

Burnout, Resilience and Faculty Development for Physician Educators: A Survey Study

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Abstract

Background and Aim: Physician burnout is a well-recognized crisis, worsened recently by the COVID-19 pandemic. It is recommended that organizations regularly measure burnout and implement mitigating strategies. Personal resilience is commonly cited as a factor that moderates burnout. The aim of this study was to measure burnout and resilience in physician educators at a pediatric academic hospital, and identify predictors of burnout and its various categories.

Methods: A survey that included demographic questions, Brief Resilience Scale and Maslach Burnout Inventory was administered online. 74 physician educators at Sidra Medicine in Qatar completed the survey between June-July 2021. The results were collected by a third party to maintain anonymity.

Results: The response rate was 42%. The overall rate of burnout was 7%. Faculty with higher personal resilience were more likely to feel 'Engaged,' and those with access to a faculty development program within the department were less likely to report 'Emotional Exhaustion'.

Conclusion: Higher resilience is associated with engagement at work. Personal and organizational strategies that promote physician resilience may reduce the risk of burnout amongst physician educators.

Keywords: Burnout; Resilience; Faculty Development; Wellness; Physician Educators

Introduction

Burnout is an occupational syndrome with three domains: emotional exhaustion, depersonalization and low sense of personal accomplishment at work [1]. It is associated with lower productivity, lower self-efficacy and increased health problems in the worker [2]. Burnout can also have an organizational impact, for example, higher rates of employee turnover and poor employee performance [2]. Physician burnout is a well-recognized crisis [3]. Higher levels of health care worker burnout has been reported worldwide after the onset of the COVID-19 Pandemic [4-6]. Although physician burnout is well-studied in western countries, there is a paucity of data from the Middle East [3].

Physician educators face the unique challenge of balancing the time required for education and training, with the demand for patient care in academic institutions while simultaneously lacking formal training in education. With these pressures, the risk of burnout increases making learning environments potentially unpleasant [7]. Personal factors that may moderate the risk of burnout amongst faculty include expertise, seniority and personal resilience [8]. Institutional factors like high staff turnover and increased workload, lack of autonomy, ineffective leaders and lack of a well-being culture can increase the risk of burnout [9,10]. Studies have shown that institutional strategies focused on wellbeing and faculty development can significantly reduce rates of physician burnout [11]. Despite that, very few academic institutions offer faculty development and wellbeing programs [7]. The American Accreditation Council for Graduate Medical Education (ACGME) has recommended that academic institutions should measure burnout and implement faculty wellbeing initiatives [12].

According to Kotter's model for change [13], the first step for creating a wellbeing culture within the organization is to determine the need, and create a sense of urgency. The pandemic has already created a greater need for a wellbeing culture within organizations globally.

Purpose of the Study

The purpose of this study was to determine the need for a wellbeing program by measuring rates of faculty burnout and resilience. The objectives of this study were a) to measure burnout in physician educators, b) to determine the relationship between burnout and individual resilience and c) to identify factors that may predict burnout within physician educators.

The outcomes will identify areas of improvement and guide next steps for change i.e. forming a hospital wide coalition promoting wellness, communicating the vision of 'well faculty = good educators' and expansion of faculty development and wellbeing programming within the organization.

Methods

Setting and participants

Sidra Medicine is the only tertiary pediatric hospital in Qatar, comprised of primarily an expatriate faculty from across the globe. Email addresses of faculty involved in training programs were obtained from the Graduate Medical Education office. We employed a third party (Mind Garden), to disseminate the online survey and ensure anonymity of responses. The survey link was sent to 177 faculty (67.7% male) in June 2021 and the survey was active for one month. We received human subject's research approval from the Sidra Medicine Institutional Review Board on May 9th, 2021. (IRB# 1697501).

Survey development

The survey included three sections:

- A) In the demographics section, we collected information on gender; years in clinical practice and teaching; current time invested in teaching versus clinical work; academic rank; administrative rank and whether the participant's division had a faculty member responsible for faculty development as educators. We also asked respondents to rate their interest in attending a Faculty Development Program (FDP) using a Likert scale.
- B) We used the Maslach Burnout Inventory (MBI) version for educators to measure burnout [14]. Licenses were purchased through Mind Garden.

The MBI measures burnout using three categories defined as follows:

1. Emotional Exhaustion: Feeling overwhelmed, stressed, and weary
2. Depersonalization: Lost enthusiasm or an unfeeling, impersonal response towards one's students.

3. Low Personal Accomplishment: Feeling low levels of competence and effectiveness, and not having a beneficial impact on students.

