Review Article: Physician Burnout in Urology

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Abstract

Introduction: Physician burnout is highly prevalent and impacts the quality of health care in the United States.

Methods: The existing literature on physician burnout was reviewed with a focus on burnout among surgeons.

Results: Although burnout has not been specifically studied in urologists, many other groups of surgeons have been assessed for burnout. Women and physicians experiencing work/home conflicts seem to be at increased risk for burnout. As the need for urologists increases with an aging patient population and improved access to health care, physician burnout threatens to impact the number of practicing urologists. This issue is especially concerning as the number of women in urology increases because female physicians experience more burnout than their male counterparts.

Conclusions: The incidence of burnout in practicing urologists needs to be further studied. While several strategies have been proposed to alleviate physician burnout, additional work is needed to mitigate the risk of burnout.

Key Words: burnout, professional; health promotion; mindfulness; urology

Sir William Osler, the father of modern medicine, cautioned against physician demoralization and burnout: “The paths are plain before you. Always seek your own interests, make of a high and sacred calling a sordid business, and regard your fellow creatures as so many tools of the trade.” Despite his appreciation of the risks of physician burnout, there is much evidence that he suffered from this condition later in his career.

Physician burnout is an important public health issue, affecting the quality of patient care and the quantity of physicians available to provide it. Burnout has been shown to negatively impact patient care and care systems in the form of decreased patient satisfaction, increased medical errors, and increased number of physicians changing jobs and sometimes abandoning medicine altogether. We need to understand what burnout is, why rates are so high among

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BPH = benign prostatic hyperplasia
physicians, how high burnout rates impact public health and how to mitigate burnout.

**What is Burnout?**

Burnout has been defined by the triad of emotional exhaustion (chronic state of physical and emotional depletion resulting from excessive job and/or personal demands and continuous stress), depersonalization (development of a negative, cynical attitude toward patients) and decreased sense of personal accomplishment (sense that work is not meaningful or important).\(^1,2\) The Maslach Burnout Inventory, a validated 22-item survey designed to measure the 3 aspects of burnout, is the instrument used in most studies of physician burnout.

Several studies have demonstrated high rates of burnout in physicians during the last few decades. The American College of Surgeons investigated different aspects of physician burnout. One survey found that 32% of American surgeons had high emotional exhaustion, 26% had high depersonalization and 13% had a low sense of personal accomplishment.\(^3\) In aggregate 40% of respondents were considered burned out and 30% screened positive for depression. Of surgeons 28% had a mental quality of life score and 11% had a physical quality of life score more than 0.5 standard deviations below the population norm. While 74% would become a surgeon again, only 51% would recommend that their children become a physician/surgeon. Burnout was associated with younger age and having a spouse employed outside the home as a nonphysician health care professional. Having children was protective against burnout. However, having a youngest child younger than 21 years increased the risk compared to those with a youngest child older than 21 years. There was a greater risk of burnout among specific specialties, including urology. Working more was associated with increased burnout, including more nights on call per week and working more hours per week.

Members of the Society of Gynecologic Oncology had similarly high scores for burnout. The results were concerning, with 14% screening positive for depression, 13% having a history of suicidal ideation, 11% taking medication for anxiety or depression in the past 12 months, 14% experiencing panic attacks and 15% screening positive for alcohol abuse.\(^4\) More than 40% of the respondents felt overwhelmed or that life was unmanageable. Despite these results, only 9% sought psychiatric care in the prior 12 months and 45% would be reluctant to seek formal psychiatric care due to concerns about medical licensing. Not surprisingly, 32% scored above the clinical cutoffs for burnout. Despite these results, 70% reported high levels of personal accomplishment, 89% would enter medicine and practice gynecologic oncology again and 61% would encourage their child to pursue a career in medicine. Risk factors for burnout included female gender, low mental quality of life score, positive depression screen, feeling stressed and/or overwhelmed, history of suicidal ideation, reluctance to seek mental health care and high CAGE questionnaire score. Older age and career satisfaction were protective against burnout.

Although 1 study evaluating physicians in the American Medical Association database found the highest burnout rates among middle career physicians, most surgical studies have found the highest rates among younger physicians.\(^3,4-6\) Female physicians are at greater risk than male physicians.\(^4,6\) A study of pediatric surgeons revealed higher career satisfaction rates than studies of a broader group of surgeons, and members of the Society of Gynecologic Oncology had high career satisfaction rates.\(^4,7\) Perhaps taking care of a specialized group of patients, eg children or patients with gynecologic cancers, conveys more meaning and is protective against burnout.

