

Health Coaching and COPD Re-hospitalization: a randomized study

Roberto Benzo, MD¹ et al

Kristin Vickers, PhD²

Paul J. Novotny, MS³

Sharon Tucker, PhD⁴

Johanna Hoult, BS¹

Pamela Neuenfeldt, MPH, RRT⁵

John Connett, PhD⁶

Kate Lorig, DrPH⁷

Charlene McEvoy, MD⁵

ONLINE DATA SUPPLEMENT

ONLINE SUPPLEMENT

Chronic Respiratory Questionnaire

The CRQ has 20 questions that are summarized in 2 subscales: physical (dyspnea and fatigue domains), and emotional (mastery and emotion domain), from the original 4 domains: dyspnea, fatigue, emotional function, and mastery.²⁶ The internal consistency and test-retest reliability and the content, construct, and concurrent validity of data obtained with this questionnaire have been reported.^{26 27,28} The mastery domain refers to a sense of control over the disease process. Fatigue refers to tiredness or lack of energy. Each question has a 7-point Likert scale, with higher scores reflecting better physical or emotional well-being. The scores for each domain range between 1 and 7 with higher scores representing greater QOL. The scores from the dyspnea and fatigue domains were combined to form the physical function component and the emotion and mastery domains were combined to make the emotional function component as recommended by Guyatt et al,²⁹ and used in previous large randomized studies in COPD.³⁰

Health Coaching compared to other methods to support self-management

In contrast to a directive advice used in regular education or other counselling programs, this coaching approach based on Motivational Interviewing (24) promotes motivation to change being elicited from the patient, and is not imposed. We emphasized to coaches that direct persuasion is not an effective method for resolving the ambivalence that many times exists when considering a change in a behavior (like

quitting smoking, exercise, deal with emotions). We trained coaches to recognize and accept the fact that patients who need to make changes in their lives approach coaching at different levels of readiness to change their behavior. The counseling style is generally quiet and elicits information from the patient (deep listening skills are required) in a relationship resembles a partnership or companionship. This coaching style emphasizes autonomy and choice in what the patient wanted to work on. It is a process that happens *with* a patient; it is not something the coach does to a patient. It focuses on an evoking process, helping patient bring forward what they already know (patients are expert in their disease) and highlights and enhances the gap between goals for the future and present behavior; it is an approach which meets patients where they are in the process of change.

The Emergency plan used

My Plan when "My breathing is not doing well"



New symptoms:

- **More shortness of breath than usual**
- **Sputum has changed color, consistency or volume**

My Immediate Actions:

1. I take control of the situation (avoid panic and practice slow breathing while you figure your next step)
2. Use the rescue inhaler (usually albuterol, or combivent) or a nebulizer treatment (usually albuterol or duoneb) as frequent as needed (every two hours)

Actions if symptoms don't improve in the initial 12 hours or before going to bed:

1. I start **prednisone 1 tablet a day for 5 days**.
2. I start my **antibiotic** if my **sputum** significantly changed:
 - Thicker or Increased amount
 - Color (turned Green or Yellow)
3. I continue my **bronchodilator (rescue inhaler)** if I am more **short of breath** than usual.
4. I call the study counselor if I need any reassurance or help

Follow Up:

- If symptoms get **worse** or do not improve after 48 hrs → **Contact my doctor**. If after 5pm or on the weekend, I go to my local emergency department. Always: be safe

