Clinical Expert Series CME

Addressing Physician Burnout and Ensuring High-Quality Care of the Physician Workforce

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Burnout in health care is a public health crisis. Burnout is a triad of emotional exhaustion, depersonalization, and feelings of reduced personal accomplishment. More than half of practicing physicians and trainees experience burnout, and the rates are increasing. This review highlights the current prevalence of burnout among U.S. physicians, especially obstetrician–gynecologists. We review personal and systemic risk factors for burnout, consequences of burnout, and proven interventions, especially at the systems level, to treat and prevent burnout.

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Please consider the following statements:

- I feel I treat some patients as if they were impersonal objects.
- I feel emotionally drained from my work.
- I feel fatigued when I get up in the morning and have to face another day on the job.
- I have become more callous toward people since I took this job.
- Working with people all day is really a strain for me.
- I don't really care what happens to some patients.

Please consider the following statements:

- I deal very effectively with the problems of my patients.
- I feel I am positively influencing other people's lives through my work.
- I feel exhilarated after working closely with my patients.

If any of these statements are familiar, you have likely taken a survey that used elements from the Maslach Burnout Inventory for health care professionals.[1] Both the 22-item and 9-item abbreviated survey shown above have been used to measure the triad of emotional exhaustion, depersonalization, and feelings of reduced personal accomplishment that results in burnout.[1,2]

More than half of today's practicing physicians and trainees experience burnout, and the rates are increasing. Obstetrics and gynecology is no exception to the rule; in some surveys our specialty ranks in the top 10 for burnout, not a feat to be celebrated.[3,4] At baseline, we practice in a high-adrenaline, demanding field, and the struggle is real–we carry an incredible clinical workload in an increasingly litigious environment, experience overwhelming documentation requirements within the electronic medical record (EMR), lack autonomy with our schedules, and struggle with individualization of patient care decisions. Away from the workplace, we cope with increasing rates of financial debt from training and struggle to integrate personal and professional responsibilities.

Physician burnout, acknowledged as a "public health crisis" over the past several years, has only intensified in the past year. In January 2020, the first case of coronavirus disease 2019 (COVID-19) in the United States was confirmed. By March, cases were being reported in every state, and the effect on our nation and the world continues to intensify.[5,6] For

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many, the past year has been marked by unprecedented uncertainty, with even higher levels of severe and sustained mental, physical, psychological, emotional, and financial stress. On Thursday April 23, 2020, emergency medicine doctor Louis Tran flew from California to New York City to assist his colleagues at Elmhurst Hospital in Queens. In an interview with National Public Radio, he noted, "It is definitely putting a stress on all of us…I definitely encounter professional colleagues who are experiencing, as best I could describe it, something similar to PTSD."[7] Just 3 days later, Dr. Lorna Breen, Medical Director of the emergency department at NewYork-Presbyterian Allen Hospital, died by suicide after expressing devastation about "the toll the coronavirus took on patients."[8]

Similar to the fast-paced experience in emergency medicine, the demands of obstetrics and gynecology are ever present. Babies need to be born. Cancer does not take a vacation. The commitment, resolve, and selflessness with which physicians and other health care workers, have responded to the pandemic highlights our deep care for patients above all else, but a simultaneous scrutiny of our health care system draws attention to its many deep cracks and imperfections. It would be foolish to assume that these imperfections affect the health care infrastructure alone.

Ultimately, we will return to a new normal and if we change nothing, at least our baseline levels of burnout will still exist. Perhaps the experience of navigating the pandemic will erase the stigma associated with talking about stress, depression, and burnout. Perhaps this experience will make us all more resilient. But what if it doesn't? What if, instead, we move to an even higher level of exhaustion and burnout and that becomes our new baseline? We must address burnout in health care with even greater urgency. Our lives depend on it.

This Clinical Expert Series will focus on burnout in the era before the COVID-19 pandemic, with a spotlight on how we can prevent a permanent increase in distress as the pandemic continues. We will discuss definitions and tools for assessments, and elaborate on the consequences of burnout and proven interventions. For the scope of this review we will concentrate on physician burnout, but we recognize that loss of satisfaction and sense of efficacy are pervasive in health care and we implore nonphysician readers to apply these strategies as well. Although personal resilience is crucial, system-wide infrastructure and support that prioritizes physician well-being is equally, if not more, imperative.

