

EDUCATION

Changes in the burnout profile of chairs of academic departments of obstetrics and gynecology over the past 15 years



Steven G. Gabbe, MD; Monica Hagan Vetter, MD; Michelle C. Nguyen, MD, MPH; Susan Moffatt-Bruce, MD, PhD, MBA; Jeffrey M. Fowler, MD

BACKGROUND: While many studies have documented the high prevalence of burnout in practicing physicians and medical trainees, fewer reports describe burnout in academic leaders. In 2002, we observed a moderate-high to high level of burnout in 41.4% of chairs of academic departments of obstetrics and gynecology.

OBJECTIVE: The purpose of this study was to identify trends in burnout and associated factors in today's obstetrics and gynecology chairs as they face complex changes to the current health care environment.

STUDY DESIGN: This was a cross-sectional study. A survey was developed based on the questionnaire used in our first investigation and sent electronically to all members of the Council of University Chairs of Obstetrics and Gynecology. Burnout was measured using an abbreviated Maslach Burnout Inventory-Human Sciences Survey. In addition to demographic data, we assessed perceived stressors, job satisfaction, spousal/partner support, self-efficacy, depression, suicidal ideation, and stress management.

RESULTS: The response rate was 60% (84/139). Almost 30% of chairs were women, increased from 7.6% in 2002. Hospital and department budget deficits and loss of key faculty remain major stressors noted by participants. The Maslach Burnout Inventory results have changed dramatically over the past 15 years. Today's chairs demonstrated less burnout but with an "ineffective" profile. Subscale scores for emotional exhaustion and depersonalization were reduced but >50% reported low personal accomplishment. Spousal support remained important in preventing burnout.

CONCLUSION: Chairs of academic departments of obstetrics and gynecology continue to face significant job-related stress. Burnout has decreased; however, personal accomplishment scores have also declined most likely due to administrative factors that are beyond the chairs' perceived control.

Key words: burnout, department chairs, obstetrics and gynecology

Introduction

Burnout syndrome, as measured by the Maslach Burnout Inventory (MBI), is defined by emotional exhaustion (EE), depersonalization (DP) in professional relationships, and a sense of reduced personal accomplishment (PA).¹ The incidence of burnout in physicians is alarmingly high with a recent study of US physicians demonstrating 54.4% of respondents with at least 1 symptom of burnout.² The impacts of burnout on physicians are wide-reaching and include decreased productivity, poor patient care, medical errors, and early retirement.³⁻⁷ Burnout is related to significant and prolonged stress in the workplace attributed to work overload,

inadequate resources to meet the demands of work, limited control over one's work schedule and lack of autonomy, as well as inadequate support from colleagues, supervisors, and coworkers.⁸ Additional risk factors include younger age, female gender, longer work hours, and practice model.^{9,10}

While many studies have examined burnout in practicing physicians and medical trainees, there are far fewer reports on burnout in academic leaders. Academic department chairs have a wide range of responsibilities including leading training programs, research groups, and clinical services for their specialty within their health care system.¹¹ Chairs are expected to be mentors and educators, be fiscally responsible in an environment of constrained financial resources, and assume additional administrative roles that now define the current complex health care environment. In 2002, we described the first study of burnout in chairs of academic departments of obstetrics and gynecology demonstrating a rate of burnout of >40.0%.¹² Since that study, burnout has

been noted to affect academic chairs in other medical specialties including otolaryngology, orthopedics, ophthalmology, pediatrics, radiation oncology, and anesthesiology.¹³⁻¹⁸

The objective of this study was to determine the rate of burnout in chairs of academic obstetrics and gynecology departments and any associated risk factors. Furthermore, we sought to identify trends in burnout over the past 15 years. We hypothesized that, given the increased workload combined with constrained resources and support, burnout would increase among obstetrics and gynecology chairs.

Materials and Methods

Study design and participants

This was a cross-sectional study conducted from June through August 2017. The study was declared exempt by the institutional review board at the Ohio State University. The questionnaire was developed based on our prior study and administered to participants electronically with 2 subsequent reminder e-mails. Chairs of academic departments

Cite this article as: Gabbe SG, Hagan Vetter M, Nguyen MC, et al. Changes in the burnout profile of chairs of academic departments of obstetrics and gynecology over the past 15 years. *Am J Obstet Gynecol* 2018;219:303.e1-6.

