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Gender Differences in Surgeon Burnout and Barriers to Career Satisfaction: A Qualitative Exploration



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ABSTRACT

Background: Physician burnout is a highly prevalent issue in the surgical community. Burnout is associated with poor career satisfaction; female gender, and younger age place surgeons at higher risk for burnout. Here, we examined drivers behind burnout and career dissatisfaction in female and junior surgical faculty, with specific attention paid to gender-based differences.

Materials and methods: Participants included full-time surgery faculty members at a single academic surgery center. Both male and female faculty members were included, at ranks ranging from instructor to associate professor. Semistructured interviews were conducted by a faculty member at the institution until thematic saturation was reached. Field notes were compiled from each interview, and these data were coded thematically.

Results: Fourteen female faculty and nine male faculty members were interviewed. For both female and male faculty, lack of control with work life was a significant theme contributing to burnout. Positive factors contributing to career satisfaction for both genders included enjoyment of patient care and teaching, teamwork and collegiality, and leadership support. For female faculty, the major theme of gender bias in the workplace as a risk factor for burnout was prominent. Male faculty struggled more than their female counterparts with guilt over complications and second victim syndrome.

Conclusions: Gender differences driving career dissatisfaction and burnout exist between female and male surgical faculty. Acknowledging these differences when designing efforts to address physician wellness and decrease burnout is critical.

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Introduction

Physician burnout is a syndrome characterized by emotional exhaustion, depersonalization, and perceived low personal

accomplishment.¹ Burnout is a significant issue within the physician community as a whole, and particularly affects surgeons whose practices can be characterized by long, unpredictable hours, high-stakes operations, and increasing

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administrative burden.² Reported rates of burnout in surgeons have been as high as over 50%.¹ This presents a significant issue not only for patient care, with increased medical errors associated with physician burnout,^{3,4} but also for the mental and physical health of the surgeon workforce.^{2,5}

Many quantitative studies have been performed in the past in efforts to identify risk factors for surgeon burnout with varying results.¹ Some have shown that gender has a significant role in affecting burnout—female gender has been associated with increased burnout compared with male gender in various surgical specialties with emphasis placed on the difficulty of maintaining balance between work and family life responsibilities.⁵⁻⁹ Additionally, lower academic ranking, younger age, and fewer years in practice have also been associated with increased burnout.¹⁰⁻¹² Despite many studies describing various demographic factors associated with burnout, little is known about the specific drivers behind these differences and why they exist.^{13,14} The inadequate characterization of why certain characteristics are associated with increased risk of burnout makes it difficult to design targeted interventions to reduce burnout and improve physician wellness.

In this qualitative study, we sought to examine academic surgical providers' perceptions of factors driving burnout, with specific attention to gender-based differences. Through this work, we aimed to shape targets for intervention and to direct further study in burnout reduction.

Methods

Study subjects

To examine common themes among surgical providers, a purposive criterion-based sampling technique was used to identify a cohort of faculty-level surgeons at a single academic center.¹⁵ In accord with literature review, we targeted surgeons of both genders at elevated risk of burnout, which included female faculty at all career stages, and male faculty in more junior positions who had been in practice for 10 y or less.¹⁰⁻¹² Eligible participants were all board-certified surgeons who had been in practice at least 1 y.

Data collection

We created a semistructured interview guide with five open-ended questions grounded upon literature review and research team consensus (Figure). Eligible participants were contacted directly by a single member of our study team via e-mail. Each was told about the goal of our study and was asked if they would be willing to participate in an in-person interview lasting approximately 30-60 min. If amenable to participation, a time mutually convenient for interviewer and participant was established. Informed consent was obtained verbally prior to the commencement of each interview. Participants were asked about their impressions of their work environment and about factors that might contribute to burnout risk. Refinement of interview questions based on concurrent analysis of interview data followed by an iterative process that occurred throughout the data gathering process.

All interviews were conducted by a single member of the research team, who is trained in qualitative interview techniques. All interviews followed the interview guide. To fully deidentify participants at our single institution, data were collected via field notes taken by the interviewer during each interview session. Field notes were analyzed verbatim. Additional written memos taken following the conclusion of each interview were also incorporated into analysis. The interviewer had a preexisting relationship with the participants prior (as colleague/coworker), and the interviewees were told the motivations for the study prior to participation.

