The role of influenza as a viral etiology of COPD exacerbations during the winter
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ABSTRACT
INTRODUCTION
COPD exacerbations produce reductions in quality of life and lung function, and are associated with accelerated progression of disease. The role of infection as an etiology of acute exacerbation of COPD during the winter season is not well reviewed.

The objective of this study was to describe the role of influenza as etiology of acute exacerbation of COPD during the winter season.

METHODS
This was a secondary data analysis of the Assessing the Management of Hospitalized Patients with Lower Respiratory Tract Infections (LRTI) database. Hospitalized patients with COPD were included in the study. The Luminex x-Tag respiratory viral panel was used to detect influenza and other respiratory viruses.

RESULTS
A total of 341 hospitalized patients with COPD were included in the study. A viral etiology was identified in 124 (36%) patients. Among those influenza virus was the most common virus identified, in 49 (40%) patients. A total of 28 (8%) patients identified with influenza virus had a history of influenza vaccine for the current season.

CONCLUSIONS
This study indicates that influenza is the most common viral etiology of COPD exacerbation during the winter months. Influenza viruses included influenza A H1 pandemic, influenza A H3 seasonal, and influenza B. Vaccines during the study period also included these viruses.

Since influenza is a preventable disease through vaccination, encouraging COPD patients to get their immunization should help to decrease the number of acute exacerbations thus improving patient quality of life and lung function, slowing disease progression, and reducing resource utilization (4).

The fact that 58% of the study population identified with influenza were vaccinated against the virus emphasizing the need for more effective vaccines. However, Influenza vaccination should still be encouraged in all patients with COPD. Furthermore, the history of prior influenza vaccination should not preclude clinicians from suspecting influenza viruses as etiologies of acute exacerbations of COPD.

REFERENCES