



Peer Support and Chronic Obstructive Pulmonary Disease Self-Management: A Promising Approach?

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To help manage their symptoms and reduce the risk of exacerbations, it is important for people with chronic obstructive pulmonary disease (COPD) to adopt key health behaviors such as using their medications correctly, monitoring symptoms for evidence of an exacerbation, staying physically active, and smoking cessation. Self-management support programs (Table 1) can help patients adopt these behaviors and have been shown to improve quality of life and reduce healthcare usage (1, 2). However, these are complex interventions with many challenges that limit implementation in “real-world” healthcare settings.

One barrier to self-management in chronic conditions is inadequate social support (3), and lack of social support may be even more of a barrier for patients with COPD because dyspnea and the associated decreased physical function may lead patients to limit social interactions and spend less time outside the home, leading to social isolation and psychological distress (4, 5).

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Limited social interactions in COPD and the accompanying psychological symptoms can lead to decreased motivation to engage in self-management behaviors (6). Some patients who are older or living alone may be less able to benefit from self-management programs (7). Lack of social support for COPD is associated with decreased physical activity, a lower likelihood of quitting smoking, and lower pneumococcal vaccination rates (8). Living alone, social disengagement, and loneliness in COPD are associated with increased emergency room visits, hospitalizations, and worse perception of health (9).

Patients with COPD report unmet support needs, including wanting to understand how to manage their disease, and emotional needs such as dealing with frustration, anxiety, and believing they are the only person with COPD (10). Although family members can provide positive support, there may be ambivalence and frustration between patients and family (6). Peer support programs can help address inadequate social support and other barriers to self-care for COPD. Peer support is provided by nonmedical lay individuals and can improve patient health by providing ongoing support from a nonprofessional, assisting in incorporating behavior change in daily life, providing social and emotional support, and encouraging recommended care (11, 12).

In this issue of *AnnalsATS*, Aboumatar and colleagues (pp. 1687–1696) describe the results of a trial that examined whether adding peer support to patient education provided by a healthcare professional improves quality of life and reduces healthcare usage. This rigorous study randomized 292 individuals with COPD in outpatient clinics (35.3%) and those hospitalized with COPD (64.7%) at two medical centers. The self-management training by the healthcare professional was limited to an individualized 1-hour

education session with a respiratory therapist. Those randomized to the peer support arm were invited to also participate in a series of up to eight group meetings that covered different aspects of COPD self-management and were also matched with a peer support person called a “BREATHE Pal” who would meet with the patient at the group meetings or by phone.

The authors found that overall, there was no difference in COPD-related quality of life measured with the St. George’s Respiratory Questionnaire between those with and without a peer support person. However, the study did find a significant reduction in COPD-related healthcare usage at both 3 months (incident rate ratio [IRR], 0.68; 95% confidence interval [CI], 0.50–0.93) and 6 months (IRR, 0.83; 95% CI, 0.70–0.98) with no difference in all-cause acute care events at 6 months or in mortality. This intriguing result suggests that the support provided by the peers may have helped patients better prevent or manage acute exacerbations of COPD. Although the data presented from this study do not provide information on the mechanism of how peer support may have reduced COPD-related healthcare usage, possibilities include helping patients to improve adherence to inhaled medications that reduce exacerbations, encouraging monitoring of symptoms, seeking nonurgent outpatient care for exacerbations, and promoting participation in pulmonary rehabilitation and regular physical activity. Additional information from this and future studies may help to shed light on the mechanism of the peer support intervention on acute care events.

An important consideration for peer support interventions is what type of person should be selected for this role and how they are selected, trained, and supervised (12, 13). In the study by Aboumatar, the peer supporters were patients with COPD who

Table 1. Definition of chronic obstructive pulmonary disease self-management interventions*

- A chronic obstructive pulmonary disease self-management intervention is structured but personalized and often multicomponent, with goals of motivating, engaging, and supporting patients to positively adapt their health behavior(s) and develop skills to better manage their disease.
- The ultimate goals of self-management are: 1) optimizing and preserving physical health; 2) reducing symptoms and functional impairments in daily life and increasing emotional well-being, social well-being, and quality of life; and 3) establishing effective alliances with healthcare professionals, family, friends, and community.
- The process requires iterative interactions between patients and healthcare professionals competent in delivering self-management interventions. These patient-centered interactions focus on: 1) identifying needs, health beliefs, and enhancing intrinsic motivations; 2) eliciting personalized health goals; 3) formulating appropriate strategies (e.g., exacerbation management) to achieve these goals; and, if required, 4) evaluating and readjusting strategies. Behavior change techniques are used to elicit patient motivation, confidence, and competence. Literacy-sensitive approaches are used to enhance comprehensibility.

*Adapted from Effing and colleagues (2).

were nonsmokers and had completed a pulmonary rehabilitation program. Importantly, family caregivers could also be peer supporters, suggesting that familiarity with COPD is an important consideration for peer support. This study provides encouraging information regarding the feasibility of identifying and training peer supporters.

Overall, the intensity, or dose, of the intervention was modest, and the intervention did not incorporate all the components of a COPD self-management program (Table 1). There was only a single 1-hour self-management education session provided by the respiratory therapist, whereas many self-management programs have at least four to eight sessions (1). In addition, although the peer support

program offered eight group visits, the mean number of group visits attended was 1.8, and less than half of patients attended four or more peer support visits, which was the authors' definition of adherence to the intervention. The lack of effect on the primary outcome of quality of life may be in part because of this lower dose of self-management training.

In exploratory analyses, nonadherent patients tended to have lower education, income, and health literacy, and in before and after analyses, quality of life at 6 months did not improve for nonadherence participants, whereas quality of life did improve among adherent patients. Reasons given by patients for not attending peer group events included being too sick, lacking transportation, or having other more

important medical problems. These findings highlight the importance of providing outreach to engage hard-to-reach patients and providing alternative or novel options for peers to reach patients, such as home or video visits.

This trial provides novel insights and encouraging results for including peers as part of a multicomponent self-management intervention for patients with COPD. Moreover, as part of a health professional team, peers offer a potentially feasible and sustainable approach for expanding the reach of self-management support and filling the many unmet needs of patients with COPD. ■

Author disclosures are available with the text of this article at www.atsjournals.org.

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