DEFINITION OF BURNOUT

Burnout is a triad of emotional exhaustion, depersonalization, and feelings of reduced personal accomplishment. It has been eloquently described by Dr. Roger Smith, an obstetrician–gynecologist (ob-gyn), as "the result of overwhelming demands in the face of insufficient resources and support, perhaps individually modified by personal resilience."[3] The syndrome of burnout is present if at least one of the elements of the triad is significantly abnormal.

Burnout is different from stress, which in small doses may provide some focus to complete a task. Chronic work-related stress, however, can be insidious and over time result in burnout, a condition better characterized by exhaustion, cynicism, disengagement, and decreased efficacy.[1,2] Although different from depression, it is strongly correlated with developing depression, as well as physical illness, hopelessness, irritability, impatience, and poor interpersonal relationships, to name a few. The Maslach Burnout Inventory for health care professionals (referenced above with sample statements) is a commonly used assessment tool, and provides consistency for assessing burnout in medicine. From gathered assessments we know that burnout has reached epidemic proportions, with prevalences near or exceeding 50% in practicing physicians,[9,10] as well as those in training.[11]

CAUSES OF AND RISK FACTORS FOR BURNOUT

Burnout is not a static entity, and changes over one's career. Training is a peak time for distress. Overall burnout, with high rates of depersonalization and emotional fatigue, is higher in residents, but it persists into one's early career, generally with less emotional exhaustion.[12] Although career satisfaction remains high, a minority of physicians feel they have enough time for family, let alone themselves.[9] By late career, burnout still persists and results in decreased productivity, with a greater proportion of physicians reducing their full-time equivalent.[13] Thus it is crucial to understand risk factors for and sources contributing to burnout over the course of one's career to better individualize interventions.

Consistent with known risk factors, burnout affects nearly half of U.S. physicians, but disproportionately affects women.[14] Female gender and young age are consistently cited as risk factors for burnout,[4,15] as are having younger children, working more hours, and having compensation tied solely to clinical productivity.[9,16] In addition, female physicians (and especially surgeons) are more likely to have lower degrees of satisfaction with work-life integration,

experience more work-home conflicts, and report lower rates of professional satisfaction compared with their male counterparts.[17–19] In a survey by the American College of Surgeons, women were more likely to be responsible for household tasks that are less likely to be outsourced.[20]

This information is especially important given the current demographics of the U.S. active physician workforce, and obstetrics and gynecology specifically. In 2017, 35% of practicing physicians were female,[21] fewer than half (43%) of practicing ob-gyns were male, and more than 80% of trainees matching into obstetrics and gynecology residency were female.[21,22] Not surprisingly, rates of burnout in obstetrics and gynecology range from 40 to 75%, with 20% reporting both burnout and depression.[3,23]

In addition to gender alone, gender discrimination and disparities are also cited as causes of disproportionate burnout in female physicians. Gender disparities in compensation and salary exist within medicine and is a subject of concern and much research.[24] Teasing out the nuances of the data, however, is crucial. For instance, although work RVUs (relative value units) may be valued equally for a male or female in a certain specialty, women tend to generate fewer RVUs.[25] This is not because women are working fewer hours. Female physicians tend to take more time with patients, engage in more collaborative decision making processes, and take on more unprofitable work, such as volunteer administrative positions.[26]

Other risks for ob-gyn burnout are experienced by all physicians, regardless of gender. The nature of our work, although incredibly rewarding, is demanding. Caring for acutely ill patients does result in job stress,[27] and rewarding work may increase the likelihood of working longer hours, or even of compassion fatigue.[28,29] A survey of gynecologic oncologists found that most worked more than 60 hours per week, a definite risk for chronic exhaustion.[30]

Interestingly, self-determination of one's schedule can help overcome the exhaustion associated with heavy workloads.[15] In fact, among practicing ob-gyns, lack of control over one's work hours and schedule was a strong predictor of burnout, whereas those with moderate levels of satisfaction with work-life balance had higher levels of emotional resilience and personal accomplishment.[31] Extended work schedules affect all other aspects of life, including time with loved ones. In the above-mentioned American College of Surgeons survey by Johnson et al, insufficient time with family was significantly associated with worse career satisfaction for both genders (men odds ratio 0.70; 95% CI 0.52–0.95; P=.02; women odds ratio 0.45; 95% CI 0.23–0.87; P=.02). More than half of respondents had an employer provision for formal parenting leave, but onsite daycare and career-sharing opportunities were uncommon.[20] These difficulties have been amplified by the current pandemic. Although it may be administratively challenging, allowing more schedule flexibility in the physician workforce culture could have the greatest immediate positive effects on physician burnout.

