Professional Burnout and the Risk Factors Among Aesthetic and Non-Aesthetic Otolaryngologists

Hesam Jahandideh[1], Fateme Abedin[1*], Niloufar Abbasi[2]

[1] Department of ENT and Head and Neck Research Center, The Five Senses Health Institute, Firoozgar Hospital, School of Medicine, Iran University of Medical Sciences, Tehran, Iran

[2] Islamic Azad University, Abhar Branch, Abhar, Iran

Received: 02 May 2025; Accepted: 14 Dec. 2025

Abstract- According to new reports, the burnout rate among doctors has increased dramatically in recent years. Some studies have found a higher prevalence of burnout in otolaryngologists. We aimed to quantify the incidence of burnout among our community otolaryngologists, identify risk factors, and assess its impact on well-being. Members of our national society of otolaryngologists were invited to complete an anonymous survey. The survey included a validated burnout measure and assessed surgeon demographics, professional and personal risk factors, and professional satisfaction and well-being. Out of the 200 surgeons invited, 170 completed the survey. Significant risk factors for burnout included age, self-identification as more of an aesthetic surgeon than a non-aesthetic surgeon, the surgeon's practice setting (private or public centers), work experience, legal conflicts with patients, and insufficient time for sleep. Emotional exhaustion scale was reported by 20.6 percent, depersonalization scale by 14.7 percent, and personal accomplishment scale by 37.1 percent. The validated burnout rate among Iranian otolaryngologists was 61.8 percent, with a multifactorial etiology. This occupational peril is avertible and can be mitigated through a series of preventive actions. Otolaryngologists need to be aware of this and seek support when needed in their professional endeavors (supplementary data).

Acta Med Iran 2026;64(2):1-7.

Keywords: Burnout; Mental health; Otolaryngologist; Aesthetic surgeon; Work-life balance

Introduction

As primarily elucidated by Freudenberger and refined by Maslach and colleagues, sustained stress due to excessive workloads can lead to burnout (1,2). Burnout is a psychological syndrome defined by devastating mental fatigue, emotional exhaustion, and lack of success in personal life as a result of job-related constant stressors (3). Professional burnout has become a focal point of concern in the medical profession, with increasing awareness of its high prevalence among doctors (4). Additionally, burnout prevalence may vary by sex, country of residence, and specialty. It is expected that almost every physician has struggled with burnout at some point in their professional life (5).

According to a recent Medscape Physician Lifestyle Report, the burnout rate has increased from 42 percent to 53 percent in the past five years (6). This rise in burnout may be contributing to an increase in medical errors (7). Recent studies have shown that lower personal quality of life, depression, alcohol misuse, disruptive behavior, absenteeism, attrition, strained personal relationships, divorce, and suicide are related to a tremendous level of burnout. Younger age and female sex have also been associated with increased burnout (8-10). Additionally, the stress level and recurrent disputes, long work hours, high risks of surgical complications in surgical specialties, and the demanding struggle to become a qualified surgeon can lead to more burnout and depression among surgeons (11,12).

Corresponding Author: F. Abedin
Department of ENT and Head and Neck Research Center, The Five Senses Health Institute, Firoozgar Hospital, School of Medicine, Iran University of Medical Sciences, Tehran, Iran
Tel: +98 9394380577, E-mail address: abedin.fateme93@gmail.com

Otolaryngology is often recognized as an equitable work-life specialty (13). Despite this, studies have shown an increased prevalence of distress and job burnout (11,14-19). Pulcrano et al. determined that the highest prevalence of burnout (77%) was among otolaryngologists (11).

