

## Misdiagnosis of COPD

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### Findings Highlight Under-Recognition and Under-Treatment of America's Second-Leading Cause of Disability

A new study shows that more than half of patients with COPD -- chronic obstructive pulmonary disease -- may be misdiagnosed as having asthma. (1) COPD is a progressive condition that leads to a worsening of respiratory symptoms, a decline in lung function and increased disability; (2) however, it tends to be under-diagnosed and under-treated. The study results, published in the *Journal of Asthma*, are from the most recent prospective, patient-reported, objectively documented COPD study to examine COPD misdiagnosis.

COPD, which includes chronic bronchitis and emphysema, is characterized by a loss of lung function over time. (2) Primarily a disease of current and former smokers, COPD affects nearly 12 million Americans. (3) Unlike asthma, COPD is associated with a cascade of decline that leads to a diminished quality of life over time. (6) "Millions of people live with COPD for years, so their inability to do the things they enjoy because they simply can't breathe is devastating," said the study's lead author, [David G. Tinkelman](#), MD, Vice President for Health Initiatives, National Jewish Medical and Research Center, Denver. "We need to clarify the differences between COPD and asthma so patients get the right diagnosis early and the appropriate interventions needed to change the course of this growing health crisis."

The study, conducted in Denver and Aberdeen, Scotland, and sponsored by Boehringer Ingelheim Pharmaceuticals, Inc. and Pfizer Inc, analyzed data from 597 patients age 40 and older with a history of lung disease or recent treatment with respiratory medications. (1) Patients were then screened using spirometry, a lung function test, to confirm their diagnosis of COPD. (1) In this study, a COPD diagnosis was defined in agreement with American Thoracic Society and European Respiratory Society guidelines as the presence of obstruction -- inability to get air out of the lungs -- based on spirometry results. (1)

Of the 235 patients diagnosed with COPD by spirometry, 51.5 percent reported a prior diagnosis of asthma only. (1) Only 37.9 percent of participants diagnosed with COPD based on the study tests reported a previous diagnosis of the disease (1), while 10.6 percent reported no prior diagnosis of COPD or asthma. (1)

"These findings are surprising given the availability of credible diagnosis and treatment guidelines specifically for COPD," noted Dr. Tinkelman. "Only through proper diagnosis and treatment will COPD patients fully benefit. Patients can benefit from lifestyle modification, pulmonary rehabilitation and proper pharmacotherapy that may help them breathe better and return to the activities they enjoy."

#### About COPD

COPD is second-leading cause of disability (5) and the fourth-leading cause of death in the U.S. (2) While COPD is primarily caused by cigarette smoking, other causes of COPD include exposure to occupational dusts and chemicals. (2) Researchers have also found a link between COPD and a rare genetic disorder involving a deficiency in the enzyme alpha1-antitrypsin (AAT) that normally prevents loss of elasticity in the lungs' fibers. (6)

The most common COPD symptoms include shortness of breath, chronic cough (sometimes with phlegm), and wheezing. (2) In mild COPD, patients experience breathlessness during high-energy activities, such as exercise. (4) As the disease worsens to the moderate and severe stages, patients become breathless more frequently, avoiding activities that cause shortness of breath. (4) This can lead to physical deconditioning -- loss of muscle strength -- and disability. (4) Patients eventually become breathless, even at rest.

COPD accounts for a high proportion of health-care costs -- nearly \$40 billion in the U.S.(7) In the last 20 years, COPD was also responsible for nearly 50 million hospital visits nationwide.(8)COPD is, however, a manageable disease. (6) According to diagnosis and treatment guidelines set by the Global Initiative for Chronic Obstructive Lung Disease (GOLD), intervention can help improve and prevent some of the symptoms of COPD and improve health status and patient outcomes.(6)

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