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# Surgeon Perspectives on Addressing Mental Health Among Total Laryngectomy Patients

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## ABSTRACT

**Objective:** Head and neck cancer patients, particularly those undergoing total laryngectomy, exhibit high rates of depression and suicide, even compared to other cancer patients. Thus, this study seeks to understand head and neck surgeons' perceived roles in and treatment patterns regarding mental health sequelae among total laryngectomy patients.

**Methods:** An anonymous survey regarding provider perspectives about the mental health experiences of total laryngectomy patients was designed and distributed via email to American Head and Neck Society members and academic otolaryngology head and neck surgery departments. Descriptive statistics were utilized to describe results.

**Results:** Respondents ( $n = 63$ ) reported frequently seeing mental health issues among total laryngectomy patients (on average, 48% of patients) and believed otolaryngologists should frequently screen for these conditions (85%). However, a significant subset of the sample (39%) reported feeling uncomfortable addressing mental health issues and cited factors such as lack of expertise (73%) or lack of resources to address mental health (73%). Overall, most respondents agreed that this population could receive better mental healthcare (88%). Referral to speech-language pathologists (80%), community-based support groups (54%), and referral to a mental health provider ( $n = 35$ , 54%) were frequently recommended post-operative prophylactic measures.

**Conclusion:** This national cross-sectional survey of head and neck surgeons demonstrated that while physicians acknowledge and appreciate the need for mental health services among laryngectomy patients, a significant minority feel unprepared to address mental health due to a lack of training and resources. Additional research is needed to identify methods to effectively address this gap in care for laryngectomy patients.

## 1 | Background

Head and neck cancer (HNC) treatment often requires rigorous multi-modality treatment with significant treatment-related morbidity [1–7]. Patients frequently experience speech and swallow disability [2, 3], body image disturbance due to changes in appearance [4, 5], and social isolation due to low public understanding of HNC and its treatment [6, 7]. Furthermore, the complexity of HNC survivorship care can be overwhelming

for patients and contribute to high rates of stress and anxiety, particularly in the setting of poor access to patient education [8, 9]. As such, HNC patients exhibit high rates of depression and suicide, even when compared to other cancer patients [8, 10]. This is especially common among laryngeal cancer patients treated with laryngectomy, who must also adjust to life without natural phonation following surgical removal of the larynx in addition to the comorbidities and complex survivorship care other HNC patients already face [11, 12].

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To combat the psychosocial detriment of HNC patients, there has been renewed attention to mental health treatment. Treatment including psychotherapy and psycho-oncology, as well as medical treatment with selective serotonin reuptake inhibitors (SSRIs) have been found to be highly effective in reducing rates of depression [13–15]. Furthermore, support groups have also been described as a method to reduce patient isolation and increase psychosocial support [16, 17]. However, mental health services remain both highly underutilized and unequally distributed among this HNC survivors and represents a key area of intervention to improve the quality of life of HNC patients going forward [18, 19].

Mental healthcare is one of the many facets of care HNC providers must guide patients and family through [20]. While the most recent American Head and Neck Society (AHNS) survivorship guidelines have dedicated a section to psycho-oncologic treatment options, doing so in practice can be difficult due to busy clinic schedules and a lack of explicit psycho-oncologic training during otolaryngology residency. Furthermore, effective mental healthcare management in the setting of HNC is unclear given the paucity of work investigating this topic. As such, we sought to characterize head and neck surgeons' perceived roles in and treatment patterns regarding mental health sequelae among total laryngectomy patients through a national survey of AHNS physician members.

## 2 | Methods

This cross-sectional study received exemption status from the University of Southern California Institutional Review Board due to the lack of patient-identifying material. As no patients or sensitive data were involved in the study, consent was implied by completion of the survey.

### 2.1 | Survey Development and Distribution

An anonymous, five-minute survey about provider perspectives on the mental health experiences of total laryngectomy patients was designed using the Qualtrics electronic survey tool (Supporting Information S1). Survey questions were derived from the results of a brief scoping review of the head and neck cancer, total laryngectomy, and psycho-oncologic literature. Combinations of terms were entered into searches on PubMed including, but not limited to, head and neck cancer, laryngectomy, anxiety, depression, mental health, and treatment. Relevant topics from this review were utilized to design a survey. The survey was reviewed and edited by two fellowship-trained head and neck oncologic and reconstructive surgeons prior to distribution. The final survey included 20 questions.

Data collection occurred from May to December 2023. The survey was distributed to members of the American Head and Neck Society once a week for 3 weeks as part of a weekly newsletter. The survey was also sent to academic otolaryngology—head and neck surgery departments once a month for 3 months for distribution to department faculty head and neck surgeons. Only head and

neck attending surgeons were eligible to complete the survey; the number of eligible head and neck surgeons can be estimated at approximately 490 individuals [21].

### 2.2 | Data Collection

The following demographic variables were collected: age, gender, state of practice, primary practice setting (academic, private practice, employed physician practice, public hospital, Veteran's Affairs hospital, other), years of post-training practice, and approximate number of total laryngectomies performed per year.

Respondents were asked about the percentage of total laryngectomy patients in their practice who experience mental health disease after total laryngectomy, as well as the percentage of patients screened with a validated tool, through traditional history and physical, or referred to a mental health specialist. We chose to include utilization of simple history taking and physical exam as an option, as less than 10% of primary care physicians utilize a validated tool (data on physicians for cancer survivors is limited), and surgeons may be more likely to identify somatic manifestations of mental health disorders than other factors from history-taking [22].

On five-point Likert scales, head and neck surgeons were asked how often they address mental health among total laryngectomy patients and whether total laryngectomy patients could receive better care for their mental health disease in general and from their otolaryngologist. Respondents were also asked the following yes/no questions: whether there is a laryngectomy support group available in their area to refer patients to, if they believe patients who received total laryngectomies should be regularly screened for mental health comorbidities, and if they feel comfortable addressing mental health in patients after a total laryngectomy. Respondents who indicated they did not feel comfortable addressing mental health were asked a follow-up question about the reasons why.

