

An Updated Review on Physician Burnout in Urology



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KEYWORDS

• Burnout • Professional • Health promotion • Mindfulness • Urology

KEY POINTS

- Physician burnout is highly prevalent and starts as early as medical school.
- Burnout has an impact on the quality of life of health care workers in the United States.
- Physicians experiencing work/home conflicts are at increased risk for burnout and, although this has an impact on both male physicians and female physicians, female physicians are more affected.
- COVID-19 will very likely have an impact on physician burnout, which will reveal itself in time.
- Understanding physician burnout is important for the future of the urologist workforce, because an aging patient population already has increased the need for urologists.

INTRODUCTION/HISTORY/DEFINITIONS/ BACKGROUND

Physician burnout first was defined in 1980 by Dr Herbert J. Freudenberger as “The extinction of motivation or incentive, especially where one’s devotion to a cause or relationship fails to produce the desired results.”¹ Physician burnout is characterized by a triad of emotional exhaustion—a chronic state of physical and emotional depletion resulting from excessive job and/or personal demands and continuous stress; depersonalization—the development of a negative, cynical attitude toward patients; and decreased sense of personal accomplishment—a sense that work is not meaningful or important.² Most studies evaluating physician burnout use the Maslach Burnout Inventory (MBI), which is a 22-question validated survey using a 7-point Likert scale. Although burnout may be defined by an elevation in any of the 3 subcategories of the MBI, it usually is restricted to excessive elevations in either emotional exhaustion or depersonalization.

Urologists became more aware of the problem of physician burnout with the publication of a 2014 Mayo Clinic study³ looking at physician burnout in the United States. Overall, physicians showed an alarming increase in the incidence of burnout compared both to the general population and to an earlier, 2011, study of physician burnout. The incidence of burnout went from 45.5% in 2011 to 54% in 2014. More worrisome for the urologic community were data showing urology as one of the worst specialties in terms of physician burnout and in term of satisfaction with work-life balance, with 63.6% of urologists in the study reporting burnout. This was a substantial increase over the 2011 study, where 41.2% of urologists reported burnout.³ Concern over the high level of burnout in urology led to the inclusion of the MBI on the 2016 American Urological Association (AUA) Census. The overall burnout rate among urologists who participated in the Census was 38.8% but went up to 41.3% when urologists over than age 65 were excluded. There were no gender differences in burnout, perhaps due to

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the small percentage of female respondents. Working more—whether defined as more hours per week or seeing more patients per week—resulted in more burnout.⁴ A follow-up study of physician burnout done by the Mayo Clinic in 2017 showed the overall rate of physician burnout had decreased to 43.9% and burnout rates in urology had decreased to 48.4%.⁵

In addition to these large, peer-reviewed studies, Medscape publishes an annual report on physician burnout. The first report to include physician burnout was released in 2013 and reported that 41% of urologists were experiencing burnout. This put urology as the eighth most burnt out specialty.⁶ In 2015, burnout rates among urologists increased to 48%, which was the tenth worst specialty for burnout.⁷ In 2019, the burnout rate had increased to 54%, which was well above the overall physician burnout rate of 44%, and in 2020 the burnout rate stayed at 54% whereas the overall physician burnout rate decreased to 41% (these data was published before the COVID-19 pandemic hit the United States).⁸ One caution about using the Medscape data is that urologists make up a small proportion of overall respondents—with 150 of fewer urologists responding annually—which may lead to selection bias.

