Helping Patients with COPD Transition from Hospital to Home -- The BREATHE Study

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What was the research about?
Chronic obstructive pulmonary disease, or COPD, is a lung disease that makes it hard to breathe. When patients with COPD leave the hospital, they risk having more breathing problems that can bring them back to the hospital. Helping patients learn how to manage COPD at home may reduce this risk.

In this study, the research team wanted to learn if a program called BREATHE helped patients with COPD go from the hospital to home. In this program, a nurse taught patients in the hospital how to manage COPD and helped them get ready to go home. Then, for up to three months, the nurse visited patients at home to talk about ways they could manage COPD. The nurse also asked what help patients needed and told them about community resources to help meet these needs.

The research team compared patients in the BREATHE program with patients who received usual care. Patients who received usual care learned about COPD from a hospital doctor or nurse. After leaving the hospital, these patients could talk with a nurse assigned to them by the hospital for a month about how to follow their discharge plans and get access to healthcare services.

What were the results?
After six months, patients in the BREATHE program and patients who received usual care didn't differ in quality of life. Compared with patients who received usual care, patients in the BREATHE program had more return visits to the hospital or emergency room for COPD.

Who was in the study?
The study included 240 patients with COPD admitted to a hospital in Baltimore, Maryland. Of these, 83 percent were white, 16 percent were black, and 1 percent were other races. The average age was 65, and 62 percent were women.

What did the research team do?
The research team assigned patients by chance to receive either the BREATHE program or usual care. The team trained nurses to work with patients in the BREATHE program.

Patients took surveys in the hospital and again one week, three months, and six months after going home. The research team also looked at patients' health records to see if they returned to the hospital or emergency room.

To create the BREATHE program, the research team worked with patients with COPD, caregivers, doctors, and nurses. A group of patients and family members gave feedback to the team throughout the study.

What were the limits of the study?
The study took place at one hospital, and most patients in the study were white. Results may differ in other hospitals and with other patients.
Future research could look for other ways to improve quality of life after a hospital stay for patients with COPD.

**How can people use the results?**

Hospitals can use the results when considering ways to help patients with COPD as they go from the hospital to home.

*To learn more about this project, visit [www.pcori.org/Aboumatar167](http://www.pcori.org/Aboumatar167).*

Lead investigator Hanan Aboumatar, MD, MPH, identified an error in the original analysis for this study. On October 8, 2019, *JAMA* published a corrected version of the paper along with an Editorial, Editor's Note, and a Notice of Retraction from Dr. Aboumatar. *JAMA* has made the full text of all four articles available free of charge. This abstract presents the study's corrected findings.