

'Self-Managing' COPD might pose risks, study suggests

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People getting comprehensive education had higher death risk, researchers found.

(HealthDay) -- In a finding that seems counterintuitive, a new study revealed that people with chronic obstructive pulmonary disease (COPD) were more likely to die after receiving comprehensive education and self-management tools.

"The comprehensive care management program was associated with unanticipated [excess mortality](#)," wrote study authors Dr. Vincent Fan, of the Veterans Affairs Puget Sound [Health Care System](#) in Seattle, and colleagues. They added that this finding differed significantly from previous studies done on self-management in COPD. And, the program used in the study also failed to decrease COPD-related hospitalizations.

The results are published in the May 15 online issue of the [Annals of](#)

[Internal Medicine.](#)

COPD refers to either emphysema or [chronic bronchitis](#). These progressive [lung diseases](#) are usually caused by cigarette smoking, and make it harder and harder to breathe as they get worse. COPD causes the production of mucus, which leads to coughing, shortness of breath and wheezing, according to the U.S. National Heart, Lung, and Blood Institute. Symptoms can get worse very quickly, particularly after an infection, and these disease exacerbations (flare-ups) often result in the need to be hospitalized, according to background information in the journal.

Findings from several previous studies suggested that educating COPD patients and helping them design emergency plans could help reduce the number of hospitalizations.

The current study included 426 [people](#) being treated for COPD at one of 20 Veterans Affairs hospital-based outpatient clinics. The study volunteers were almost all male (about 97 percent), and about nine of 10 were white. About half were married, and most had graduated from high school and attended some college or vocational school. Just under 30 percent were still smoking.

The [intervention group](#) had 209 people, while the usual-care group had 217.

The study intervention consisted of four individual 90-minute weekly educational sessions. These sessions included an assessment of that person's COPD, including their current medications and what triggered [exacerbations](#) for them. Participants received a written, individualized action plan that included the steps they needed to take when their COPD flared up. They were taught how to recognize the symptoms of a flare, and they were given daily COPD management advice. They were also

given prescriptions for prednisone (a steroid anti-inflammatory medication) and an antibiotic.

Case managers were available every day to answer any questions by phone. The study volunteers were instructed to call in if they had to initiate treatment based on their written plan. Researchers also called to check in on the volunteers every two months.

The one-year incidence of COPD hospitalizations was 27 percent in the intervention group and 24 percent in the usual-care group. Twenty-eight people died in the intervention group versus 10 people in the usual-care group -- a three times higher risk of death, according to the study.

Due to safety concerns, the trial was stopped early. The researchers don't know why extra education and self-management would lead to an increased risk of death, however.

"I'm not convinced that the intervention increased the risk of death. It certainly was not expected, and other studies that have looked at COPD and other diseases have found that people do well with these types of interventions," said Dr. Jonathan Whiteson, director of cardiopulmonary rehabilitation at NYU Langone Medical Center in New York City.

"If you flip a coin, the odds are 50-50 that you'll get heads. But, if you flip the coin 20 times, you might only get heads a few times. But, if you keep flipping the coin, it will eventually even out. That could be what was going on here. If they hadn't stopped the study, it might have equaled out a little more," Whiteson said.

He noted that because the study was predominantly in white males, it's difficult to extrapolate these findings to other populations.

Dr. Thomas Aldrich, a pulmonologist at Montefiore Medical Center in

New York City, said, "It's really hard to imagine how this program could be so toxic, and it's hard to explain why it happened."

Aldrich said similar self-management programs like this have had good results in people with asthma. But, it's possible that there's an inherent difference in people with COPD, he noted. "Most people with COPD smoked, despite repeated health care warnings, so they've already demonstrated that they're not necessarily strongly influenced by [health care](#) advice, and maybe that's part of the problem," Aldrich said.

Dr. Len Horovitz, an internist and pulmonologist at Lenox Hill Hospital in New York City, agreed that patient differences may have played a role in this study's surprising findings. But he believes that an individual's threshold for reporting symptoms may be what's at play here.

"The threshold at which a patient will report symptoms, even when coached, is going to be quite variable. A patient might feel that their symptoms aren't much worse, although a lung function test would tell us they are. There's a lot of fear and denial for patients. And, it's hard for a doctor to know ahead of time how stoic a patient is," Horovitz said.

And, the problem with COPD is that symptoms can get worse very quickly.

"When in doubt, report your symptoms to your doctor. Because COPD is chronic, you learn to live with a lot of the symptoms," Horovitz said.

Whiteson agreed: "Come to me -- let me interpret what the symptoms mean. People with COPD can get very sick very quickly. We don't want you to wait even a day," he said.

More information: Learn more about chronic obstructive pulmonary

disease from the [U.S. National Heart, Lung, and Blood Institute](#).

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