High income and growing demand in cosmetic surgery make job burnout less noticeable for aesthetic surgeons. In this field, considerable attention is directed toward achieving the best results (20). The High obsession of some clients, which is included in the category of obsessive compulsive disorder, can lead to dissatisfaction with the results of the operation (21). This dissatisfaction leads to various issues, such as frequent referrals, legal conflicts with the surgeon, and, ultimately, tension in the doctor-patient relationship. Ultimately, this can increase the sense of job failure, contributing to job burnout among these surgeons. According to the latest report from The Lancet, several factors have contributed to the rise in the rate of suicide and immigration among Iran's medical staff. These include receiving low salaries despite high work pressure, improper management of the healthcare system, high taxes, and the soaring cost of living (22).

In this study, we aimed to conduct a survey to describe the prevalence of professional burnout among otolaryngologists, especially those working in the aesthetic field, using the Maslach Burnout Inventory - Human Services Survey (MBI-HSS). We also examined personal factors and practice characteristics that may predispose surgeons to professional burnout.

The specific aims of this study were to determine the incidence of burnout among otolaryngologists, especially those who consider themselves aesthetic surgeons; identify personal and practice characteristics; and analyze the relationship between these characteristics and burnout in this career.

Materials and Methods

Study design and target population

A survey was conducted in person to assess burnout among otolaryngologists in Iran directly. Approval was obtained from our institutional ethical committee (IR.IUMS.REC.1403.127). Participation in the survey was voluntary and anonymous. Only qualified surgeons in the country were included in the survey. The survey included consent, demographic information, and the MBI, which was previously validated in Persian (23).

Instrument and questionnaire

All candidates were asked 22 questions based on the MBI-HSS. Professional burnout was defined as any threshold of the 3 MBI domains: emotional exhaustion (EE), depersonalization (DP), or personal accomplishment (PA) reached an established high threshold. Each question was answered on a 7-point Likert scale from "never" (0) to "everyday" (7). According to the MBI-HSS, 9 questions assessed EE (questions 20-16--14-13-8-6-3-2-1); 5 questions assessed DP (22-15-11-10-5); and 8 questions assessed PA (questions 21-19-18-17-12-9-7-4).

These 3 domains were categorized into low, moderate, or high severity levels based on previously established conservative cutoff scores (24).

A score of 1-22 indicates a weak level of burnout, 22-66 indicates a moderate level, and 66 and above indicates a high level.

Survey strategy

Demographics

The demographics section of the questionnaire consisted of 6 multiple-choice questions. Participants were asked about their sex, age, and marital status. (Table 1)

Work schedule, work environment, and extracurricular activity

Participants were asked 8 questions about their work schedule and environment (Table 1). Work experience is defined as the period during which a participant worked as an otolaryngologist: less than 5 years, 5-10 years, 10-20 years, or more.

In the work schedule section, participants were asked to place themselves as either more aesthetic surgeons or non-aesthetic surgeons based on the number and diversity of aesthetic and non-aesthetic surgeries performed per year. The surgeon's practice site was evaluated based on whether they performed surgeries in private or public centers. The city of practice was classified as the capital (Tehran), and other metropolises .Mashhad, Shiraz, Isfahan, Tabriz, Ahvaz, and Karaj) and other cities. Legitimate, disciplinary, judicial, or other legal conflicts with patients in the last 10 years, actions for immigration in the last 10 years, enough time to sleep, sufficient spare time, and other factors were also determined (Table 1).

Statistical analyses

Statistical analysis was conducted using SPSS Version 26.0 (SPSS Inc., Chicago, USA). Missing values were excluded prior to analysis. Associations

between burnout and risk factors were compared using Pearson chi-square tests for categorical variables and t-tests for continuous variables. Correlation coefficients were calculated to assess the relationships between variables. A *P* of less than 0.05 was considered statistically significant.

The variables included in the burnout model were age, sex, marital status, years in practice, hours worked per week, spare time, practice setting (private practice, academic or public centers), city of practice (capital, other metropolises, smaller cities), practice type (aesthetic or non-aesthetic surgery), getting enough sleep time, immigration proceedings in the last 10 years, legal conflicts with patients, any medication history and subscales of burnout: EE, DP, PA.

