

## National Learning Objectives for COPD Educators

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The COPD Educator will be able to achieve the following objectives.

Performance objectives, denoted by the letter B, will be evaluated within the educator programs.

## **Cognitive Objectives**

Chronic Obstructive Pulmonary Disease Definition, Epidemiology, Pathogenesis and Pathophysiology

- 1. Define chronic obstructive pulmonary disease.
- Describe the impact of COPD on society, and the individual and family in terms of:
  - a) prevalence,
  - b) morbidity,
  - c) mortality,
  - d) economic costs,
  - e) psychological functioning,
  - f) social functioning,
  - g) quality of life
  - h) family life, and
  - i) quality of life tools.
- 3. Explain the pathogenesis of chronic obstructive pulmonary disease.
- 4. Explain the pathophysiology of chronic obstructive pulmonary disease.

- 5. Explain the risk factors for chronic obstructive pulmonary disease:
  - a) host,
  - b) environmental, and
  - c) other
- 6. **Describe alpha-1-antitrypsin deficiency.**
- 7 Discuss the non-pulmonary manifestations of alpha-1-antitrypsin deficiency.
- 8. Discuss the following related to chromic obstructive pulmonary disease:
  - a) Systemic manifestations,
  - b) Common co-morbidity,

## **COPD Diagnosis and Evaluation**

- 9. Identify signs and symptoms that are indicative of chronic obstructive pulmonary disease.
- 10A. Specify the essential components of a client history for chronic obstructive pulmonary disease.
- 10B. Demonstrate how to take a client history.
- 11. Determine the components of a physical examination for chronic obstructive pulmonary disease.
- 12. Interpret the findings of a physical examination of a person with chronic obstructive pulmonary disease.

- 13. Explain the role of the following in diagnosing or evaluating chronic obstructive pulmonary disease:
  - a) pulmonary function tests,
  - b) pharmacotherapy,
  - c) walk test
  - d) arterial blood gases,
  - e) oximetry and
  - f) chest x-ray.
- 14. Explain methods for assessing dyspnea.
- 15. Assess the severity of a client's chronic obstructive pulmonary disease.

#### 16. Explain spirometry assessment in terms of:

- a) indications,
- b) interpretation of results (FEV1, FVC, FEV1/ FVC, peak expiratory flow), and
- c) quality control.
- 17. Examine alpha-1-antitrypsin deficiency in terms of:
  - a) targeted testing,
  - b) diagnostic tests, and
  - c) characteristics of the associated chronic obstructive pulmonary disease compared with the chronic obstructive pulmonary disease caused by environmental factors.
- Describe the clinical differences between asthma and chronic obstructive pulmonary disease.
- 19. Describe the features of asthma and chronic obstructive pulmonary disease coexisting in a given individual.

- 20. Identify differential diagnoses for chronic obstructive pulmonary disease.
- 21. Discuss the impact of sleep apnea on chronic obstructive pulmonary disease.

## Chronic Obstructive Pulmonary Disease Management

#### Self-Management

- 22. Explain the purpose of a written action plan for chronic obstructive pulmonary disease.
- 23. Describe the components of an appropriate plan of action.
- 24A. Describe how to use a written action plan for a client with chronic obstructive pulmonary disease.
- 24B. Demonstrate how to teach a client to use a written action plan.
- 25. Examine the comprehensive approach to the management of chronic obstructive pulmonary disease.

## 26A. Examine strategies to assist clients to cope with chronic obstructive pulmonary disease:

- a) physiological factors (dyspnea, fatigue, sleep disturbance, exercise limitation),
- b) psychological factors (anxiety, depression, fear), and
- c) activities of daily living.

## 26B. Demonstrate:

- a) pursed lip breathing technique,
- b) diaphragmatic breathing,
- controlled cough and forced expiration technique, and
- e) relaxation techniques.
- 27. Evaluate clients' need for nutritional intervention.
- 28. Examine the benefits of exercise training in chronic obstructive pulmonary disease.
- 29. Apply the PLISSIT model to address sexuality with clients with chronic obstructive pulmonary disease.