Head and neck surgeons were also asked to choose from a list of their top three interventions they recommend to prophylactically address mental health disease among total laryngectomy patients; this was asked in the pre-operative and post-operative settings. Finally, they were asked to select from individual lists what factors they perceive to be causing mental health disease among total laryngectomy patients and who should address mental health in patients after a total laryngectomy.

### 2.3 | Data Analysis

Descriptive statistics were used to characterize our cohort. Analysis was performed in STATA SE Version 18.0 (StataCorp LLC, College Station, Texas). In the case of missing or incomplete data, only individuals with complete data from one block (e.g., demographics, etc.) were included in each descriptive analysis.

### 3 | Results

Participant characteristics ( $n = 63$ ) are delineated in Table 1. Respondents were primarily male ( $n = 34$ , 55%), completed their training ten or fewer years ago ( $n = 40$ , 63%), and practiced in academic settings ( $n = 48$ , 76%). Most respondents performed four or more total laryngectomies annually ( $n = 48$ , 76%); all US census regions were well-represented.

Table 2 depicts respondent experiences and perspectives on the mental health of total laryngectomy patients ( $n = 66$ ). Respondents reported observing mental health issues in just under half of their patients with a total laryngectomy (Mean = 47.5%, SD = 25.3%) and believed otolaryngologists should frequently screen these patients for mental health comorbidities ( $n = 56$ , 85%). Individuals most frequently reported using traditional history and physical exam (Mean = 55%, SD = 40%). Head and neck surgeons frequently felt comfortable addressing mental

health ( $n = 40$ , 61%) and often or always ( $n = 26$ , 55%) addressed it (via discussions, referrals, medications, support group referral, or other means) among total laryngectomy patients. However, participants also frequently agreed this patient population could receive better mental health care ( $n = 58$ , 88%).

Difficulty communicating ( $n = 59$ , 89%), social isolation ( $n = 53$ , 80%), inadequate social support ( $n = 51$ , 77%), and avoidance of

**TABLE 1** | Surgeon characteristics ( $n = 63$ ).

Characteristic	<i>n</i> (%)
Age	
30–39	30 (48)
40–49	17 (27)
50–59	8 (13)
60–69	6 (10)
≥ 70	1 (2)
Gender	
Male	34 (55)
Female	24 (44)
Other/Prefer not to answer	1 (2)
US region of practice	
Northeast	15 (24)
Midwest	20 (32)
South	18 (29)
West	10 (16)
Years of practice after residency/fellowship	
< 5	27 (43)
5–10	13 (21)
11–20	8 (13)
≥ 20	15 (24)
Primary practice setting	
Academic	48 (76)
Private practice	4 (6)
Employed physician practice	10 (16)
Other	1 (2)
Average number of total laryngectomies performed per year	
0	3 (5)
1–3	12 (19)
4–10	31 (49)
≥ 10	17 (27)

**TABLE 2** | Experiences with and perspectives on the mental health of total laryngectomy patients ( $n = 73$ ).

Question	<i>n</i> (%)
What percentage of patients in your practice experience mental health issues after total laryngectomy? (Mean, SD)	47.5 (25.3)
Do you believe patients that have received a total laryngectomy should be regularly screened for mental health co-morbidities by otolaryngologists?	
Yes	56 (85)
No	10 (15)
Of your patients that have received a total laryngectomy, what percent do you screen for mental health comorbidities and refer for screening preoperatively? (Mean, SD)	
Using a validated tool (i.e., PHQ-9, PHQ-2, GAD-7, etc.)	10.9 (23.8)
Using a traditional history and physical	55.3 (40.1)
Referred to mental health specialist for screening	9.7 (12.5)
How often do you address (discussions, referrals, medications, support groups, etc.) mental health in patients that have received a total laryngectomy?	
Never	2 (3)
Rarely	10 (15)
Sometimes	18 (27)
Often	23 (35)
Always	13 (20)
Do you feel comfortable addressing mental health in patients after a total laryngectomy?	
Yes	40 (61)
No	26 (39)
Is there a laryngectomy patient support group available in your area to refer patients?	
Yes	49 (75)
No	16 (24)
In general, total laryngectomy patients could receive better care for their mental health disease.	
Strongly disagree	3 (5)
Somewhat disagree	2 (3)
Neither agree or disagree	3 (5)
Somewhat agree	16 (24)
Strongly agree	42 (64)

social interaction ( $n = 50$ , 76%) were the most frequently cited causes of mental health disease among total laryngectomy patients (Figure 1). Although respondents most frequently believed mental health professionals ( $n = 22$ , 33%) and otolaryngologists ( $n = 13$ , 20%) should address mental health issues, otolaryngologists who felt uncomfortable addressing mental health ( $n = 26$ , 30%) most commonly cited a lack of expertise ( $n = 19$ , 73%) or resources ( $n = 19$ , 73%) in the event of a positive screening (Figure 2).

Referral to speech-language pathology ( $n = 55$ , 85%), educational materials ( $n = 43$ , 66%), and community-based support groups ( $n = 35$ , 54%) were the most often recommended prophylactic interventions to address mental health sequelae preoperatively; medication ( $n = 13$ , 20%) and spiritual/religious support ( $n = 7$ , 11%) were least cited (Figure 3). While speech-language pathology referrals ( $n = 52$ , 80%) and community-based support groups ( $n = 35$ , 54%) were also frequently recommended post-operative prophylactic measures, referral to a mental health provider ( $n = 35$ , 54%) also ranked among the most recommended post-operative interventions.