Sociodemographic and professional characteristics and outcomes

Of the 200 respondents invited to participate, 170 otolaryngologists returned the survey. The professional features and personal demographics of the study participants are summarized in Table 1.

Most of the responding members were young and middle-aged. Approximately 35.1% of the participants were married. There was an even distribution by otolaryngologists' sex, with men and younger surgeons being slightly more. The majority of surgeons (64%) self-rated themselves as aesthetic surgeons. Most responders worked an average of 6 days per week. Principally, 42.4% of study participants were in private practice, while approximately 52.4% were in public hospitals, and 5.2% worked in both settings.

42.9% of the sample practiced in Tehran (the largest and most populous city in the country), 32.9% in other cities. 37.6% of surgeons intend to immigrate or plan to immigrate. Approximately 43.5% of respondents reported having previously been involved in legal conflicts with patients, and about 40% reported insufficient sleep time. Over half of the participants reported having no spare time.

Burnout subscales, as described in classic models, including high EE, high DP, and low PA, are summarized in Figure 1.

Overall, approximately 61.8% of our sample exhibited high burnout, characterized by high EE, high DP, and low PA. Specifically, about 20.6% of otolaryngologists experienced high EE, 14.7% reported high DP, and most (40%) had low PA scores (Figure 1).

Professional experience as an aesthetic surgeon, the site of practice, and insufficient sleep time had a significant relationship with the level of EE ($P<0.05$). Gender, immigration plans, and insufficient sleep time had a significant relationship with DP ($P<0.05$). Legal conflicts with patients and medical history had a significant relationship with low PA ($P<0.05$). The type of surgery (aesthetic or non-aesthetic) and the practice setting were significantly associated with burnout ($P<0.05$).

Results indicated a negative correlation between all three burnout subscales and marital status. Enough sleep time had a negative correlation coefficient with EE and DP. The city of practice showed a negative correlation between DP and PA, which, as observed in most populated cities, decreases PA and increases DP, but this result needs further study. Legal conflicts with patients had a negative correlation with EE and PA.

Table 1. Predictive Sociodemographic and Professional Features for Burnout

	Burnt Out (percent)	Not Burnt Out (percent)	*P*
Participants	105(61.8)	65(38.2)	
Gender			0.406
Male	70(52.6)	17(48.6)	
Female	63(47.4)	18(51.4)	
Marital status			0.312
Married	45(33.8)	14(40.0)	
single	88(66.2)	21(60.0)	
Professional experience			0.048
Less than 5years	46(61.3)	29(38.7)	
5-10years	23(74.2)	8(25.8)	
10-20 years or more	36(56.3)	28(43.8)	
Type of surgery			0.026
aesthetic	78(60)	27(79.4)	
Non-aesthetic	52(40)	7(20.6)	
practice setting			0.025
Private	62(36.4)	10(5.8)	
Public practice	64(37.6)	25(14.7)	
Both setting	9(5.2)	0	
City of practice			0.20

Tehran	56(41.5)	17(48.6)	
Other metropolitans	33(24.4)	8(22.9)	
Other cities	46(34.1)	10(28.6)	
Action for immigration			0.42
yes	42(40)	22(33.8)	
no	63(60)	43(66.2)	
Legal conflicts with patients			0.06
yes	40(38.1)	34(52.3)	
no	65(61.9)	31(47.7)	
Spare time			0.22
yes	28(26.7)	23(35.4)	
no	77(73.3)	42(64.6)	
Enough sleep time			0.68
yes	78 (57.8)	18 (51.4)	
no	57 (42.2)	17(48.6)	
Medical history			0.12
yes	27(25.7)	24(36.9)	
no	78(74.3)	41(63.1)	

Discussion

Our findings revealed that the overall prevalence of burnout among otolaryngologists is 61.8%. The alarmingly high prevalence in this specialty is associated with both high EE and high DP scores (Figure 1).

Levels of EE were surprisingly low among respondents, with 43.5% reporting low levels. Furthermore, 64.7% reported low levels of DP, and 37.1% reported high levels of PA.