0002-9378/\$36.00

© 2018 Elsevier Inc. All rights reserved.

<https://doi.org/10.1016/j.ajog.2018.06.012>

AJOG at a Glance

Why was this study conducted?

This study was conducted to identify trends in burnout and associated factors in today's chairs of obstetrics and gynecology as they face complex changes in the current health care environment.

Key findings

Almost 30% of the chairs in the study were women as compared to 7.6% in 2002. Hospital and department budget deficits and loss of key faculty remain major stressors for the chairs. Emotional exhaustion and depersonalization were reduced, but >50% of the chairs reported low personal accomplishment.

What does this add to what is known?

A dramatic change in the profile of burnout in chairs of obstetrics and gynecology was documented. An "ineffective" profile now characterizes the chairs.

of obstetrics and gynecology who were members of the Council of University Chairs of Obstetrics and Gynecology (CUCOG) were invited to participate via a list serve maintained by CUCOG.

Survey design and instrument

A 33-item survey was created based on the questionnaire utilized in our prior study of burnout in academic chairs of obstetrics and gynecology conducted in 2000. These data included the participants' demographic data, information regarding their departments, and perceived job satisfaction. Burnout was measured using an abbreviated MBI-Human Sciences Survey (HSS) described previously.^{12,19} Validated questionnaires were used to assess spousal support and self-efficacy.^{20–24} Respondents were also asked to score themselves on their efficacy on a scale of 1–100. With the exception of 4 additional questions about marital status (1 question), depression (2 questions), and suicidal ideation (SI) (1 question), this survey was identical to the survey used in our first study.²⁵

Data analysis

Data were analyzed with software (SPSS, Version 23.0, IBM Corp, Armonk, NY). Demographic data were characterized using descriptive statistics. Data are reported as frequency, valid percentage, or mean \pm SD where appropriate. Categorical data such as demographics and category of burnout were compared using χ^2 . Normally distributed continuous

variables were compared using independent *t* tests and analysis of variance. Pearson correlations were used to analyze continuous variables and burnout scores. Logistic regression was performed to determine the extent to which key variables predicted burnout. The critical *P* value was set at $<.05$.

Results**Demographic data**

Of the 139 invited chairs, 84 (60%) responded. Table 1 describes the full demographic data of the respondents. Most of the chairs were men (70%), married (96%), and subspecialists in maternal-fetal medicine (43%) (Table 1). Seven chairs listed >1 subspecialty. The mean age of the respondents was 58.8 (4.9) years. Eighty of the chairs (94.0%) had permanent appointments and had served an average of 6.6 (5.0) years. Participants held full-time faculty positions at an average of 2.2 (1.1) different institutions since completion of their training.

Respondents worked 67.0 (11.1) hours with no difference between male and female chairs. Weekly work hours were allocated as follows: 47% — administrative duties, 32% — patient care, 10% — teaching, 9% — research, and 2% — other, such as additional institutional or national responsibilities.

Department characteristics

The chairs reported that the previous chair had served for an average of 8.9 years (6.5). The average number of

full-time faculty (excluding fellows) was 42.2 (36.3). Participants reported that their departments had 5.0 (2.5) division chiefs and 32.1 (19.7) house officers and fellows.

Stressors

Almost 28% of respondents noted that hospital budget deficits were either "largely" or "extremely" impacting their department. Other significant stressors reported as affecting departments and their chairs by large or extreme degrees included department budget deficits (25.6%), loss of key faculty (12.7%), and union disputes (8.8%). Approximately 14% of respondents selected "other" when asked about stressors, including the need for more staff, systemwide integration challenges, and a lack of organizational administrative effectiveness. Specific issues that were generally identified as having "little to no impact" on departments included sexual harassment, violence in the workplace, substance abuse, and bioethics violations. When asked to assess the overall personal impact of these stressors, 20.0% reported they had been affected to a large-extreme degree, 47.5% to a moderate degree, and 32.5% slightly or not at all.

