

# Faculty Wellness: Educator Burnout among Otolaryngology Graduate Medical Educators

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## Abstract

**Objectives.** Burnout is a well-described psychological construct with 3 aspects: exhaustion, depersonalization, and lack of personal accomplishment. The objective of this study was to assess whether faculty members of an otolaryngology residency program exhibit measurable signs and symptoms of burnout with respect to their roles as medical educators.

**Study Design.** Cross-sectional survey.

**Setting.** Otolaryngology-head and neck surgery residency program.

**Subjects and Methods.** Faculty members from an otolaryngology residency program, all of whom are involved in resident education, completed the Maslach Burnout Inventory-Educators Survey (MBI-ES). The surveys were completed anonymously and scored with the MBI-ES scoring key.

**Results.** Twenty-three faculty members completed the MBI-ES, and 16 (69.6%) showed symptoms of burnout, as evidenced by unfavorable scores on at least 1 of the 3 indices (emotional exhaustion, depersonalization, or low personal accomplishment). The faculty consistently reported moderate to high personal accomplishment and low depersonalization. There were variable responses in the emotional exhaustion subset, which is typically the first manifestation of the development of burnout.

**Conclusion.** To our knowledge, this is the first application of the MBI-ES to investigate burnout among otolaryngology faculty members as related to their role as medical educators. Discovering symptoms of burnout at an early stage affords a unique and valuable opportunity to intervene. Future investigation is underway into potential causes and solutions.

## Keywords

burnout, wellness, education, educator

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**B**urnout threatens physicians in every specialty. A complex psychological construct, burnout comprises 3 components, which have been well described: emotional exhaustion (EE), depersonalization (DP) or cynicism, and low personal accomplishment (PA) or inefficiency.<sup>1,2</sup> Individuals experiencing burnout are not able to fully engage in their work, and their performance is threatened, even contributing to medical error.<sup>3,4</sup> Beyond the work environment, burnout can lead to negative personal consequences, such as depression or substance abuse.<sup>5</sup> Workers in many professions with a high degree of human interaction are particularly at risk, including those in medical professions and education.<sup>1,2</sup>

Graduate medical education relies on faculty members to serve a dual role as educators and clinicians. As such, many clinical faculty members serve as medical educators for otolaryngology residents, with the responsibility for developing and training the next generation of competent, compassionate, and well-rounded otolaryngologists. Quality resident education depends on a healthy, educated, vibrant, and engaged faculty teaching in the operating room and clinics and mentoring research. A healthy faculty is therefore essential to the success of resident education.<sup>6</sup>

What is the impact on otolaryngologists functioning in these 2 capacities, both of which have a known risk for burnout? Does the role of educator lead to measurable symptoms of burnout among otolaryngology faculty members, or does the personal satisfaction derived from teaching protect otolaryngologist medical educators? To our knowledge, there is no literature to date on burnout rates among educators in the faculty of otolaryngology residency training programs. In fact, very little research has been published about graduate medical educators in any field with regard to

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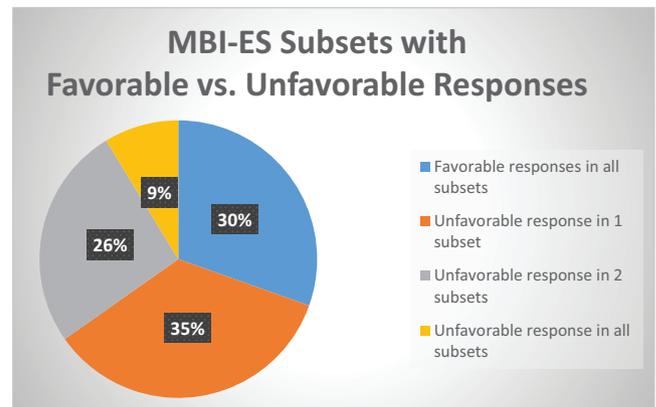
educator-related burnout. Using the Maslach Burnout Inventory–Educators Survey (MBI-ES), El-Ibiary et al reported their findings exploring burnout among educators (pharmacy faculty).<sup>5</sup> They identified EE (1 of the 3 dimensions of burnout) among >40% of their respondents. The Maslach Burnout Inventory–Health Services Survey (MBI-HSS) has been applied to subsets of otolaryngologists, including academic chairpersons, academic otolaryngologists, residents, and practicing otolaryngologists.<sup>7-10</sup> However, these studies did not investigate the responsibility and privilege that the role of educator adds to the daily work of the many otolaryngologists who participate in residency training.

