PULMONARY REHABILITATION AND COLLABORATIVE SELF MANAGEMENT

JULIA O’SHEA, BA, RRT
PULMONARY REHAB LEAD
UNIVERSITY OF VERMONT MEDICAL CENTER
OBJECTIVES

• Describe collaborative self-management.
• Discuss the importance of self-efficacy in the success of collaborative self-management.
• Review components and goals of Pulmonary Rehab (PR)
• Discuss implementation of individualized collaborative self-management of the pulmonary patient.
“The symptom burden, functional impairment, and impaired quality of life in patients with chronic respiratory disease are not simply consequences of the underlying physiological disorder, BUT also depend on the patient’s adaptation to the illness, its comorbidities, and its treatments.”

AMERICAN THORACIC SOCIETY/EUROPEAN RESPIRATORY SOCIETY STATEMENT ON PULMONARY REHAB
LET’S START FROM THE BEGINNING
COLLABORATIVE SELF-MANAGEMENT

• Self-management programs aim to teach the skills needed to carry out medical regimens specific to a patient's control of their own condition and improve their well-being.

• Components of self-management:
  • Education
  • Behavioral support
  • Motivational support with promotion of self-efficacy
COLLABORATIVE SELF-MANAGEMENT TEAM

- **Patient** - self accountability, desire to change
- **Family/friends, caregivers** - support patient’s independence
- **Healthcare professionals** - Resist the Righting Reflex
  - Desire to set things right; to get people on the path to health and wellness. We try to fix them.
- **Peers/Support group** - support, grow, and learn with each other
# Are They Ready to Change?

<table>
<thead>
<tr>
<th>Stage of Change</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-contemplation</td>
<td>Unaware/unwilling to change</td>
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<tr>
<td>Contemplation</td>
<td>Seriously considering change, but no commitment to take action</td>
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<tr>
<td>Preparation</td>
<td>Committed to change, and may make small behavioral changes</td>
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<tr>
<td>Action</td>
<td>Starting to make changes</td>
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<tr>
<td>Maintenance</td>
<td>Sustaining changes</td>
</tr>
<tr>
<td>Relapse</td>
<td>Return to previous behavior</td>
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SELF-EFFICACY

• “The belief in one’s capabilities to organize and execute the courses of action required to manage prospective situations.” ~ Albert Bandura, Psychologist

• In other words, self-efficacy is a person’s belief in his or her ability to succeed in a particular situation. Bandura described these beliefs as determinants of how people think, behave, and feel.

• Patient has to feel confident they can make the behavior change

• A “can-do” cognition indicating a sense of control

• Helps us understand the resistance to or the ability to change
PULMONARY REHABILITATION

REQUIRES DETERMINATION AND MOTIVATION

DR. THOMAS PETTY, UNIVERSITY OF COLORADO HOSPITAL
COMPONENTS OF PULMONARY REHAB

• Patient referral from MD
• Patient is evaluated one on one and pre-program assessments performed
• Individualized Treatment Plan is developed
• Orientation, Patient Education Handbook, group classes start
• Education every session for 1 hour
• Exercise is 2 hours
• Twice a week for 8 weeks
WHO CAN PARTICIPATE IN PULMONARY REHAB?

• Moderate to very severe COPD as defined by GOLD* classification II, III, & IV, and
• Chronic respiratory disease (non-COPD) when referred by the treating physician

*GOLD = Global Strategy for the Diagnosis, Management, and Prevention of COPD
GOALS OF PULMONARY REHAB

Services dedicated to restoring patients who live with chronic lung conditions to their highest possible level of independent function and quality of life within the limitations of their lung conditions and any comorbidities.