A survey of all surgeons who obtained American Board of Surgery certification in 1988, 1992, 1996, 2000 or 2004 showed that although overall satisfaction with career choice was 85%, of the respondents 40% would not recommend a surgical career to their children.\(^8\) More than half (59%) believed that they worked too many hours and this negatively impacted family life, with 65.9% dissatisfied with the amount of time available for family and 80.8% dissatisfied with the amount of time available for hobbies and recreation. At least a third of respondents felt that they were unable to balance work and personal time. The work/life imbalance is particularly interesting, given that 85% of those studied were male.

Imbalance between career and personal life is associated with higher rates of burnout. One survey evaluated conflicts between work and personal responsibilities. Of surgeons 47% reported a recent conflict between work and home life.\(^9\) Younger and female surgeons were more likely to have had a recent conflict. Other factors that increased the risk of work/home conflict included having children and working more hours per week. Having a recent work/home conflict was strongly associated with burnout, lower quality of life, depressive symptoms, relationship difficulties, alcohol abuse/dependency and career dissatisfaction.

Among pediatric surgeons work/home balance is also an issue. There is a high satisfaction rate with career choice (96%) despite long working hours. Of pediatric surgeons 58% reported working 60 to 80 hours weekly and 23% worked 80 to 100 hours weekly, leaving little time for life
outside work. Only 6% of pediatric surgeons reported having sufficient time to themselves, 7% strongly agreed that child-rearing responsibilities were reasonably shared with their partner and 11% strongly agreed that they balance professional and family responsibilities. This study also surveyed the life partners of pediatric surgeons and found that only 6% of partners strongly agreed that they rarely experienced conflict between professional and family duties.

A study by the American Medical Association evaluated work/home balance. Middle career physicians (those in practice 11 to 20 years) reported working more hours and taking more nights on call. This group also had the lowest satisfaction with work/life balance and were least likely to recommend medicine as a career choice. Perhaps surprisingly, middle career physicians were more likely to have high emotional exhaustion and to be burned out. Early career physicians were more likely to experience a recent work/home conflict and were least likely to resolve this conflict in a way that allowed home and work responsibilities to be met. The early career physicians were most likely to have high depersonalization scores. Depersonalization became incrementally less prevalent in middle and late career. These early career physicians also had the lowest satisfaction with career choice.

A survey by the American College of Surgeons comparing female to male surgeons found that female surgeons reported more work/home conflicts. Of female surgeons 57% felt that child-rearing slowed their career advancement, compared to only 20% of males. Although 1 in 5 surgeons reported a conflict between their career and the career of their spouse, these were more common for women (52.6% vs 41.2%), and women were less likely to have the conflict resolved in their favor compared to men (59.0% vs 87.3%). Not surprisingly, females had higher mean emotional exhaustion scores than males (22.9 vs 20.6) and were more likely to be burned out (43.3% vs 29.0%). Female surgeons also reported more depressive symptoms (33.0% vs 29.5%) and lower mental quality of life scores, with 34.0% of women compared to 27.4% of men reporting a score more than 0.5 standard deviations below the population norm. Men had lower physical quality of life scores compared to women. Slightly fewer women would become a physician (71.1% vs 74.4%) or a surgeon (67.3% vs 71.1%) again if they could revisit their career choice.

This was not the only series to find higher burnout among female surgeons. A study exploring coping behaviors in male vs female surgeons found that only 49% of females felt their lives were well balanced, compared to 67% of males. Similarly 62% of females were facing a major life stressor, compared to 40% of males. In a recent study of gender differences in practicing urologists about 70% of urologists were satisfied with their career, with no gender differences in satisfaction rates. However, female urologists were less likely to choose medicine or urology again.

Public Health Impact: Manpower Issues

At the same time physician burnout has become endemic there is concern about physician shortages. In March 2015 the Association of American Medical Colleges published their most recent report on projections for physician supply and demand during the next 10 years. Demand is growing faster than supply, leading to a projected shortfall of 46,100 to 90,400 physicians by 2025. The demand for nonprimary care physicians will exceed supply by 28,200 to 63,700 physicians in this same time frame.

Concern about the aging population led Weiner et al to construct a model to assess manpower needs in urology. They used BPH as their model disease. Assuming a 40% prevalence of symptomatic BPH in men older than 65 years, they estimated an additional 3,540,000 patients with BPH in 2020 compared to 1997. The authors estimated that 4% of men with BPH undergo surgery, and a national growth rate of practicing urologists of 100 per year based on the current trends. Based on this estimate, the number of BPH related surgical procedures per urologist will continue to increase compared to the 1990 baseline number.