Analysis

Grounded-theory analysis was used to allow for inductive emergence of major themes. Five members of our research team coded all interview notes. Members of the research team first independently reviewed the notes, inductively identifying codes. The researchers then met to discuss their codes, at which time a preliminary codebook was developed, codes were applied to an initial set of session notes. The researchers then independently applied the codebook to additional transcribed fieldnotes. The researchers subsequently met to reconcile the notes, modifying or adding additional codes as needed. All discrepancies were settled through group consensus. This process was repeated until a final codebook was developed. Initial notes were reviewed and recoded in accord with the final codebook. Interviews and comparison coding continued until thematic saturation, or lack of generation of new codes, was reached. Data were analyzed within and across interview sessions to crystallize emergent themes.

Member checking

To ensure validity of our fieldnotes and analysis from a participant lens, member checking was performed.^{16,17} Both anonymized raw data and the results of our thematic analysis were sent to our participants. Any disagreement in participant interpretation was taken into account in further thematic analysis.

Researchers

Our research team was comprised of researchers of varying training levels and academic degree backgrounds based at Brigham and Women's Hospital in Boston, Massachusetts. Two attending surgeons and three surgical residents experienced in qualitative work comprised our research team. This study was approved by the Partners Health Care System institutional review board.

Results

Participants

A total of 63 faculty members met inclusion criteria (35 female and 28 male faculty members). Out of the eligible individuals, 23 (36.5%) faculty members, 14 female (40.0%) and 9 male (32.1%), agreed to participate and were interviewed (Table 1).

- 1) What are the best and worst things about your job that you think have impact on your well-being?
- 2) Do you receive feedback/recognition from your Chair/Division Chief?
- 3) Do you feel that the department of surgery is supportive of:
 - 1) Junior faculty?
 - 2) Surgeons with children?
 - 3) Can you describe ways in which improvements could be made?
- 4) What changes in professional life would have the biggest impact on improving your personal/family life?
- 5) How does compensation model affect your well-being and your professional development?
 - 1) What would you change?

Fig – Interview guide.

Practice duration ranged from 1 to 28 y. Academic rank ranged from Instructor to Associate Professor. Ten different surgical practice specialties were represented: general surgery, surgical oncology, acute care surgery, cardiothoracic surgery, breast surgery, vascular surgery, colorectal surgery, otolaryngology, plastic surgery, and urologic surgery.

Themes common across genders

Participants of both genders expressed an overarching sense of lack of control over their work life. Workflow efficiency, administrative transparency, impression of personal value, and support of family responsibilities were described as key contributors to degree of perceived control. When these factors were described as present (i.e., “I can balance my clinical and research time. I feel like I do have protected time”—male participant, or “My schedule is flexible and allows me to attend family events”—female participant), participants expressed an improved sense of autonomy and job satisfaction; conversely, when absent, participants described a sense of powerlessness and despair. Lack of control was further associated with sentiments of anxiety and frustration in portrayals of the work place (Table 2).

Across genders, participants also described factors that consistently, positively impacted their degree of career satisfaction. These included enjoyment of patient care and teaching, teamwork and collegiality, control over one’s time, and sense of leadership support (Table 3). Notably, male participants expressed the perception of having leadership support consistently more than the female participants. Members

of both genders described bias against responsibilities associated with family life and parenting as challenging to career advancement; however, this concept was also more strongly described in the testimonies of female participants.

Female prominent themes

For female faculty, the theme of gender bias in the workplace was strong. Female participants consistently described gender-based biases as negatively impacting their work life. (Table 4).

Male prominent themes

Male faculty more prominently voiced guilt and emotional turmoil attributable to complications than did their female colleagues. Such descriptions raise concern for increased prevalence of second victim syndrome in male participants^{18,19} (Table 5).

Member checking

Based on the results of our member checking process, slight modifications were made to representative quotations in response to participant concern over anonymity and framing of our thematic analyses. No changes to our major themes were made.

Discussion

In this qualitative study, we identified lack of control over work life as a significant contributor to surgeon burnout that was common for both men and women. Positive factors contributing to career satisfaction shared by both genders included enjoyment of patient care and teaching, strong teamwork and collegiality, and leadership support. We also identified two major themes that differed between male and female surgeons—gender bias and second victim syndrome. This information is not only useful in characterizing the drivers behind burnout in the at-risk population in our institution’s surgical faculty but can also lend insight in the understanding of risk factors that may differ between

Table 1 – Participant demographics.

Demographic	Male (n = 9)	Female (n = 14)
Age (mean, SD)	40.7 (±3.0)	44.0 (±7.9)
Academic rank		
Instructor	5 (56.6%)	9 (64.3%)
Assistant professor	3 (33.3%)	3 (21.4%)
Associate professor	1 (11.1%)	2 (14.3%)
Currently married	9 (100.0%)	13 (92.9%)
Have children	8 (88.9%)	10 (71.4%)

Table 2 – Themes associated with burnout.