## 4 | Discussion

In this study, we utilized a cross-sectional national sample of head and neck surgeons—specifically members of the AHNS—to characterize their perceived role in and treatment patterns regarding the mental health of total laryngectomy patients. Physicians acknowledge relatively high rates of anxiety and depression among laryngectomees. However, a significant subset of these physicians do not feel comfortable addressing these issues (39%), often citing discomfort due to lack of expertise in mental health, lack of resources to offer, and lack of time to screen and evaluate for mental health issues. The most utilized intervention for mental health issues was referral to a speech language pathologist, followed by referrals to community support groups, and finally to mental health providers. Overall, our

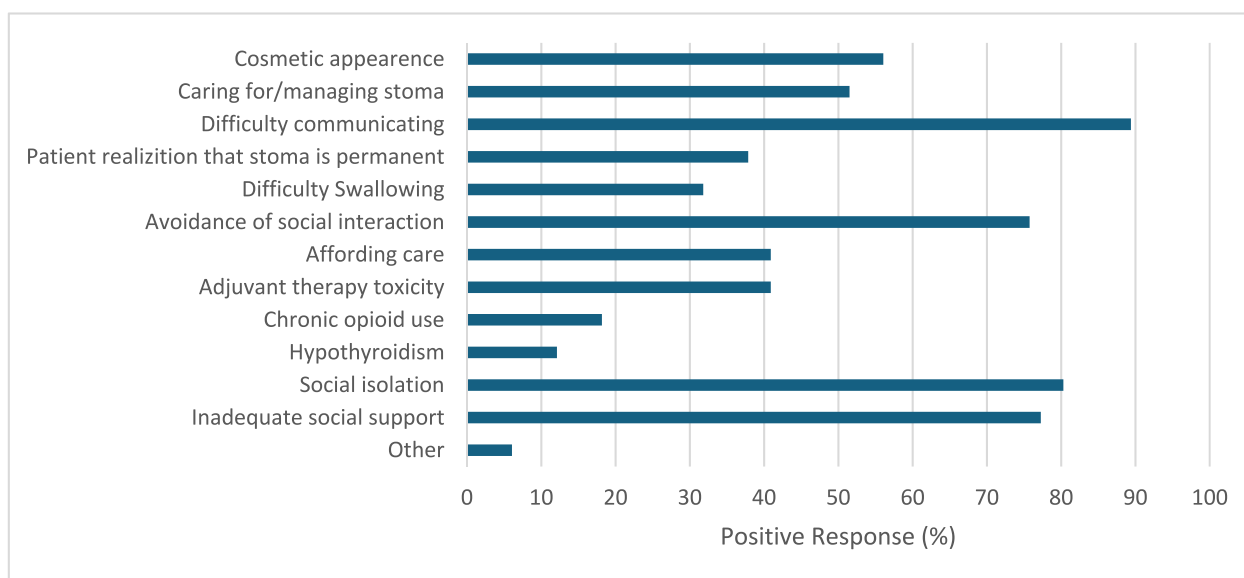
results demonstrate physician acknowledgment of mental health issues among laryngectomees, though limited training may result in inadequate adherence to AHNS guidelines on survivorship care among HNC survivors [20].

Previous studies investigating physician perspectives on peri-operative management of laryngectomy patients have been very limited and are outdated [23–26]. Previous literature has demonstrated some unwillingness to address mental health preoperatively, even though doing so was associated with fewer feelings of depression postoperatively [23, 24]. Other studies investigating physician and speech-language pathologist perspectives on postoperative management of laryngectomy patients have focused on physical rehabilitation without consideration of mental health [25, 26].

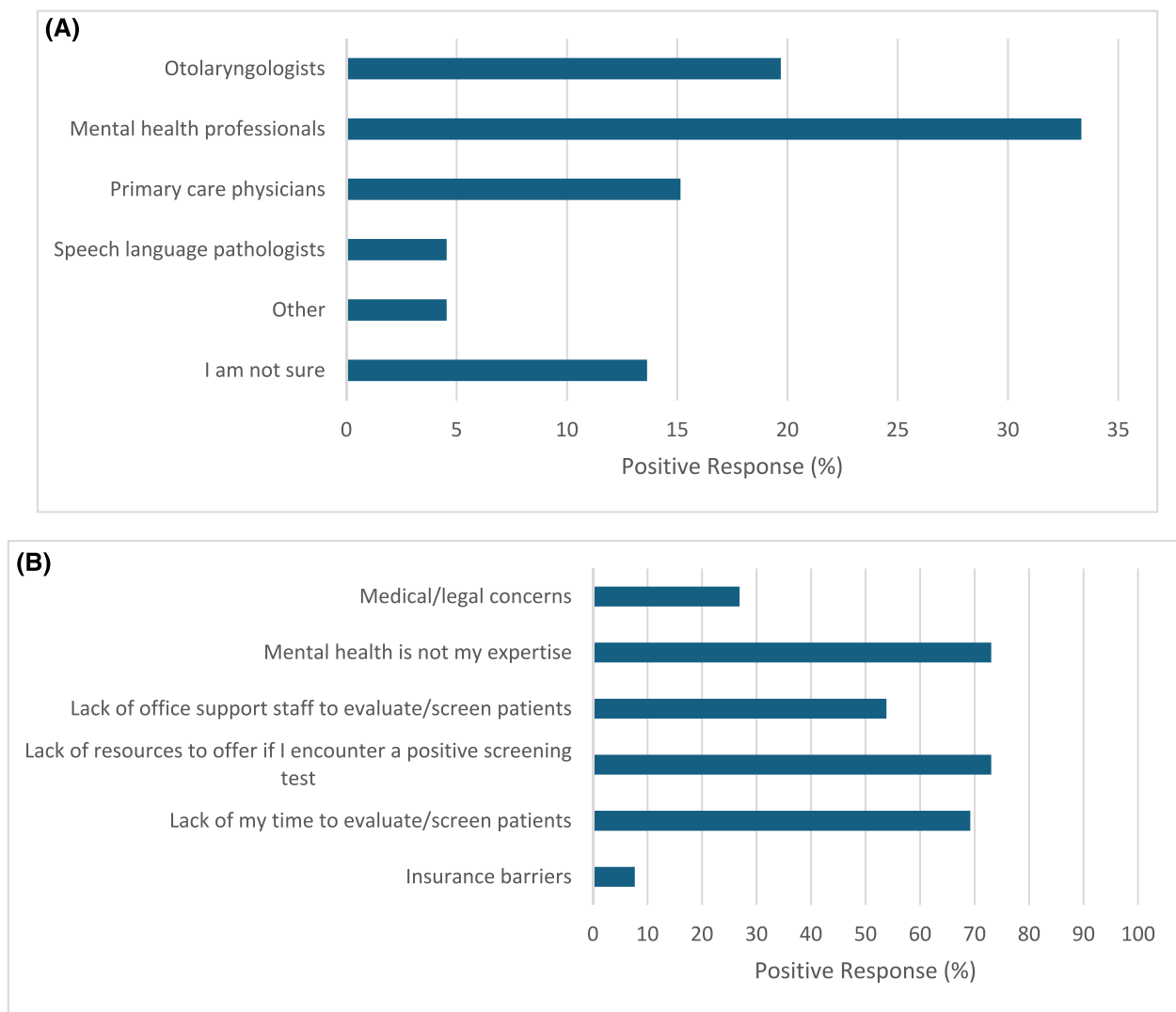
Our study expands upon this literature in a variety of ways. First, to our knowledge, this study is the only study to investigate physicians' perceptions regarding roles in and treatment of mental health sequelae of total laryngectomy since the updated HNC survivorship guidelines emphasized the role of mental health screening and intervention among HNC survivors [20]. Furthermore, while previous studies have investigated physician willingness to address mental health among laryngectomy patients [23], these studies have not investigated the surgeons' perspectives on the appropriate role of the head and neck surgeon in addressing mental health. This study goes even further by investigating comfort with this role and reasons for lack of comfort in the role and inability to address mental health.

