

Urologist burnout: Frequency, causes, and potential solutions to an unspoken entity

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Introduction

Physician burnout has been linked to decreased job performance, increased medical errors, interpersonal conflicts, and depression. Recent multispecialty studies suggest that urologists have higher rates (up to 63.6%) of burnout compared to physicians in other specialties; however, these reports were limited by low sample sizes. We aimed to evaluate the prevalence of urologist burnout, verify risk factors, and recommend preventative measures and solutions for colleagues at risk or suffering from burnout.

Urologist burnout is a true entity, which transcends level of training and nationality. Its roots appear to be deep-seated in our tireless efforts to strive for excellence in care for our patients, our growing academic and research pursuits, and surmounting administrative responsibilities; these virtues, which are regarded as the foundations of our career successes, are often obtained at the expense of personal health and wellbeing and family sacrifice. Various other medical societies have become increasingly vocal about the issue of physician burnout and have actively initiated successful strategies to minimize its impact on their members. As an organization with a strong national presence, the Canadian Urological Association (CUA) should promote tools to prevent and interventions to assist those at risk and suffering from burnout.

Increased awareness in the general medical community has led to strategies and tools that can help prevent, identify, or assist physicians in their recovery from burnout. The CUA should develop and facilitate access to information and offer comprehensive support for urologists struggling with burnout.

A review of the literature

The term “burnout” was first coined by Dr. Herbert J. Freudenberger in his 1980 book *Burnout: the High Cost of Achievement*, where he defined it as, “The extinction of motivation or incentive, especially where one's devotion to a cause or relationship fails to produce the desired results (Richelson, 1980). This term has since become synonymous with a widely-used list of characteristics embodying a poor work-life balance and ensuing poor physical and emotional health. Over the past fifteen years, there has been an increased awareness of the detrimental effects of burnout and methods by which to mitigate its predictable sequelae. Many studies evaluating burnout have turned to using the Maslach Burnout Inventory (MBI), which is a validated questionnaire that assesses three classical components of burnout: 1) emotional exhaustion: feeling of being emotionally overextended and exhausted by one's work; 2) depersonalization: an unfeeling and impersonal response toward recipients of one's service; and 3) decreased sense of personal accomplishment: feelings of competence and successful achievement in one's work (Maslach C, 1996).

We carried out a search of the existing literature using the PubMed database with the following search terms: physician “and” burnout; surgeon “and” burnout; urologist “and” burnout; urologist “and” work satisfaction; urologist “and” job “and” stress; urologist “and” Maslach burnout inventory; urologist “and” depersonalization; urologist “and” accomplishment. We found a total of 2443 unique English abstracts that met these search criteria from 1960 to 2017, including both review articles and individual manuscripts. Of these articles, only four pertained directly to urology or to urologists in training, and hence were considered in detail while conducting our analysis and recommendations in this manuscript; the pertinent findings of these studies are listed in Table 1. Data from other surgical and non-surgical disciplines were also evaluated in our review.

Results

Several landmark studies have evaluated the impact of burnout on physician quality of life and work satisfaction. Unfortunately, despite this increased awareness, the incidence of burnout amongst physicians continues to climb. The largest and most recent study completed to date involved over 35,000 physicians in the United States. Compared to a similar study published in 2011, the rate of burnout across all disciplines increased by almost 10% from 45.5% in 2011 to 54.4% in 2014 (Shanafelt et al., 2015). Concomitantly, there was a disturbing decline in the satisfaction of work-life balance (WLB) to 40.9% compared to 48.5% in 2011. Despite the variances observed across specialties, the rates of burnout and satisfaction with WLB were significantly better in the general adult US population.

