Abstract

The increasing number of patients affected by chronic obstructive pulmonary disease (COPD) and associated exacerbations has led to both rising hospital admissions and significant economic impact. Evidence-based guidelines have been formulated for COPD management recommending the use of low dose, oral corticosteroid therapy in the treatment of exacerbations. However, fewer than 50% of physicians' prescribing practices appropriately reflect the published clinical guidelines on the use of systemic corticosteroids in these patients. Objective. The purpose of this study was to evaluate the impact of a pharmacist-led educational intervention on prescribing practices and patient outcomes when using systemic corticosteroids in patients with COPD exacerbations. Methods. This retrospective case-control study included patients admitted to an inpatient family medicine service with a COPD exacerbation who received systemic corticosteroids. Two pharmacist-led educational interventions were delivered to prescribers to review current guidelines for managing COPD exacerbations with systemic corticosteroids. Patients were retrospectively identified over a three month span prior to and following the educational intervention. Data was collected via chart review to evaluate prescribing practices prior to and following the educational sessions. In addition, data was collected to evaluate the effects of an educational intervention on length of stay, adverse events, and cost of treatment. Results. A total of 23 pre-intervention patients and 18 post-intervention patients met inclusion criteria. After pharmacist-led interventions, guidelines were not more likely to be adhered to by prescribers when compared to guideline adherence in the preintervention patients. Because no statistically significant change in guideline adherence was observed, there was no impact on secondary outcomes. Conclusion. Pharmacist-led didactic educational interventions and guideline dissemination do not improve guideline adherence and prescribing practices with respect to systemic corticosteroids in COPD exacerbations.

Keywords
Pulmonary Disease, Chronic Obstructive, Guideline Adherence, Pharmacists, United States.