• EDUCATION
  • Maximize home SELF MANAGEMENT, improve compliance
  • Recognize changes in signs/symptoms
  • Early intervention, reduce exacerbations, readmissions, and mortality

• EXERCISE
  • Improve and maintain good physical functioning
  • Support, Resources, Home Exercise and Action Plan
EDUCATION TOPICS

- Breathing retraining
- Anatomy of the respiratory system
- Inhaler technique
- Oxygen therapy
- Respiratory medications
- Bronchial hygiene
- What to do if you are sick
- Tools for stress management
- Goals and wellness
- Community resources
- Traveling with oxygen
- Lessons from a past graduate
- PFTs
- Nutrition for lung disease
- Advance directives
- ADLs and energy conservation
EXERCISE TRAINING

• Must be physician-prescribed and individualized.
• May take place one to one or in group setting.
• Includes breathing retraining, endurance/stamina, strength/resistance, ROM/flexibility, balance/coordination training.
• Approach is always progressive and emphasizes dyspnea and fatigue control
• Goal: reconditioning for improved ADLs/independence and quality of life.
TOOLS FOR SELF MANAGEMENT

• Dyspnea management
• Medication management
• Minimizing exacerbations
• Emergency action plan
• Psychosocial component
DYSPNEA MANAGEMENT

Dyspnea: the most common and debilitating symptom of chronic lung disease

“...Pulmonary rehabilitation has been documented to be the most effective way to decrease dyspnea, improve exercise tolerance and improve health-related quality of life in COPD. The magnitude of benefit in these outcomes well exceeds those for all available pharmacologic treatment options.”

Casaburi, R. Pulmonary Rehabilitation: Advances in the Past 10 Years. 
TREATMENT OF DYSPNEA

- Body position/posture
- Pursed-lips breathing (PLB) - Defined by ATS guidelines as involving a nasal inspiration followed by expiratory blowing against partially closed lips, avoiding forceful exhalation
- Diaphragmatic breathing
- **Slow, deep, mindful** breathing may relieve the tachypnea (especially ILD)
- Any breathing strategy training should be closely monitored to ensure asynchronous breathing does not occur
MEDICATION MANAGEMENT

- Proper use and adherence with inhaled bronchodilators and controller medications
- Inhaler technique and In-check testing
MINIMIZING EXACERBATIONS

- Airway clearance techniques
- Use of an emergency action plan
  - Self-administration of antibiotic & prednisone during an exacerbation
- Breathing awareness
  - Practice of slow, mindful, pursed lips breathing including demonstration and practice
- Physical activity
  - Daily practice at a specific time of day to dedicate to simple physical activity
EMERGENCY ACTION PLAN

- **COPD** - early recognition and self-administration of antibiotic & prednisone during an exacerbation (COPD Action Plan)
- **Pulmonary Fibrosis/ILD** - oxygen desaturation, uncontrolled tachypnea, worsening cough
- **Pulmonary Hypertension** - Unexplained dyspnea on exertion, chest pain, signs of right ventricular dysfunction, such as weakness, dizziness, easy fatigability, decrease in blood pressure (BP) and declining exercise tolerance. Awareness that worsening of PH can lead to exercise-induced syncope or sudden death.
- **ALL** - proper use of supplemental oxygen titrated to SpO₂
PSYCHOSOCIAL COMPONENT

• Anxiety and depression are often related to: worse health outcomes, higher rates of exacerbations, higher rates of hospitalization, higher rate of readmissions, increased hospital length of stay, and reduced survival

• Participation in pulmonary rehab can lead to substantial and clinically meaningful changes in anxiety and depression

• Support group- decreases social isolation, increased connectedness, opportunity for social outings/travel, exercise support, education, etc…
SUMMARY

• Collaborative self-management and self-efficacy is a key component in pulmonary rehabilitation.

• Success requires the recognition that people have to be ready to change, and have to be confident in their ability to change if they are going to be successful.

• Create a long-term supportive environment for continued focus on behavior change and regular physical activity.
WHAT REALLY HAPPENS IN PULMONARY REHAB!
REFERENCES AND RESOURCES


REFERENCES AND RESOURCES