We considered that this additional role of medical educator may increase demands on otolaryngologists who function as clinical faculty, putting the otolaryngologist/educator at risk for burnout. Not only do these physicians experience the stresses associated with clinical practice, but they also shoulder responsibilities of resident education and, likely, additional administrative tasks. However, a high degree of PA that may result from engaging in graduate medical education can be protective against burnout. We also considered that many clinical faculty members derive a great degree of personal satisfaction from their participation in training residents. As there are no prior reports investigating whether otolaryngology faculty members experience burnout, we performed a pilot study to determine whether we would find measurable symptoms of educator burnout among our faculty members, which may in turn warrant further research.

## Materials and Methods

Non-human subjects designation was obtained through the Connecticut Children’s Medical Center Institutional Review Board. Participants were recruited at a departmental conference in our multisite otolaryngology residency program. Faculty members completed the MBI-ES.<sup>11</sup> The MBI-ES is a 22-item survey answered with a 7-point Likert scale reflecting the frequency of the feelings in each item, ranging from “never” to “once a day.” The MBI-ES utilizes subsets of statements relating to EE, DP, and PA. Lower EE and DP scores are associated with less burnout, whereas a high PA score is associated with less burnout. The participants were instructed to approach the survey with respect to their roles in medical education. The MBI-ES uses the term *student*, as opposed to the MBI-HSS, which uses the term *recipient*. However, apart from this distinction and the instructions of the researchers, the surveys are similar.

The survey results were scored anonymously with the MBI-ES scoring key and recorded with Microsoft Excel. For consistency, we adopted the score stratification from El-Ibiary et al, as their study also used the MBI-ES, as opposed to prior studies’ use of the MBI-HSS. The scoring subscales that we applied were as follows: EE (low, 0-16; moderate, 17-26; high,  $\geq 27$ ), DP (low, 0-6; moderate, 7-12; high,  $\geq 13$ ), and PA (low, 0-30; moderate, 31-36; high,  $\geq 37$ ).<sup>5</sup>



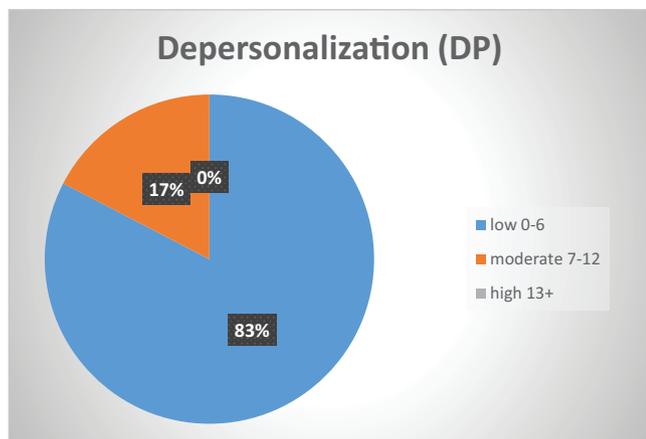
**Figure 1.** Percentage of faculty showing favorable vs unfavorable responses in subsets of the Maslach Burnout Inventory–Educators Survey. Favorable responses in all 3 subsets reflect no burnout symptoms. Unfavorable responses in all 3 subsets represent a pattern consistent with burnout.