Men generally had the highest rate of burnout, while 27.2% of females had high EE, and more women were prone to higher DP scores (16%), as Maslach *et al*., mentioned that women were more likely to have higher EE scores, whereas men were predisposed to higher DP scores (25). Our study, like Benjamin *et al*., (26), revealed higher EE and DP scores for women. According to several prior publications in otolaryngology and other surgical subspecialties, long work hours per week were among the strongest drivers of physician distress and burnout. The current study found that 64 of 135 individuals who worked 6 days a week experienced burnout (11,27,28).

The age group most affected by professional burnout was between 30 and 40, confirming that younger physicians were more likely to experience burnout (29). This phenomenon can be explained by many obstacles young physicians encounter, in contrast to older, wealthier surgeons. Burnout was more common among unmarried individuals. 66.2%) (Table 2). Several studies evaluating the effect of marriage on physician burnout have yielded mixed results (30). Nearly 37.6% of surgeons who practiced in public centers have experienced burnout, in contrast to (36.4%) in the private sector. While a systematic review found that most private surgeons are at greater risk of burnout (30), this is not true in our country setting, due to mandatory services that any physician must provide in the public sector and meager income in public hospitals. So it seems that the total situation in the private sector is better than in public centers.

Approximately 56 of 135 otolaryngologists who experienced burnout practiced in Tehran, indicating high competition in large cities. The high rate of willingness to immigrate is consistent with a poor professional work environment. Lifestyle factors, such as overall health perception and spare-time activities, are also essential to consider in the development of burnout. 73.3% of surgeons in this study, who were classified as experiencing professional burnout, did not have leisure time. As Gerber *et al*., stated, regular exercise, as an indicator of a healthy lifestyle, is inversely correlated with burnout (31). About 25.7% of participants in the burnout group have taken any type of drug regularly, which may show the presence of coincident medical or psychological disorders.

According to the European Academy of Facial Plastic Surgery Collaborative Cross-Sectional Study, about 91% of rhinoplasties are performed by ENT surgeons (21). As reported by Nabavizadeh *et al*., in a systematic review and meta-analysis in 2023, the prevalence of body dysmorphic disorder (BDD) is very high among candidates for rhinoplasty. Obsessive-compulsive disorder is another factor, affecting about 23% of these patients. BDD symptoms, heightened anxiety, and depression are significant factors associated with increased dissatisfaction after surgery (21). The biggest challenge for aesthetic surgeons is managing rising patient expectations. In elective aesthetic surgery, the line between a successful result based on the doctor's

and the patient's point of view can be exceedingly different. Unrealistic expectations of the result make patients unsatisfied with the outcome. However, precise and remarkably good surgical technique is crucial (12).

Despite the absence of clear clues of disorder in people who experience obsessive-compulsive disorder, dissatisfaction with the result of aesthetic surgery leads to a tense process in the doctor- patient relationship, ultimately increasing the sense of job failure as a factor of job burnout. Likewise, in this study, legal conflicts with patients have had a negative correlation with PA (-0.296) and a positive correlation with DP (0.171) (Table 3, 4). Arguably, legal conflicts with patients, particularly in the aesthetic field, could be a risk factor for professional burnout, but this needs further evaluation.

Table 2. Correlation with the emotional exhaustion (EE) subscale

	Correlation coefficient	*P*
Age	0.135	0.030
Sex	-0.026	0.370
Marital status	-0.022	0.389
Professional experience	0.174	0.007
City of practice	0.125	0.043
Aesthetic surgery	0.258	0.001
Enough sleep time	-0.022	0.385
Legal conflicts with patients	-0.007	0.464

Table 3. Correlation coefficient with the depersonalization (DP) subscale

	Correlation coefficient	*P*
Age	0.091	0.103
Sex	0.065	0.200
Marital status	-0.008	0.460
Professional experience	0.063	0.185
City of practice	-0.137	0.030
Aesthetic surgery	0.036	0.325
Enough sleep time	-0.037	0.313
Legal conflicts with patients	0.171	0.013