Job satisfaction

Perceived job satisfaction has remained stable over the past 5 years and is reported in Table 2. When the chairs were asked how likely they were to step down over the next 2 years, 66.7% stated it was either "not" or "slightly" likely. However, 16.3% of respondents noted they were "very" to "extremely likely" to step down within the next 2 years. When asked how satisfied they were with the balance between their personal and professional lives, over half of the respondents were satisfied (25.0% — somewhat satisfied, 27.4% — very satisfied). Only 3.8% of respondents were "very dissatisfied" with their work-life balance.

Stress management

The chairs were asked to describe 3 ways in which they managed job-related stress. Time with family and friends including travel was the most commonly reported approach with 88.8% of

respondents selecting this option followed by exercise, 70%, and hobbies, 47.5%. The most frequently mentioned forms of exercise were running and walking while music and reading were the most commonly listed hobbies. Approximately 24% of respondents report engaging in meditation and/or mindfulness practices.

Self-efficacy

Participants reported they have an average degree of self-efficacy and control, scoring 17.9 (3.6) of a maximum score of 30. There was no difference in self-efficacy scores between male and female chairs: 17.9 (3.9) and 17.9 (3.0), respectively. When asked to rate their effectiveness on a scale of 1–100, the chairs scored themselves at 79.4 (3.7). There was no difference in the self-assessment of effectiveness on this scale between genders.

Interactions with family and spouse or partner

Almost all of the participants were married (Table 1). Participants were asked a series of questions concerning the quality of interactions between the chair and their spouse/partner designed to assess spousal support. There was moderate spousal/partner support noted in this study with a mean score of 22.6 (4.9) out of a maximum score of 30 with no difference between the scores for female and male chairs. Almost half of the chairs (49%) reported that their spouses or partners were “always” willing to listen to their concerns about work-related problems or “always” understood when there was a need for the chair to work “extra hours.” Nearly 61% of the spouses and partners “always” or “often” encouraged the chairs to take advantage of professional opportunities, whereas 12% “rarely” or “never” did so.

Depression and SI

In all, 24.1% of respondents reported feeling down, depressed, or hopeless, while 19.0% indicated they had little interest or pleasure in doing things in the past 2 weeks. Nearly 4% of respondents reported having had SI in the past 12 months.

TABLE 1
Demographic data of respondents

Variable	Frequency	Percentage
Position		
Chair	80	95.2%
Acting chair	4	4.8%
Gender		
Male	59	70.2%
Female	25	29.8%
Subspecialty diplomates		
Maternal-fetal medicine	36	42.9%
Gynecologic oncology	12	14.3%
Reproductive endocrinology/infertility	12	14.3%
Female pelvic medicine and reconstructive surgery	5	6.0%
Critical care	2	2.8%
Palliative care	2	2.8%
None	22	26.2%
Access to chair's support group		
Yes	25	30.9%
No	56	69.1%
Marital status		
Single	0	0%
Married	76	96.2%
Divorced/separated	2	2.3%
Domestic partnership	1	1.3%

Gabbe et al. Burnout in academic chairs. *Am J Obstet Gynecol* 2018.

MBI-HSS subscale scores

The MBI profile of burnout includes each of the following: high EE, high DP, and low PA.^{1,19} Table 3 lists the distribution of MBI-HSS scores by subscale and category. The mean subscale score for EE was 20.1 (12.3), 7 points below the cut-off for high EE in physicians and

nurses. The mean subscale score for DP was 3.5 (4.2), 6.5 points below the cut-off for high DP. Respondents scored a mean of 31.7 (8.3) on the PA subscale, which is nearly 9 points below the cut-off for high PA. PA subscale scores were not correlated with the length of service of the chair, the hours worked per week,

TABLE 2
Trends in self-reported job satisfaction over 5 years

	Very dissatisfied	Somewhat dissatisfied	Neutral	Somewhat satisfied	Very satisfied
Currently	3 (3.9%)	4 (5.1%)	7 (9.0%)	32 (41.0%)	32 (41.0%)
1 y ago	3 (3.9%)	6 (7.9%)	4 (5.3%)	38 (50.0%)	25 (32.9%)
5 y ago	3 (3.9%)	5 (6.6%)	8 (10.5%)	24 (31.6%)	36 (47.4%)

Gabbe et al. Burnout in academic chairs. *Am J Obstet Gynecol* 2018.

