

## Depression in Japanese Patients With COPD: A Cross-Sectional Study

To the editor:

I read the study by Horita et al “Depression in Japanese Patients With COPD: A Cross-Sectional Study,”<sup>1</sup> in which the severity and prevalence of depression were found to be associated with the severity and other parameters of COPD.<sup>1</sup>

In addition to the COPD parameters, obstructive sleep apnea (OSA) should be added as a risk factor for depression. The comorbid association of COPD and OSA is called the “overlap syndrome.”<sup>2</sup> Chen et al evaluated 2,818 patients diagnosed with OSA, and 14,090 matched non-OSA enrollees used as a comparison cohort.<sup>3</sup> The reported incidence of depression per thousand person-years was about twice as high among patients with OSA as those without OSA.<sup>3</sup> Furthermore, Best et al studied 82 outpatients with treatment-resistant depression who underwent overnight polysomnography, and found that many individuals with treatment-resistant depression have OSA.<sup>4</sup>

The effect of CPAP treatment on depression was evaluated by Diamanti et al, in 24 patients with depression and OSA, who were followed for at least 6 months after initiation of CPAP.<sup>5</sup> CPAP improved quality of life and decreased depression symptoms.<sup>5</sup> In a similar study, El-Sherbini et al explored the effect of CPAP in 37 patients with depression and OSA, before and 2 months after initiating CPAP.<sup>6</sup> Their findings suggested that patients with OSA should be screened for depression, and that CPAP should be tried first, before other depression therapies.<sup>6</sup>

COPD, overlap syndrome, and depression are intertwined. When evaluating depression in patients with COPD, screening for OSA should be performed, and CPAP treatment, if indicated, should follow. This approach may improve the control of depression in patients with COPD.

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The author has disclosed no conflicts of interest.

DOI: 10.4187/respcare.02855

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## Depression in Japanese Patients With COPD: A Cross-Sectional Study—Reply

In Reply:

Alkhuja and colleagues remind us that CPAP treatment may be effective for treating depression seen in patients with COPD and obstructive sleep apnea (OSA): the overlap syndrome. These conditions are interrelated in that COPD and OSA are inflammatory conditions; depression can increase smoking, decrease medication adherence, and cause sleep disturbance; and poor sleep quality can worsen depression. Although CPAP treatment is not used for patients who have COPD alone, in persons with both COPD and depression it seems worthwhile to screen for OSA with a sleep study, as unrecognized OSA may contribute to the severity of the other conditions.

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The authors have disclosed no conflicts of interest.

DOI: 10.4187/respcare.02890