Burnout is further divided into five profiles: Engaged, Ineffective, Overextended, Disengaged, and Burnout. The burnout profiles are described below:

- a) The Engaged profile scores low on Emotional Exhaustion and Depersonalization, and high on Personal Accomplishment.
 - b) The Ineffective profile has a low Personal Accomplishment score. Individuals with this profile may not feel competent or effective at work. Interventions for this profile might include more recognition for a job well done.
 - c) The Overextended person has a high Emotional Exhaustion score. This person may feel competent and involved yet feels emotionally exhausted. Interventions for this profile could include reducing work hours and a better work-life balance.
 - d) The Disengaged individual has a high Depersonalization score. The disengaged educator has energy and confidence but may find it difficult to dedicate time and energy to their students.
 - e) Burnout profile has high scores on both Emotional Exhaustion and Depersonalization.
- C) In order to measure resilience we used the Brief Resilience Scale (BRS) [15] with permission from the author. The BRS is a reliable means of assessing resilience (defined as the ability to bounce back or recover from stress) and may provide unique and important information about coping with work-related stressors. It is comprised of six questions which are rated on a Likert scale of 1 - 5. Average BRS scores of < 3 indicate low resilience, 3 - 4: 30: normal resilience and > 4:30 indicates high resilience.

Data analysis

We received de-identified data from Mind Garden at the end of the survey period including total and mean scores for the MBI and the BRS. We compared mean scores for our faculty to the norm, which represents standard deviations obtained from a general population of 4,000 educators. We used the statistical software R version 4.1.1 for all statistical analyses. We reported descriptive statistics using frequencies and mean \pm SD to represent categorical and continuous variables, respectively. To compare continuous variables between groups, we used the Mann-Whitney U-test or One-way Anova as appropriate. We used the Chi-square or Fisher's Exact Test as appropriate to calculate the p-values of associations between categorical variables. We considered any relationship with a p-value less than 0.05 as significant.

Results

Of the 177 faculty members, 116 participants reviewed the survey via the personalized link provided. However, only 74 completed the survey for a response rate of 41.8% (74/177).

Of the respondents, the 64.9% were male gender (48 out of 74) and 50% of faculty had been in clinical practice for > 20 years. Years of teaching experience was consistent with about 1/3 in each category (0 - 10, 10 - 20 and > 20 years). A majority of respondents had achieved a rank of clinical instructor or assistant professor; however, 25% of faculty had not secured an academic appointment at the time of the survey. A rank of professor or associate professor was less common. More than 80% of faculty reported being actively involved in supervising trainees and nearly 90% of faculty noted they were spending up to 10 hours a week teaching (Table 1).

More than half of the respondents reported an interest in attending a FDP (Table 1).

Within the organization the overall scores for emotional exhaustion and personal accomplishment was similar to the norm while depersonalization scores were lower than the norm (Figure 1).

	N: 74 (%)
Gender	
Male	48 (64.9)
Female	26 (35.1)
Academic Rank	
Clinical Instructor	11 (14.9)
Assistant Professor	32 (43.2)
Associate Professor	9 (12.2)
Full Professor	3 (4.05)
None	19 (25.7)
Administrative Rank	
Chair of Department	2 (2.70)
Division Chief	14 (18.9)
Program Director /Associate Program Director	20 (27.0)
Other*	18 (24.3)
None	20 (27.0)
Certification Training Route	
American Board	18 (24.3)
Canadian Board	6 (8.11)
UK Board	23 (31.1)
Australian Board	1 (1.35)
Arab board	17 (23.0)
Other**	9 (12.2)
Years in Clinical Practice	
< 5	4 (5.41)
6 - 10	9 (12.2)
11 - 15	5 (6.76)
16 - 20	19 (25.7)
> 20	37 (50.0)
Past teaching experience (years)	
0 - 5	11 (14.9)
6 - 10	15 (20.3)
11 - 15	11 (14.9)
16 - 20	12 (16.2)
> 20	25 (33.8)
Do you currently supervise trainees	
Yes	61 (82.4)
No	13 (17.6)

Time spent teaching (hours/week)	
< 5	41 (55.4)
6 - 10	25 (33.8)
> 10	8 (10.8)
Interest in a Faculty Development Program**	
0	7 (9.46)
1	6 (8.11)
2	4 (5.41)
3	17 (23.0)
4	16 (21.6)
5	24 (32.4)

Table 1: Participant demographics.

*Assistant division chief, clinical/quality lead, clerkship director, committee member; European (3); Tunisian (1); Indian (1) **Likert scale of 1-5.

