

Background

Physician burnout is a critical problem in our current healthcare system with an estimated 54% of physicians reporting symptoms of burnout [1]. A growing body of literature has linked burnout to wide-ranging potential consequences impacting both physicians and their patients, including physician depression, suicidal ideation, and substance abuse [2–4], as well as suboptimal care, reduced patient satisfaction, and medical errors [5–8].

Within the field of Otolaryngology – Head and Neck Surgery (OHNS), several recent studies have begun to characterize the prevalence and risk factors for burnout within the specialty, including studies focusing on practicing otolaryngologists [9–12], otolaryngology residents [13–15], and academic chairs [16]. However, there is a limited understanding of how otolaryngologists who are not feeling burned out from work are protected from burnout

Objective: In this work, we aim to add to this growing body of literature by characterizing both contributing and protective factors for burnout among faculty within a large academic OHNS department at a tertiary referral center.

Methods and Materials

Design: Cross sectional-study

Sample: 42 faculty within an academic OHNS department

Data:

- A 9-question survey was distributed electronically
 - Demographic and professional characteristics (rank, gender, family responsibilities, and percentage of academic/protected time)
 - Frequency of burnout and self-reported contributing factors
- Semi-structured interviews with 3 participants that reported that they never feel burned out from work

Statistics: Multiple logistic regression analyses

Table 1: Characteristics of study sample

Survey Question	N (%)
Gender	
Male	27 (64.3%)
Female	15 (35.7%)
Academic rank	
Assistant Professor	18 (42.9%)
Associate Professor	13 (31.0%)
Professor	11 (26.2%)
Family Responsibilities	
Child care	24 (57.1%)
Adult care	6 (14.3%)
Percentage of academic/protected time	
0-10%	5 (11.9%)
10-20%	7 (16.7%)
20-33%	3 (7.1%)
33-50%	6 (14.3%)
50-75%	9 (21.4%)
>75%	12 (28.6%)

