

# Surgeon Wellness and Burnout

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**Abstract:** Physician wellness and burnout have been an increasing source of concern as physician depression and suicide continue to be on the rise. The Pediatric Orthopedic Society of North America (POSNA) has been on the forefront of addressing these issues throughout the creation of a Physician Wellness Task Force, membership surveys, and a pre-course at the Annual Meeting directly addressing this topic. However, physician members of POSNA still report a burnout rate of almost 40%. Despite hard questions being asked, there continues to be significant debate about how best to address physician burnout and focus on physician wellness.

## **Key Points:**

- Occupational burnout is the constellation of emotional exhaustion, depersonalization, and a perceived lack of personal accomplishment.
- Physician burnout can lead to increased complications and medical errors.
- Physician burnout requires a multi-faceted approach to prevent and treat, including both personal and institutional strategies.
- POSNA continues to develop and implement strategies to help their members prevent burnout and focus on wellness.

## **Introduction**

Physician wellness and burnout has become an increasingly important topic of concern and discussion throughout the medical community and, most recently, in the orthopaedic community. Recently, POSNA has taken a special interest in the wellness of its physicians. A 2018 survey of pediatric orthopaedists was undertaken, and a physician wellness task force was established. As an action item, POSNA recently devoted the entire 2019 Annual Meeting pre-course to physician wellness.

Occupational burnout, in particular, stems from workplace stressors and a lack of coping mechanisms, which results in emotional exhaustion, depersonalization, and a perceived lack of personal accomplishment.<sup>1</sup> Negative effects related to burnout

include repercussions in both professional and personal life, including severe depression and other mental health issues. There is an estimated relative risk for suicide as high as 3.4 in male physicians and 5.7 in female physicians<sup>2</sup> with an average number of approximately 400 physicians per year succumbing to suicide. Relative to other professions, physicians rank near the top for suicide rate.<sup>3</sup> This high incidence of mental health issues has prompted our field to search for strategies for early detection, treatment, and prevention.

Numerous studies have been undertaken to elucidate whether certain specialties or groups are at a higher risk. Orthopaedic surgery specifically has had reported burnout rates of 40%-60%. A 2017 survey of 15,000 physicians from 29 specialties reported the rate of burnout among orthopaedists at 34%, with 14% of

orthopaedists reported experiencing both depression and burnout.<sup>4</sup> In a 2018 unpublished survey of POSNA members, 38% of respondents reported personal burnout and 46% reported team burnout.<sup>3</sup> Moreover, 57% of women reported experiencing burnout, while 30% of men reported personal burnout.<sup>3</sup> Factors contributing to wellness and burnout may differ among men and women in the same workplace, and this may be due to differences in perceived gender roles, hierarchal structure, and power imbalances.<sup>3</sup>

Despite the plethora of research that is coming out on this topic, there are many career variables within our field that may impact burnout and further investigation is needed to learn the effects of level of training, gender, personal considerations, and institutional support.<sup>1</sup>

### Effects of Burnout

Much attention has been paid to burnout in recent years as it not only affects individual medical team members but patient care as well. One of the most important factors in recognizing and addressing surgeon burnout is the depth of permeation throughout both personal and professional life. From a professional standpoint there is a noted increase in medical errors, reduced patient satisfaction, reduced productivity, and increased job turnover.<sup>1,5</sup> Shanafelt et al<sup>6</sup> noted that a 1-point change in the depersonalization score on the Maslach Burnout Inventory (MBI) was associated with an 11% increase in the likelihood of reporting a medical error.

The effects of burnout are also felt at a personal level, including decreased personal fulfillment, conflict with colleagues, cynicism, substance abuse, physical illness, depression, and suicidal ideation.<sup>1,5,7,8</sup> To date, there have been at least 34 orthopaedic surgeons who have committed suicide.<sup>9</sup> Each year approximately 1 million Americans lose their doctor to physician suicide.<sup>9</sup>

### Risk Factors

Recent evaluation of burnout in orthopaedic surgeons has attempted to stratify certain subsets that are at a higher risk than others within the field (Figure 1).

## Risk Factors

- difficult relationships with other faculty
- increased conflict between home and work life
- greater number of work hours/call shifts
- increased stress at work
- anxiety over clinical competence
- increased alcohol use

**Figure 1.** Risk factors for burnout

Identification of these groups may facilitate early diagnosis and intervention. Many of the inherent personality traits that lend to excelling early on in one's career, such as perfectionism, fierce individualism, pride, and the perception of failure, may later lend towards anxiety, self-esteem issues, feelings of inadequacy, and continual discontent and dissatisfaction.<sup>7,10</sup>

Sargent et al<sup>2</sup> identified residents in particular as one of the high-risk groups in all areas of burnout, including emotional exhaustion, depersonalization, and low personal accomplishment. It was noted that 56% of residents, compared to 24.8% of faculty, scored at the highest level of detachment on the Maslach Burnout Inventory (MBI);<sup>11</sup> a 20-question validated instrument that evaluates 3 subelements of burnout: emotional exhaustion, depersonalization, and sense of personal achievement. However, among attending and faculty surgeons, burnout is marked by emotional exhaustion

and depersonalization and while feeling of personal achievement is preserved.<sup>2</sup>

In comparison to U.S. residents, surveys of Dutch and Australian trainees demonstrate significantly lower rates of emotional exhaustion and depersonalization at 16.2%, 11.4%, and 26%, 10%, respectively.<sup>12,13</sup> Work hours are significantly less in both of these countries (48 hours per week averaged in the Dutch survey), however, after implementation of the 80-hour workweek in the United States, the rates of burnout have not improved uniformly in response which lends to the idea that there may be other factors.<sup>1</sup>

