Palliative Care and Pulmonary Rehabilitation

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KEYWORDS

• Palliative care • Advance care planning • Education • Hospice • End of life
• Pulmonary rehabilitation

KEY POINTS

- Patients with advanced chronic obstructive pulmonary disease (COPD) commonly have unmet needs, such as dealing with a high daily symptom burden, emotional distress, needs of family caregivers, and requirements for advance care planning. Each of these can be addressed in the context of a palliative care program.
- Palliative care and pulmonary rehabilitation are both important components of integrated care for patients with chronic respiratory diseases and share some similarities.
- Pulmonary rehabilitation provides the opportunity to introduce palliative care by implementing education about advance care planning as an integral part of its program.

INTRODUCTION

A century ago, most deaths occurred suddenly, caused by infectious diseases, accidents, and childbirth.[1] Demographic transitions, like aging of the population and a shift in causes of death to chronic diseases, have had major consequences for the experience of dying and palliative care needs.[2,3] The experience of dying has increasingly become a feature of old age.[2] Many people acquire progressive chronic diseases toward the end of life.[1,2] Chronic obstructive pulmonary disease (COPD) is a highly prevalent chronic disease and is the third leading cause of death worldwide.[4]

Management of COPD includes reduction of risk factors, like smoking cessation; appropriate immunizations; attention to nutrition; pharmacologic treatment, such as inhaled bronchodilators and glucocorticosteroids; and nonpharmacologic treatment, such as pulmonary rehabilitation, long-term oxygen therapy, and surgery.[5] Pulmonary rehabilitation is indicated for patients who are symptomatic or who complain of having decreased daily life activities.[6] The American Thoracic Society/European Respiratory Society Statement *Key Concepts and Advances in Pulmonary Rehabilitation*[7] defines pulmonary rehabilitation as "a comprehensive intervention based on a thorough patient assessment followed by patient-tailored therapies which include, but are not limited to, exercise training, education and behavior change, designed to improve the physical and psychological condition of people with chronic respiratory disease and to promote the long-term adherence to health-enhancing behaviors." Pulmonary rehabilitation has been shown to reduce dyspnea, increase exercise capacity, and improve quality of life in patients with COPD and other chronic respiratory diseases.[7]

Quality of life in patients with COPD is even more greatly affected by their disease than quality of life

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of patients with cancer.[8] Therefore, palliative care has been recognized as an important approach for patients with advanced COPD.[8–10] Palliative care is defined by the World Health Organization (WHO) as "an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual" (**Box 1**).[11]

Palliative care and pulmonary rehabilitation are both important components of integrated care for patients with chronic respiratory diseases and share some similarities. Palliative care, like pulmonary rehabilitation, aims to decrease symptom burden and improve quality of life and uses an interdisciplinary approach to achieve this. Despite the similarities, several differences distinguish these approaches.[12] For example, palliative care focuses on decreasing symptoms, whereas pulmonary rehabilitation intends to modify the disease and promote the long-term adherence to health-enhancing behaviors. In addition, palliative care includes several aspects that do not receive attention during pulmonary rehabilitation, such as bereavement counseling and spiritual care. Exercise training is the cornerstone of pulmonary rehabilitation but receives little attention in palliative care.[12]

The needs of patients with advanced respiratory disease are complex and should be addressed by integrating curative-restorative and palliative care.[13] In this article, an overview of the complex needs and barriers involved in the provision of palliative care is provided, and how advance care planning education as a component of palliative care can be introduced during pulmonary rehabilitation is described.

Box 1
WHO definition of palliative care

Palliative care is an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual

Palliative care:

- Provides relief from pain and other distressing symptoms
- Affirms life and regards dying as a normal process
- Intends neither to hasten nor postpone death
- Integrates the psychological and spiritual aspects of patient care
- Offers a support system to help patients live as actively as possible until death
- Offers a support system to help the family cope during the patient's illness and in their own bereavement
- Uses a team approach to address the needs of patients and their families, including bereavement counseling, if indicated
- Will enhance quality of life and may also positively influence the course of illness
- Is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy, and includes those investigations needed to better understand and manage distressing clinical complications

From World Health Organization. WHO definition of palliative care. Available at: http://www.who.int/cancer/palliative/definition/en. Accessed December 01, 2013.

DISEASE TRAJECTORY AND THE PALLIATIVE CARE MODEL IN ADVANCED COPD

The course of advanced COPD is typically marked by a gradual decline in health status, punctuated by acute exacerbations. Every exacerbation can be life threatening and is associated with an increased risk of dying.[1] About 10% of patients with COPD admitted to the hospital because of an acute exacerbation die during their stay in the hospital.[14] Moreover, almost half of these patients die within 4 years of discharge.[15] Progressive respiratory failure is the primary cause of death in patients with COPD hospitalized for an exacerbation.[16] In addition, patients with COPD often suffer from comorbidities, which may further compromise survival.[17] Cardiovascular events are an important cause of death for patients with COPD.[18]

Even the best models of 6-month survival in patients with nonmalignant diseases have a limited ability to predict death for individual patients.[19,20] As a result, introducing palliative care should not depend on the physician's estimation of a limited life expectancy. The traditional dichotomous model of curative and palliative care, in which curative care ends and palliative care starts at a certain moment, is not appropriate for patients with chronic life-limiting diseases like COPD. The Official American Thoracic Society Clinical Policy Statement *Palliative Care for Patients with Respiratory Diseases and Critical Illnesses* describes an individualized integrated model of palliative care,