

Supplementary Table S1 . Key features of Questionnaires used for this study.

Questionnaires	Items	Cronbach's alpha
Copd Assessment Test (CAT) Questionnaire	<p>Participants are asked to evaluate their current situation by assigning a rating from 0 (never) to 5 (very often) for each item listed below</p> <ol style="list-style-type: none"> 1. <i>Cough</i> 2. <i>Phlegm</i> 3. <i>Chest tightness</i> 4. <i>Breathlessness</i> 5. <i>Limited activities</i> 6. <i>Confidence in leaving home</i> 7. <i>Sleeplessness</i> 8. <i>Energy</i> 	0.78
Fatigue Severity Scale (FSS)	<p>Participants are asked to express their agreement during the past week with each item below by utilizing a Likert scale that ranges from 1 (strong disagreement) and 5 (strong agreement)</p> <ol style="list-style-type: none"> 1. <i>My motivation is lower when I am Fatigued</i> 2. <i>Exercise brings on my fatigue</i> 3. <i>I am easily fatigued</i> 4. <i>Fatigue interferes with my physical Functioning</i> 5. <i>Fatigue causes frequent problems for me</i> 6. <i>My fatigue prevents sustained physical Functioning</i> 7. <i>Fatigue interferes with carrying out certain duties and responsibilities</i> 8. <i>Fatigue is among my most disabling Symptoms</i> 9. <i>Fatigue interferes with my work, family, or social life</i> 	0.99
Patient Health Questionnaire (PHQ-9)	<p>Participants are asked to express their agreement over the last two weeks with each item below by utilizing a scale that ranges from (not at all) to 3 (nearly every day).</p> <ol style="list-style-type: none"> 1. <i>Little interest or pleasure in doing things</i> 2. <i>Feeling down, depressed, or hopeless</i> 3. <i>Trouble falling or staying asleep, or sleeping too much</i> 	0.86

	<p>4. <i>Feeling tired or having little energy</i></p> <p>5. <i>Poor appetite or overeating</i></p> <p><i>Feeling bad about yourself or that you are a failure or have let yourself or your family down</i></p> <p>6. <i>Trouble concentrating on things, such as reading the newspaper or watching television</i></p> <p>7. <i>Moving or speaking so slowly that other people could have noticed. Or the opposite being so figety or restless that you have been moving around a lot more than usual</i></p> <p>8. <i>Thoughts that you would be better off dead, or of hurting yourself</i></p> <p><i>An item was also added to the end of the diagnostic portion of the PHQ-9 asking patients who checked off any problems on the questionnaire: “How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?”</i></p>	
General Anxiety Disorder (GAD-7)	<p>Participants are asked to express their agreement over the last two weeks with each item below by utilizing a scale that ranges from (not at all) to 3 (nearly every day).</p> <p>1. <i>Feeling nervous, anxious, or on edge</i></p> <p>2. <i>Not being able to stop or control worrying</i></p> <p>3. <i>Worrying too much about different things</i></p> <p>4. <i>Trouble relaxing</i></p> <p>5. <i>Being so restless that it is hard to sit still</i></p> <p>6. <i>Becoming easily annoyed or irritable</i></p> <p>7. <i>Feeling afraid, as if something awful might happen</i></p>	0.93
Copd And Asthma Sleep Impact Scale (CASIS)	<p>Participants are asked to express their agreement during last week with each item below by utilizing a Likert scale ranging from 1 (never) to 5 (very often).</p> <p><i>During the past week, how often did you:</i></p> <p>1. <i>have a bad night’s sleep?</i></p> <p>2. <i>have problems staying awake during the day?</i></p> <p>3. <i>have trouble falling asleep?</i></p> <p>4. <i>wake up at night with breathing problems (shortness of breath, coughing, chest tightness, etc.)?</i></p> <p>5. <i>wake up during the night and have trouble falling back asleep?</i></p> <p>6. <i>have a good night’s sleep?</i></p> <p>7. <i>wake up feeling rested?</i></p>	0.72

Athens Insomnia Scale (AIS)	<p>Participants are asked to evaluate their current situation over the past month by assigning a rating from 0 to 5 for each item listed below</p> <ol style="list-style-type: none"> 1. <i>Sleep induction</i> 2. <i>Awakenings during the night</i> 3. <i>Final awakening</i> 4. <i>Total sleep duration</i> 5. <i>Sleep quality</i> 6. <i>Well-being during the day</i> 7. <i>Functioning capacity during the day</i> 8. <i>Sleepiness during the day</i> 	0.85
Epworth Sleepiness Scale (ESS)	<p>Participants are asked to express their agreement with each item below by utilizing a scale that ranges from (no chance of dozing) to 3 (high chance of dozing).</p> <p><i>How likely are you to doze off or fall asleep in the following situations, in contrast to feeling just tired?</i></p> <ol style="list-style-type: none"> 1. Sitting and reading 2. Watching TV 3. Sitting, inactive in a public place (e.g. a theatre or a meeting) 4. As a passenger in a car for an hour, without a break 5. Lying down to rest in the afternoon when circumstances permit 6. Sitting and talking to someone 7. Sitting quietly after a lunch without alcohol 8. In a car, while stopped for a few minutes in the traffic 	0.75