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Toward an understanding of the burnout phenomenon among dermatology residents

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To the Editor:

The concept of burnout was first described in the 1970s by an American psychologist, Herbert Freudenberg, as a prolonged response to emotional and personal stressors in the workplace [1]. Later, Maslach designed a tool to assess burnout syndrome consisting of three dimensions: 1) emotional exhaustion, 2) depersonalization, and 3) a diminished feeling of personal achievement [2]. It is important to differentiate between burnout and stress. Stress is defined as "any uncomfortable emotional experience accompanied by predictable biochemical, physiological, and behavioral changes" and may be experienced by all life forms [3,4], whereas burnout is a work-related matter triggered by occupational factors, such as work overload and a lack of social support.

"Burnout versus moral injury" is also a recent controversial topic that was introduced in 2018 [5]. A moral injury occurs when a person commits, witnesses, or fails to prevent an action that violates their deeply held ethical beliefs. In the field of medicine, this can happen when health care providers must act on beliefs that go against their oath. An editorial published in 2019 suggested that sometimes physicians are compelled to follow rules that comply with stakeholder demands. This includes hospital administration, the nation's healthcare system, or insurance company regulations. Burnout, fundamentally, implies that the problem lies within the physicians themselves in which they become less resilient to work demands.

However, moral injury implies that the defect lies within the constraints of the system. Accordingly, the proposed solution consists of manipulating the healthcare environment in which physicians work rather than focusing on the physicians' adaptive skills [6].

Burnout is a public health issue of national proportions as it may progress to clinical depression. It may aggravate or induce suicidal ideation and lead to substance abuse, malpractice, negligence, medical errors, and suboptimal patient care [3,4,7,8]. The Maslach Burnout Inventory (MBI) has become the gold standard measure of burnout. It is used in an estimated 88% of all research on burnout [9,10]. It consists of three dimensions: 1) emotional exhaustion, the basic individual stress component, defined as severe fatigue caused by study demands; 2) cynicism, the interpersonal component, defined as students' mental distance from their studies or excessively detached interactions with other students in an academic setting; and 3) a reduced sense of personal achievement, the self-evaluation component, defined as feelings of decline in one's competence and productivity and a low sense of accomplishment. This inventory has been adapted to produce multiple surveys for different jobs, such as the MBI for Human Service Survey (MBI-HSS), for medical personnel (MBI-HSS-MP), and for educators (MBI-ES), [10]. Numerous alternative burnout questionnaires have been proposed, but to date, no instrument has achieved the popularity and reliability of the Maslach Burnout Inventory.

From 2011 to 2014, dermatologists' practitioner status changed from being among the medical specialties with the lowest burnout rates to that reflecting the largest increase (from 32% to 57%), ranking ninth among the 24 specialties evaluated. [11] Regarding dermatology residents, little is known about burnout rate. In our review, only three studies were found.

The first study was conducted in Canada, in 2016, among all Canadian dermatology residents using the MBI as an assessment tool for burnout. Exhaustion was high (54%) as were depersonalization (50%), and a low level of personal achievement (40%). In this study sample, examinations were identified as the highest stressor (61%); other stressors, such as work and family obligations, finances, and research obligations, contributed to burnout to a lesser extent. Moreover, more than two thirds of the participants (72%) reported sleeping less than seven hours daily whereas more than half reported having experienced a low or depressed mood within the past year. The highest peaks of burnout were noted upon entering the residency program and in preparing for examinations [12].

The second study was conducted among dermatology residents in Texas, United States in 2020, using the Oldenburg Burnout Inventory (OLDI) as the assessment tool. Burnout was prevalent in more than half the dermatology residents (51.89%), strongly attributed to an increase in patient volume as well as a rise in average time spent by residents in documentation. Similarly, documentation was identified as a major source of burnout among dermatology residents in other studies [13]. Other reasons mentioned for burnout were time spent communicating with patients out of clinic hours, long clinic hours, understaffing, and patient load. Factors that could contribute to the wellness of residents in this study were reported as 1) hiring more staff to assist in patient communication and authorization, 2) having protected time for studying and clinical research, 3) limiting the overbooking of patients, and 4) having a fixed lunch break. Moreover, residents who had high burnout rates reported having lower interest in pursuing clinical research and applying for fellowships or full-time

jobs, factors having a significant effect on their career plans [14].

Documentation, a major source of burnout among this sample, proved to be perceived as a major contributor to burnout from the literature as well. A cross-sectional survey was conducted at the Brigham and Women's Hospital Dermatology department and its associated residency program to assess the perception of scribe impact on documentation time as well as the quality and duration of teaching. The results of the survey showed that a majority of physicians perceived that assigning a scribe decreases documentation time (92% attending physicians, 88% trainees) enhancing the learning experience (57% attending physicians, 80% trainees) by increasing the learning time and availability of physicians to address educational questions (57% attending physicians, 68% trainees). The study suggested that although most hospitals hire scribes primarily to increase work efficiency, an additional benefit of decreasing burnout by decreasing documentation burden and increasing educational time was noticed [15].

The third and final study is a multi-center study done on all dermatology residents in Riyadh, Saudi Arabia in 2020, using the MBI as the assessment tool for burnout. The percentages of emotional exhaustion, low sense of personal accomplishment, and depersonalization were 41.2%, 45.1%, and 13.7%, respectively. A statistically significant effect linked lower burnout rates with salary satisfaction, career and work-life balance, and average number of sleeping hours. The study found the overall burnout rate to be only 7.8%. The researchers attributed this to fairness in the distribution of on-call time, working hours, and number of clinics per week among the residents in the study sample. In addition, residents had protected time for research and academic activities (two academic half days and one-half day for research per week). Furthermore, residents in the study sample reported benefiting from their relationships with mentors [16].