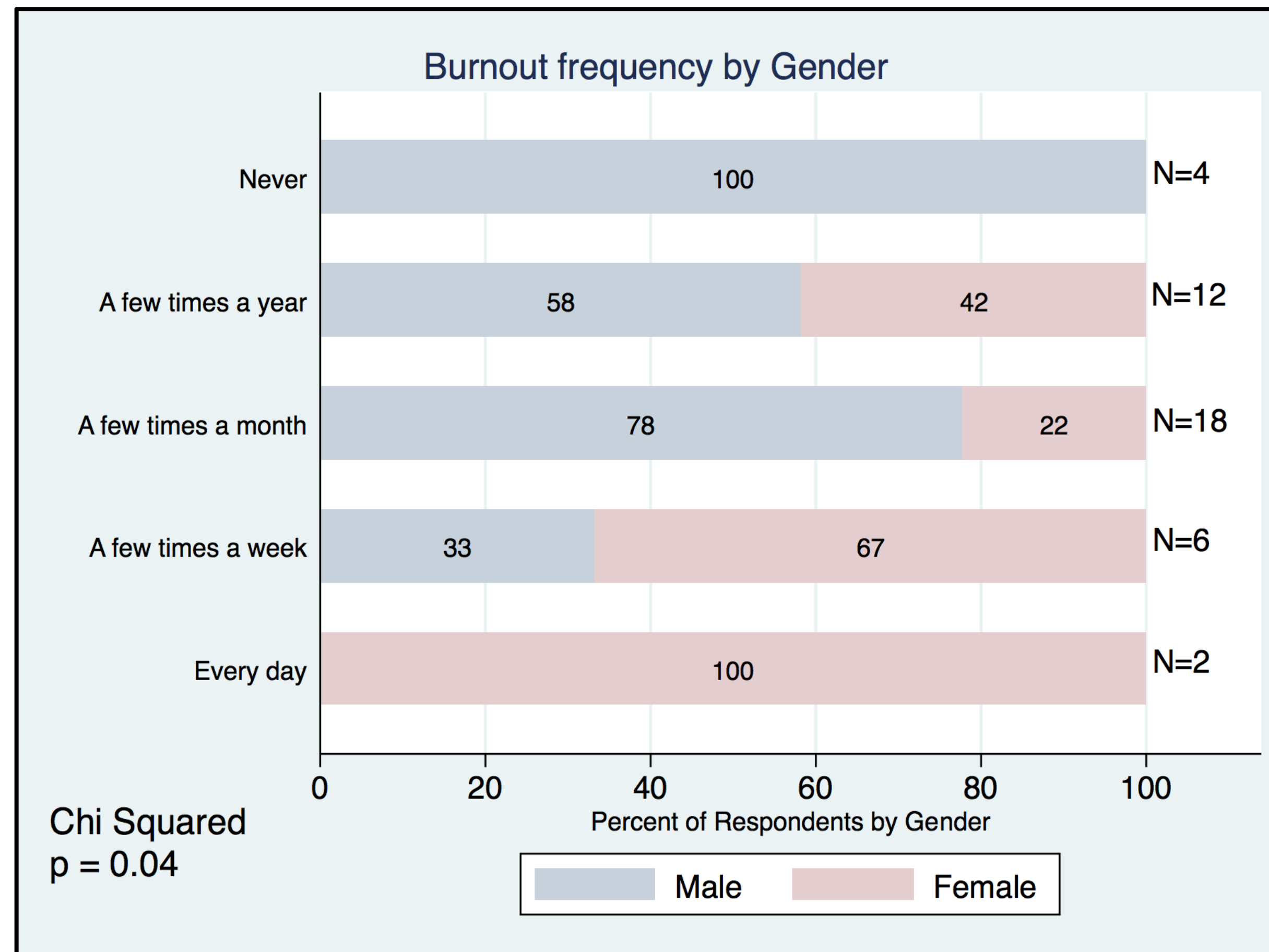


Figure 1: Bar graph of burnout frequency by gender

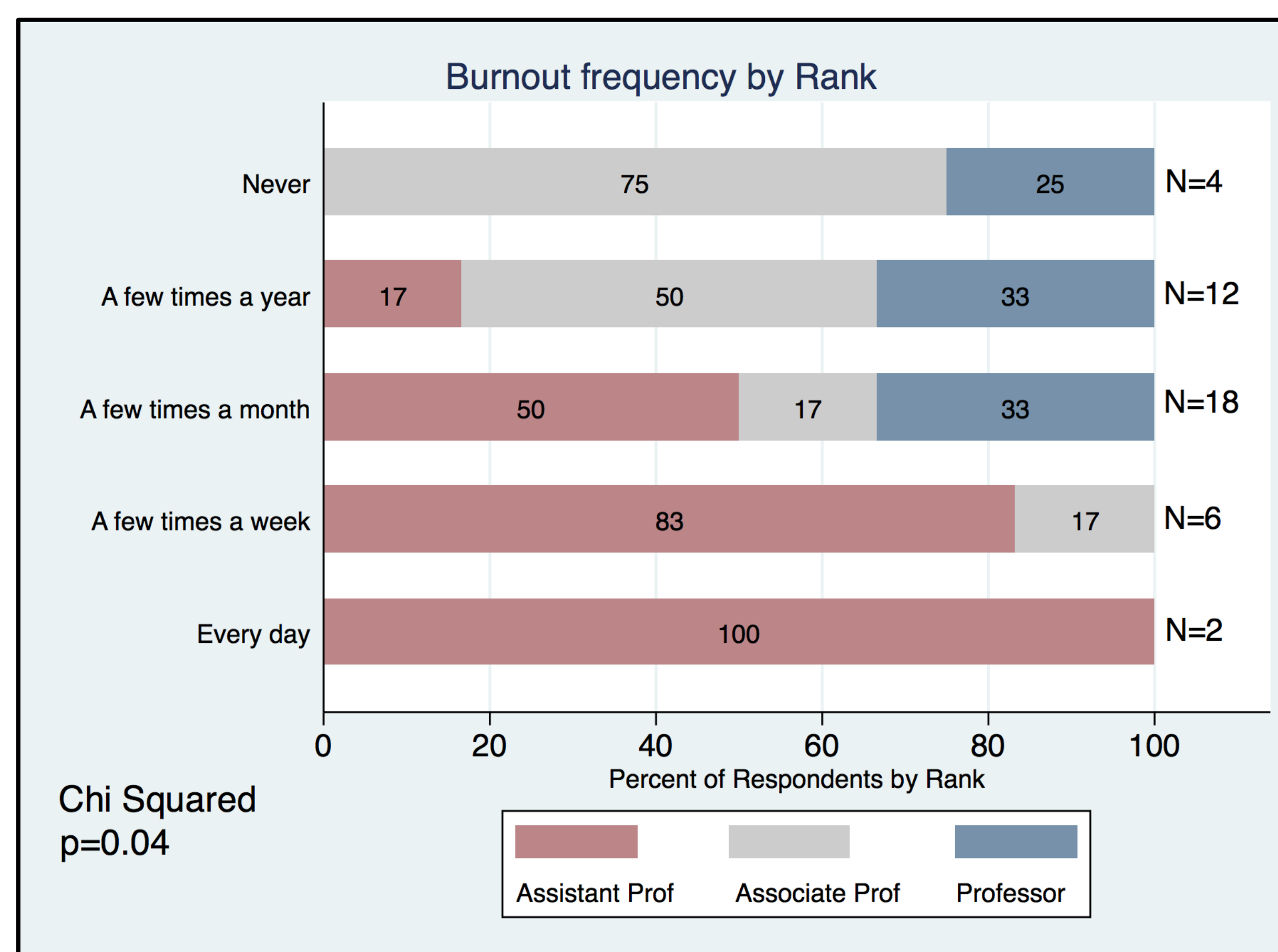


Figure 2: Bar graph of burnout frequency by rank

Results

In multiple logistic regression analysis, Associate Professors and Full Professors had a 96% reduced odds ($p = 0.02$) of high burnout relative to Assistant Professors. Additionally, female gender was associated with a 25-fold increased odds of high burnout ($p=0.03$). Family responsibilities (i.e. child care, adult care), percentage of academic/protected time, and extra hours worked were not significant independent predictors of high burnout.

Three overarching themes were identified from semi-structured interviews with faculty that reported they never feel burned out from work:

- Focus on helping others
- Happiness as the currency rather than compensation
- Gratitude for freedom, opportunities, and ability to have impact

Table 2: Survey respondent answers on frequency of burnout and contributing factors

Survey Question	Mean (SD)	N (%)
If you feel burned out, what are the contributing factors? Average ranking:		
N = 38		
Epic documentation	1.8 (1.5)	24 (63.2%)
Patient care (e.g. phone calls, Epic inbasket)	2.2 (1.4)	25 (65.8%)
Work activities outside business hours	3.1 (1.8)	27 (71.1%)
Academic work (writing manuscripts, grants)	3.4 (2.0)	25 (65.8%)
Research	3.9 (2.3)	20 (52.6%)
Family responsibilities (child care, adult care)	4.3 (1.8)	16 (42.1%)
Other national/international society work	5.1 (2.1)	16 (42.1%)
Department/institution committee work	5.3 (2.3)	13 (34.2%)
How many hours do you work per week beyond Monday-Friday 7am-5pm (i.e. 50 hours per week)?		
N = 42		
0-5	5 (11.9%)	
5-10	11 (26.2%)	
10-15	12 (28.6%)	
15-20	8 (19.0%)	
>20	6 (14.3%)	
If you do spend extra hours working outside the work week, what is it typically for? Average ranking:		
