

# **HHS Public Access**

Author manuscript *Surgery*. Author manuscript; available in PMC 2023 August 31.

Published in final edited form as: *Surgery*. 2022 December ; 172(6): 1744–1747. doi:10.1016/j.surg.2022.09.024.

# Determinants and barriers to junior faculty well-being at a large quaternary academic medical center: A qualitative survey

Polina Zmijewski, MD, MA<sup>a,\*</sup>, Ruth Obiarinze, MD<sup>a</sup>, Andrea Gillis, MD<sup>a</sup>, Jessica Fazendin, MD<sup>a</sup>, Herbert Chen, MD<sup>a</sup>, Brenessa Lindeman, MD, MEHP<sup>a</sup>

<sup>a</sup>Department of Surgery, University of Alabama at Birmingham, AL

# Abstract

**Background:** Increasing levels of burnout among trainees and faculty members at all levels is a major problem in academic medicine. Junior faculty members may be at unique risk for burnout and have unique needs and barriers that contribute to attrition, job satisfaction, and overall workplace well-being.

**Methods:** Twenty-seven faculty members at the assistant professor level at a large, quaternary referral academic medical institution were interviewed. A qualitative analyst with no reporting relationship to faculty was used as the proctor. Seven scripted questions targeting faculty well-being and institutional barriers to well-being were administered, and the responses were coded for common themes between respondents.

**Results:** Respondents most commonly identified clinical work (26%), research (19%), and teaching (19%) as the best aspects of their job. Among respondents, 3% stated they were not able to devote as much time as they would like to work they enjoyed and found most meaningful. Of these respondents, 44% cited "insufficient help" as the root cause. Also, 33% stated time spent writing and managing institutional review board requirements was a major contributor, and 22% cited both clinical volume/performance benchmarks and administrative responsibilities as significant barriers. The most common responses to departmental factors that can be improved included moving meetings to during the workday versus after hours, establishing a similar value system/metric for all faculty, and providing more opportunities to interact with faculty across divisions. The most common barriers to change identified were difficulty hiring research support, patient volume and clinical demands, and a pervasive culture of continuing to work after the workday has ended. At an institutional level, provision of childcare and promotion of basic science research were identified as areas for improvement. More actionable items were identified at the departmental rather than institutional level (53 vs 34).

**Conclusions:** Junior faculty well-being is most affected at the department level. Qualitative data collection from junior faculty regarding barriers to well-being and academic/clinical productivity

Conflict of interest/Disclosure

<sup>\*</sup>Reprint requests: Polina Zmijewski, MD, MA, Department of Surgery, University of Alabama at Birmingham, 1808 Seventh Avenue South, Boshell Diabetes Building 506, Birmingham, AL 35294., pzmijewski@uabmc.edu (P. Zmijewski); Twitter: @PolinaZmijewski, @UABSurgery.

Presented at the 17th annual Academic Surgical Congress, February 1-3, 2022, Orlando, FL

The authors of this article have no competing interests to declare.

can be invaluable for departments and institutions seeking to make cultural or systemic improvements.

### Introduction

Burnout and job dissatisfaction are endemic problems in the field of medicine and in surgery specifically.<sup>1–4</sup> Increasing levels of burnout among trainees as well as faculty members is a pressing issue, especially in light of the additional pressures placed on providers as a result of the COVID-19 pandemic.<sup>5,6</sup> These problems have been extensively described in the last 2 decades in the surgical literature.

One of the earliest qualitative studies of burnout among surgeons took place in June 2008. American College of Surgeons members were sent an anonymous survey, which was completed by 7,905 surgeons, 40% of whom stated that they were "burned out"; 30% of respondents screened positive for symptoms of depression, and 28% had quality of life scores that were half of a standard deviation below the population mean.<sup>1</sup>

Multiple studies have reported that female general surgeons may be more vulnerable to burnout, potentially because of lack of female mentorship or leadership,<sup>7,8</sup> differing pressures, balancing work and personal responsibilities, and differing approaches to patient care.<sup>9</sup> These data highlight the presence of at-risk populations within the field of general surgery. Multiple studies suggest that more junior practitioners of surgery, such as residents<sup>3,4</sup> and junior faculty members, maybe such at-risk populations for burnout and have unique needs and barriers that contribute to attrition, low job satisfaction, and overall poor workplace well-being. Concern for the well-being of junior practitioners of surgery prompted the present study.