Individual-level interventions and collegial support are crucial, but systemic change needs to be happening concurrently. One mammoth of job stress is inherent to the contemporary practice of modern medicine–"death by a thousand clicks" (attributed to Christopher Darus, MD, gynecologic oncologist). The medical chart has always been a means of communication, but now it is also a key driver of billing, a task that has been shifted to physicians. As a result, physicians are overburdened with documentation requirements and administrative tasks, which lead to an incredible loss of autonomy.[16,32] Spending more time on these activities, which are often considered by the physician to be meaningless, places one at an increased risk for burnout.[33,34]

The subspecialty of gynecologic oncology presents an odd juxtaposition of significant emotional exhaustion and depersonalization with preserved levels of personal accomplishment and fulfillment. In a 2015 survey, nearly one-third of gynecologic oncologists meet criteria for burnout. More concerning, 15% screened positive for alcohol use disorder, 13% reported a history of suicidal ideation, 34% had impaired quality of life, and almost 45% indicated they would be reluctant to seek medical care for these issues. On the opposite side, nearly 70% reported high levels of personal accomplishment, most (89%) would enter medicine again, and 61% stated they would encourage their child to enter medicine.[30] This information is simultaneously disturbing and encouraging, with an indication that addressing the systems-level issues that lead to concerning symptoms may afford physicians even greater work satisfaction.

CONSEQUENCES OF BURNOUT

It has long been recognized that physicians face a unique set of challenges and stressors in their work, with a force and frequency not easily appreciated by the general public.[2] We did not predict the current epidemic of physician burnout, perhaps because of the wide spectrum of risk factors. Similarly, the consequences resulting from physician burnout are extremely varied. These have been well-described in the literature and include negative effects on patient care, professional behavior, physician's self-care and

safety, and finances. There are also physical manifestations of burnout, often seen as a chronic "flight or fight" response. This can include behavioral changes, personal and relational, and physical illness.[35,36]

Behavioral changes and physical illness can progress to a much more severe outcome–suicide–with an estimated 400 physicians dying by suicide annually[37] and a risk of suicide approximately 1.5 times that of the general population.[38] Suicide completions seem to be more common in male physicians, with more nonfatal attempts and documented depression in women.[39] Those who reported a suicide attempt or self-identified depression were more likely to be non-Asian, to be born in the United States, to have a personal or family history of alcohol use disorder or dependence, and to have a history of severe harassment in the medical setting.[39]

Burnout is also a costly condition. A Canadian study estimated the cost to be $213.1 million annually, with $185.2 million attributed to early retirement and $27.9 million to reduced clinical hours.[40] Within the United States, the estimate ranges from $2.6 billion to $6.3 billion annually. Specifically, $4.6 billion of loss per year can be attributed to physician turnover and reduced productivity secondary to burnout.[41] When burnout is present, and prevalent, it results in lower quality of care, reduced work hours, and in some cases withdrawal from practice.[17,42–47] There has been no clear correlation demonstrated between surgeon fatigue and rates of complications or patient outcomes,[48–50] but sleep deprivation, longer work hours, and more call shifts are associated with a higher rate of motor vehicle accidents and higher rates of perceived medical errors.[51]

ADDRESSING BURNOUT

One of the initial strategies for addressing physician burnout is largely focused on individual risk factors and individual-focused interventions. "Medice, cura te ipsum," "Physician, heal thyself" is a proverb from the Bible, often used in discussions about burnout in health care. The effect of this statement is nuanced–it implies that a physician, already so adept at managing the problems of others, should be able to address the problems he or she faces. In fact, physicians pledge to be actively involved in maintaining their own wellness when we recite the Declaration of Geneva,[52] the "modern Hippocratic Oath":

I SOLEMNLY PLEDGE to dedicate my life to the service of humanity; THE HEALTH AND WELL-BEING OF MY PATIENT will be my first consideration…

I WILL ATTEND TO my own health, well-being, and abilities in order to provide care of the highest standard…

I MAKE THESE PROMISES solemnly, freely, and upon my honour.

For a physician experiencing burnout, a consistent characteristic is the inability to reflect on one's impairment and an unwillingness to seek help.[53] Thus, for someone who has already started to spiral into burnout, "heal thyself" is a callous proposition.

