Distinct Dysphagia Profiles in Patients With Oral Cancer After Surgery

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OBJECTIVES: To determine distinct profiles based on symptom severity in patients undergoing surgery for oral cancer and examine whether these profiles differ by participant characteristics.

SAMPLE & SETTING: 300 patients who underwent surgery for oral cancer at two outpatient clinics between June and December 2021.

METHODS & VARIABLES: Symptoms were assessed using the MD Anderson Symptom Inventory–Head and Neck Cancer Module. Sociodemographic and clinical characteristics were collected. Latent profile analysis was performed.

RESULTS: Five distinct dysphagia profiles were identified, which qualitatively differed regarding co-occurrence patterns of dysphagia, mucus-related symptoms, speech disturbances, and psychoneurologic symptoms. Significant differences were reported in interference to function, number of co-occurring symptoms, time since diagnosis and treatment completion, use of symptom management medications, oral cancer stage and site, and treatment completed.

IMPLICATIONS FOR NURSING: Identifying distinct dysphagia profiles can improve patient outcomes and help in planning specific nursing interventions to influence nutritional and functional status in oral cancer survivors. Dysphagia and dry mouth can persist beyond one year post-treatment, so follow-up dysphagia assessments are needed.

KEYWORDS symptom cluster; dysphagia; head and neck cancer; oral cancer; latent profile analysis

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Extensive evidence exists that patients with head and neck cancer (HNC), including oral cancer, experience multiple local, systemic, and psychological symptoms across the cancer trajectory (Murphy et al., 2019; Muthu et al., 2018; Speksnijder et al., 2021; Townes et al., 2020). Some of these symptoms can continue even after surgical resection of a tumor (Crowder et al., 2018) and occur together as symptom clusters (SCs). SCs have been found to have synergistic effects on patient outcomes (Oh et al., 2019), signifying the need for advanced SC research in cancer. SC research conducted using a person-centered approach, in which patients are clustered based on their experiences with concurrent symptoms, has significant clinical value (Barsevick, 2016; Miaskowski, 2016; Ryan et al., 2019). This approach enables the identification of subgroups or profiles of individuals who share similar patterns of symptom experiences. Examination of these distinct profiles can inform clinical decisions on targeted assessment and intervention strategies, which can subsequently lead to better treatment effectiveness and improved patient outcomes (Ryan et al., 2019).

Latent profile analysis (LPA), a model-based approach to clustering based on continuous indicators (e.g., patients' ratings of symptom severity), generates groups of latent profiles through estimates of conditional means and variances, such that each group of individuals has a distinct pattern of responding to symptom items (Lanza & Rhoades, 2013; Lazarsfeld & Henry, 1968). This allows researchers to examine qualitative differences among individuals and how symptoms combine to form profiles, providing insight into the different groups' symptom experiences (Spurk et al., 2020; Williams & Kibowski, 2016). In symptom science, LPA allows for investigating how various symptoms