### 4.1 | Clinical Implications

Despite the fact that most physicians in our cohort report often or always addressing mental health, the vast majority reported that this patient population could receive better mental healthcare. First, this result demonstrates that otolaryngologists are somewhat familiar with the previously demonstrated



**FIGURE 1** | Perceived causes of mental health disease among total laryngectomy patients.



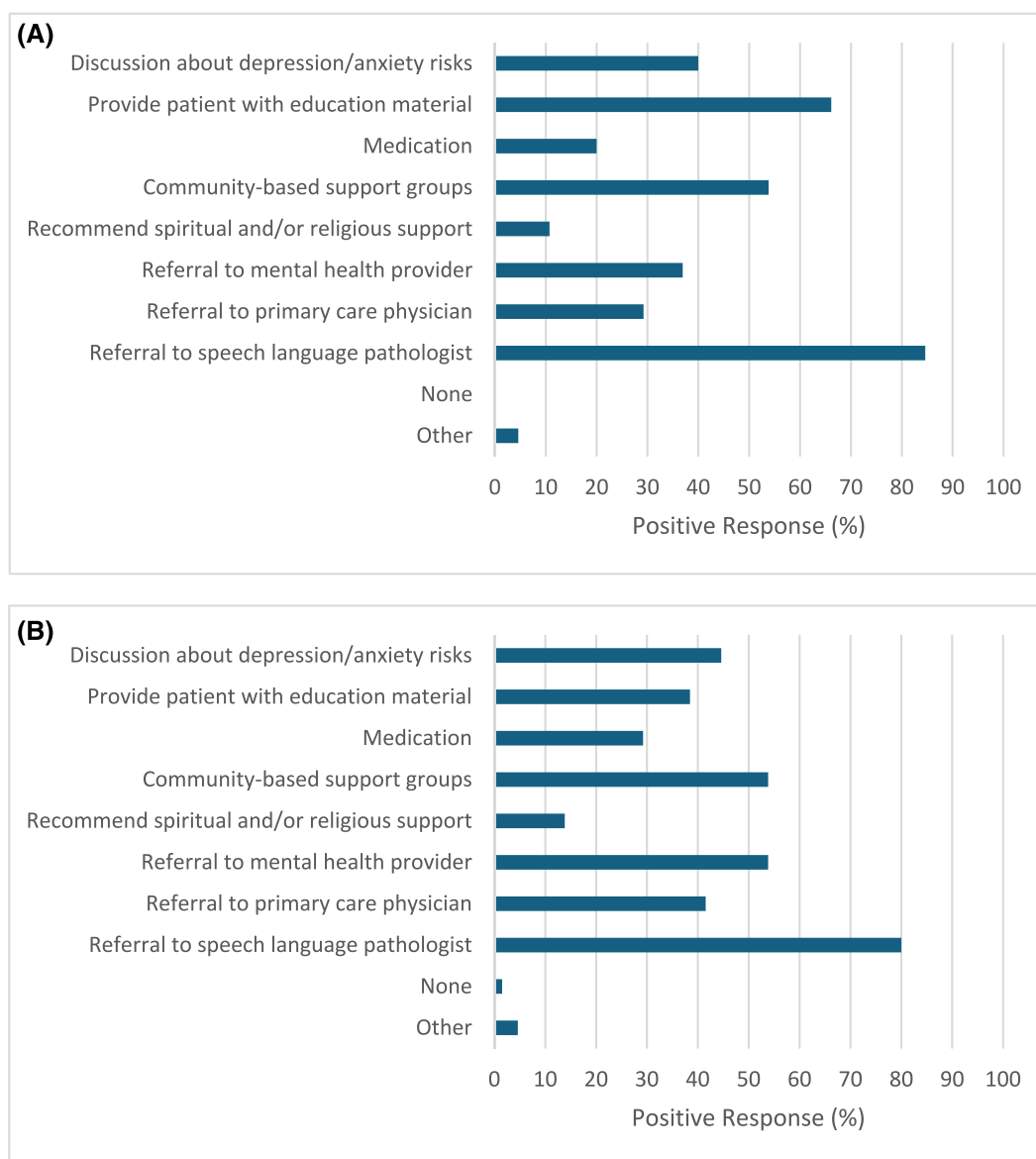
**FIGURE 2** | Addressing mental health disease among laryngectomy patients. (A) Surgeons' perspective on who should address mental health. (B) Reasons why surgeons do not feel comfortable addressing mental health in patients after a total laryngectomy.

importance of mental healthcare among total laryngectomy patients. Prior literature has clearly demonstrated the burden of mental health issues among total laryngectomy patients. Structured clinical interviews based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) after laryngectomy demonstrated that nearly a quarter of these patients develop a new mental health disorder within 1 year [12], with similar prevalence being demonstrated in studies via other methods [11, 27, 28].