The 2017 AUA Census explored career regret among practicing urologists. Only 70.3% of urologists were satisfied with their career, 83.2% were satisfied with the amount of autonomy they had, and 84.5% would choose medicine as a career again. Of those who would choose medicine again, 93.4% would choose urology as their specialty.⁹

Physician burnout begins long before training is complete. Medical students start experiencing physician burnout even before graduation. A study of 4402 medical students found that 49.6% were experiencing burnout, 58% screened positive for depression, and 9.3% reported suicidal ideation in the past year. The medical students were more likely to report emotional exhaustion (41.1%) than depersonalization (27.2%). Burnout seems to increase with each subsequent year of medical school before peaking in third year and then declining slightly in fourth year.¹⁰

An Association of American Medical Colleges (AAMC) study showed that physician burnout worsened in residency but depression and suicidal ideation improved; 50% of residents experienced burnout, 50.7% screened positive for depression, and 8.1% reported suicidal ideation in the past year.¹¹ Other studies have shown high levels of burnout among residents from various specialties. One study evaluating 665 surgical residents found that 69% of them met the criteria for burnout, with

female surgical residents having a burnout rate of 73%.¹² When looking at internal medicine residents at the beginning of training compared with the end of internship, Ripp and colleagues¹³ found that burnout rates increased dramatically. At the start of training, the burnout rate was 36% but had increased to 81% by the end of intern year. Among those who started internship free from burnout, 75% developed burnout by the end of the year.¹³

A 2018 *JAMA* article compared burnout rates among residents in various specialties and found that urology residents fared poorly; 63.8% of post-graduate year 2 (PGY-2) urology residents reported burnout, with 15.5% reporting career decision regret.¹¹ Looking only at urology residents, Machalik and colleagues¹⁴ found that 68.2% of respondents reported burnout, with no gender differences in burnout. Burnout decreased as the residents progressed through their training.¹⁴ The 2019 AUA Resident and Fellow Census explored burnout and career regret among urologic trainees; 82.9% of residents and 92.8% of fellows said that they would choose medicine as a career again. Male residents and male fellows were more likely to choose medicine again compared with women (84.6% of male residents vs 78.7% of female residents and 94.0% of male fellows vs 90.0% of female fellows). Of those who would choose medicine again, 95.9% of residents and 94.4% of fellows would choose urology again. Only 48% of residents said that they never had considered another career during training. PGY-2 was the year mostly likely to report reconsidering career choice, with 28.3% of PGY-2s questioning their choice, whereas chief residents were unlikely to question their career choice with only 1% reporting rethinking their career choice. Physician burnout was reported in 47.0% of urology residents, with PGY-2s having the worst burnout at 65.2% and chief residents having the least burnout at 40.0%.⁹

It would be naïve to not consider the impact of COVID-19 on burnout among urologists. Many physicians were deployed to COVID-19 units and many practices have had to shift toward telehealth. One chief urology resident described her experiences in being deployed to the COVID-19 units in New York City at the height of the pandemic: “I would be lying if I said there was not any fear on my part as it is natural to fear the unknown. There were rumors that several residents had gotten sick with at least 1 fellow resident in another New York City program actually dying of the virus.”¹⁵ As discussed previously, rates of burnout decrease as residents progress through their surgical training; however, the impact that

COVID-19 and redeployment will have on resident burnout remains to be seen.

The pandemic also brought with it a sudden shift in the way many physicians were forced to practice medicine in a very short time. In an article by Watts and colleagues,¹⁶ converting a practice to telemedicine in order to avoid freezing the practice was discussed. This was done by 1 of the largest hospital networks in the United States. This posed a particular challenge due to health care disparities leading to higher death rates and rates of contracting the virus. Difficulties with this transition included lack of reliable Internet access, language barriers, and reimbursements from the Centers for Medicare & Medicaid Services (CMS). CMS did pass a waiver that modified the rules surrounding telemedicine, allowing for reimbursements regardless of the location where the visit occurred and allowing for reimbursements for audio-only telemedicine.¹⁶ Adapting to new ways of practicing medicine may have an impact on physician burnout and need to be studied further.