TABLE 3
Categorization of Maslach Burnout Inventory-Human Sciences Survey subscale scores

	Low	Moderate	High
Emotional exhaustion	38.7%	30.7%	30.7%
Depersonalization	87.7%	6.2%	6.2%
Personal accomplishment	50.6%	32.1%	17.3%

Gabbe et al. Burnout in academic chairs. *Am J Obstet Gynecol* 2018.

self-efficacy scores, or satisfaction with work-life balance. There was no significant difference between the mean subscale scores or their distribution in the low, moderate, and high categories when comparing male and female chairs.

The pattern of MBI-HSS scores observed in the chairs was low-moderate EE, low DP, and low PA. Only 2 (2.4%) chairs fulfilled all the subscales for burnout. This was primarily due to their extremely low DP scores. Conversely, only 6 (7.4%) met the criteria for the MBI-HSS engagement profile with low EE, low DP, and high PA. Approximately 90% of chairs qualified for moderate burnout primarily driven by their low PA scores. Because of this large clustering, the moderate group was further classified into 3 subgroups: low-moderate, moderate-moderate, and high-moderate as described in our previous work. Respondents with low-moderate burnout were then included in the low burnout category while chairs with high-moderate burnout were classified into the revised high burnout category (Table 4). Approximately 22% of respondents met the revised criteria for high burnout. Self-efficacy scores were found to be negatively correlated to burnout ($r = -.532$, $P < .001$) as were spousal/partner support scores ($r = -.360$, $P = .001$). Higher reported work-life balance satisfaction was also

negatively correlated with burnout ($r = -.386$, $P = .001$). The number of respondents in our sample provided for a power of 0.8 and a P value of $< .05$ to be achieved. Age, gender, and length of time as a chair were not correlated with burnout nor were there any correlations between reported department demographics such as size of the department and burnout.

Data analysis

A hierarchical logistic regression was conducted to investigate the likelihood of chair burnout based on chair self-efficacy scores, spousal support, and satisfaction with work-life balance as predictors given their univariate significance. Satisfaction with work-life balance did not significantly contribute to the model and was therefore removed from the analysis. The final model ($\chi^2 = 23.694$, $P < .001$ with degrees of freedom = 2) demonstrated that both self-efficacy (odds ratio, .67; $P = .004$) and spousal support scores (odds ratio, .78; $P = .001$) were independent predictors of burnout among the chairs.

Comment

In this cross-sectional study of academic obstetrics and gynecology chairs, we found a rate of high-moderate to high levels of burnout of 22.2% (19/84), which is improved from 41.4% (46/111) in 2002. The demographics describing obstetrics and gynecology chairs have remained relatively stable since 2002 with the exception of an increased number of female chairs. Previously, only 9 (7.6%) academic obstetrics and gynecology chairs were women, whereas 25 (29.8%) respondents in this study were female. The chairs continue to

work nearly 70 hours each week, spending almost half of their time on administrative duties and nearly one-third in patient care. Furthermore, the stressors identified by today's chairs are unchanged from the previous study. While prior studies have identified the electronic health record as a contributor to burnout among faculty, the chairs did not include this as a stressor.²⁶ Finally, spousal/partner support and satisfaction with work-life balance remain high. More than 80% of today's chairs are "very" to "somewhat" satisfied with their positions, and their opinion has changed little in the past 5 years (Table 2).

Unfortunately, physicians have a high rate of depression, poor work-life balance, and one of the highest suicide rates of any profession in the United States.^{2,8,27} Approximately 30% of respondents meet the screening criteria for depression with 4% reporting SI in the past year. These rates of depression and SI are lower than those noted in the general physician population in 2014: 39.8% and 6.4%, respectively.² High burnout has been correlated with depression and SI, and it is likely that the low burnout rate noted in this study is related to the lower rates of psychological distress we found.

