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## The Impact of Anxiety on Chronic Obstructive Pulmonary Disease

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### ABSTRACT

Patients with COPD have chronic respiratory symptoms and significant physical limitations secondary to abnormal pulmonary function. These patients often have significant comorbidity, including psychiatric disorders such as anxiety and/or depression. The frequency of anxiety and generalized anxiety disorder (GAD) in patients with COPD significantly exceeds the frequency in the general population. GAD reduces the quality of life in these patients and potentially contributes to acute flares in their chronic lung disease. Most neurobiological models for anxiety involve the limbic system and amygdala. Stimulation of these areas results in fear and anxiety. The sense of dyspnea (an unpleasant sensory perception of difficult breathing) also stimulates the limbic system, including the amygdala. Consequently, episodes of dyspnea could contribute to the development of anxiety in these patients through kindling phenomena. This could evolve to the point that the patient has chronic anxiety which is maintained by the ongoing sense of dyspnea secondary to chronic lung disease. Pulmonary rehabilitation improves the overall quality of life in these patients and reduces respiratory symptoms, including dyspnea. Patients who do not respond to pulmonary rehabilitation or who have more severe GAD may need chronic medications, such as selective serotonin reuptake inhibitors. These patients will also benefit from psychological and psychiatric evaluation and care.

### KEYWORDS

Generalized Anxiety Disorder; COPD; Acute Flare; Treatment

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