However, our results underscore a gap in the abilities of head and neck surgeons to address mental health. While many factors that contribute to anxiety and depression among laryngectomees, including social functioning [29] and physical functioning [30], cannot be easily remedied, specific treatment of mental health disorders in this population has been demonstrated to be effective [13–17]. Our study showed that just over 50% of respondents reported referral to a mental health provider to be a main treatment for patients with mental health issues, but a strong majority reported referral to a speech language pathologist to be among their leading choices for treatment. This

finding suggests that many head and neck surgeons tend to try to address indirect contributors to mental health struggles in total laryngectomy patients rather than treating the mental health issues themselves, which is understandable given the typical primary role of a head and neck surgeon after surgical management.

Although speech language pathologists often encounter individuals with mental health issues and may have more time to address such issues, previous studies have documented that speech language pathologists also report lacking the professional training and outside mental health service referral options necessary to serve these patients [31–33], similar to what head and neck surgeons reported in this study. While utilization of speech language pathologists to treat the underlying contributors to mental health issues can help to alleviate this problem [34, 35], treatment by a mental health provider—either via psychotherapy or antidepressants—has been shown to provide additional efficacy in addressing this often unmet need [13–17]. While speech-language pathologists, social workers, and others play a key role in the treatment of mental health



**FIGURE 3** | Recommended interventions to prophylactically address potential mental health sequelae among patients who undergo total laryngectomy. (A) Before total laryngectomy. (B) After total laryngectomy.

issues among laryngectomees, our findings suggests one major gap in treatment of mental health among this population may be related to lack of referral to mental healthcare providers. Mental health disorders represent a separate pathology that is distinct from head and neck cancer, and we believe it is critical that these disorders should be addressed by professionals in the field of mental health.

Another important limitation suggested by our study is lack of comfort in addressing mental health and lack of resources to offer. With a significant minority of our sample reporting discomfort in addressing mental health, increased access to continuing education courses for head and neck surgeons regarding treating mental health would be prudent. This training can also be incorporated into interdisciplinary grand rounds and webinars hosted by otolaryngologic societies. Case presentations and discussion formats, like Balint groups, have helped other fields enhance understanding of patient-physician

interactions and could similarly benefit head and neck surgeons [36]. Additionally, training regarding resources for mental health treatment—another reason our sample frequently cited for lack of comfort addressing mental health—should be implemented.

Furthermore, many individuals reported a lack of time to screen and evaluate for mental health issues as a major barrier to providing mental health care. Interestingly, most respondents (40%) reported a preference for using traditional history and physical for mental health screening. Although history and physical is key to identifying and diagnosing mental health conditions, this practice is often regarded as inadequate for identification of mental health conditions due to the frequent lack of formal training in appropriate psychiatric history taking and time constraints that limit an adequate psychiatric history and result in underdiagnosis [37, 38]. Additionally, while the time of the surgeon may be limited,



quality improvement projects have demonstrated that screening tools, such as the Hospital Anxiety and Depression Scale (HADS), can be used to identify mental distress in HNC patients and increase subsequent utilization of mental health services [39, 40]. Furthermore, such tools have shown value in promoting early detection and intervention for mental health crises among general and at-risk populations [41]. We suggest the implementation of routine screening for distress of laryngectomy patients as a component of complete and ethical care of these individuals [20, 42]. This routine screening can be accomplished through pre-visit questionnaires, and the utilization of established mental health treatment and referral pathways could help overcome the barriers described in this manuscript that contribute to the difficulty of mental health treatment by head and neck surgeons.

Although improving patient quality of life is a sufficient reason to address mental health among laryngectomees, there are a variety of other reasons as to why this is critical. Anxiety and depression have long been associated with a variety of somatic symptoms [43, 44], which also contribute to greater overall healthcare costs [45, 46]—a critical consideration for cancer patients. Furthermore, an increased burden of anxiety and depression has been linked to worse treatment adherence and worsened outcomes in individuals with HNC [47–52]. Though not specific to laryngectomy patients, anxiety and depression have been associated with increased mortality in cancer patients [40]. Collectively, the high burden of mental health comorbidities and the associated negative outcomes (including worsened quality of life, increased cost, and worsened health outcomes) demonstrate the serious need for increased focus on mental health treatment in this population.

## 4.2 | Study Limitations

This study has limitations. Results are prone to response bias, as physicians more interested in mental health may have been more likely to respond, potentially skewing results to be representative of those aware of mental health issues among patients. Our sample is skewed towards younger individuals and is not representative of all AHNS surgeons, though respondents were from across the US and mostly performed four or more laryngectomies a year. Furthermore, we acknowledge that not all surgeons who perform laryngectomy in the US are members of AHNS. While our survey was informed by existing literature and the perspectives of fellowship-trained head and neck surgeons, the limited response options for questions may have prevented elucidation of some unique physician perspectives. While some questions allowed free response options, these responses were optional; the amount and quality of these responses were not considered worthy of a qualitative analysis. Additionally, our survey is relatively underpowered to answer some questions, such as which head and neck surgeons may be less likely to report being comfortable addressing mental health among total laryngectomees. Lastly, our survey is not validated, as there is no available validated metric available to assess our research questions. Despite these limitations, this study provides a very novel investigation into physician insights on mental healthcare for individuals undergoing a laryngectomy.