We did find low rates of burnout among participants with higher spousal/partner support and self-efficacy scores. Contrary to the prior study, burnout was not associated with age, length of service, or hours worked per week. How have today's chairs reduced burnout despite continuing to work long hours and facing significant stressors? Spouse/partner support clearly plays a major role in reducing burnout and nearly all of respondents were married. Additionally, the chairs participate in a wide variety of stress-reducing activities. The presence of a chairs' support group could also play a role as almost 31% of respondents had access to such groups. Finally, as burnout has received more attention at a national level, it is likely the chairs have benefitted from this increased awareness. As 1 chair noted, "Wellness is a top priority."

Interestingly, we noted a change in the MBI profile of burnout in the chairs. Participants in this study had low-

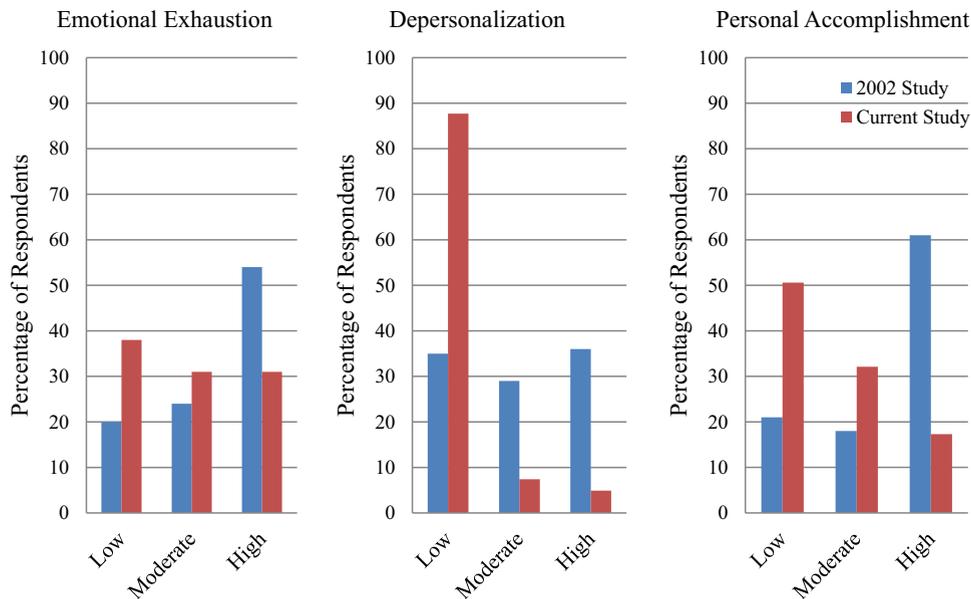
TABLE 4
Revised burnout categories

Low	Moderate	High
27.2%	50.6%	22.2%

Gabbe et al. Burnout in academic chairs. *Am J Obstet Gynecol* 2018.

FIGURE

Changes in the Maslach Burnout Inventory-Human Sciences Survey burnout profile in academic chairs



Comparison of Maslach Burnout Inventory-Human Sciences Survey subscale scores between 2002 and current study.

Gabbe et al. Burnout in academic chairs. *Am J Obstet Gynecol* 2018.

moderate EE, low DP, and strikingly low PA whereas respondents in 2002 had high EE and DP scores but high PA (Figure). Recently, this pattern of MBI scores has been described as the “ineffective” profile.^{19,28} The lower DP scores suggest that our chairs today may enjoy better interpersonal relationships with colleagues, trainees, and patients. However, the strikingly high rate of low PA subscores suggests that current academic chairs in obstetrics and gynecology may perceive they are less influential leaders.