Although systems-level changes are desperately needed, there are some things that individuals can do to address burnout. Stress and sleep deprivation are cited as two major causes of burnout, and the combination of chronic stress with sleep deprivation has grave consequences: physical, cognitive, and emotional.[54] The solution for sleep deprivation–sleep–is not as straightforward as it seems. Quantity does not result in quality, and appropriate sleep hygiene is important. Work hour restrictions have been implemented for trainees, and newer work models such as laborist shifts and shared call schedules have increased. In a 2019 review of 14 studies evaluating the effect on burnout of limiting physician work hours, eight (57.1%) reported a positive effect.[55] Implementing these changes across other specialty and subspecialty groups could significantly reduce burnout among ob-gyn physicians.

The solution for stress is even more nuanced. Working fewer hours, for instance, is not a guaranteed solution. Training in stress management, time management and problem solving does take an investment in time – something we all have so little of – but has been proven to reduce stress.[56,57] Physical activity results in an improved sense of well-being, but the positive effects of exercise can be negated by chronic stress.[58]

It is important to recognize that those experiencing burnout feel isolated, but are not alone. The strategies used to treat burnout can also be used to prevent it, to build resilience. Recognizing the issue is one step in the right direction–acknowledging burnout is not a sign of weakness and should not carry a stigma. The time has come to truly address physician burnout–we started at extraordinarily high levels, which have been further exacerbated by our current COVID-19 pandemic. We have discussed the individual-level changes that are key to a successful practice, but "physician, heal thyself" is not enough. Institutions must invest in their physicians and in the strategies and changes that promise to reduce burnout and increase physician satisfaction (Shanafelt TD, DyrbyeLN, West CP. Physician

burnout: an urgent call for early intervention–reply [letter]. JAMA Intern Med 2013;173:710–11. doi:10.1001/jamainternmed.2013.3791).[59]

HOW CAN WE LEARN MORE ABOUT PHYSICIAN BURNOUT?

Studying burnout and burnout interventions is difficult–just as there has been a stigma preventing physicians from seeking help for burnout or depression, there is a stigma toward qualitative studies, often seen as less rigorous than quantitative science. Burnout is a multi-factorial problem, and experts on this subject argue that a traditional approach to study it would be ineffective–to overlook the subjective aspect, the art of medicine, the humanity of its practitioners, would be a disservice. Fortunately, the body of literature addressing burnout is growing.

Shanafelt and colleagues, who have published extensively on this subject, undertook a rigorous systematic review and meta-analysis of interventions aimed at preventing or reducing physician burnout.[60] Structural interventions included shortened shifts, communication skills training, stress management, and mindfulness-based approaches. Implementation of one of these four interventions resulted in about a 10% reduction in burnout, which translates to a 30% relative risk reduction in emotional exhaustion and 12% risk reduction in depersonalization. This is incredibly effective given that prior research by Shanafelt et al showed that even a more modest 1-point change in burnout scores results in less perceived medical errors and suicidal ideation.[38,43,61]

WHAT INTERVENTIONS WORK?

To best tailor interventions addressed at burnout, it is important to recognize that each presentation is unique. A physician experiencing burnout may be able to continue their high achievement in the workplace while struggling at home or with self-care. Identifying those subtle signs of destructive behaviors early in their course is crucial, but difficult. Although personal interventions can be effective, many have argued that "organizations must go first."[62] Most physicians feel that the source of their burnout is not them, but is driven by the system, generally the EMR. Although a physician can work doggedly to improve the "self" component of burnout, relapse is not uncommon. Sustainable change needs to involve the infrastructure of our health care system to identify, intervene, and ultimately prevent physician burnout.