Table 4. Correlation coefficient with the personal accomplishment (PA) subscale

	Correlation coefficient	*P*
Age	0.076	0.145
Sex	-0.052	0.251
Marital status	-0.046	0.277
Professional experience	0.047	0.252
City of practice	-0.30	0.338
Aesthetic surgery	0.006	0.470
Enough sleep time	0.099	0.099
Legal conflicts with patients	-0.296	0.000

According to this study's results, professional experience is significantly associated with burnout (*P*=0.048). Generally, society's perception of aesthetic surgeons, especially otolaryngologists, is that they have the highest income and the lowest burnout rate. This profession is neglected compared to other surgical fields. Since job burnout in healthcare professionals decreases work efficiency, increases job absenteeism, escalates health costs and personnel relocation, leads to behavioral and physical changes, declines in services provided to patients, and subsequently dissatisfaction with medical services (9,10,25-28). The relationship between surgeon burnout and failure in standard patient care has significant implications for planning institutional efforts to reduce errors and improve the quality of care.

There are some limitations to the present study that may influence our findings. This survey is cross-sectional and cannot distinguish between observed risk factors, causal relationships, or the possible direction of effects.

It is also challenging to determine whether respondent demographics are sufficiently similar to generalize the results to all otolaryngologists, especially in the aesthetic field, and it is unclear whether burned-out surgeons are more or less likely to complete surveys

due to a lack of enthusiasm for the topic. There may be numerous risk factors for burnout that were not mentioned in the present study. Undoubtedly, the more participants, the more accurate the result.

On the whole, burnout among healthcare providers, especially in the surgical field, is drawing attention in recent times. This study has determined that the high prevalence of burnout among otolaryngologists is concerning and that identified risk factors should be analyzed by educational institutions and the management boards of public hospitals and private clinics. Putting it all together, this vicious cycle of burnout and malpractice could be recognized and broken down.

Acknowledgment

This study protocol was conducted with the approval of the institutional review and ethical board of the Iran University of Medical Sciences, Tehran (IR.IUMS.REC.1403.127)