Low PA most often reflects a lack of resources and support. Over the past 2 decades, power has shifted from physicians to payers and from chairs to hospital administration.²⁹ Lack of resources and influence for departments of obstetrics and gynecology has been exacerbated by their relatively small size and limited profit margin, in many instances resulting from the care of Medicaid or uninsured patients. This sentiment is best reflected in the representative comments of 2 chairs. One noted, “There is increasing control of physicians’ professional lives by hospital administration, which leads to professional dissatisfaction and frustration. The providers are working hard,

reflecting in excellent department performance in all mission areas. Unfortunately, this is overshadowed by the deficient financial performance of the hospital system. Providers are becoming subjects of blame and culpability, which leads to disengagement and job dissatisfaction. The requested (demanded) budget cuts threaten to implode the department.” Another chair added, “There are many factors that remain out of my control in terms of making professional decisions for myself and my faculty. Many of these are financial (budgets, falling reimbursement) and organizational (Joint Commission, Department of Health, Accreditation Council for Graduate Medical Education, Residency Review Committee). Administrative support has been lessened through the years. Retention and recruitment remain challenging.” Of note, low PA has also been observed in chairs of ophthalmology and orthopedics.^{13,16}

Given the low PA scores, why have self-efficacy scores remained stable? It may be that the chairs, after considering the challenges they face as illustrated in the quotes above, believe they are doing the

best job they can. This can contribute to an impostor syndrome where although one is in a leadership position, they are unable to make important decisions due to organizational constraints.³⁰ Chairs may be able to improve their sense of PA by becoming more involved in the leadership of their medical schools, practice plans, medical center, or national organizations.

Our current study has several limitations and strengths. The MBI-HSS questionnaire was not administered in a controlled setting, and we did not use the full 22-question MBI-HSS. As in our first study, we selected the 12 questions that had the highest factor correlation with the burnout subscales to allow for a direct comparison of results from the prior study and this study. Turnover of respondents is likely given the time between studies. While the response rate to our survey is very good, we do acknowledge possible responder bias. For example, physicians who are experiencing burnout could be more or less likely to respond. Since chairs were asked to recall job satisfaction currently as well as 1 and 5 years ago (Table 2), recall bias may have impacted the validity of these

data. Strengths of this article include our high response rate and the ability to comment on trends and changes of burnout and associated factors over a long time interval of significant changes in health care and academic medicine.

In conclusion, our study focusing on today's chairs of departments of obstetrics and gynecology reveals a more diverse group of academic leaders, most of whom report high satisfaction with their jobs and work-life balance. These leaders face significant job stressors and rely on spousal/partner support and stress management activities outside the medical care setting to ease that burden. This approach has reduced EE and DP. While the chairs believe they are effective, their perception of PA is limited most likely by factors beyond their control. Hopefully, the findings of this study will help guide future strategies to combat burnout among the academic leaders of obstetrics and gynecology as well as other specialties. ■