DISCUSSION

Physician burnout has been shown to be related to lack of autonomy, long work hours, lack of control of work schedule, financial issues, feeling isolated, inefficient and/or hostile work environments, and setting unrealistic goals or having them imposed on oneself.¹⁷ Like residents, attending urologists have more burnout when they work more. The AUA Census data found that working more clinical hours per week, working more overall hours per week, or seeing more patients per week all increased burnout. Midcareer urologists (those in practice 10–25 years) have more burnout than early career urologists.⁹ In other fields of medicine, this increased burnout has been correlated to increased workload in midcareer physicians.¹⁸

Working more led to more burnout among urologic trainees also. In the Machalik and colleagues study, working more than 80 hours per week and/or having difficult to access or unavailable mental health services worsened burnout. Reading for pleasure, spending time with family/friends, and having access to mental health services all improved burnout.¹⁴

Satisfaction with work-life balance worsened for physicians overall between 2011 and 2014.³ Work-life balance improved in 2017 but did not reach 2011 levels.⁵ Work-life imbalance has been correlated with burnout in other specialties. In 1 study of general surgeons, those with a recent conflict between work and home were more likely to experience burnout. In this study, 47% of surgeons reported a recent work/home conflict.

Risk factors were younger age, female gender, having children, and working more hours per week.¹⁸

The 2017 AUA Census inquired about work-life balance for practicing urologists. Overall, 67.3% said that work left them enough time for family and personal life; however, there was a gender divide, with 68.2% of male urologists reporting that they have enough time for family and personal life and only 57.6% of female urologists reporting enough time for family and personal life. Female urologists aged 45 and under reported the worst work-life balance, with a meager 36.3% reporting enough time for family and personal life. Other major causes of workplace dissatisfaction included electronic medical records (EMRs), decreasing reimbursements, and CMS mandates.⁹

Much of the literature on burnout prevention has focused on physician self-care. Things like preventative health maintenance, exercise, proper sleep and nutrition, mindfulness meditation, and appropriate mental health care fall into this category. Many physicians are resistant to mental health services. There is a fear of licensing repercussions for seeking mental health care, which acts as a barrier.¹⁹ Given that burnout and depression often are comorbid, counseling has been shown to decrease emotional exhaustion and sick leave at 1-year follow-up.²⁰ Participation in a stress management program has been shown to decrease medication errors and malpractice claims.²¹

Mindfulness teaches individuals nonreactive awareness of their affective response to external events and is important in changing the internal experience of stress. It is characterized by nonjudgmental, sustained, moment-to-moment awareness of physical sensations, perceptions, affective states, thoughts, and imagery. Health care professionals have been shown to benefit from mindfulness even more so than the general population.²²

Several national organizations offer support to help physicians cope with burnout. The AUA was able to assess burnout among its membership by including the MBI in the 2016 AUA Census.⁹ The goal was not only to better understand the impact of burnout in urology in order to offer assistance to urologists but also to present these data to organizations like the CMS to demonstrate the impact of new regulations on physicians. The AUA is using a multiprong approach to burnout: help for urologists with burnout through education, political advocacy to help politicians and government organizations understand the impact of policy on burnout, and practical solutions, such as the AUA Quality (AQUA) Registry, to give urologists a way of complying with new regulations.²³

The American College of Graduate Medical Education (ACGME) is recognizing that burnout is a major problem during residency. At the 2016 ACGME Annual Educational Conference, burnout was included on the program and the slides made publicly available on the ACGME Web site as a webinar. Burnout and suicide prevention are important topics for the ACGME, and there are multiple webinars available on their Web site. Their goal is to include physician wellness training in residency programs nationally and increase awareness about the risks of burnout and suicide during residency.²⁴

Some of the best work on burnout prevention and suicide prevention comes from the American Medical Association (AMA). The AMA has created the STEPS Forward program, which offers many helpful modules. These modules are divided by topic: patient care, workflow and process, leading change, professional well-being, and technology and finance. Workflow modules can help physicians increase efficiency in their practices whereas suicide prevention modules may help save physician lives.²⁵

Over the past several years, women have entered medical school at a rate that exceeds men for the first time in history. Although urology has been slower to catch up with the gender trends in medicine, the number of women urologists has increased over time. According to the 2019 urology residency match statistics, of 389 applicants, 101 were female, with a match rate of 83%. This was an improved match rate over 2018 when 106 females applied out of 402 total applicants, with a match rate of 79%.²⁶ Due to the low number of female respondents, the 2016 AUA Census was unable to show increased burnout in women urologists⁹; however, most studies on physician burnout show that female physicians experience more burnout than male physician. It is likely that future studies on physician burnout in urology will show this gender difference as women make up a greater percentage of the urologic workforce.