Mentorship was considered to be one of the protective factors preventing burnout in the last study sample. Hence, healthcare inequity in the form of gender-based differences could be considered a

possible cause of high external stressor leading to burnout by directly affecting mentorship. For an instance, a study done in 2016 in the USA, suggested that although the number of women entering the medical field is equivalent to the number of men, women constitute only a fraction of the leadership roles in the field of dermatology. Despite excelling at entering the competitive field of dermatology and contributing to it, women constitute roughly 33% of the professors and 25% of chairs. The lack of role models for female dermatologists could hinder their career progression and become a cause of burnout [17]. This was also supported in other literature reporting that dermatology residents desire more mentorship from faculty members [18].

In conclusion, the overall rise in the burnout phenomenon among dermatology residents was supported by several studies, despite being an

under-reported issue. The increase in incidence in all burnout aspects (emotional exhaustion, low sense of personal achievement, depersonalization) was noted, with a predominance in emotional exhaustion. Multiple factors contributed to this increase. However, certain factors were more statistically significant than others, including examinations, inadequate sleeping hours, and time spent by residents in documentation. Only one study showed a decrease in burnout rate related to fair distribution of on-call schedules and protected time for research and academic activities. In addition, good mentor-mentee relationships could be beneficial. The relationship between burn-out and moral injury has not really been assessed.

Potential conflicts of interest

The authors declare no conflicts of interest

References

- Freudenberger HJ. Staff burn-out. *J Soc Issues*. 1974;30:159–65. [DOI: 10.1111/j.1540-4560.1974.tb00706.x]
- Maslach C, Jackson SE. The measurement of experienced burnout. *J Organ Behav*. 1981;2:99–113. [DOI: 10.1002/job.4030020205]
- Bakker AB, Schaufeli WB, Demerouti E, Janssen PP. M., & Van Der Hulst. Using equity theory to examine the difference between burnout and depression. *Anxiety Stress Coping*. 2000;13:247–68, [DOI: 10.1080/10615800008549265].
- Iacovides A, Fountoulakis KN, Kaprinis S, Kaprinis G. The relationship between job stress, burnout and clinical depression. *J Affect Disord*. 2003;75:209–21. [PMID: 12880934].
- Talbot SG, Dean W. Physicians aren't 'burning out.' They're suffering from moral injury. *Stat*. 2018;7:18. <https://www.statnews.com/2018/07/26/physicians-not-burning-out-they-are-suffering-moral-injury/>.
- Dean W, Talbot S, Dean A. Reframing Clinician Distress: Moral Injury Not Burnout. *Fed Pract*. 2019;36:400–402. Erratum in: *Fed Pract*. 2019;36:447. [PMID: 31571807].
- Wurm W, Vogel K, Holl A, et al. Depression-Burnout Overlap in Physicians. *PLoS One*. 2016;11:e0149913. [PMID: 26930395].
- Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Annu Rev Psychol*. 2001;52:397–422. [PMID: 11148311].
- Boudreau RA, Boudreau WF, Mauthe-Kaddoura AJ. From 57 for 57: A bibliography of burnout citations. In Poster, 17th Conference of the European Association of Work and Organizational Psychology (EAWOP). Oslo, Norway.
- Schaufeli WB, Desart S, De Witte H. Burnout Assessment Tool (BAT)-Development, Validity, and Reliability. *Int J Environ Res Public Health*. 2020;17:9495. [PMID: 33352940].
- Shanafelt TD, Hasan O, Dyrbye LN, et al. Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014. *Mayo Clin Proc*. 2015;90:1600–13. Erratum in: *Mayo Clin Proc*. 2016;91:276. [PMID: 266532970].
- Shoimer I, Patten S, Mydlarski PR. Burnout in dermatology residents: a Canadian perspective. *Br J Dermatol*. 2018;178:270–271. [PMID: 28374946].
- Dorrell DN, Feldman SR, Huang WW. The most common causes of burnout among US academic dermatologists based on a survey study. *J Am Acad Dermatol*. 2019;81:269–70. [PMID: 30682395].
- Brown AE, Drozd B, Nguyen C, Chen L, Nguyen TT. Correlation of well-being during dermatology residency with future career plans. *Dermatol Online J*. 2020;26:13030/qt26v1h7gc. [PMID: 33423417].
- Zhong CS, Mostaghimi A, Nambudiri VE. Impact of medical scribes on dermatology trainee and attending experience. *Dermatol Online J*. 2019;25:13030/qt1xc5n4t2. [PMID: 31735004].
- Shadid A, Aldosari BM, ALGarni AM, Altalhab S, Alharithy R. Burnout syndrome and its predictors in dermatology residents. *Researchsquare* 2020. [DOI: 10.21203/rs.3.rs-41505/v1]
- John AM, Gupta AB, John ES, Lopez SA, Lambert WC. A gender-based comparison of promotion and research productivity in academic dermatology. *Dermatol Online J*. 2016;22:13030/qt1hx610pf. [PMID: 27617455].
- Freiman A, Barzilai DA, Barankin B, Natsheh A, Shear NH. National appraisal of dermatology residency training: a Canadian study. *Arch Dermatol*. 2005;141:1100–4. [PMID: 16172306].