Editorial

Addressing Rheumatology Resident Well-Being Is Critical to the Rheumatology Workforce and the Care of Our Patients

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Matriculating medical students have lower levels of burnout compared to age-matched college graduates,1 and yet residents and practicing physicians have higher rates of burnout compared to the general population,2,3 suggesting that medical training may play a role in increasing rates of burnout. Burnout, characterized by Maslach and Jackson as the triad of depersonalization, emotional exhaustion, and loss of a sense of personal accomplishment,4 is well documented in physicians around the world and has been shown to be increasing over time, particularly after the start of the coronavirus disease 2019 (COVID-19) pandemic.5,6 There is a lack of longitudinal data on the effect of the pandemic on rheumatologists specifically, although in a survey of Canadian rheumatologists conducted between 2020 and 2021 during the COVID-19 pandemic, 51% of rheumatologists met the criteria for burnout.7 A recent Medscape survey reported that rheumatologists have the second-highest burnout levels among 29 specialties.8

In this issue of *The Journal of Rheumatology*, McGoldrick et al9 evaluated burnout among American rheumatology fellows in a cross-sectional study performed in 2019. One hundred five fellows completed a survey designed to evaluate burnout using an adapted version of the previously validated Maslach Burnout Inventory.10 The authors also measured secondary outcomes such as depression, quality of life, and fatigue.9 They posed open-ended questions to collect qualitative data on perceived factors that reduce and factors that worsen burnout.

McGoldrick et al found that 38.5% of postgraduate year (PGY) 4 and 16.7% of PGY5/6 fellows had at least 1 symptom of burnout.9 PGY4 fellows had higher rates of burnout, more depression, worse fatigue, and worse quality of life compared to PGY5 fellows. Younger age was associated with higher levels of burnout, but there was no variation by gender, race/ethnicity, or relationship status. In the qualitative analysis, respondents identified several protective factors for burnout, including exercise, family and friends, sleep, support at work, and hobbies. Factors that contributed to burnout included excessive pages while on call, documentation, presentation burden, long work hours, and patient care demands. The authors concluded that efforts to combat burnout should begin while physicians are still in training, and that a particular focus should be placed on younger trainees and those early in their training. Overall, the authors noted that although their survey was conducted on a national scale, some notable limitations include the fact that only 18% of rheumatology fellows responded, the study was not longitudinal in nature, and the survey was conducted prepandemic and hence the effect of the pandemic on burnout in rheumatology fellows is not known.

Although rheumatology has often been seen as a “happier specialty,”9 it is clear that the burnout epidemic has not spared rheumatologists, nor, as McGoldrick et al have shown,9 our rheumatologists in training. This study draws attention to this issue, which is critical to the health of our current and future rheumatology workforce.

Identifying and managing burnout in our rheumatology trainees is important. Evidence has suggested that burnout has a profound effect on trainees. Wei et al performed a systematic review looking at burnout in nursing students. Their findings revealed a negative association between burnout and student engagement.12 Similarly, in a metaanalysis of over 100,000 students of all levels of education, including university and college, Madigan and Curran examined the relationship between burnout and academic achievement.13 All 3 domains of burnout (depersonalization, emotional exhaustion, and loss of a sense of personal accomplishment) predicted worse academic

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achievement. In rheumatology, the training period is short and yet, in this brief period of time, trainees are expected to develop a depth of knowledge and experience to allow them to succeed as rheumatologists and provide excellent patient care. Addressing factors that contribute to burnout should therefore be seen as critical.

Burnout in medicine is a complex phenomenon, the roots of which are multifactorial. Innumerable medical advances over the last several decades have increased life expectancy, and although our patients are living longer, they are not always living well. As a result, over the years, medicine has become more complex and, in parallel, the systems that govern it have become more bureaucratic. Much more of the modern physician's time is spent entrenched in administrative tasks—often tasks that are mandated by other individuals or systems. Indeed, a recent survey highlighted that the top factor leading to physician burnout was “too many bureaucratic tasks.” This was closely followed by “spending too many hours at work”—a sequela of having to deal with more administrative work in conjunction with just as much, if not more, clinical work compared to our predecessors. A review by Yates agreed that excess bureaucracy plays a role in physician burnout, in addition to other factors including lack of clinical autonomy, lack of respect from colleagues, computerization of practice, and insufficient compensation. These factors can be conceptually categorized into 3 groups: work factors, personal characteristics, and organizational factors.