N = 42		
Epic documentation	1.7 (1.1)	25 (59.5%)
Academic work (writing manuscripts, grants)	2.0 (1.0)	36 (85.7%)
Patient care (e.g. phone calls, Epic inbasket)	2.3 (1.1)	24 (57.1%)
Research	3.0 (1.4)	25 (59.5%)
Other national/international society work	3.7 (1.7)	21 (50.0%)
Department/institution committee work	4.1 (1.6)	16 (38.1%)

Discussion

This work builds on several studies that have characterized factors contributing to occupational burnout in OHNS. Occupational burnout is a psychological syndrome that emerges in response to persistent work-related stress and consists of the triad of emotional exhaustion (EE), depersonalization (DP), and a reduced sense of personal accomplishment (PA) [17]. Among physicians, including otolaryngologists an increased feeling of DP is the most common symptom of burnout [9–11].

In this study of academic otolaryngologists, we found that high burnout is significantly associated with gender and rank in multiple regression analyses while controlling for family responsibilities, percentage of academic/protected time, and extra hours worked per week. Moreover, semi-structure interviews with otolaryngologists who are not experiencing burnout provided a preliminary understanding of both internal resources (e.g. personal attributes, personality traits, outlook) and external resources (e.g. practice setting, wellness strategies) that may be protective against burnout.

Study Limitation: Cross-sectional study does not support cause inferences

Conclusion

We found that gender and rank are significant predictors of burnout among academic otolaryngologists, and identified several internal and external resources in faculty who are able to avoid burnout. These findings may help drive future interventions to promote wellness and prevent burnout among academic otolaryngologists.

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