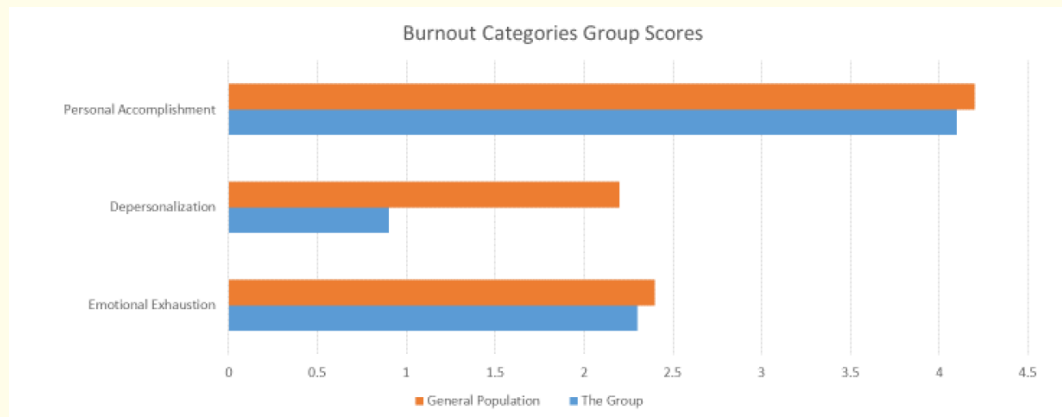


Figure 1: Group scores for emotional exhaustion, depersonalization and personal accomplishment.

Approximately 7% of the faculty reported burnout (Table 2).

Burnout and resilience

Respondents with high BRS scores (mean > 4:30) were more likely to be Engaged (p < 0.01), while those with low BRS scores (mean < 3) were more likely to feel Overextended (p < 0.01) (Table 3).

Burnout Profiles	N:74 (%)
Engaged	
No	52 (70.3)
Yes	22 (29.7)
Ineffective	
No	46 (62.2)
Yes	28 (37.8)
Overextended	
No	57 (77.0)
Yes	17 (23.0)
Disengaged	
No	72 (97.3)
Yes	2 (2.70)
Burnout	
No	69 (93.2)
Yes	5 (6.76)

Table 2: Breakdown of burnout profiles.

	No Mean (SD)	Yes Mean (SD)	P value
Engaged			
BRS	3.43 (0.64)	4.12 (0.53)	0.0000744*
Ineffective			
BRS	3.64 (0.72)	3.64 (0.63)	0.889
Overextended			
BRS	3.77 (0.67)	3.20 (0.51)	0.00254*
Disengaged			
BRS	3.66 (0.68)	2.92 (0.12)	0.0969
Burnout			
BRS	3.66 (0.67)	3.30 (0.88)	0.179

Table 3: Wilcox test comparison of brief resilience scale (BRS) based on burnout profiles.

*Denotes Statistical Significance.

Predictors of burnout

Faculty that reported having access to an existing FDP within their department, reported lower emotional exhaustion (p 0.03) (Table 4).

Years in Clinical Practice	0 - 5	6 - 10	11 - 15	16 - 20	> 20	p value
	N = 4	N = 9	N = 5	N = 19	N = 37	
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	
Emotional Exhaustion	2.15 (1.26)	3.19 (1.67)	3.44 (1.87)	1.87 (1.16)	2.14 (1.46)	0.078
Depersonalization	1.25 (1.37)	1.51 (1.26)	1.84 (0.83)	0.84 (0.84)	0.70 (0.86)	0.033*
Personal Accomplishment	2.72 (1.76)	3.44 (1.47)	3.38 (1.33)	4.51 (1.07)	4.30 (1.17)	0.020 *
Past teaching experience (years)	0 - 5	6 - 10	11 - 15	16 - 20	> 20	p value
	N = 11	N = 15	N = 11	N = 12	N = 25	
Emotional Exhaustion	2.27 (1.31)	3.06 (1.64)	2.23 (1.39)	2.61 (1.44)	1.71 (1.35)	0.069
Depersonalization	1.18 (1.18)	1.28 (1.07)	1.04 (1.07)	1.20 (1.06)	0.46 (0.55)	0.048*
Personal Accomplishment	3.31 (1.59)	4.00 (1.31)	4.30 (1.24)	4.07 (1.04)	4.45 (1.21)	0.179
Supervision of Trainees	Yes	No	p value			
	N = 61	N = 13				
Emotional Exhaustion	2.36 (1.49)	1.98 (1.42)	0.398			
Depersonalization	1.00 (1.00)	0.66 (0.86)	0.227			
Personal Accomplishment	4.17 (1.20)	3.80 (1.68)	0.465			
Time Spent in Teaching	< 5 hours	6 - 10 hours	> 10 hours	p value		
	N = 41	N = 25	N = 8			
Emotional Exhaustion	2.23 (1.52)	2.58 (1.46)	1.69 (1.23)	0.312		
Depersonalization	0.87 (0.95)	1.24 (1.08)	0.38 (0.39)	0.072		
Personal Accomplishment	3.86 (1.46)	4.22 (0.86)	5.00 (1.21)	0.060		
Presence of Faculty leading Faculty development	Yes	No	Don't know	p value		
	N = 43	N = 25	N = 6			
Emotional Exhaustion	1.89 (1.24)	2.85 (1.59)	2.83 (1.88)	0.020*		
Depersonalization	0.82 (0.94)	1.12 (0.95)	1.03 (1.41)	0.476		
Personal Accomplishment	4.22 (1.32)	4.00 (1.21)	3.70 (1.58)	0.584		