A program-specific questionnaire was administered, including questions about potential stressors (eg, demands on faculty time, productivity concerns, and administrative tasks) to identify potentially modifiable factors for future quality improvement use. We intentionally did not gather demographic data, such as work environment, practice type, subspecialty, or sex, as we were focusing entirely on faculty in the role as educator and wanted to ensure anonymity. Of note, our residency program includes faculty members in academic and private practice at 4 separate hospitals, resulting in varied work environments. For this reason, we emphasized that the participants should approach the survey exclusively in their role as graduate medical educators.

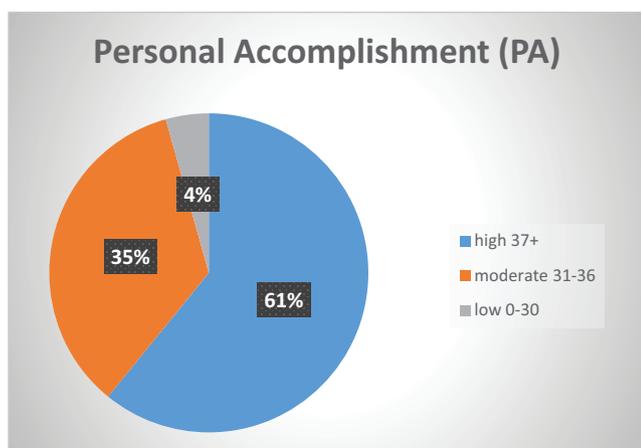
## Results

Twenty-three faculty members in our otolaryngology residency training program completed the survey. Faculty were included who had been in practice >6 months and were not retiring in the next 12 months. There was a 100% response rate for faculty members meeting the inclusion criterion. Of the 23 respondents, 7 (30.4%) showed no burnout symptoms, as evidenced by low EE and DP with high PA. Eight (34.8%) showed findings of burnout with an unfavorable score in at least 1 of the 3 categories, with either moderate to high EE/DP or moderate to low PA. Six (26.1%) respondents had unfavorable scores in 2 categories, and 2 (8.7%) had unfavorable scores in 3 categories (**Figure 1**).

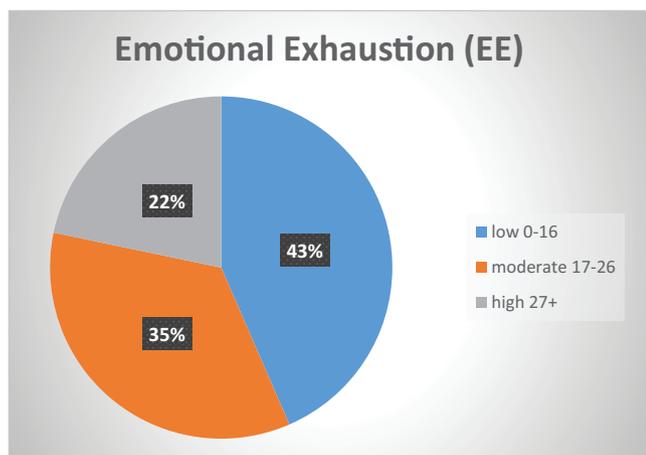
When evaluating each subset, we found the most consistency in DP, with an aggregate score of  $3.4 \pm 3.0$  (mean  $\pm$  SD). When stratifying responses into low, moderate, and high categories, we found that most faculty scored low (favorable) for DP (19 of 23, 82.6%), as opposed to moderate ( $n = 4$ , 17.4%) and high ( $n = 0$ , 0%), as seen in **Figure 2**. In contrast, the PA and EE subsets had more variability. The results for PA ( $38.4 \pm 6.8$ ) showed 14 (60.9%) in the high (favorable) range, with 8 (34.8%) in the moderate range and only 1 (4.3%) in the low range (**Figure 3**). However, despite



**Figure 2.** Percentage of faculty responses in each range of the depersonalization subset (low, 0-6; moderate, 7-12; high,  $\geq 13$ ). In this subset, lower scores are favorable.



