PROJECT INFORMATION

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Comparing Two Methods to Improve CPAP Use among Patients with COPD and Obstructive Sleep Apnea -- The O₂VERLAP Study

Principal investigator

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Organization

COPD Foundation

What was the research about?

Chronic obstructive pulmonary disease, or COPD, and obstructive sleep apnea are long-term health problems that make it hard to breathe and limit oxygen to the body. Having both COPD and sleep apnea is called overlap syndrome. People with overlap syndrome can use continuous positive airway pressure, or CPAP, to help them breathe while sleeping. CPAP therapy uses mild air pressure to keep airways open.

In this study, the research team compared two ways to help patients use CPAP therapy:

- **Proactive care.** Patients completed an online course about COPD, sleep apnea, and CPAP. A peer coach, a person with COPD, called patients weekly for five weeks to answer questions about living with overlap syndrome. In the fifth week, a respiratory therapist called patients to answer final questions.
- **Reactive care.** Patients could access a website with information about COPD and sleep apnea. Patients could also call a COPD information line answered by peer coaches.

The research team wanted to compare how well the two types of care improved patients' use of CPAP and their sleep outcomes.

What were the results?

CPAP use did not increase for patients in either group compared with their CPAP use at the start of the study. Also, patients' sleep quality, daytime sleepiness, and ability to do daily activities did not improve in either group.

Who was in the study?

The study included 294 people with overlap syndrome from across the United States. Among patients, 88 percent were White, 5 percent were Black, and 6 percent reported other race or multiple races; 4 percent were Hispanic. The average age was 64, and 53 percent were men.

What did the research team do?

The research team used email, social media, and outreach through COPD and sleep apnea websites and PCORnet[®] to recruit patients. PCORnet is a national network of health systems created to conduct research funded by PCORI. The team assigned patients by chance to receive proactive or reactive care for five weeks. A respiratory therapist called patients in both groups to help them set goals for CPAP use.

CPAP companies helped patients and researchers have access to data on patients' use of CPAP.

At the start of the study and 6 and 12 weeks later, patients completed online or phone surveys. The

research team collected data about patients' CPAP use for one month before the study and during the study. Patients with overlap syndrome helped plan the study and select study outcomes.

What were the limits of the study?

Patients who took part in this study were already using CPAP more than six hours per night on average. The unexpected high use of CPAP made it hard for the study to further improve CPAP use.

Future research could include patients with low CPAP use.

How can people use the results?

Researchers can use the results when planning other studies to improve CPAP use for patients with overlap syndrome.

To learn more about this project, visit www.pcori.org/Stepnowsky383.

The COPD Patient-Powered Research Network (COPD PPRN) formerly was a Network Partner in PCORnet[®], the National Patient-Centered Clinical Research Network. PCORnet[®] has been developed with funding from the Patient-Centered Outcomes Research Institute (PCORI[®]).