### **Smoking Cessation**

- 30. Explain the importance of smoking cessation:
  - a) in the prevention of chronic obstructive pulmonary disease, and
  - b) in the management of chronic obstructive pulmonary disease.

## 31. Explain the role of nicotine addiction including:

- a) Physiology
- b) Symptoms of nicotine withdrawal.

## 32. Identify strategies to assist a client with smoking cessation including:

- a) Counseling
- b) Support
- c) Pharmacotherapy.
- 33. Assess the factors affecting the client's ability/readiness to quit smoking.
  - a) Models of behaviour change
  - b) Personal considerations.
- 34. Distinguish among the pharmacological aids to smoking cessation.
- 35. Identify the components of motivational interviewing that may assist clients to quit smoking.

### **Pulmonary Rehabilitation**

- 36. Identify the components of pulmonary rehabilitation programs.
- 37. Analyze the effectiveness of interventions used in rehabilitation.

#### **Noninvasive Mechanical Ventilation**

40. Explain the role of noninvasive mechanical ventilation in acute exacerbation of chronic obstructive pulmonary disease.

## Oxygen Therapy

- 38. Examine the role of oxygen therapy in the management of chronic obstructive pulmonary disease:
  - a) define supplemental long-term oxygen therapy (LTOT),
  - b) examine the indications for LTOT,
  - c) describe the tests used to assess the need for LTOT,
  - d) examine the benefits of LTOT,
  - e) describe the oxygen equipment which is used for LTOT,
  - f) discuss choice of equipment which is best suited for client needs and lifestyle,
  - g) discuss safety factors concerning oxygen use, and
  - h) examine implications regarding oxygen use with air travel.

### **Antitrypsin Replacement Therapy**

39. Examine the role of antitryspin replacement therapy in the management of alpha-1-antitrypsin deficiency lung disease.

#### **Surgical Interventions**

- 41. Discuss surgical options for clients with chronic obstructive pulmonary disease:
  - a) lung volume reduction, and
  - b) lung transplantation.

#### **Alternative Therapies**

42. Discuss the role of alternative therapies in the management of chronic obstructive pulmonary disease.

### Acute Exacerbations of COPD

- 43. Define acute exacerbation of chronic obstructive pulmonary disease (AECOPD).
- 44. Explain prevention strategies that may reduce the frequency of acute exacerbations of chronic obstructive pulmonary disease.
- 45. Assess for acute exacerbation of chronic obstructive pulmonary disease.

46. Explain how to manage acute exacerbation of chronic obstructive pulmonary disease.

## **End of Life and Palliative Care**

- 47. Describe what is meant by end-of-life care planning.
- 48. Describe what is meant by advance directive.
- 49. Discuss the role of palliative care in end-stage chronic obstructive pulmonary disease.
- 50. Examine the team approach to end-oflife care planning.

## Pharmacotherapy for Chronic Obstructive Pulmonary Disease

- 51. Identify generic and trade names of medications.
- 52. Classify medications according to their action.
- 53. Explain the indications for the medications.
- 54. Describe the side effects of the medications.
- 55. Identify the methods of administration of the medications.

- 56A. Counsel clients on the proper method of use and maintenance of medication delivery devices.
- 56B. Demonstrate how to use and maintain medication delivery devices.
- 57. Identify which inhaled delivery devices are used with specific medications.
- 58. Establish which inhaled delivery devices are best suited to clients of different ages and varying needs.

## **Education**

- 59. Explain the benefits of client education.
- 60A. Analyze verbal and nonverbal communication in the educator-client relationship.
- 60B. Demonstrate effective verbal and nonverbal communication in the educator-client relationship.
- 61. Describe models and theories commonly used in health education, including the Health Belief Model, PRECEDE Model, Transtheoretical Model, Social Cognitive Theory and Self-efficacy Theory.