Theme	Female participants	Male participants
Anxiety and frustration	“It’s a relentless grind. ”	“I cannot win. I try to do a good job but I get blocked.” “I don’t feel like I’m meeting my own expectations. I always feel behind.”
Family/parenting responsibilities	“I am made to feel guilty if I put my family first.” “The culture does not take family into account. ”	“A lot of meetings are held at 6am. I constantly feel like I should attend, but I cannot because of my children.” “Parenting is the hardest job. ”
Control over schedule	“I’m never not on call—I have to be able to answer 24/7.”	“There’s a lack of protected time. ”
Impression of personal value	“The definition of success needs to be broadened. Education is of the lowest value. It is invisible work. ”	“I feel that I am not appreciated or respected. ”
Workflow efficiency	“There is poor streamlining of processes. From operating room, to staffing to resources.”	“I am drowning in paperwork. ” “Everything is painful. ”
Administrative transparency	“What are the salary taxes? Things need to be more transparent. ”	“I would like more open communication and more transparency. ”

genders. Future initiatives to target burnout and improve surgeon wellness should consider these differences.

A major theme specific to the female surgeon participants interviewed for our study were frustrations with gender bias encountered in the workplace. No male participants noted facing barriers in the workplace perceived to be related to their gender. While prior studies have demonstrated that female gender has been associated with increased burnout, many lacked descriptive exploration of the drivers of this phenomenon.^{5,7} Furthermore, studies that have evaluated potential drivers of increased female surgeon burnout have primarily focused on exploring the effect of the female surgeon’s “dual role” of work and home life responsibilities on burnout.^{7,20} For example, Lyu et al.²¹ investigated the role of domestic responsibilities on women surgeon career satisfaction and demonstrated that increased domestic responsibilities were associated with lower career satisfaction in women. In evaluating a different aspect of the “dual-role” conflict, Dyrbye et al.⁷ showed that women more frequently experienced work-home conflicts, were more likely to be responsible for providing primary childcare in the household, and overall were more likely to be burned out. While the “dual-role” responsibility conflict did emerge in our

thematic analysis, both male and female surgeons expressed these frustrations as contributing to burnout and career dissatisfaction, and it was a less prominent theme than workplace gender bias among female surgeons. Of note, our male surgical participants were all junior faculty (i.e., under 45 y of age) and the majority married to working spouses/physicians. With this changing paradigm of dual-working parents, male surgeons may take on greater parenting roles than prior generations resulting in a greater spotlight placed on this struggle between work-life balance for both genders.

In a mixed methods study on the differences in burnout among the female surgery resident population, Dahlke et al.⁶ found that in addition to dual-role conflicts, equally apparent were themes related to workplace gender bias in the form of daily challenges posed by patients, colleagues, and different expectations. These findings mirror the theme specific to female surgeons identified in our study of facing gender bias in the workplace. Our findings suggest that while unbalanced “dual-role” responsibilities do affect female surgeon career satisfaction and can contribute to burnout, more attention should focus on gender bias in the workplace affecting female surgeons.

Table 3 – Themes associated with career satisfaction.

Theme	Female participants	Male participants
Patient care	“The best part of my work is bonding with patients. ” “I love my patients. ”	“I like challenging patients. ”
Teaching	“I love teaching the residents. I love getting to nurture them. ”	“ Teaching and working with residents is something I love to do. ”
Teamwork and collegiality	“I have terrific colleagues. ” “I get along great with the OR staff.” “I enjoy working with a good OR team.”	“I can get help from my partners. I can turn to my partners and they can turn to me.” “I have terrific residents and scrub techs. ” “My office staff is great, and the medical assistants are great too.”
Leadership support	“My division chief is very supportive. ” “I have good mentorship. You need powerful sponsors to help.”	“I have good mentors, but not within my department.” “I feel supported in my work. The future looks bright. ” “I don’t mind a heavy workload as long as it’s meaningful, and I feel supported by the leadership. ”

Table 4 – Female prominent themes.