## 5 | Conclusions

Overall, this national cross-sectional survey of head and neck surgeons demonstrated that while physicians acknowledge and appreciate the need for mental health services among laryngectomy patients, many feel unprepared to address mental health due to a lack of training and resources. Integrating mental health and resource education into training programs and implementing routine screenings could improve the identification and treatment of emotional distress among laryngectomy patients.

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### Author Contributions

**Carlos X. Castellanos:** Conception and design of work, data acquisition and analysis, interpretation of data, drafting of manuscript, critical revision. **Matthew E. Lin:** Conception and design of work, data acquisition and analysis, interpretation of data, drafting of manuscript, critical revision. **Tyler J. Gallagher:** Design of work, data acquisition and analysis, interpretation of data, drafting of manuscript, critical revision. **Mark S. Swanson:** Conception and design of work, design of work, interpretation of data, critical revision. **Daniel I. Kwon:** Conception and design of work, interpretation of data, drafting of manuscript, critical revision.

### Conflicts of Interest

The authors declare no conflicts of interest.

### Data Availability Statement

The data that support the findings of the study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical reasons.

### References

1. D. G. Pfister, S. Spencer, D. Adelstein, et al., “Head and Neck Cancers, Version 2.2020,” *Journal of the National Comprehensive Cancer Network* 18, no. 7 (2020): 873–898, <https://doi.org/10.6004/jnccn.2020.0031>.
2. L. R. Wall, E. C. Ward, B. Cartmill, and A. J. Hill, “Physiological Changes to the Swallowing Mechanism Following (Chemo)Radiotherapy for Head and Neck Cancer: A Systematic Review,” *Dysphagia* 28, no. 4 (2013): 481–493, <https://doi.org/10.1007/s00455-013-9491-8>.
3. P. García-Peris, L. Parón, C. Velasco, et al., “Long-term Prevalence of Oropharyngeal Dysphagia in Head and Neck Cancer Patients: Impact on Quality of Life,” *Clinical Nutrition* 26, no. 6 (2007): 710–717, <https://doi.org/10.1016/j.clnu.2007.08.006>.
4. M. C. Fingeret, Y. Yuan, D. Urbauer, J. Weston, S. Nipomnick, and R. Weber, “The Nature and Extent of Body Image Concerns Among Surgically Treated Patients With Head and Neck Cancer,” *Psycho-Oncology* 21, no. 8 (2012): 836–844, <https://doi.org/10.1002/pon.1990>.
5. E. M. Graboyes, E. G. Hill, C. H. Marsh, S. Maurer, T. A. Day, and K. R. Sterba, “Body Image Disturbance in Surgically Treated Head and Neck Cancer Patients: A Prospective Cohort Pilot Study,” *Otolaryngology-Head and Neck Surgery* 161, no. 1 (2019): 105–110, <https://doi.org/10.1177/0194599819835534>.
6. A. Dahill, H. Al-Nakishbandi, K. B. Cunningham, G. M. Humphris, D. Lowe, and S. N. Rogers, “Loneliness and Quality of Life After Head and Neck Cancer,” *British Journal of Oral and Maxillofacial Surgery* 58, no. 8 (2020): 959–965, <https://doi.org/10.1016/j.bjoms.2020.04.041>.