A study in 2011 surveying academic urology programs found that respondents would have approximately 292 job openings in the next 5 years. Extrapolating a similar number of hires from nonrespondent programs brought the total number of academic job opportunities to 369. The growth of women in urology from 1.2% of board certified urologists in 1995 to approximately 10% of the practicing urology workforce may impact these workforce concerns. A recent study found that women urologists earn less than their male counterparts and work fewer hours per week. Reviewing workload relative value units among pediatric urologists, Kogan et al observed that female pediatric urologists generated fewer workload relative value units compared to males.

Pruthi et al in 2013 found that the proportion of urological surgeons decreased from 3.23 to 3.18 per 100,000 population between 1981 and 2009. At the same time the proportion of urologists older than 55 years increased from 24.6% to 44%, and the proportion older than 70 years increased from 3.4% to 7.4%. In 2009 the average age of a urologist was 52.5 years, and the average age of the surgical workforce overall was 50.9 years.
The American Medical Association study of different career stages revealed that while late career physicians are most likely to report an intention to reduce clinical hours in the next 12 months, being retired or not in practice is independently associated with burnout. The authors indicate that this finding suggests a link between burnout and a decision to leave practice. Although this study did not specifically evaluate urologists, the aging urological workforce and high physician burnout among urologists are cause for concern regarding worsening shortages of urologists in the future.

**Mitigating Burnout: Physician Wellness**

We need to create a culture of physician wellness. Instruments have been developed to define and document physician burnout and mental health issues but wellness is less understood. Shanafelt et al consider the positive side of being well, stating, “Wellness goes beyond merely the absence of distress and includes being challenged, thriving and achieving success in various aspects of personal and professional life.” But how do we measure and achieve physician wellness? Clearly there are work factors and personal factors that contribute to wellness.

On the work side physician autonomy seems to have a huge impact on wellness. The ability to influence the work environment, participate in organizational decisions that affect medical practice and have more control over work schedule is likely to have a substantial positive effect. Decreased emotional and work related exhaustion were demonstrated in 1 study where interventions were introduced to enhance physician control over the work environment, improve efficiency in office design and quality of staff, and contribute to a sense of satisfaction and meaning derived from patient care.

One residency program has worked to promote wellness by providing a “wellness toolbox,” including screening for burnout and providing ongoing education on achieving wellness. There are lectures, retreats, support groups, social events and other activities aimed at promoting wellness. Although hard data are not available to assess the outcomes of this program, there is a perceived culture shift within the department, with an increased willingness to participate in wellness activities and openly discuss wellness.

Work/life balance is a major issue for all physicians, although female physicians are affected more than males. The American Board of Urology requires that a resident work 46 weeks per year for the duration of the residency. The American Board of Surgery requires residents to work 48 weeks per year with an option, on special request, for 2 additional weeks off for illness or maternity leave. This schedule limits maternity leave, sick leave or family medical leave to 6 weeks per year. As women make up a larger percentage of practicing physicians, strategies to cope with work/life conflict will be increasingly important.

Organizational strategies to reduce work/home conflict include greater autonomy in scheduling, more allowance for job sharing and on-site backup childcare for nonschool days. One study revealed that meetings before 8:00 a.m. or after 5:00 p.m. were more frequently perceived as problematic by women with children than by any other group. The same study cited absence of a part-time tenure track, lack of on-site childcare and emergency childcare, and lack of parental leave and other family leave policies as more problematic for women faculty.

Physicians are notorious for neglecting self-care. Between 35% and 56% of physicians do not have their own personal physician. A study of general surgery residents from the University of Wisconsin showed that physical health was compromised in 50% after age 49 years. Of these surgeons 28% exercised less than 3 times weekly and 10% did not exercise at all. Encouraging physicians to take an interest in their physical well-being may help prevent burnout and promote wellness. Poor physical health correlates with burnout. In addition, physical activity has been linked to disease prevention and improved health.

Addressing mental health issues among physicians is important. Many studies examining burnout have found high rates of depression. One study demonstrated a positive effect of a counseling intervention on decreasing emotional exhaustion and sick leave at 1-year followup. A study by Jones et al revealed that the introduction of a stress management program resulted in significant reductions in medication errors and malpractice claims. Fear of licensing repercussions when seeking mental health care is problematic as it presents a barrier to well-being.