References

1. Friesen D, Sarros JC. Sources of burnout among educators. Journal of Organizational Behavior. 1989:179-88.
2. Maslach C, Jackson SE, Leiter MP. Maslach burnout inventory: Scarecrow Education; 1997.
3. Maslach C, Leiter MP. Understanding the burnout experience: recent research and its implications for psychiatry. World psychiatry. 2016;15(2):103-11.
4. Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. Archives of internal medicine. 2012;172(18):1377-85.
5. INTeReSTS DO. Burnout in physicians. JR Coll Physicians Edinb. 2015;45:104-7.
6. Leslie Kane M. I Cry but No One Cares': Physician Burnout & Depression Report 2023: Medscape; 2023 [Available from: https://www.medscape.com/slideshow/2023-lifestyle-burnout-6016058.
7. Williams ES, Manwell LB, Konrad TR, Linzer M. The relationship of organizational culture, stress, satisfaction, and burnout with physician-reported error and suboptimal patient care: results from the MEMO study. Health care management review. 2007;32(3):203-12.
8. Galaiya R, Kinross J, Arulampalam T. Factors associated with burnout syndrome in surgeons: a systematic review. The Annals of The Royal college of surgeons of England. 2020;102(6):401-7.
9. Shanafelt TD, Balch CM, Dyrbye L, Bechamps G, Russell T, Satele D, et al. Special report: suicidal ideation among American surgeons. Archives of surgery. 2011;146(1):54-62.
10. Oreskovich MR, Kaups KL, Balch CM, Hanks JB, Satele D, Sloan J, et al. Prevalence of alcohol use disorders among American surgeons. Archives of surgery. 2012;147(2):168-74.
11. Pulcrano M, Evans SR, Sosin M. Quality of life and burnout rates across surgical specialties: a systematic review. JAMA surgery. 2016;151(10):970-8.
12. Prendergast C, Ketteler E, Evans G. Burnout in the plastic surgeon: implications and interventions. Aesthetic surgery journal. 2017;37(3):363-8.
13. Freeman BS. The ultimate guide to choosing a medical specialty: McGraw-Hill; 2013.
14. Shanafelt T, Sloan J, Satele D, Balch C. Why do surgeons consider leaving practice? Journal of the American College of Surgeons. 2011;212(3):421-2.
15. Shanafelt TD, Noseworthy JH, editors. Executive leadership and physician well-being: nine organizational strategies to promote engagement and reduce burnout. Mayo Clinic Proceedings; 2017: Elsevier.
16. Shanafelt TD, Balch CM, Bechamps G, Russell T, Dyrbye L, Satele D, et al. Burnout and medical errors among American surgeons. Annals of surgery. 2010;251(6):995-1000.
17. Shanafelt TD, Balch CM, Bechamps GJ, Russell T, Dyrbye L, Satele D, et al. Burnout and career satisfaction among American surgeons. Annals of surgery. 2009;250(3):463-71.
18. West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. Journal of internal medicine. 2018;283(6):516-29.
19. Golub JS, Weiss PS, Ramesh AK, Ossoff RH, Johns III MM. Burnout in residents of otolaryngology–head and neck surgery: a national inquiry into the health of residency training. Academic Medicine. 2007;82(6):596-601.
20. Guyuron B. Dynamics in rhinoplasty. Plastic and reconstructive surgery. 2000;105(6):2257-9.
21. Nabavizadeh SS, Naseri R, Sadeghi E, Afshari A, Dehdari Ebrahimi N, Sadeghi A. Prevalence of body dysmorphic disorder in rhinoplasty candidates: A systematic review and meta-analysis. Health Science Reports. 2023;6(8):e1495.
22. Devi S. Iranian medic suicides spark criticism of working conditions. The Lancet. 2024;403(10431):1010.
23. Ehiakonande M SA, Soodani M. Relationship between

health and job burnout of Behbahan Islamic Azad University employees. Thought and behavior in clinical psychology. 1387;3(10):99-107.

24. Byrne BM. Testing for the factorial validity, replication, and invariance of a measuring instrument: A paradigmatic application based on the Maslach Burnout Inventory. Multivariate Behavioral Research. 1994;29(3):289-311.
25. Maslach C, Leiter MP. Burnout. Stress: Concepts, cognition, emotion, and behavior: Elsevier; 2016. p. 351-7.
26. Benjamin T, Gulati A, Zebolsky AL, Seth R, Knott PD, Okuyemi O, et al. Assessing the Prevalence of Burnout Among Female Microvascular Head and Neck Surgeons. Facial Plastic Surgery & Aesthetic Medicine. 2023.
27. Balch CM, Shanafelt TD, Dyrbye L, Sloan JA, Russell TR, Bechamps GJ, et al. Surgeon distress as calibrated by hours worked and nights on call. Journal of the American College of Surgeons. 2010;211(5):609-19.
28. Reed L, Mamidala M, Stocks R, Sheyn A. Factors correlating to burnout among otolaryngology residents. Annals of Otology, Rhinology & Laryngology. 2020;129(6):599-604.
29. Balch C, Shanafelt T, Sloan J, Satele D, Kuerer H. Burnout and career satisfaction among surgical oncologists compared with other surgical specialties. Annals of surgical oncology. 2011;18:16-25.
30. Dimou FM, Eckelbarger D, Riall TS. Surgeon burnout: a systematic review. Journal of the American College of Surgeons. 2016;222(6):1230.
31. Gerber M, Brand S, Elliot C, Holsboer-Trachsler E, Pühse U, Beck J. Aerobic exercise training and burnout: a pilot study with male participants suffering from burnout. BMC research notes. 2013;6(1):1-9.