Of utmost interest and surprise from this analysis was the discovery that urologists ranked the most extreme on a combination of high burnout and low work-life satisfaction. This finding was compounded with a worrisome increase in burnout among urologists from 41% to 63.6% during the 2011-2014 interval, albeit only 119 urologists responded to the 2014 survey, thus making it difficult to generalize across all urological subspecialties (Shanafelt et al., 2015). As expected, several other medical and surgical subspecialties ranked highly on the MBI burnout inventory and lower on the WLB satisfaction score, including family medicine, neurology, orthopedic surgery and general internal medicine. Interestingly, despite having high burnout scores, emergency medicine, dermatology, radiology and physical medicine and rehabilitation had higher satisfaction with WLB, likely

attributable to a more predictable schedule of work related activities compared to surgical subspecialties. Specialties ranking lowest on the burnout inventory included general surgery, pediatric subspecialties, psychiatry and preventative and occupational medicine. Although there are various limitations to this type of large scale evaluation of burnout, it highlights a growing problem facing physicians. With greater than 50% of physicians experiencing burnout and low job satisfaction, we risk losing a major component of our work force to early retirement and potential substance abuse which could adversely affect the quality of care provided to patients across the medical spectrum.

While burnout continues to be a significant factor in the longevity of many practicing urologists' careers in North America, its impact reaches far beyond our borders. Several reports, ranging from anecdotal evidence to large, organized surveys conducted in industrialized nations around the globe have highlighted the impact of burnout on our specialty. These studies demonstrate that burnout permeates our medical culture as early as residency training and continues to be a major factor in job dissatisfaction, interpersonal conflicts and substance abuse even for urologists who are well into their senior years of practice. Although several international reports confirm the existence of burnout, only a few probe its etiology and even fewer propose solutions.

A contemporary study was designed to evaluate self-reported burnout rates and causative factors in Ireland and the United Kingdom (UK) (O'Kelly et al., 2016). Questionnaires were sent to all members capturing socio-demographic data and potential risk factors for burnout as well as the MBI to objectively assess for workplace burnout. The overarching goals were to evaluate the incidence of burnout amongst consultants and residents, identify causative factors and develop a novel questionnaire to complement the MBI so as to make it more specific for urologists. Of the 42% respondents (n=575), the median age was 45 years, 87% were male, 79% were consultants, and 40% had leadership positions. On average, the MBI revealed moderate emotional exhaustion, depersonalization and high personal achievement scores across the group. The highest burnout scores were associated with age <45, in private practice, and/or a leadership role in the workplace including hospital management, whereas gender and ethnicity had no effect. The factors that most often correlated with burnout (from most to least important) were identified as administrative work load, volume of work, lack of institutional resources or management support, lack of pension, patient expectations, on-call responsibilities and salary. Recurrently reported causative and preventive factors are summarized in Table 2. Interestingly, factors which had the least impact include operating room decision making, research, and medico-legal pressures. Unfortunately, 15% of the respondents reported self-medication or excessive alcohol intake to combat burnout whereas only 8% sought professional help. Encouragingly, 80% wished that burnout should be evaluated in urology practices and 60% indicated that if there were counseling or support services provided, they would make use of them. Similar data were reported 15 years earlier from a group in Germany where the authors focused on community versus academic practice as a predictor of burnout (Bohle, Baumgartel, Gotz, Muller, & Jochem, 2001). With a 59% response rate, these authors found that the greatest burnout score, based upon MBI indices, were in urologists who practiced in academic institutions, were younger than age 45 or in residency. Age over 45 and practicing in a private/community setting appeared to be protective factors against burnout. In considering these and other studies aimed particularly at urologists, it is evident that

burnout seems to be more prevalent among more junior urologists practicing in academic institutions, who likely have been appointed to multiple administrative roles. Given that the early years of one's clinical/surgical practice is extremely important in establishing the framework for a successful academic and clinical practice, these data beg the question of how we can better mentor junior colleagues during this vulnerable period of their careers.