**Figure 3.** Percentage of faculty responses in each range of the personal accomplishment subset (low, 0-6; moderate, 7-12; high,  $\geq 13$ ). In this subset, high scores are favorable.



**Figure 4.** Percentage of faculty responses in each range of the emotional exhaustion subset (low, 0-6; moderate, 7-12; high,  $\geq 13$ ). In this subset, low scores are favorable.

more variability for EE as compared with DP, there was additional evidence of burnout as compared with PA. In the EE subset ( $17.5 \pm 11.4$ ), 10 (43.5%) scored in the low (favorable) range, 8 (34.8%) in the moderate range, and 5 (21.7%) in the high range (**Figure 4**).

## Discussion

Johns and Ossof studied burnout among otolaryngology-head and neck surgery chairs, demonstrating that 81% were experiencing moderate burnout.<sup>7</sup> Golub et al examined burnout symptoms among academic otolaryngologists and found prevalent burnout in their population, including 4% with high burnout, 66% moderate, and 30% low.<sup>8</sup> Fletcher et al concluded that burnout was present in nearly 20% practicing otolaryngologists.<sup>10</sup> The stressors and demands likely differ among all otolaryngologists (chairs, academic, and practicing) depending on clinical practice, academic demands, and financial considerations. These studies utilized the MBI-HSS, which does not address educator-related burnout. While the MBI-HSS is similar to the MBI-ES with slight differences in wording, our respondents were given instructions to frame their responses toward their role in resident education. Although each otolaryngologist may serve various roles—surgeon, administrator, educator, business owner—we asked our participants to answer the questions primarily as a medical educator.

This study demonstrates that otolaryngology faculty members in our residency training program are showing symptoms of burnout, as evidenced by 69.6% demonstrating unfavorable responses in at least 1 subset of the MBI-ES. While the majority scored low on DP, scores for EE and PA were more variable. In general, EE symptoms are considered the first manifestation of burnout. Our findings therefore indicate that many of our faculty members are experiencing some symptoms of educator burnout and that many are in early stages.

We also demonstrated a relatively high degree of PA among our faculty, with only 1 respondent falling in the low range. We considered that many otolaryngologists serving as medical educators derive a great degree of personal satisfaction from teaching residents. This may be protective against the development of burnout. While most faculty fell into the high range (14 of 23, 60.9%), this still presents an opportunity for improvement that may be beneficial for those working as medical educators. Prevention of burnout was proposed to be the best institutional strategy to maintain faculty wellness.<sup>6</sup> Given our findings of relatively early burnout symptoms, we have an opportunity to both mitigate current contributing factors and prevent development of further burnout.

We acknowledge limitations to this pilot study. All participants are from a single residency program, and it is conceivable that the local culture, residency structure, or unique educational demands of our program contribute to burnout symptoms in a way that is not generalizable to the faculty members of other residency programs. Subsequent research is needed to further investigate educator burnout among

faculty of other otolaryngology residency programs. In addition, we did not measure noneducator-related burnout symptoms or burnout symptoms in noneducator otolaryngologists. Therefore, we cannot determine from this initial descriptive study whether the role of educator causes or protects against measures of stress, including burnout symptoms.

## Conclusion

Our study is, to our knowledge, the first to investigate educator-related burnout among faculty members in an otolaryngology residency program. Given our findings that the majority are experiencing measurable symptoms of burnout, longitudinal and multicenter studies are needed to further explore faculty wellness. We believe that by focusing on and investigating the wellness of faculty members, otolaryngology residents will benefit doubly—formally through exposure to vibrant and enthusiastic teachers and informally through modeling an emphasis on wellness and burnout prevention.

## Author Contributions

**Katherine R. Kavanagh**, conception and design; acquisition, analysis, and interpretation of data; drafting the work; final approval; and agreement to be accountable for all aspects; **Jeffrey Spiro**, conception and design; acquisition, analysis, and interpretation of data; critical review of the work; final approval; and agreement to be accountable for all aspects.

## Disclosures

**Competing interests:** None.

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