Table 4: Predictors of burnout

**Denotes Statistical Significance.*

Faculty with more years of teaching experience were less likely to experience depersonalization (p 0.04). Higher number of years in clinical practice was associated with less depersonalization (p 0.03) and higher sense of personal accomplishment (p 0.02) (Table 4). Holding an administrative rank decreased the likelihood of feeling ineffective (p 0.04) (Table 5).

We saw a trend for lower depersonalization in faculty who spent more time teaching, although this did not reach statistical significance (p 0.07) (Table 4).

We also noted a trend for higher sense of personal accomplishment in faculty with higher academic rank (but not higher administrative rank) although not statistically significant (p 0.07) (Table 6).

There were no gender related differences (Table 6).

Administrative Rank:	No	Yes	p = 0.04443*
Chair	1 (2.1)	1 (3.5)	
Division Chief	8 (17.3)	6 (21.4)	
Program Director	18 (39.1)	2 (7.1)	
Other	5 (10.8)	7 (25.0)	
None	14 (30.4)	12 (42.8)	

Table 5: Administrative Rank versus Feeling Ineffective.

*Denotes Statistical Significance

Academic Rank	Clinical Instructor	Asst. professor	3Assoc prof	Full prof	None	p value
	N = 11	N = 32	N = 9	N = 3	N = 19	
Emotional Exhaustion	2.12 (1.34)	2.52 (1.43)	1.92 (1.52)	0.47 (0.50)	2.46 (1.59)	0.177
Depersonalization	0.78 (1.01)	1.05 (0.92)	0.76 (1.18)	0.07 (0.12)	1.07 (1.03)	0.450
Personal Accomplishment	3.84 (1.36)	4.32 (1.11)	4.53 (1.00)	5.17 (1.44)	3.52 (1.48)	0.075
Administrative Rank	Chair	Div chief	Prog. Dir	Other	None	p value
	N = 2	N = 14	N = 20	N = 18	N = 20	
Emotional Exhaustion	1.55 (0.78)	2.62 (1.73)	2.77 (1.59)	1.74 (0.95)	2.14 (1.52)	0.206
Depersonalization	0.70 (0.71)	1.10 (1.24)	1.12 (0.95)	0.81 (0.70)	0.79 (1.08)	0.755
Personal Accomplishment	4.30 (1.13)	4.06 (1.13)	4.63 (1.10)	3.91 (1.27)	3.76 (1.55)	0.273
Gender	Male	Female	p value			
	N = 48	N = 26				
Emotional Exhaustion	2.37 (1.42)	2.14 (1.59)	0.537			
Depersonalization	1.03 (1.08)	0.78 (0.75)	0.244			
Personal Accomplishment	4.05 (1.36)	4.21 (1.19)	0.602			

Table 6: Predictors of burnout including academic rank, administrative rank and gender.

Discussion

Resilience is a significant factor for reducing burnout and promoting physician wellbeing [16-18]. We found that faculty with higher personal resilience were significantly more likely to feel engaged with work and teaching and less likely to feel overextended or emotionally exhausted. Engaged faculty find their work more meaningful and may have lower rates of stress. Resilience is a modifiable factor. Promoting resilience amongst physicians requires both personal and organizational strategies and both can be equally effective in reducing burnout [19,20]. Personal strategies include engaging in physical [21] and social or leisure activities [18], mindfulness training [22,23], and use of narratives or reflective writing [24]. Organizational factors such as effective leadership, autonomy, incentives such as protected time for educational activities, professional development opportunities and resources to promote resilience can create an engaged workforce [8,9]. Literature recommends that organizations should frequently measure burnout and address associated factors regularly to pro-

mote faculty wellbeing and engagement [25]. However, measuring burnout within the organization can be tricky due to privacy concerns. A large number of our faculty expressed concern about the privacy of their information despite the use of a third party to collect data. Almost a third chose not to complete the survey after reviewing it. Therefore, organizations must create a culture that promotes wellbeing and allow its employees a psychologically safe environment where openness about burnout is supported.

