

WHAT IS DYSPNEA?

Dyspnea is an uncomfortable awareness of altered breathing and is a subjective symptom reported by patients. The most common causes of dyspnea include heart failure, asthma, pneumonia, obstructive pulmonary diseases, interstitial lung disease, and anxiety.

SIGNS & SYMPTOMS

A patient's self-report is the gold standard for the assessment of dyspnea. A numeric rating scale (NRS) from 1–10 can be used to elicit severity of the symptom.²⁻⁴

"0" = no breathlessness "10" = severe breathlessness

- Patients may describe breathing as difficult, labored, uncomfortable, distressing, or painful with either inspiration or expiration.

- Patients may complain of sense of breathlessness, inability to take a deep breath, "air hunger," and chest tightness, and may engage in pursed lip breathing.

- Patients may express anxiety, fear, or feelings of panic.

- Breathing can be short, rapid, shallow, labored, uneven, and gasping.

- Patients may demonstrate or report decreased activity tolerance with impaired ability to complete activities of daily living (ADLs) and decline in functional status.

- Patients who are nonverbal or patients nearing end of life—observe for restlessness, accessory muscle use, paradoxical (uneven) breathing pattern, grunting, nasal flaring, and expressions of fear.

INTERVENTIONS

Identify the underlying etiology and stage of illness. Implement measures to reduce immediate suffering from difficulty breathing.²⁻⁴ Review goals of care with patient and family and discuss the benefits and burdens of treatment (e.g., use of supplemental oxygen, high-flow oxygen, use of noninvasive ventilatory support, and ventilatory support) to reduce intensity of progressive dyspnea. Consider patient and family goals and wishes and definition of quality of life when evaluating treatment options.²⁻⁴

- In advanced illness, as culturally appropriate, discuss shifting goals of care to reduce symptom burden and improving patient's capacity to cope when optimization of the underlying etiology is not achievable.
- Continue ongoing monitoring of symptoms and impact on functional status.

- Educate on a high-quality dyspnea management plan for patients who are at risk for a dyspnea crisis. A dyspnea plan can include both nonpharmacological and pharmacological treatments and rituals to enact when dyspnea crisis occurs.
- Consider social work, psychology, counseling, or spiritual care consult for palliative and hospice support and intervention to address concerns regarding caregiver support, fear, anxiety, guilt, depression, spiritual and cultural rituals, and financial concerns.

NONPHARMACOLOGICAL INTERVENTIONS	PHARMACOLOGICAL INTERVENTIONS
<p>Investigate reversible causes while pursuing quality of life or symptom management.</p> <p>Position for comfort and optimal lung expansion.</p> <p>Cognitive-behavioral interventions: Address underlying psychosocial and spiritual or existential issues.</p> <p>Fatigue: Promote energy conservation, rest, use of assistive devices, and OT/PT discipline if appropriate.</p> <p>Explore relaxation strategies.</p> <p>Employ fans and adjust environment (e.g., cool room).</p> <p>Dyspnea Management in Heart Failure</p> <p>Diet: Recommend a low-salt diet and fluid restriction.</p> <p>Consult cardiac and pulmonary rehabilitation in accordance with goals of care.</p> <p>Procedures may include thoracentesis/drain placement, suctioning, and chest wall percussion.</p>	<p>COPD, Asthma, Superior Vena Cava Syndrome (SVCS): Corticosteroids (inhaled)</p> <p>COPD, Asthma: Bronchodilators</p> <p>Secretions: Expectorants for decreasing secretions, nebulized saline, anticholinergics</p> <p>Heart Failure: Diuretics, ACE inhibitors, inotropes, vasodilators, angiotensin receptor blockers, beta blockers</p> <p>Pulmonary Fibrosis: Anti-inflammatory/antifibrotic agents, opioids, supplemental oxygen, benzodiazepines</p> <p>Pain and/or Dyspnea: Opioids and non-opioids</p> <p>Hypoxemia: Oxygen, high-flow oxygen</p> <p>Anxiety: Anxiolytics</p> <p>Infection: Antibiotics</p> <p>Anemia: Blood transfusions</p>

FAMILY & TEAM DISCUSSIONS

Patient and Family Education and Support

- Provide instruction on underlying etiology of dyspnea, treatment options, medications, and anticipated effects.
- Explore realistic expectations for symptom trajectory with reassuring education on continued management strategies to allay fears.
- Provide instruction on medication management strategies.
- Clarify goals.
- Provide instruction on appropriate nonpharmacological strategies.

Examples: Positioning techniques, elevate head of bed, cool room environment, relaxation techniques.

Interprofessional Team:

Successful interventions in caring for patients with dyspnea benefit from multiple perspectives to treat physical, social, psychological, and spiritual aspects of care.

SYMPTOM DOCUMENTATION EXAMPLES

1. **78 yr old male with stage III lung cancer** reports over the last 7 days worsening dyspnea and fatigue 8/10 while ambulating 15 feet with a usual baseline of 25 feet. Prior O₂ use was 2 liters prn at bedtime, now using 2 liters of continuous O₂ via nasal cannula with moderate relief.
2. **86 yr old female with COPD** reports near fall incident this week “I felt short of breath and became dizzy in the shower and had to sit down. Thankfully, my husband was there to help me.” She is now using a seated walker to ambulate and assist with energy conservation. Spouse is also now assisting patient with some ADLs and all IADLs. PPS (Palliative Performance Scale) 50% decreased from 60% from last month’s visit. She continues to take her medications, including inhalers and nebulizer as prescribed. Her prn use of albuterol nebulizer is increased to 4x daily from of 2x daily. Denies any reports of increased cough beyond baseline, increased sputum, hemoptysis, fever, chills, or night sweats.
3. **56 yr old with bulbar ALS** diagnosed 1 year ago. One week ago, she reported shortness of breath 10/10 and fatigue 7/10, particularly in the morning and feelings of dizziness. More difficult to perform ADLs and all IADLs. Not able to eat or talk due to shortness of breath. She is now on BiPAP at night, with short period in the middle of the day. Waking up with more energy and ability to do ADLs. No further dizziness or headaches. Able to eat more. Quality of life improved.

DESIRED NURSING OUTCOMES

Improve patient's breathing status to effect physical well-being, functionality, and quality of life to a level acceptable to the patient.²⁻⁴

- Promote optimal comfort.
- Maximize functional status and quality of life for both patient and family within the context of the patient's illness progression.
- Promote goals of care discussions to include use of ventilator support (noninvasive and mechanical ventilation) in addition to resuscitation status and technology. Clarify the circumstances in which the patient would want to start or stop ventilator support.
- Ensure and document decision-makers/family are aware of patient's preferences.

REFERENCES

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