Patient perspectives and barriers to physical activity following COPD exacerbations: results from a quality improvement program at a minority-serving VA hospital

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Introduction
Chronic obstructive pulmonary disease (COPD) affects up to 24 million people in the United States. 3rd leading cause of death. $50 billion in healthcare expenditures per year. Women, elderly, and individuals in lower socio-economic strata (e.g., those without high school diploma, household income <$25K/year) are disproportionally affected. Exertional dyspnea is common in patients with COPD exacerbations and can trap patients in a “vicious cycle of inactivity.”

Limited physical activity has been associated with increased risk for exacerbations, hospitalization, and death. Pulmonary rehabilitation shortly after hospital discharge is efficacious in reversing this vicious cycle. Unfortunately, only a small fraction of patients recovering from COPD exacerbations is able to attend, and complete, the program. No study to date has examined physical function, satisfaction with ability to complete daily activities, and barriers to participation in a physical activity training program in patients recovering from COPD exacerbations in an urban US population.

The objective of this study is to examine patient-reported physical function, satisfaction with ability to complete everyday activities, and interest and barriers to participation in exercise programs.

Methods
As part of a quality improvement program to reduce readmissions following COPD exacerbations, a survey was administered to patients who attended a Recovering Obstructive Lung Disease (ROLD) discharge clinic at an urban, academic Veterans Affairs hospital. 52 patients recovering from COPD exacerbations (<1 month following hospital discharge) completed the survey. The survey consisted of 7 questions regarding:

- Daily physical function
- Perceptions regarding the role of physical activity in their recovery
- Barriers to joining a physical activity training program

We assessed items from the PROMIS™ Physical Function and the PROMIS™ Satisfaction with Social Roles and Activities questionnaires.

Results

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**References**

**Summary and Conclusions**

**Patients reported difficulty with physical function, low satisfaction with their ability to complete everyday activities and expressed interest in exercise programs.**

**Multiple barriers to participation in exercise programs were identified.**

- **Only 60% believed exercise programs would be helpful.**
- **Other barriers included transportation costs or logistics and dyspnea were most common barriers.**
- **Home-based physical activity training could be a viable approach to prevent deconditioning in the post-hospitalization setting, however, its feasibility and effectiveness need to be evaluated.**

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