References

- Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Annu Rev Psychol* 2001;52:397–422.
- Shanafelt TD, Hasan O, Dyrbye LN, et al. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clin Proc* 2015;90:1600–13.
- Dewa CS, Jacobs P, Thanh NX, Loong D. An estimate of the cost of burnout on early retirement and reduction in clinical hours of practicing physicians in Canada. *BMC Health Serv Res* 2014;14:254.
- Dewa CS, Loong D, Bonato S, Thanh NX, Jacobs P. How does burnout affect physician productivity? A systematic literature review. *BMC Health Serv Res* 2014;14:325.
- Dewa CS, Loong D, Bonato S, Trojanowski L. The relationship between physician burnout and quality of healthcare in terms of safety and acceptability: a systematic review. *BMJ Open* 2017;7:e015141.
- Turner TB, Dilley SE, Smith HJ, et al. The impact of physician burnout on clinical and academic productivity of gynecologic oncologists: a decision analysis. *Gynecol Oncol* 2017;146:642–6.
- Balch CM, Freischlag JA, Shanafelt TD. Stress and burnout among surgeons: understanding and managing the syndrome and avoiding the adverse consequences. *Arch Surg* 2009;144:371–6.
- Shanafelt TD, Sloan JA, Habermann TM. The well-being of physicians. *Am J Med* 2003;114:513–9.
- Spickard A Jr, Gabbe SG, Christensen JF. Mid-career burnout in generalist and specialist physicians. *JAMA* 2002;288:1447–50.
- Shanafelt TD, Balch CM, Bechamps GJ, et al. Burnout and career satisfaction among American surgeons. *Ann Surg* 2009;250:463–71.
- Lieff S, Banack JG, Baker L, et al. Understanding the needs of department chairs in academic medicine. *Acad Med* 2013;88:960–6.
- Gabbe SG, Melville J, Mandel L, Walker E. Burnout in chairs of obstetrics and gynecology: diagnosis, treatment, and prevention. *Am J Obstet Gynecol* 2002;186:601–12.
- Cruz OA, Pole CJ, Thomas SM. Burnout in chairs of academic departments of ophthalmology. *Ophthalmology* 2007;114:2350–5.
- Kusano AS, Thomas CR Jr, Bonner JA, et al. Burnout in United States academic chairs of radiation oncology programs. *Int J Radiat Oncol Biol Phys* 2014;88:363–8.
- Johns MM III, Ossoff RH. Burnout in academic chairs of otolaryngology: head and neck surgery. *Laryngoscope* 2005;115:2056–61.
- Saleh KJ, Quick JC, Conaway M, et al. The prevalence and severity of burnout among academic orthopedic departmental leaders. *J Bone Joint Surg Am* 2007;89:896–903.
- McPhillips HA, Stanton B, Zuckerman B, Stapleton FB. Role of a pediatric department chair: factors leading to satisfaction and burnout. *J Pediatr* 2007;151:425–30.
- De Oliveira GS Jr, Ahmad S, Stock MC, et al. High incidence of burnout in academic chairpersons of anesthesiology: should we be taking better care of our leaders? *Anesthesiology* 2011;114:181–93.
- Maslach C, Jackson SE, Leiter MP, Schaufeli WB, Schwab RL. *Maslach Burnout Inventory Manual*, 4th ed. Menlo Park, CA: Mind Garden Inc; 2016.
- Spanier G. Measuring dyadic adjustment: new scales for assessing the quality of marriage and similar dyads. *J Marriage Fam* 1976;38:15–28.
- Pearlin LI, Schooler C. The structure of coping. *J Health Soc Behav* 1978;19:2–21.
- Penkower L, Bromet EJ, Dew MA. Husbands' layoff and wives' mental health. A prospective analysis. *Arch Gen Psychiatry* 1988;45:994–1000.
- Phelan J, Schwartz JE, Bromet EJ, et al. Work stress, family stress and depression in professional and managerial employees. *Psychol Med* 1991;21:999–1012.
- Bandura A. Self-efficacy: toward a unifying theory of behavioral change. *Psychol Rev* 1977;84:191–215.
- Whooley MA, Avins AL, Miranda J, Browner WS. Case-finding instruments for depression. Two questions are as good as many. *J Gen Intern Med* 1997;12:439–45.
- Shanafelt TD, Dyrbye LN, Sinsky C, et al. Relationship between clerical burden and characteristics of the electronic environment with physician burnout and professional satisfaction. *Mayo Clin Proc* 2016;91:836–48.
- Schernhammer ES, Colditz GA. Suicide rates among physicians: a quantitative and gender assessment (meta-analysis). *Am J Psychiatry* 2004;161:2295–302.
- Leiter MP, Maslach C. Latent burnout profiles: a new approach to understanding the burnout experience. *Burnout Res* 2016;3:89–100.
- Rayburn WF, Waldman JD, Schrader R, Fullilove A, Lang J. Retention of chairs in obstetrics and gynecology: a comparison with other clinical departments. *Obstet Gynecol* 2009;114:130–5.
- Rohrmann S, Bechtoldt MN, Leonhardt M. Validation of the impostor phenomenon among managers. *Front Psychol* 2016;7:821.

Author and article information

From the Divisions of Maternal-Fetal Medicine (Dr Gabbe) and Gynecologic Oncology (Drs Hagan Vetter and Fowler), Department of Obstetrics and Gynecology, and Department of Surgery (Drs Nguyen and Moffatt-Bruce), Ohio State University College of Medicine, Columbus, OH.

Received March 29, 2018; revised June 18, 2018; accepted June 20, 2018.

The authors report no conflict of interest.

Corresponding author: Steven G. Gabbe MD. Steven.gabbe@osumc.edu