- 62. Distinguish the general characteristics that may influence learning among:
  - a) preschool children (3-4 years)
  - b) young school-age children (5-8 years)
  - c) older school-age children (9-12 years)
  - d) adolescents (13-18 years)
  - e) adults (19-64 years), and
  - f) seniors (> 65 years).

## 63. Distinguish the learning styles of:

- a) preschool children (3-4 years)
- b) young school-age children (5-8 years)
- c) older school-age children (9-12 years)
- d) adolescents (13-18 years)
- e) adults (19-64 years), and
- f) seniors (> 65 years).
- 64. Explain predisposing, enabling and reinforcing factors that influence behaviour.
- 65. Differentiate among educational interventions to address predisposing, enabling and reinforcing factors.
- 66. Describe group process in the context of providing group education.
- 67A. Apply effective instructional practices for individuals and groups.
- 67B. Demonstrate effective instructional practices for individuals and groups.
- 68. Apply the principles of health education.
- 69. Use motivational interviewing to facilitate behavior change.

## 70A. Utilize effective teaching strategies appropriate for:

- a) adults,
- b) older adults, and
- c) adults of advanced age (i.e. frail elderly).
- d) groups.
- 70B. Demonstrate effective teaching strategies for individuals and groups.
- 71. Explain how to educate clients who have special needs or difficulty with self-management.
- 72. Identify the factors that an educator would evaluate to determine if a client is able to manage her/his respiratory illness.

## 73A. Use a comprehensive education process for individuals and groups:

- a) assess learning needs, and factors that influence learning and behavior change,
- b) determine learning outcomes in collaboration with clients,
- c) design a plan for an education intervention,
- d) implement an education plan, and
- e) evaluate client learning outcomes (impact evaluation).

## 73B. Demonstrate the education process for individuals and groups.

- 74. Evaluate health education resources available in the community.
- 75. Design a comprehensive education program.

## Educator and Program Evaluation

76. Evaluate the educator's skills and abilities.

### 77. Evaluate the education program

- a) Process (e.g., program delivery), and
- b) Outcomes (e.g., program effectiveness).

## Professionalism

## 78. Illustrate professional conduct:

- a) maintain professional competency,
- b) appraise the literature for relevance and credibility,
- c) adhere to evidence-based practice or best practice guidelines,
- d) observe professional boundaries,
- e) accept accountability for one's own actions,
- f) acknowledge one's personal and professional limitations, and
- g) maintain decorum.

## 79. Apply ethical principles when conducting client education, including:

- a) beneficence,
- b) non-maleficence,
- c) respect for autonomy,
- d) justice,
- e) confidentiality,
- f) respect for the values and beliefs of others, and
- g) respect for cultural differences.

# 80. Examine the team approach to respiratory illness management in terms of:

- a) the goal,
- b) benefits and barriers,
- c) role and responsibilities of the educator,
- g) role and responsibilities of other health care professionals,
- e) role and responsibilities of clients, and
- f) effective strategies.
- 81. Advocate for health education, resources and services for people with respiratory illness.

## **Performance Objectives**

These performance objectives, which are denoted by the letter B, correspond with the cognitive objectives, which are denoted by the letter A. The performance objectives are to be evaluated within the educator programs.

### **Diagnosis and Evaluation**

10B. Demonstrate how to take a client history.

#### Management

## 24B. Demonstrate how to teach a client to use a written action plan.

#### 26B. Demonstrate:

- a) pursed lip breathing technique,
- b) diaphragmatic breathing,
- controlled cough and forced expiration technique, and
- e) relaxation techniques.

## 56B. Demonstrate how to use and maintain medication delivery devices

## Education

- 60B. Demonstrate effective verbal and nonverbal communication in the educator-client relationship.
- 67B. Demonstrate effective instructional practices for individuals and groups.
- 70B. Demonstrate effective teaching strategies for individuals and groups.
- 73B. Demonstrate the education process for individuals and groups.