Unfortunately, graduation from residency doesn't equate into decreases in burnout; orthopedic leaders, including department chair and residency program directors, demonstrated a similar pattern but with a higher rate of emotional exhaustion.<sup>14</sup> Surgeons who had greater than 10 years of experience were found to have lower rates of emotional exhaustion and depersonalization.<sup>2</sup>

### Detection

Multiple warning signs may be evident to both close coworkers and/or family members including that of hopeless statements, anxiety, mood swings, isolation, or increased use of alcohol (Figure 2).<sup>7</sup> Behavior in excess including destructive behaviors such as increased alcohol consumption or even increased exercise may indicate an emotional disturbance.<sup>7</sup> And, it is possible that there will be minimal or no warning signs.<sup>9</sup>

### Prevention and Treatment

There is a reluctance in the medical community to seek professional help or therapy, many view this as a sign of weakness or a perception of failure.<sup>7</sup> Others are deterred by fear of retribution, such as risk to their job or medical licensure. And still, others fear the stigma associated with "needing help." Thus, a multifaceted approach is required for prevention/treatment. An important element is to remove the stigma of seeking out professional help after recognition of burnout or more severe symptoms such as depression or suicidal ideation. Unfortunately, a

## Signs and Symptoms

- failing relationships at work and home
- withdrawal
- exhaustion that does not respond to adequate rest
- cynicism
- lack of efficacy
- desperation
- internalization
- overworking
- increased alcohol use, disruptive or dangerous behaviors
- change in appetite or sleep habits
- irritability
- muscle spasms
- back pain
- headaches

*Figure 2: Signs and symptoms of burnout*

recent survey found that 1 in 16 U.S. surgeons reported suicidal ideation in the past year, however, only 26% sought out a psychiatrist or psychologist for help.<sup>15</sup>

## Resources for physicians experiencing burnout or depression

- **The institute for healthcare improvement-** turning burnout to engagement and finding joy in practice: <http://www.ihl.org/education/WebTraining/Webinars/joy-in-work/Pages/default.aspx>
- **Stanford School of Medicine** -website promoting health and resiliency including self assessments: <http://wellmd.stanford.edu>
- **Well Being Index-** anonymous online tool for assessment of stress, promoting self-awareness, provide resources, and track progress. <https://www.mededwebs.com/well-being-index>
- **Dr. Pamela Wible-** a physician from Oregon who has done extensive research into physician suicide, provides free services/discussion with medical students, residents, physicians. <https://www.idealmedicalcare.org/contact/>
- **Headspace mindfulness app-** <https://www.headspace.com/headspace-meditation-app>
- **Insight Timer mindfulness app-** <https://insighttimer.com/>
- **National Suicide Prevention Lifeline-** confidential support provided 24 hours a day- 1-800-273-8255
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emotional exhaustion, depersonalization, and personal accomplishment significantly improved. In comparison, shorter workshops or courses did not provide this improvement.

Others have pointed out that the implementation of changes at the organizational or institutional level are the most effective means of reducing the burden of burnout.<sup>17</sup> Dunn<sup>18</sup> and colleagues evaluated the effects of practice management changes designed to increase physician control, including customizing work and scheduling options, creating group meetings regarding concerns and case discussion, and increasing efficiencies and satisfaction with medical practice. After 5 years, the changes resulted in substantially lower emotional exhaustion among the studied physicians.

In addition, institutions can organize infrastructure and support for physicians, clarify guidelines for advancement, reward contributions, and provide opportunity for mentorships and partnerships.<sup>1</sup> Choong found that institutional elements that were critical for reducing surgeon burnout included increased physician autonomy, work efficiency, and satisfaction; encouraging participation in leadership opportunities; improving fairness; and streamlining workflow.<sup>19</sup>

**Figure 3.** Resources for physicians

One component of prevention of severe burnout symptomology and treatment of earlier stages of burnout comes from early cognizance of one's personality traits and situations that may lead towards these thought patterns. Mindfulness training over a prolonged period has shown to ease tension, reduce stress, and increase a sense of well-being in addition to providing a healthy coping mechanism (Figure 3). It allows one to focus on the present and relieves feelings of past guilt as well as future fear and anxiety.<sup>7</sup> In one study by Goodman and Schorling,<sup>16</sup> an 8-week mindfulness course was implemented and the outcomes of the MBI scores were examined. Scores in all 3 aspects of this questionnaire

### POSNA's Role

In 2019, POSNA published an article detailing the goals of a member health and wellness charter.<sup>3</sup> POSNA recognizes that the "epidemic of physician burnout interferes with the delivery of high-quality care that our patients and families need and deserve," and at the same time, burnout places our members at an increased risk of dissatisfaction, early retirement, depression, and suicide. Addressing this issue began in 2018 with a member survey, which found that overall, 38% of respondents reported personal burnout and 46% reported team burnout.<sup>3</sup> Based on these findings, POSNA has established specific health and wellness goals with near-

term objectives that include a redesign of postgraduate fellowship education, a redesign of healthcare delivery, and a new research agenda designed to determine if POSNA is helping.

## Summary

In summary, physician burnout is on the rise. However, recognition of the problem continues to improve. Institutions across the country are working to improve the environment while offering opportunities for individual mindfulness practices. Moreover, increased recognition of the problem has led to new programs and initiatives. POSNA has already taken large steps to combat physician burnout. Despite these gains, more research and funding is needed on this very important public health topic.

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