Several systems-level strategies have proven to be effective, and worthy of the investment because of resultant improved physician productivity and retention.[18,55] These include maintaining a positive culture in the workplace,[63] individualized schedules,[64] and avoiding early or late meetings that interfere with personal responsibilities or free time.[47] Additional structural solutions would further support a reduction in physician burnout. These include options for formal leave, career sharing, onsite child care, flexible paid time off and vacation, perhaps even options for sabbatical, all in support of work-life integration.[20,59,64–66]

As noted above, restructuring our medical system may seem an insurmountable task, but highlighting individual leadership shows promise. In a survey of physicians at Mayo Clinic, faculty ratings of leadership behaviors correlated well with diminished faculty burnout, improved job satisfaction, and other factors reflecting resilience.[64] Another study from Mayo Clinic showed that small group meetings focusing on commitment to profession, collegiality, and social support were also effective at reducing burnout, social isolation, and likelihood of leaving the profession while increasing quality of life, job satisfaction, and engagement.[66] Another successful strategy is the creation and implementation of resiliency training programs, many specific to obstetrics and gynecology.[62] Some authors have suggested that allowing physicians to devote 20% of their time to education, research, or patient advocacy could restore the joy of practicing medicine.[67,68]

"Herd immunity" has been a popular discussion concept during this pandemic, but it also represents an approach to physician burnout.[53] When creating "herd immunity" for burnout, the first step is to recognize the potential symptoms of the disease: atypical outbursts of anger, passive-aggressive behavior, or withdrawal from colleagues. It can then be surrounded with a more positive environment, such as creating a community of caring within workplaces. The importance of collegiality and mentorship cannot be emphasized enough, as these interventions are proven to work. As advised by Dr. Roger Smith, ob-gyn, "We must commit to reaching out to, and accepting the help of, others. We must see this all as a part of professionalism."[53]

It should perhaps be intuitive for a field that expresses loss of autonomy as a risk factor for burnout, that simply asking people for input can boost their engagement and satisfaction. Soliciting input from our families and friends is a lesson we can apply to our personal lives as well. Among obstetrics and gynecology department chairs, having positive support from a partner was correlated with lower burnout, yet previous studies have shown that

partners of physicians often feel ignored and 30% report burnout. We need to make sure the people who make up the backbones of our support networks feel recognized. This, along with systems-level changes mentioned previously, would reduce the risk of work-home conflicts as well.[17]

WHERE DO WE GO FROM HERE?

Organizational changes are occurring. The triple aim for health care, proposed by the Institute for Healthcare Improvement, focuses on improving the patient experience, improving the health of populations, and reducing the per capita cost of health care.[69] Some have proposed to expand that to a quadruple aim that includes clinician experience. The American Medical Association has launched STEPS forward, aimed at practice improvement, with modules dedicated to physician burnout and well-being.[70] In 2017 The National Academy of Medicine launched the Action Collaborative on Clinical Well-Being and Resilience, with a host of on-line and print materials.[71] Reports from the National Academies of Sciences, Engineering, and Medicine draw attention to issues of patient safety and quality of care, and provide resources for implementing change.[72] The recommendations from these societies are data-driven and provide concrete solutions, such as streamlining workflow, team-based approaches to care, reducing the administrative burdens of the EHR, and providing leadership-driven professional support opportunities to address, and ideally prevent, physician burnout.

Within obstetrics and gynecology, the Society of Gynecologic Oncology serves as an example of organizational leadership to prioritize physician well-being. Early on, the society recognized the prevalence of burnout among gynecologic oncologists. The initial 2014 practice survey led to the creation of a Wellness Task Force, now a committee, which ultimately published a review and recommendations for addressing burnout.[4] A resiliency training curriculum for gynecologic oncology fellows has been launched.[73] Similarly, the Society for Maternal-Fetal Medicine offers a wellness program for members, which includes a fellow's curriculum and mentorship program.[74] A Wellness Task Force exists within the Council on Residency Education in Obstetrics and Gynecology and has been formulating a residency wellness curriculum, although there is no module specific for those in practice.[75]

In summary, nearly half of U.S. physicians report one or more symptoms of burnout. We suspect this will increase as we continue to face the COVID-19 pandemic. Burnout is associated with increased rates of anxiety, depression, exhaustion (emotional and physician), sleep deprivation, and loss of cognitive function. More alarming is the rate of suicide, greater than that of the general public and even greater than that of combat veterans.[76]

We are under constant stress, constant monitoring, constant reporting, and constant assessments. Time in front of a computer has taken us away from our families and has taken us away from our patients. It is heartening to see that rates of personal accomplishment are still high.[30] We need to capitalize on this to further optimize our system. We must maintain a commitment to personal well-being while also addressing optimization of the EMR, allowing for more flexible work schedules or job sharing. We can no longer expect physicians to heal themselves, "Medice, cura te ipsum." It is time to demand that our health care systems provide the infrastructure, support, and financial investment in physicians so that we can continue to effectively care for each other and our patients.

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