The majority of studies evaluating burnout have focused on attending physicians in academic or private settings. However, its incidence during residency training is alarming. The largest reported study evaluating this metric was conducted in France involving urology residents in training programs using the MBI index supplemented by questions regarding demographics, professional and familial status, duty hours and extracurricular interests (Roumiguie et al., 2011). With a substantial response rate of 65%, the authors discovered that 25% of residents in training had burnout syndrome with 8% describing emotional exhaustion and 22% experiencing depersonalization, with no difference based on gender. Interestingly, this study elucidated several protective factors including being in a meaningful relationship, having at least one extracurricular hobby, and seniority in the residency program. It is worth noting that senior residents who are in preparation for Board or qualifying examinations have less burnout than their junior counterparts. This is presumably explained by the increased work load of the urology service on more junior residents which likely includes non-urological service related tasks and hence is comparable to the additional non-clinical responsibilities posed upon junior faculty by more senior counterparts within their institutions. This issue should be a top priority for both program directors and department chairs.

Fortunately, most studies evaluating physician burnout have attempted to identify causative factors, but are limited by non-homogenous cohorts and a lack of a standardized risk factor assessment tool. Several risk factors have been identified by the American Medical Association to be associated with higher rates of physician burnout. These include: demanding clinical workload, increased number of nights on call, a partner who also is a physician, young children to raise, a recently encountered medical error, mid-level career, conflicts between work-life balance, and less than 20% of their time spent on the most meaningful aspects of work(Rees).

It appears that physicians, especially surgeons, are more at risk of burnout than the general population. In an attempt to elucidate why, a multi-centric review was systematically conducted to look at the nonphysical effects of a surgical career. The authors concluded that surgeons have a high prevalence of burnout, psychiatric morbidity, and depression, with suicidal ideation rates above those of the general population. Professional factors, such as poor professional relationships, malpractice claims, and work-home conflicts appear to contribute significantly to these phenomena. Even in the presence of familial and social supports, these barriers to burnout appear to be waded down by the impact of overarching professional factors (Oskrochi, Maruthappu, Henriksson, Davies, & Shalhoub, 2016). These principles have been reported across many surgical sub-specialties, including obstetrics/gynecology, otolaryngology, and orthopedic surgery, where the investigators found that increasing hours worked per week were a statistically significant predictor of burnout, decreased career satisfaction, and poorer overall quality of life(Pulcrano, Evans, & Sosin, 2016). Awareness of the encroaching physical and emotional demands of the medical profession on personal burnout become

increasingly important as they can contribute to untoward patient consequences including major medical errors and personal detriment including unexpected/early retirement (Shanafelt et al., 2010). In line with these reports, dissatisfied physicians were up to 3 times more likely to leave medicine than satisfied physicians, with surgeons being the most likely to retire early (Landon, Reschovsky, Pham, & Blumenthal, 2006) The risks of burnout are real and summarized in Table 3.

What medical associations are doing

In order to establish a comprehensive physician wellness program targeted towards urologists, we evaluated a variety of available information from medical associations and societies, single center reports and institutional practices from which we could draw insight and expertise. Although other surgical associations and societies are also concerned about burnout, there was not much information freely available through their websites. We were, however, successful in identifying readily available support for physicians in medical, pediatric, emergency medicine and family medicine society websites (aap.org, aafp.org and cfpc.ca). Some of the topics addressed included physician wellness, maintaining work-life balance, and tips on handling the first years of practice. Several sites also provided contact numbers for confidential counseling, suggested readings and web-links (blogs, videos, etc.). The most extensive resources for physician support, however, were found through the American and Canadian Medical Association (ama-assn.org and cma.ca). The flagship resource appears to be an online program launched by the American Medical Association in June 2015 called STEPS Forward (Table 4), which addresses physician burnout via online educational modules covering key areas such as: practice efficiency and patient care, patient health, physician health, technology and innovation (Mark Linzer).