Many of these factors thought to contribute to burnout are similar to those McGoldrick et al found in rheumatology trainees. In the present study, they found that rheumatology fellows identified work factors (such as long work hours, demands of patient care, and documentation requirements), personal characteristics (such as work-life balance and hobbies), and organizational factors (such as support from colleagues and superiors) as variables affecting burnout. One of the things that sets trainees apart from attending physicians is that they lack social capital. The resultant power differential further amplifies the bureaucratic hurdles and the lack of autonomy that trainees can face—2 important factors previously identified by physicians as leading to burnout, and organizational factors (such as support from colleagues and superiors) as variables affecting burnout. One of the things that sets trainees apart from attending physicians is that they lack social capital. The resultant power differential further amplifies the bureaucratic hurdles and the lack of autonomy that trainees can face—2 important factors previously identified by physicians as leading to burnout, and organizational factors (such as support from colleagues and superiors) as variables affecting burnout.

We must also keep in mind the exacerbation of burnout seen in the context of the COVID-19 pandemic. An international cross-sectional survey conducted by the Global Rheumatology Alliance in 2022 highlighted the negative effect of the pandemic on rheumatology trainees in terms of clinical teaching, didactic teaching, procedural opportunities, ultrasound exposure, ability to teach junior trainees, research experiences, and overall career impact. This study also demonstrated an increase in burnout and stress levels, and even a negative effect on physical health.

What can we do about burnout in medical trainees? Interventions should be evidence-based. Specifically, those that target a combination of the identified categories of work factors, personal factors, and organizational factors are likely to have the largest and longest-lasting effect. Several studies have examined such interventions including shortened work hours, stress management training, self-care workshops, and wellness programs. Lefèvre et al showed in 2019 that a dedicated multifaceted wellness curriculum instituted for Emergency Medicine residents at the University of Alberta improved the wellness of these residents and had a high degree of participant satisfaction.

A systematic review by Busireddy et al in 2017 found that reduced work hours was the one intervention that was consistently associated with lower levels of emotional exhaustion and lower rates of burnout in resident physicians. However, reducing work hours may not be a practical solution in a healthcare system that is already overwhelmed with clinical work, and given an already short period of residency and fellowship.

Targeting the educator-student relationship is another strategy that has been proposed to mitigate trainee burnout. Proneman et al, in a study of nursing students, suggest that student resilience can be strengthened by an effective educator-student relationship, which, in turn, can be fostered by a physically and emotionally safe teaching-learning environment, constructive educator-student interactions, and certain personal qualities such as mutual respect. Wei et al found “faculty caring” to be a significant factor predicting student confidence, which, in turn, is associated with lower student burnout. Although these studies suggest that caring faculty who are good role models might be helpful in mitigating student burnout, at a time where faculty physicians also have high rates of burnout, how influential is this factor likely to be? Madigan and Kim performed a systematic review of teacher burnout and its association with student academic achievement.

Although this study was not specific to physicians or medical residents, it did reveal that teacher burnout was associated with worse academic achievement in students and decreased student motivation, suggesting a link between faculty and trainee burnout.

Assuming the learning environment and related factors such as faculty mentoring and role modeling are vital to student learning, resident burnout must be addressed in the broader context of physician burnout. We need to expand the focus for interventions, which are often aimed at the individual medical resident, toward interventions that address the systemic issues that foster burnout in medicine more broadly.

The cost of failing to manage physician and trainee burnout is thought to be large. Shanafelt et al identify some of these costs, which include increased physician turnover, decreased clinical productivity, decreased patient satisfaction, and patient safety concerns.

McGoldrick et al in the present study point out that retention of rheumatologists is critical in light of the predicted rheumatologist shortage not only in the United States but also in Canada. A survey by the Canadian Rheumatology Association (CRA) in 2020 highlighted that there was a deficit of 194 full-time equivalent (FTE) rheumatologists in Canada to meet the CRA target of 1 FTE rheumatologist per 75,000 individuals. This deficit is expected to worsen in the coming years, as 28% of respondents plan to retire in the next 5 to 10 years. This impending shortage reinforces that the effects of burnout of our rheumatology trainees go far beyond the effects on the
individual. Burnout can affect an already short supply of rheumatologists, the quality of care delivered by rheumatologists, and the health and safety of our rheumatology patients.

In 2018, Thomas et al published a Charter on Physician Well-being. They tell us that physicians who are well can best serve their patients. We agree and also advocate that trainees who are well can learn better, and faculty who are well can be better teachers. Addressing burnout in rheumatology trainees will enhance learning and thereby patient safety, ultimately leading to higher-quality care. This important study by McGoldrick et al highlights the real and present issue of burnout among our rheumatology trainees. Further studies are required to determine how best to reduce trainee burnout through evidence-based interventions. It is vital that residents, faculty, hospitals, and universities work collaboratively to address the organizational, structural, and individual factors that have contributed to burnout.

REFERENCES