Theme	Female participants
Gender bias	<p>“There is an assumption of incompetence due to my gender by nurses, residents, and attendings.”</p> <p>“I need to state that I am the boss and that I am in charge.”</p> <p>“Bias may be worse as an attending. During my first case as an attending, I was blocked from the operating room by anesthesia, and I had to call a senior male partner to back me up.”</p> <p>“Being asked ‘Are you sure you can handle this?’”</p> <p>“I got no referrals in my first 2 y until a male surgeon left, and I partnered up with a female physician.”</p> <p>“I face more scrutiny by referring doctors than senior, male surgeons.”</p>

A striking theme that was present in our analysis particular to the male surgeon participants was the effect of second victim syndrome on burnout. Second victim syndrome, or the emotional trauma felt by health care providers involved in unanticipated adverse events, can be particularly challenging for surgeons.¹⁸ The second victim syndrome experience after an event has been described in four phases—the third phase, recovery, is characterized by willingness to reflect on the event and the need to discuss the events openly with colleagues.¹⁹ Luu et al.¹⁹ found that male surgeons were more likely to view themselves as outliers based on their experiences of second victim syndrome emotions compared with women surgeons. This insight into the male surgeon perception of second victim syndrome as uncommon among their colleagues may be contributing to barriers to recovery, as those who feel alone in their experiences are likely less willing to discuss their adverse events with colleagues and peers. This phenomenon appears to be reflected in our thematic analysis, as many male participants expressed that they had difficulty finding an individual to discuss their experiences with who had a common understanding of the experience but did not worsen their feelings of guilt, while no female participants

Table 5 – Male prominent themes.

Theme	Male participants
Guilt and emotion associated with complications	<p>“I cannot separate myself from my outcomes.”</p> <p>“I feel embarrassed.”</p> <p>“I feel additional guilt about complications from my senior colleagues.”</p> <p>“I am so burned out, I worry I won’t care anymore and will continue going in the wrong direction.”</p> <p>“I had a hard time sleeping for a while after a complication. Sometimes I would feel my heart racing during the day or it would be difficult to breathe.”</p> <p>“I would dream about my patients. My spouse is wonderful, but she’s not in the medical field.”</p> <p>“Being sued is a terrible experience. It’s not a matter of if, but when.”</p>

attributed unresolved emotional distress related to second victim syndrome as a major contributor to burnout.

The culture of surgery is changing, and newer generations of surgeons have been shown to possess shifting priorities, placing more emphasis on balance between professional and personal lives.^{22,23} Concomitantly, younger surgeons have also experienced more burnout and career dissatisfaction.^{1,11,12} In our study, many of the frustrations experienced by surgeons of both genders were related to the theme of lack of control—over their workflow, of their time, and their career trajectories. As the culture of surgery changes alongside the demands of the profession, it will be critical for organizational support to adapt as well. Implementation of organizational interventions targeted toward alleviating the burden of administrative tasks, improving physician workflow, and increasing workplace efficiency have been shown to significantly reduce physician burnout.^{24,25} As newer generations of surgeons continue to enter the workforce, such efforts will be even more critical.

There are certain limitations that must be considered when evaluating our results. First, as a qualitative study, the role of the individual interviewer can impact the results. The interviewer of this study was a female surgeon of Assistant Professor rank—all of these characteristics can color the interactions between interviewer and participant, and our results must be viewed within this context. Additionally, given the sensitive nature of the interview questions and to provide highest level of anonymity to participants, interviews were not audio-recorded, and data were collected via field notes by the interviewer. This can result in transcription error and is also subject to interviewer bias. Participation in this study was also voluntary, and there may be differences between the population of surgeons who chose to participate compared with those who did not that may skew our results. As the topic of the interview was known beforehand, it may be that participants were more interested in taking part of the study given higher levels of burnout or career dissatisfaction. Finally, our sample is derived from academic surgeons practicing in a single institution, and this can limit generalizability of our results. Despite these limitations, our study provides rich descriptive insights into the drivers of burnout and career satisfaction among surgical faculty.

In investigating the drivers in burnout and career dissatisfaction among surgical faculty, we elucidate some clear issues that can be addressed, many of which should be done at an institutional level. For example, institutional efforts to provide employees with access to flexible child care services, sponsorship of educational programs and interventions aimed toward reducing implicit gender bias, and adoption of structured peer support programs for clinicians to normalize and structure outlets for clinicians dealing with experiences with adverse events are all efforts that have been shown to be effective in the past.²⁶⁻²⁸ Combating surgeon burnout requires both recognition of these pervasive issues, followed by evidence-based action.

Conclusion

Although burnout in the physician workforce has been improving, it still remains a highly prevalent problem which,

left unaddressed, can result in serious consequences for both physicians and patients.^{3,29} We found that while many drivers of career dissatisfaction and burnout are shared between male and female surgical faculty in the newer generation, certain differences still exist. Acknowledging these differences when designing efforts to address physician wellness and decrease burnout is critical.

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