Although there is a paucity of well-designed studies on interventions for established burnout among physicians, in particular urologists, the most optimum strategy appears to be employing a combination of education (even in the form of a professional development coaching program for resident physicians), early recognition and intervention (Kumar, 2016; Palamara, Kauffman, Stone, Bazari, & Donelan, 2015). For example, members of the internal medicine department at Massachusetts General Hospital in Boston instituted a professional development coaching program which included curriculum development, coach-intern interactions and evaluative metrics. The authors found that interns subsequently reported less emotional exhaustion and burnout compared to previous. A similar program could be implemented in urology training programs to prospectively identify measures which could lessen the incidence and impact of physician burnout for residents and could be a collaborative effort between the national urological associations and their respective undergraduate medical licensing bodies. Together, a uniform curriculum could be distributed to programs throughout the nation to standardize our approach to alleviating burnout at the training phase.

The American College of Radiology Commission on Human Resources recommends that institutions and group practices consider the following protective actions to address potential burnout in their members: ensure adequate staffing, reduce prolonged stress, restore a sense of control, reduce call obligations, restore lifestyle balance, improve efficiency, develop reasonable financial expectations/goals, reduce isolation and seek professional help (Harolds, Parikh, Bluth, Dutton, & Recht, 2016). Interestingly, the orthopedic surgery literature demonstrates evidence to suggest that mindfulness-based interventions or educational programs combined with meditation and counseling

sessions/workshops in addition to modification of institutional administrative expectations as excellent strategies for the prevention and treatment of burnout (Daniels, DePasse, & Kamal, 2016). Lastly, the responsibility for identifying and managing burnout should not only rely on the individual or department. Health care organizations should implement strategies and personnel who are adequately trained and equipped to manage burnout in their physician employees. This will not only improve morale amongst the physicians but will translate to many improvements in many indices which institutions take pride in (ex: better patient outcomes, improved patient satisfaction, less sick leave by employees) (Hlubocky, Back, & Shanafelt, 2016). Supporting this, the latest issue of the Harvard Business Review reported that organizations would benefit from assigning a burnout officer/ambassador to recognize early signs of burnout before performance is impacted (Valcour, 2016). Departmental leaders should be encouraged to set limits on workloads, make recognition meaningful, emphasize learning, and facilitate mutual support in efforts to lessen employee burnout.

How can CUA help?

The Canadian Urological Association (CUA) has strived to be the premier urologic association with the stated aim of providing support to the urological community in Canada. As part of our mission to promote the highest standards of urological clinical care through education, research and the formulation of health care policy, we must also address burnout for the continued growth and well-being of our field. Burnout amongst physicians increases the risk of depression, anxiety, sleep disturbances, fatigue, alcohol and drug abuse, marital dysfunction, premature retirement and sadly, suicide. Identifying risk factors and offering tools to heal the affected are certainly imperative and have been shown to be effective in other specialties. Prevention of burnout, however, should be at the center of our organization's mandate in addressing urologists' well-being from as early as residency training all the way to retirement as this is the only manner in which we will ensure the recruitment and retention of the best trained physicians to Urology as a profession; only a preventative attitude towards burnout will positively affect our workforce stability and improve the excellence of care offered by our members.

Beyond promoting physician healthcare programs, the CUA can help prevent burnout by simply establishing a wellness committee, distributing an annual wellness survey and proposing simple interventions that can be re-assessed overtime. Furthermore, borrowing from organizational literature, we must advance our awareness and understanding of burnout through education & research and mitigate the negative effects of burnout through advocacy for our colleagues who suffer from it. The CUA conducts numerous educational seminars throughout the year targeting both trainees and practicing physicians; these could serve as conduits to deliver information about physician burnout. The Urology Specialty Committee, in concert with Urology Program Chairs and residency program directors, should consider introducing the topic of burnout to department leaders so as to better recognize burnout in their residents and faculty and provide them the tools to appropriately intervene to alleviate burnout and its aftermath. The CUA annual meeting also provides an opportunity to educate our membership and promote wellness through workshops, lectures from life/performance coaches and mediation experts.