7. J. VanCleave and J. Fall-Dickson, "Perceived Social Isolation and Health-Related Quality of Life in Head and Neck Cancer," supplement, *Innovation in Aging* 3, no. S1 (2019): S980–S981, <https://doi.org/10.1093/geroni/igz038.3552>.
8. W. Lydiatt, J. Moran, and W. Burke, "A Review of Depression in the Head and Neck Cancer Patient," *Clinical Advances in Hematology and Oncology* 7, no. 6 (2009): 397–403.
9. M. E. Lin, O. Ayo-Ajibola, C. X. Castellanos, et al., "Assessing Laryngectomy Patient Education on YouTube: Investigating Quality and Reliability," *OTO Open* 8, no. 1 (2024), <https://doi.org/10.1002/oto2.113>.
10. N. Osazuwa-Peters, M. C. Simpson, L. Zhao, et al., "Suicide Risk Among Cancer Survivors: Head and Neck Versus Other Cancers," *Cancer* 124, no. 20 (2018): 4072–4079, <https://doi.org/10.1002/ncr.31675>.
11. C. Bussian, D. Wollbrück, H. Danker, et al., "Mental Health After Laryngectomy and Partial Laryngectomy: A Comparative Study," *European Archives of Oto-Rhino-Laryngology* 267, no. 2 (2010): 261–266, <https://doi.org/10.1007/s00405-009-1068-7>.
12. J. Keszte, H. Danker, A. Dietz, et al., "Mental Disorders and Psychosocial Support During the First Year After Total Laryngectomy: A Prospective Cohort Study," *Clinical Otolaryngology* 38, no. 6 (2013): 494–501, <https://doi.org/10.1111/coa.12194>.
13. L. Harris, K. Vogtsberger, and D. Mattox, "Group Psychotherapy for Head and Neck Cancer Patients," *Laryngoscope* 95, no. 5 (1985): 585–587, <https://doi.org/10.1288/00005537-198505000-00012>.
14. L. Gurren, E. O'Sullivan, I. Keogh, and S. Dunne, "Barriers to Accessing Psycho-Oncological Support in Head and Neck Cancer: A Qualitative Exploration of Healthcare Professionals' Perspectives," *European Journal of Oncology Nursing* 58, no. 5 (2022): 102145, <https://doi.org/10.1016/j.ejon.2022.102145>.
15. W. M. Lydiatt, D. Bessette, K. K. Schmid, H. Sayles, and W. J. Burke, "Prevention of Depression With Escitalopram in Patients Undergoing Treatment for Head and Neck Cancer: Randomized, Double-Blind, Placebo-Controlled Clinical Trial," *JAMA Otolaryngol-Head & Neck Surgery* 139, no. 7 (2013): 678–686, <https://doi.org/10.1001/jamaoto.2013.3371>.
16. E. Hammerlid, M. Ahlner-Elmqvist, K. Bjordal, et al., "A Prospective Multicentre Study in Sweden and Norway of Mental Distress and Psychiatric Morbidity in Head and Neck Cancer Patients," *British Journal of Cancer* 80, no. 5–6 (1999): 766–774, <https://doi.org/10.1038/sj.bjc.6690420>.
17. K. T. Vakharia, M. J. Ali, and S. J. Wang, "Quality-of-life Impact of Participation in a Head and Neck Cancer Support Group," *Otolaryngology-Head and Neck Surgery* 136, no. 3 (2007): 405–410, <https://doi.org/10.1016/j.otohns.2006.10.018>.
18. A. M. Chen, M. E. Daly, E. Vazquez, et al., "Depression Among Long-Term Survivors of Head and Neck Cancer Treated With Radiation Therapy," *JAMA Otolaryngology-Head & Neck Surgery* 139, no. 9 (2013): 885–889, <https://doi.org/10.1001/jamaoto.2013.4072>.
19. T. J. Gallagher, R. S. Chung, N. Khachikyan, M. E. Lin, and N. C. Kokot, "Demographic Disparities in Diagnosis and Treatment of Anxiety and Depressive Disorders in Head and Neck Cancer Survivors," *Head & Neck* (2025): 1–12, <https://doi.org/10.1002/hed.28103>.
20. N. Goyal, A. Day, J. Epstein, et al., "Head and Neck Cancer Survivorship Consensus Statement From the American Head and Neck Society," *Laryngoscope Investigative Otolaryngology* 7, no. 1 (2022): 70–92, <https://doi.org/10.1002/lio2.702>.
21. A. Talwar, A. J. Gordon, A. F. Bewley, et al., "Distribution of the Head and Neck Surgical Oncology Workforce in the United States," *Head & Neck* 44, no. 11 (2022): 2537–2544, <https://doi.org/10.1002/hed.27157>.
22. *Increase the Proportion of Primary Care Visits Where Adolescents and Adults Are Screened for Depression — MHMD-08*. (Healthy People, 2030). Published 2019. Accessed February 11, 2025, <https://odphp.health.gov/healthypeople/objectives-and-data/browse-objectives/mental-health-and-mental-disorders/increase-proportion-primary-care-visits-where-adolescents-and-adults-are-screened-depression-mhmd-08>
23. J. Fuchs Berkowitz and F. E. Lucente, "Counseling before Laryngectomy," *Laryngoscope* 95, no. 11 (1985): 1332–1336, <https://doi.org/10.1288/00005537-198511000-00007>.
24. N. D. Stafford, R. J. P. Lewin, P. Nash, and G. F. Hardman, "Surgeon Information Giving Practices Prior to Laryngectomy: A National Survey," *Annals of the Royal College of Surgeons of England* 83, no. 6 (2001): 371–375.
25. G. L. Culton and J. M. Gerwin, "Current Trends in Laryngectomy Rehabilitation: A Survey of Speech-Language Pathologists," *Otolaryngology-Head and Neck Surgery* 118, no. 4 (1998): 458–463, <https://doi.org/10.1177/019459989811800405>.
26. O. H. Ahmed, D. F. Roden, Y. C. Ahmed, B. Wang, C. A. O. Nathan, and D. Myssiorek, "Perioperative Management of Total Laryngectomy Patients: A Survey of American Head and Neck Society Surgeons," *Annals of Otolaryngology, Rhinology & Laryngology* 128, no. 6 (2019): 534–540, <https://doi.org/10.1177/0003489419830118>.
27. N. B. Wulff, S. O. Dalton, I. Wessel, et al., "Health-Related Quality of Life, Dysphagia, Voice Problems, Depression, and Anxiety After Total Laryngectomy," *Laryngoscope* 132, no. 5 (2022): 980–988, <https://doi.org/10.1002/lary.29857>.
28. H. Danker, D. Wollbrück, S. Singer, M. Fuchs, E. Brähler, and A. Meyer, "Social Withdrawal After Laryngectomy," *European Archives of Oto-Rhino-Laryngology* 267, no. 4 (2010): 593–600, <https://doi.org/10.1007/s00405-009-1087-4>.
29. S. Singer, H. Danker, O. Guntinas-Lichius, et al., "Quality of Life before and After Total Laryngectomy: Results of a Multicenter Prospective Cohort Study," *Head & Neck* 36, no. 3 (2013): 359–368, <https://doi.org/10.1002/hed.23305>.
30. A. Perry, E. Casey, and S. Cotton, "Quality of Life After Total Laryngectomy: Functioning, Psychological Well-Being and Self-Efficacy," *International Journal of Language & Communication Disorders* 50, no. 4 (2015): 467–475, <https://doi.org/10.1111/1460-6984.12148>.
31. J. M. Novak and K. M. Kapolnek, "Speech-Language Pathologists Serving Clients With Mental Illness: A Collaborative Treatment Approach," *Contemporary Issues in Communication Science and Disorders* 28, no. Fall (2001): 111–122, [https://doi.org/10.1044/cicsd\\_28\\_f\\_111](https://doi.org/10.1044/cicsd_28_f_111).
32. B. Ryan, J. Bohan, and I. Kneebone, "Help-seeking and People With Aphasia Who Have Mood Problems After Stroke: Perspectives of Speech-Language Pathologists," *International Journal of Language & Communication Disorders* 54, no. 5 (2019): 779–793, <https://doi.org/10.1111/1460-6984.12476>.
33. Allred J., "Speech-Language Pathologists' Perspectives on Working With Couples Impacted by Aphasia," 2024.
34. Y. Longobardi, V. Savoia, F. Bussu, et al., "Integrated Rehabilitation After Total Laryngectomy: A Pilot Trial Study," *Supportive Care in Cancer* 27, no. 9 (2019): 3537–3544, <https://doi.org/10.1007/s00520-019-4647-1>.
35. Y. Longobardi, V. Savoia, C. Parrilla, et al., "Pre-Operative Speech-Language Pathology Counselling in Patients Undergoing Total Laryngectomy: A Pilot Randomized Clinical Trial," *Current Psychology* 42, no. 7 (2023): 5717–5727, <https://doi.org/10.1007/s12144-021-01932-z>.
36. M. Roberts, "Balint Groups: A Tool for Personal and Professional Resilience," *Canadian Family Physician* 58, no. 3 (2012): 245.