Although previous work has outlined the presence of a problem with wellness and burnout among surgeons, very few qualitative studies have examined causes and potential interventions.<sup>10,11</sup> With this in mind, we set out to investigate root causes of job dissatisfaction within our own department and obtain a list of actionable interventions. We focused our efforts specifically on junior faculty, as they are a seldom studied group in the literature and may be at increased risk for significant work-related burnout. We suggest that reasons for this may be multifactorial and could potentially include their lower status in department hierarchy, lack of mentorship or clear career goals, lack of understanding of department culture, and pressures from department leaders to maintain high levels of clinical productivity.<sup>12</sup> Because of these increased pressures, we hypothesized that this group may have greater insight into institutional and departmental initiatives to target interventions benefiting our most vulnerable employees.

## **Methods**

After institutional review board approval, 55 faculty members at the assistant professor level at a large, quaternary referral academic medical institution were recruited to participate in an appreciative inquiry interview by a qualitative analyst. Recruitment for this exercise was conducted via a department-wide e-mail sent by authors of this article (B.L. and R.O.); 27 of 55 voluntarily consented to participate. Seven scripted questions targeting faculty well-being

and institutional barriers to well-being were administered by the facilitator in 1 session. The facilitator was a postdoctoral research fellow with no reporting relationship to faculty. Sessions with faculty took place over several weeks.

Interview questions were developed by authors of this study (B.L. and R.O.) and followed an appreciative inquiry framework,<sup>13</sup> where participants were asked to describe positives of the present state, potential improvements, and consideration of a desired future state. Interviews were recorded and transcribed by the facilitator. Two coders then independently reviewed the data set and generated a list of themes. Coders were members of the department of surgery and are coauthors of this study (R.O. and B.L.). Themes were reviewed iteratively using grounded theory methodology, which involves the application of inductive reasoning to formulate hypotheses, and refined throughout the coding process. When disagreement was identified, open discussion about the coding schema was conducted until consensus was reached. The questions asked are detailed in the Table.

# Results

Participants most commonly identified clinical work (26%), research (19%), and teaching (19%) as the best aspects of their job; 33% of respondents stated they were not able to devote as much time as they would like to work they enjoyed and found most meaningful. Those respondents were further questioned about barriers to performing meaningful work; 44% cited "insufficient help" as the root cause. One-third stated time spent writing and managing institutional review board requirements was a major contributor, and 22% cited clinical volume and performance benchmarks as a major barrier. An additional 22% cited administrative responsibilities as significant barriers. Of the 77% who stated they were able to devote sufficient time to the work they found meaningful, the most commonly cited reasons for being able to do so included careful personal allocation of time (2 respondents), sufficient support staff for their division,<sup>2</sup> and establishment of a predictable, routine schedule.<sup>2</sup> Other responses included the presence of residents, a positive work environment, leadership support, and establishing realistic expectations for personal accomplishment.

Participants identified multiple areas of improvement that would allow them to spend time focusing on the more fulfilling aspects of their jobs. The most commonly evoked responses were presence of meetings and commitments at the end of the work day (3 respondents), high levels of pressure for research productivity,<sup>2</sup> and the desire for more mentorship among PhD researchers.<sup>2</sup> Actionable areas for improvement identified included moving meetings to workday hours, clear institutional messaging about the value of clinical versus academic work, and implementation of a professional development series teaching time management, personal efficacy, communication skills, and team building.

In response to the question of what prevents positive departmental change, respondents most commonly identified difficulties in hiring research support (3 respondents), high patient volume and clinical demands,<sup>3</sup> and an institutional culture of performing work related tasks after work has ended for the day.<sup>2</sup> The most common responses of faculty when asked which departmental factors can be improved included moving meetings to during the workday versus after hours,<sup>3</sup> establishing a similar value system/metric for all

faculty across the board,<sup>3</sup> and providing more opportunities to interact with faculty across divisions.<sup>3</sup> Other actionable items at the department level included increased departmental communication; publicizing resources for faculty, such as employee discounts and other perks; and enhancing and investing in opportunities for faculty to interact.

At an institutional level, provision of childcare (3 respondents) and promotion of basic science research<sup>2</sup> were identified as areas for improvement. More themes were identified when inquiring about departmental rather than institutional improvements and barriers, and more actionable items (53 vs 34) were identified at the department level.