The way medicine is practiced will forever be changed by the impact of COVID-19. This has had an impact on health care workers on every level, and the long-term effects on mental health and physician burnout will reveal themselves in time. This has affected urologists at both the attending and resident levels. Attendings in some hospitals were forced to convert all office visits to telemedicine visits to assess and triage scheduled and newly referred patients. Although there are numerous benefits to this new realm of medicine, there are strains as well, including Internet access, language barriers, and difficulties

obtaining reimbursements. Some urology resident physicians were deployed to medicine COVID-19 floors. One study distributed a survey to 144 residency programs with a 45% response rate. Reserve staffing had started in 80% of programs. Redeployment was reported by 26% of programs; 60% of programs reported concern that residents will not meet case minimums due to COVID-19.²⁷ The fear associated with the unknown and social media postings about residents succumbing to the virus likely will cause a negative impact among resident physicians. Many residency programs have tried to adapt. The educational model for residents has evolved in the era of COVID-19 with many lectures series online, providing residents with access to education and information in ways not previously seen. The flexibility of online lectures could be beneficial to residents, allowing them to learn on their own time. With increased didactics and lectures, however, come increase stress. Residents who are off service taking care of COVID-19 patients may not have the emotional energy to dedicate to education. The challenges faced by residents fearing for their personal safety and the safety of their loved ones may foster an environment for learning. Program leaders are encouraged to hold recurring forums for residents to acknowledge and discuss their daily challenges. Health care systems should consider regular house staff screenings for psychiatric conditions, including anxiety, depression, insomnia, and distress; mental health services, including emergency hotlines, should be readily available to those in need.²⁸

SUMMARY

Physician burnout is an issue having an impact on the practice of medicine in the United States. Burnout begins in medical school and worsens during residency training. PGY-2 urology residents are at the highest risk of burnout among urology residents. Estimated rates of physician burnout among practicing urologists has ranged from approximately 38% to well above 60%. Although burnout is not synonymous with depression, the 2 can be comorbid and, therefore, physicians experiencing burnout need to have access to well-being programs and mental health care. Just knowing that mental health services were available was enough to reduce burnout in urology residents.

Work-life imbalance is a cause of practice dissatisfaction and may be a risk factor for physician burnout. Female gender and younger age both increase the risk of conflict between work and home life. As the number of women entering

the field of urology increases, these young urologists will need support and mentorship to help navigate work-life balance. Changes in medical practice also may have an impact on physician burnout. The requirement to use EMRs has become a major practice dissatisfier for urologists. Increasing government regulation and decreasing reimbursements also have led to dissatisfaction with medical practice. Helping physicians improve workflow and participating in political advocacy may be 2 ways to mitigate these issues.

Although self-care is important for mental and physical well-being, it does not address many of the underlying causes of physician burnout. Urologists should be encouraged to practice self-care—regular medical visits, destigmatized mental health care, healthy diet, routine exercise, and mindfulness meditation are all important components of a healthy lifestyle. These acts of self-care alone will not prevent frustration from loss of autonomy, practice inefficiencies, and other changes in our health care system. Self-care needs to be promoted while still promoting improvements in practices.

Finally, it is hard to process the impact that COVID-19 has had on physicians' experiences. From coping with uncertainty and loss to permanent changes in health care delivery, fully understanding the long-term effects of this pandemic is awaited. COVID-19 has accelerated telemedicine practically overnight, with changes in requirements for billing and reimbursement. This may be a positive outcome of the pandemic. But many urologists and urology residents who served on the frontlines may suffer lasting negative effects from seeing loss and devastation first hand. There also have been financial hardships to both private practice urologists as well as employed urologists from decreased surgical volume and patient volume while communities were in lockdown. Whether this impact is lasting or not remains to be seen.

DISCLOSURE

The authors have nothing to disclose.

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