37. R. J. Moldawsky, "Is the Psychiatric History Losing its Relevance?," *Permanente Journal* 24, no. 4 (2020): 8–10, <https://doi.org/10.7812/TPP/19.186>.
38. A. Faisal-Cury, C. Ziebold, D. M. de O. Rodrigues, and A. Matijasevich, "Depression Underdiagnosis: Prevalence and Associated Factors. A Population-Based Study," *Journal of Psychiatric Research* 151, no. 5 (2022): 157–165, <https://doi.org/10.1016/j.jpsychires.2022.04.025>.
39. N. Riblet, K. Skalla, A. McClure, K. Homa, A. Luciano, and T. H. Davis, "Addressing Distress in Patients With Head and Neck Cancers: A Mental Health Quality Improvement Project," *JNCCN Journal of the National Comprehensive Cancer Network* 12, no. 7 (2014): 1005–1013, <https://doi.org/10.6004/jnccn.2014.0097>.
40. A. M. H. Krebber, F. Jansen, P. Cuijpers, C. R. Leemans, and I. M. Verdonck-de Leeuw, "Screening for Psychological Distress in Follow-Up Care to Identify Head and Neck Cancer Patients With Untreated Distress," *Supportive Care in Cancer* 24, no. 6 (2016): 2541–2548, <https://doi.org/10.1007/s00520-015-3053-6>.
41. E. O'Connor, R. C. Rossom, M. Henninger, et al., "Screening for Depression in Adults: An Updated Systematic Evidence Review for the U.S. Preventive Services Task Force," *U.S. Preventive Services Task Force Evidence Syntheses, Formerly Systematic Evidence Reviews* (2016).
42. J. M. Deleemans, K. Mothersill, B. D. Bultz, and F. Schulte, "Ethical Considerations in Screening Head and Neck Cancer Patients for Psychosocial Distress," *Supportive Care in Cancer* 28, no. 2 (2020): 617–624, <https://doi.org/10.1007/s00520-019-04860-8>.
43. E. Bekhuis, L. Boschloo, J. G. M. Rosmalen, and R. A. Schoevers, "Differential Associations of Specific Depressive and Anxiety Disorders With Somatic Symptoms," *Journal of Psychosomatic Research* 78, no. 2 (2015): 116–122, <https://doi.org/10.1016/j.jpsychores.2014.11.007>.
44. L. J. Simms, J. J. Prisciandaro, R. F. Krueger, and D. P. Goldberg, "The Structure of Depression, Anxiety and Somatic Symptoms in Primary Care," *Psychological Medicine* 42, no. 1 (2012): 15–28, <https://doi.org/10.1017/S0033291711000985>.
45. P. E. Greenberg, A. A. Fournier, T. Sisitsky, C. T. Pike, and R. C. Kessler, "The Economic Burden of Adults With Major Depressive Disorder in the United States (2005 and 2010)," *Journal of Clinical Psychiatry* 76, no. 2 (2015): 155–162, <https://doi.org/10.4088/JCP.14m09298>.
46. D. D. Jeffery, L. Art Ambrosio, L. Hopkins, and H. B. Burke, "Mental Health Comorbidities and Cost/utilization Outcomes in Head and Neck Cancer Patients," *Journal of Psychosocial Oncology* 37, no. 3 (2019): 301–318, <https://doi.org/10.1080/07347332.2018.1519626>.
47. B. Barber, J. Dergousoff, M. Nesbitt, et al., "Depression as a Predictor of Postoperative Functional Performance Status (PFPS) and Treatment Adherence in Head and Neck Cancer Patients: A Prospective Study," *JAMA Otolaryngology–Head & Neck Surgery* 44, no. 1 (2015): 1–8, <https://doi.org/10.1186/s40463-015-0092-4>.
48. J. Miller, L. Szalacha, S. Hartranft, and C. Rodriguez, "Predictors of Nonadherence to Treatment Schedules Among Patients With Head and Neck Cancer," *Clinical Journal of Oncology Nursing* 25, no. 3 (2021): 305–315, <https://doi.org/10.1188/21.CJON.305-313>.
49. J. Anderson, A. N. Slade, P. R. McDonagh, W. Burton, and E. C. Fields, "The Long-Lasting Relationship of Distress on Radiation Oncology-Specific Clinical Outcomes," *Advances in Radiation Oncology* 4, no. 2 (2019): 354–361, <https://doi.org/10.1016/j.adro.2018.11.001>.
50. L. Tang, C. X. Castellanos, D. I. Kwon, and N. C. Kokot, "The Effects of Psychosocial Determinants on Post-Operative Complications of Head and Neck Free Flap Patients," *American Journal of Otolaryngology* 44, no. 2 (2023): 103721, <https://doi.org/10.1016/j.amjoto.2022.103721>.
51. M. Pinquart and P. R. Duberstein, "Depression and Cancer Mortality: A Meta-Analysis," *Psychological Medicine* 40, no. 11 (2010): 1797–1810, <https://doi.org/10.1017/S0033291709992285>.
52. J. Walker, A. Sawhney, C. H. Hansen, et al., "Treatment of Depression in Adults With Cancer: A Systematic Review of Randomized Controlled Trials," *Psychological Medicine* 44, no. 5 (2014): 897–907, <https://doi.org/10.1017/S0033291713001372>.

### Supporting Information

Additional supporting information can be found online in the Supporting Information section.