data was used for the analysis.

NAMCS and NHAMCS are national level multi-stage probability annual surveys of visits to private office-based physicians and hospital based outpatient visits, respectively.

**RESULTS**

In 2006, COPD accounted for 36.78% (95% CI: 30.72 - 42.85) million ambulatory care visits by adult patients. Of these visits, 54.60% were by females, 43.41% visits were in South region and whites accounted for 93.00% visits. COPD medication were prescribed at 43.46% of the visits; First line of therapy was prescribed at 24.77% visits.

**DISCUSSION**

First line of therapy was prescribed in one fourth of the total visits. Anticholinergics were the least prescribed drugs among first line of therapy. Among all the medications, bronchodilators were the most prescribed medications. They accounted for one third of the total visits.

Results of the study showed that no variation exists among sex, race and region for the first line of therapy for COPD.

Previous study found geographic variation for COPD diagnosis and treatment. However, this study did not find any variation for the prescription of first line of therapy across various regions.

**LIMITATIONS**

We could not control for severity of COPD as it was not captured in the survey. The study did not control for the comorbidity in the final multivariate logistic model.

**CONCLUSIONS**

Bronchodilators were highly prescribed medication for COPD treatment among all medication classes.

No disparities were found for first line of therapy across sex, race and region for COPD.

**REFERENCES**


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