

# Moderate Depression in Patients with Chronic Obstructive Pulmonary Disease

## A Call for Treatment Parity

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### BACKGROUND

- ▶ Those with chronic obstructive pulmonary disease (COPD) are **twice as likely** to develop depression
- ▶ Depression is **under-diagnosed** and **under-treated** in this patient's with COPD due to symptom overlap (i.e. low energy) and broad treatment guidelines
- ▶ Moderate depression management (PHQ=10-14) may range from follow-up to psychotherapy and/or pharmacotherapy
- ▶ Though von Siemens et al. (2019, Germany) found single symptom homogeneity among those with varying degrees of COPD, the generalizability of their findings to the more heterogeneous American population remains unclear
- ▶ Patients with COPD are left vulnerable as clinicians may misconstrue depression symptoms to be a consequence of COPD and opt to treat more conservatively
- ▶ It is crucial to understand how the presentation of depression is impacted by co-morbid COPD

### OBJECTIVE

To study whether moderate depression is captured similarly by the PHQ-9 in patients with and patients without co-morbid COPD, in an effort to highlight the importance of depression treatment in both groups.

### METHODS

- ▶ A retrospective review of nationally representative NHANES data from 2017 to March 2020 was conducted
- ▶ Moderate depression was defined as a PHQ-9 score between 10 and 14
- ▶ Individual question responses were compared between participants with and participants without COPD, using Pearson Chi-Square test for independence

### RESULTS

- ▶ Among the 8306 participants evaluated, 503 screened positive for moderate depression and, of those, 91 were told they had co-morbid COPD
- ▶ Taking participants who screened positive for moderate depression, responses to how frequently they were bothered over the last two weeks by the following **did not significantly differ** based on the presence or absence of co-morbid COPD
  - “having little interest in doing things” (p=0.447)
  - “feeling down, depressed, or hopeless” (p=0.439)
  - “trouble sleeping or sleeping too much” (p=0.693)
  - “poor appetite or overeating” (p=0.976)
  - “feeling bad about yourself” (p=0.161)
  - “moving or speaking slowly or too fast” (p=0.974)
  - “thoughts you would be better off dead” (p=0.545)
- ▶ Responses to how frequently they were bothered over the last two weeks by the following **did significantly differ** based on the presence or absence of co-morbid COPD
  - “feeling tired or having little energy” (p=0.013)
  - “trouble concentrating on things” (p=0.044)

### DISCUSSION

- ▶ These results suggest the PHQ-9 **similarly captures moderate depression** in the American population, regardless of the presence of co-morbid COPD
- ▶ Therefore, clinicians **should not** attribute patient symptoms of depression to a consequence of COPD and opt for conservative management

### CONCLUSION

An understanding that the symptomatology of depression is largely unchanged by co-morbid COPD should result in its increased diagnosis and treatment.

#### REFERENCES

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