# Discussion

In this study, we set out to answer *why* surgeons may demonstrate burnout and job dissatisfaction and identify factors at the institutional and departmental levels that could help alleviate these concerns and barriers. We were able to elucidate a number of potential avenues, primarily at the departmental level, to improve the experience of junior faculty. One of the most common themes identified within the data set included moving work commitments and meetings to more regular work hours, to discourage a culture of working after the workday has been completed. Although we did not directly measure for differences in responses based on respondent sex, it is important to note that these particular themes may apply disproportionately to surgeons with young children or caregiving responsibilities at home. Women may be especially vulnerable to the effects of an institutional culture of working after hours,<sup>14</sup> and this is a critical consideration for departments seeking to diversify their surgeon workforce.<sup>7,8</sup> Another theme that emerged within actionable interventions included hiring adequate research or support staff for junior faculty in their clinical and academic endeavors and allowing for a greater balance of job resources and demands.

Institutional and departmental culture was a theme commonly explored by participants, and, although admittedly a rather nebulous concept, appears to play a primary role in junior faculty experience. Mistreatment and toxic cultures likewise have a significantly negative effect on burnout rates of employees.<sup>3,4</sup> Creating a culture of intellectual curiosity, faculty support, and appreciation of group and individual accomplishment should be the goal of all academic departments, but a blueprint for this type of cultural transformation or formation does not presently exist.

The themes identified in our qualitative review were consistent with those of previous work in this arena. A recent 2021 qualitative study by Walker et al<sup>10</sup> explored the themes present in the responses of 32 surgeons to questions querying their emotional well-being and burnout and elucidated a number of emergency protective factors. Individual protective factors included presence of autonomy and having adequate time for the pursuit of nonclinical endeavors. Team adaptability, presence of clearly defined boundaries, and team cohesiveness were also found to be factors protective from burnout. In this study, they posited that institutions that routinely recognize individual contributions and value are the most resistant to employee burnout.<sup>10</sup>

Zmijewski et al.

Another qualitative analysis investigated the presence of burdensome emotions and their effects on the pre-, peri-, and postoperative life of a surgeon; 27 surgeons from 10 academic institutions described a range of emotional situations faced both at work and at home and the influences of surgical culture and institutional frameworks, such as exhaustion, time pressure, and pressure to embody the ideal image of a surgeon, leading to emotions, such as fear, distress, anxiety, and guilt.<sup>11</sup> Qualitative inquiry of surgeons, therefore, can be a valuable tool in the investigation of the root causes of burnout, depression, and job dissatisfaction, but research in this realm is lacking. Our study contributes to this growing base of qualitative literature on wellness in surgery.

With regard to the nebulous concept of "cultural change," a 2020 metanalysis of articles targeting randomized controlled trials that focused on improvement of well-being in health care personnel, interventions targeting mindfulness, and gratitude were found to be most effective at reducing work-induced stress, depression, and anxiety.<sup>15</sup> Unique initiatives, such as the Gratitude and Good Outcomes lecture series at the University of California, San Francisco, highlighting the accomplishments of faculty and residents as an annual replacement of the traditional morbidity and mortality conference, seek to integrate gratitude practices into the surgical work flow<sup>16</sup> and could be a potential addition to the armamentarium of tools departments can use to decrease burn out and make the cultural improvements that our data suggest are necessary.

The limitations of our study include the fact that our data incorporate the responses of only 27 junior faculty members at a single southeastern academic surgery center. Our results may not be applicable to diverse geographical regions, community hospital practices, and faculty/ providers of differing levels. It is also important to note that demographic data were not gathered on respondents because of concerns for breach of confidentiality. For this reason, we were also not able to gather data on the percentage of protected clinical versus academic time for each faculty member. The lack of this granular data may blind us to the biases of respondents and affect the conclusions drawn from our qualitative review.

Future directions include broadening our sample size to create a more geographically diverse subset of junior faculty and determining if common themes exist at other institutions seeking to enhance their employee's job satisfaction and wellness. At our institution, themes identified can actively be used in local quality improvement interventions.

Our study contributes to the growing armamentarium of qualitative literature on surgeon wellness and should be modelled at other institutions seeking answer on how to improve wellness in their own departments. Analysis of qualitative interviews allows the identification of the "why" variable with regard to wellness barriers and interventions at the departmental and institutional levels.

