Psychiatric Disorders and COPD
Still Stronger Evidence for Convincing Policymakers?

To the Editor:

We read with considerable interest the meta-analysis by Atlantis et al in this issue of CHEST (see page 766) that evaluated the circular relationship between depression/anxiety and COPD, a phenomenon that has been observed in other chronic diseases (eg, cardiovascular disease). Although another excellent addition to the extant literature, there are a couple of points in the article that we would like to comment on.

In every meta-analysis, a balance must be struck between including as many studies as possible and not oversimplifying the reported data. For example, Atlantis and colleagues’ combine studies that assessed the effect of psychologic factors on both the development (ie, among healthy individuals) and the progression (ie, among patients with COPD) of COPD. Although the combination of these end points provides a strong message that psychiatric factors are important in the context of COPD, aggregating such data tends to diminish the potential clinical utility of the results. For example, in our recent meta-analysis, which focused on the progression of the COPD, we found an important distinction between the impact of anxiety vs depression on risk for exacerbations. Our pooled analyses indicated that patients with anxiety were at greater risk for outpatient-treated exacerbations (ie, those treated in the patient’s own environment), whereas those with depression were at higher risk for exacerbations treated in-hospital (ie, in the ED or requiring hospitalization). This distinction may have clinical importance in COPD and on how a respiratory physician may intervene with a patient with depression compared with anxiety. As such, caution is needed when reducing outcomes in COPD. This kind of crude classification is likely to provide an incomplete picture of COPD morbidity in relation to psychologic factors and may be the reason why this meta-analysis provides seemingly exaggerated risk ratios compared with previous reviews.

In a similar manner, the use of different tools to measure psychiatric status is a vitally important issue that needs to be addressed. The Atlantis and colleagues’ analysis pooled studies that used structured interviews, self-administered questionnaires, or algorithms in large administrative databases. The majority of these tools have not been validated in COPD populations, which raises questions about their diagnostic accuracy in the context of lung disease. Consequently, it seems imperative to improve the measure of these factors by developing new tools and increasing the discriminative performance of existing tools. This rigorous work is required to meet the present need of stronger evidence for convincing policymakers and, more importantly, to develop more effective treatments for patients with COPD and these important psychiatric comorbidities. Finally, we join Atlantis and colleagues in the call to arms to continue to sensitize researchers and clinicians on the deleterious role of psychiatric disorders on both the development and the progression of COPD and the potential bidirectional relationship.

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REFERENCES


Response

To the Editor:

We thank Dr Moullec and colleagues for their interest in, and supportive comments on, our study in this issue of CHEST. Generally speaking, we agree with the principle that careful consideration is needed when pooling results from individual studies included in a systematic review. However, the selection of studies is also determined by the research question(s), and our study may have had a wider focus than theirs. Our responses to their specific points are as follows.

First, all decisions about which exposures (risk factors), primary outcomes, and summary effect measures to use were made a priori following careful consideration, as recommended by the Centre for Reviews and Dissemination. For instance, we predefined clinically relevant depression and anxiety by diagnostic criteria or correlated cutoff scores for self-rated symptoms. We, and others referenced by the authors, have shown that both methods classify people with chronic diseases (COPD, diabetes, and cardiovascular disease) into clinically relevant dichotomies of depression or anxiety and are widely used for identifying probable cases in epidemiologic research. We acknowledge that there is room to improve this area for more flexibility in the future.