

# Association Between Patient-Reported Symptoms of Dysphagia and Psychological Distress in Head and Neck Cancer Survivors

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**OBJECTIVES:** To describe the prevalence of and the association between patient-reported dysphagia and psychological distress (anxiety and depression) in head and neck cancer (HNC) survivors.

**SAMPLE & SETTING:** 228 HNC survivors seen at an interprofessional survivorship clinic in Pittsburgh, PA, between October 2018 and January 2020.

**METHODS & VARIABLES:** Dysphagia was evaluated using the Eating Assessment Tool. Anxiety and depression were measured using the Generalized Anxiety Disorder-7 and Patient Health Questionnaire-8, respectively. Descriptive statistics and multiple linear regression were performed.

**RESULTS:** 70% (n = 159) of survivors reported problems with swallowing safely and efficiently. Twenty-seven survivors reported symptoms of major depression, 34 reported mild symptoms of anxiety, and 19 reported moderate to severe symptoms of anxiety and depression. After controlling for treatment modality, age, and stage, dysphagia was associated with increased symptoms of anxiety and depression.

**IMPLICATIONS FOR NURSING:** Oncology nurses can inform their daily practice by implementing regular assessments for anxiety and depression in HNC survivors reporting symptoms of dysphagia.

**KEYWORDS** head and neck cancer; dysphagia; depression; anxiety; patient-reported outcomes  
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**H**ead and neck cancer (HNC) generally originates in the squamous cells of the upper aerodigestive tract. The most common sites include the oral cavity, pharynx, and larynx (National Cancer Institute [NCI], 2021). HNC diagnoses comprise about 4% of total cancer diagnoses in the United States, and more than 70% of those diagnosed are men (NCI Surveillance, Epidemiology, and End Results Program, 2021; Siegel et al., 2020). Treatment for early-stage HNC commonly includes either surgery or radiation therapy. However, about 60% of patients are diagnosed with advanced disease, which is typically categorized by a larger primary tumor volume, metastases to the regional lymph nodes, or a combination of both (Chow, 2020). The treatment method for advanced stage carcinoma is often multimodal, including a combination of radiation therapy, chemotherapy, and/or surgery (Marur & Forastiere, 2016).

HNC and its treatment can contribute to high symptom burden, which can interfere with patients' daily activities (Gunn et al., 2013; Hanna et al., 2015). About one-third of patients with HNC present to treatment with high symptom burden, with the most severe symptoms reported being pain, fatigue, distress, and insomnia (Hanna et al., 2015). Patients undergoing concurrent chemotherapy and radiation therapy are more likely to experience a higher symptom burden than patients undergoing radiation therapy alone (Rosenthal et al., 2014). Because of the routine use of multimodal therapy, substantial side effects are common. The most prevalent toxicities include fibrosis of the head and neck region, xerostomia, dysgeusia, psychological distress, pain, and dysphagia (Astrup et al., 2015; Haisfield-Wolfe et al., 2009; Nilsen et al., 2019; Villa & Sonis, 2016).