In conclusion, junior faculty well-being is most often affected at the department level. Qualitative data collection from junior faculty regarding barriers to well-being and academic/clinical productivity can be invaluable for departments and institutions seeking to make cultural or systemic improvements. Actionable interventions can be identified and implemented through qualitative research methods.

# Funding/Support

This research did not receive any specific funding from any agencies in the public, commercial, or not-for-profit areas.

#### References

- Shanafelt TD, Balch CM, Bechamps GJ, et al. Burnout and career satisfaction among American surgeons. Ann Surg. 2009;250:463–471. [PubMed: 19730177]
- Pulcrano M, Evans SR, Sosin M. Quality of life and burnout rates across surgical specialties: a systematic review. JAMA Surg. 2016;151:970–978. [PubMed: 27410167]
- Baker S, Gleason F, Lovasik B, et al. Relationship between burnout and mistreatment: who plays a role? Am J Surg. 2021;22:1060–1065.
- Gleason F, Baker SJ, Wood T, et al. emotional intelligence and burnout in surgical residents: a 5-year study. J Surg Educ. 2020;77:e63–e70. [PubMed: 32819871]
- Barello S, Palamenghi L, Graffigna G. Burnout and somatic symptoms among frontline healthcare professionals at the peak of the Italian COVID-19 pandemic. Psychiatry Res. 2020;290:113129. [PubMed: 32485487]
- Ruiz-Fernández MD, Ramos-Pichardo JD, Ibáñez-Masero O, et al. Compassion fatigue, burnout, compassion satisfaction and perceived stress in healthcare professionals during the COVID-19 health crisis in Spain. J Clin Nurs. 2020;29: 4321–4330. [PubMed: 32860287]
- Rakestraw SL, Chen H, Corey B, et al. Closing the gap: increasing female representation in surgical leadership. Am J Surg. 2022;223:273–275. [PubMed: 33827754]
- Schoel LJ, Fazendin J, Chen H, et al. Endocrine surgery is at the forefront of gender diversity. Am J Surg. 2021;221:86e89. [PubMed: 32622505]
- Dahlke AR, Johnson JK, Greenberg CC, et al. Gender differences in utilization of duty-hour regulations, aspects of burnout, and psychological well-being among general surgery residents in the United States. Ann Surg. 2018;268:204–211. [PubMed: 29462009]
- 10. Walker HR, Evans E, Nirula R, et al. "I need to have a fulfilling job": a qualitative study of surgeon well-being and professional fulfillment. Am J Surg. 2022;223: 6–11. [PubMed: 34332744]
- 11. Orri M, Revah-Lévy A, Farges O. Surgeons' emotional experience of their everyday practice a qualitative study. PLoS One. 2015;10: e0143763. [PubMed: 26600126]
- Lam A, Heslin MJ, Tzeng CD, et al. The effects of tenure and promotion on surgeon productivity. J Surg Res. 2018;227:67–71. [PubMed: 29804864]
- Sandars J, Murdoch-Eaton D. Appreciative inquiry in medical education. Med Teach. 2017;39:123–127. [PubMed: 27852144]
- Rangel EL, Lyu H, Haider AH, et al. Factors associated with residency and career dissatisfaction in childbearing surgical residents. JAMA Surg. 2018;153: 1004–1011. [PubMed: 30073246]
- 15. Melnyk BM, Kelly SA, Stephens J, et al. Interventions to improve mental health, well-being, physical health, and lifestyle behaviors in physicians and nurses: a systematic review. Am J Health Promot. 2020;34:929–941. [PubMed: 32338522]
- Shen WT, Sosa JA. Gratitude and good outcomes: rediscovering positivity and perspective in an uncertain time. World J Surg. 2020;44:2848–2849. [PubMed: 32566976]

3.

## Table I

#### Interview questions

| 1 | What are the best aspects of your job here?   |
|---|---|
| 2 | What do you find meaningful in your work?   |
| 3 | Are you able to devote as much time as you'd like to the work that you enjoy most/find meaningful?                        |
|   | • If so, what facilitates your ability to do that?  |
|   | • If not, what barriers prevent you from being able to do that?   |
| 4 | What are things about your job that you'd like to improve or otherwise change?  |
| 5 | What prevents you from making the changes you'd like to see?  |
| 6 | What do you believe that department leadership can do to improve the environment and well-being for faculty? Name up to 3 |
| 7 | What do you believe the institution can do to improve the environment and well-being for faculty? Name up to 3.           |
|   |   |