Mindfulness based interventions are being tested as an antidote to stress and burnout. This form of stress reduction teaches individuals nonreactive awareness of their affective response to external events and is a key to changing the internal experience of stress. Its practice is characterized by nonjudgmental, sustained, moment to moment awareness of physical sensations, perceptions, affective states, thoughts and imagery. In a study of mindfulness based stress reduction for healthy individuals health care professionals benefited from the intervention even more than the general population. Mindfulness based programs have been shown to benefit health care professionals with depression. In 1 such study depression scores decreased, and perceived...
stress, anxiety and activity impairment were improved among participants.38

A less time intensive subset of mindfulness based intervention, the Mindfulness in Motion program, has been developed for on-site practice in high stress work environments.36 It retains the principles of mindfulness based intervention, using gentle yoga stretches with relaxing music to decrease stress. When delivered on site in an intensive care unit setting, the retention rate was 97%. Resiliency scores, work engagement and vigor were all significantly improved in the mindfulness group compared to controls. This finding suggests that in stressful work environments the Mindfulness in Motion approach may be a solution to reducing stress and burnout.

In a thoughtful article Gunderman suggests that the solution to combating physician burnout lies not in decreasing stress, but in promoting professional fulfillment.39 He argues that it is the deprofessionalization of physicians that is causing burnout. By focusing on compensation, we imply that physicians are “self-interested money grabbers” instead of dedicated professionals. He believes that promoting professional wholeness—compassion, courage and wisdom—will prevent burnout.

Conclusions

Physicians in the United States today are working in an environment where HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) asks patients to rate their health care experiences. The patient experience is considered so important that the results account for 25% of the hospital value based purchasing score, which directly impacts Medicare reimbursements. There are countless Web sites devoted to teaching doctors and hospitals how to improve their Press Ganey scores. This emphasis on patient satisfaction seems misplaced since higher patient satisfaction may actually be linked to higher medical costs and worse patient outcomes. Using patient satisfaction scores to guide reimbursement does exactly what Gunderman warns against.39 It deprofessionalizes physicians, causing doctors to undervalue their work, and leads to physician burnout. Not only is physician burnout linked to decreased patient satisfaction and worse patient outcomes, but burned out physicians are also more likely to change jobs or leave the practice of medicine.

The Association of American Medical Colleges has published data on projected physician shortages, especially in surgical fields. With expected physician workforce shortages in the future combating burnout is important to maintaining health care delivery. Promoting physician wellness should be a priority. Increasing physician autonomy, encouraging self-care by making exercise programs, routine health care maintenance and mental health care more accessible, and promoting mindfulness based interventions are all pathways to decreasing burnout and improving wellness. Furthermore, we need to promote the idea of medicine as a calling and a noble profession to help doctors realize the importance of their work.

We need to further study the prevalence of burnout among urologists to better understand the impact on our field. Hopefully we can use these data to develop wellness programs. The goals are to prevent emotional exhaustion and depersonalization by teaching physicians how to cope with stress, better balance home and work, and combat a decreased sense of personal achievement by promoting the importance of the practice of medicine as a lifelong calling.

References


In light of the increasing demand but obvious impending shortage in urology, the author presents a timely report on burnout. Unfortunately specific studies for urologists are rare but certainly the prevalence is unacceptably high among surgeons. The implications of this progressing burnout and dissatisfaction are concerning. Middle and early career surgeons and women seem to be at greatest risk. Tschuor et al noted several factors that increase job satisfaction, including administrative support, innovation, autonomy, decentralized control and ability to attend conferences, 


along with networking and peer support.¹ Many of these factors are being threatened directly or indirectly with decreasing reimbursement, increasing workload and insurance driven metrics. However, the United States is not unique in these problems. In France 24% of the urologists surveyed had severe burnout on the Maslach Burnout Inventory.²

I worry about the long-term consequences to our field if we do not act. There is certainly the risk of early retirement. In addition, medical students sense physician unhappiness, which ultimately may affect their choice of specialty. Thus, burnout could limit the qualified candidate pool. Both problems cause a decrease in our workforce supply. Finally, for those currently practicing the possibility of developing unhealthy coping mechanisms exists. Franke et al demonstrated a 20% use of cognitive enhancing and 15% use of mood enhancing drugs (prescription and illicit) among surgeons.³ We need to start caring for ourselves. I agree completely with the author—we need to pay attention to the problem and develop realistic solutions.

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References