Conclusion

Physician burnout is now being recognized as a common but very debilitating entity and is defined as loss of enthusiasm for work, feelings of cynicism, and a low sense of personal accomplishment. A large national survey suggested that urologists rank close to the top of all specialties in burnout scores. As an organization with a strong national presence, the CUA should develop and promote tools to prevent and interventions to assist those at risk and suffering from burnout. Dealing with burnout rests not only in the hands of the affected individual (recognizing symptoms, seeking professional advice, acquiring resilience strategies for wellness) but also in the capable hands of their physician leaders (building a local culture of advocacy) as well as the institutions (by proactively optimizing the clinical practice environment and institutional culture) for which they work so tirelessly for. Only together can we make the most significant improvement in the quality of life of our membership and mitigate the effects of burnout.

DRAFT

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Figures and Tables

Table 1. Overview of published articles pertaining directly to factors contributing to burnout amongst trainee and practicing urologists

Author	Year	Study Ttype	Country	Sample size	Response rate	Pertinent findings
O'Kelly et al	2016	Survey	U.K., Ireland	1380	575 (42%)	<ul style="list-style-type: none"> – 15% reported self-medication or EtOH to combat burnout – 8% sought professional help for burnout – 60% would have attended counseling if provided – 80% felt burnout should be evaluated in urology practices – Highest burnout associated with age <45, private practice, leadership roles, hospital management – Characteristics associated with burnout included high administrative work load, volume of clinical work, lack of institutional resources, pension, patient expectations – Operative decision making, research and medico-legal pressures did not impact burnout rates – Gender or ethnicity had no impact on burnout
Roumigue M et al	2011	Survey	France	180	119 (66%)	<ul style="list-style-type: none"> – 25% of residents in training experienced burnout – 8% had emotional exhaustion, 22% had depersonalization – Characteristics protective from burnout included being in a relationship, >1 extracurricular hobby, seniority in residency and older age – Gender had no impact on burnout
Bohle A et al	2001	Survey	Germany	128	75 (59%)	<ul style="list-style-type: none"> – Increased risk of burnout associated with academic practice, residency and age <45
Wines AP et al	1998	Survey	Australia	275	205 (75%)	<ul style="list-style-type: none"> – <50% reported seeing their family physician for work related anxiety and depression – >50% admitted to self-prescription of analgesics and benzodiazepines – Greatest risk of burnout was overwhelming administrative responsibilities

Table 2. Factors associated with burnout

Causative factors	Protective factors
<ul style="list-style-type: none"> – Chronic exposure to high levels of stress – Increased work load – Lack of institutional resources or management support – Too many bureaucratic tasks – Lack of control and autonomy – Financial concerns – Patient expectations – On-call responsibilities – Poor level of job satisfaction – Young age – Female gender (association may vary among countries) – Negative marital status or being married to another physician – Poor working relationships – Conflict between work-life balance – Having young children 	<ul style="list-style-type: none"> – Reducing time spent at work – Gaining seniority – Working in a positive work environment – Being in a meaningful relationship – Having extracurricular hobbies – Achieving work & life balance

Table 3. Sequelae to physician burnout

<p>Burnout among doctors increases the risk of:</p> <ul style="list-style-type: none"> – Depression – Anxiety – Sleep disturbances – Fatigue – Difficult job situations – Medical errors – Substance abuse – Marital dysfunction – Premature retirement – Suicide

Table 4. Next steps to recognize, reduce, and prevent burnout amongst physicians

<p>Interventions should help individuals:</p> <ul style="list-style-type: none">– Recognize symptoms– Seek professional advice– Build resilience– Improve feelings of control and reduce feelings of chaos– Remember that prevention is key	<p>Organizations should focus on:</p> <ul style="list-style-type: none">– Optimizing the clinical practice environment– Improving team spirit and teamwork– Increasing communication– Establishing wellness as a quality indicator– Starting a wellness committee and identifying a wellness champion– Distributing wellness surveys– Promoting wellness– Planning interventions
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Adapted from the AMA steps forward program.

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