Similar to previous findings [8], our study showed that greater clinical and teaching experience was protective against certain burnout categories. More experienced faculty experienced lower depersonalization and higher sense of personal accomplishment. These findings support the need to target junior faculty for wellbeing programs as they may be at higher risk for burnout. We found that having an administrative rank was protective against feeling ineffective. We noted a trend towards greater sense of personal accomplishment in faculty as they spent more time teaching. Other studies have suggested that allowing opportunities for engagement in education and leadership can help build a sense of meaning in work [9]. Of note, our study did not find gender differences in burnout categories. This finding is similar to other studies that showed gender is not a consistently independent predictor of burnout when adjusted for age and other factors [8].

We also found that having access to an FDP within the department was associated with lower rates of emotional exhaustion amongst teaching faculty. FDPs focus on wellbeing, professional development as physicians and educators and provide access to mentorship. These programs can promote a sense of community and engagement, reduce stress and feelings of isolation and teach essential skills to educators e.g. how to deliver feedback to trainees [9]. Studies have also shown that the need for faculty development is higher in academic hospitals where physicians are required to take on the role of educators [7,26-28]. Other than pursuing formal degrees in education which can often be out of reach due to time constraints or expense, there are very few opportunities for faculty to formally learn academic and professional skills. Clinician educators may be expected to create and administer curricula, complete trainee evaluations and deliver feedback without previous training in the area. While learning this on the job is possible, and may explain lower rates of depersonalization experienced by experienced faculty, formal training in this area can help junior educators. The majority of our faculty expressed interest in having access to a FDP. Therefore, academic hospitals should create a culture where physician wellness is valued by offering on the job faculty development and wellbeing programming to improve engagement. As engaged, energetic and compassionate teaching faculty are essential for creating a safe and active learning environment, this has important implications in improving learning experiences for medical students and residents in addition to patient care [3].

Recommendations

We join other authors [16,17,19,20,24] in advocating for physicians educators and organizations to focus on resilience building in order to create an engaged workforce and a safe learning environment. We also recommend that faculty should have access to faculty development and wellbeing programs within the organization, promoting 'community' and reducing isolation and emotional exhaustion. In addition, organizations that choose to measure burnout/work engagement must create a psychologically safe environment that allows faculty to express emotional difficulties.

Limitations of the Study

The main limitation of this study was the low response rate. Several participants expressed concern to us about privacy of the results within the organization despite the anonymous nature of the survey. For this reason, after reviewing the contents of the survey a significant portion (42/116, 36.2%) opted not to complete the survey.

Conclusion

Higher resilience and access to faculty development opportunities at work may improve engagement and reduce emotional exhaustion. Physician educators value opportunities for faculty development.

Financial Disclosure

The authors have no relevant financial or non-financial interests to disclose.

Conflict of Interest

All authors have indicated they have no potential conflicts of interest to disclose.

Clinical Ethics Approval

This study was conducted in accordance with established local and regional ethical standards, and with the Helsinki Declaration. Approval was granted by the Sidra Medicine IRB (# 1697501).

Consent to Participate

To ensure participant anonymity, the online survey was disseminated via a third party (Mind Garden). Consent information was included online and consenting subjects were asked to click “agree” or “continue” thereby providing implied consent. As individual responses results could not be traced, completed submissions could not be retrieved to be discarded in the event an individual subsequently wished to withdraw. This information was noted in the consent information.

Authors' Contributions

All listed authors were involved in conceptualizing and designing the project and study, results interpretation and finalization of the manuscript. Dr. Latif drafted the initial manuscript. Mr. Mohammed Elanbari completed the data analysis and assisted with interpretation of the results. All authors reviewed and revised the manuscript, and approved the final manuscript as submitted.

Bibliography

1. Schaufeli WB., *et al.* “Burnout: 35 years of research and practice”. *Career Development International* 14.3 (2009): 204-220.
2. Dewa CS., *et al.* “An estimate of the cost of burnout on early retirement and reduction in clinical hours of practicing physicians in Canada”. *BMC Health Services Research* 14.1 (2014): 254.
3. Lancet T. “Physician burnout: A global crisis”. *The Lancet* 394.10193 (10193): 93.
4. Conti C., *et al.* “Burnout Status of Italian Healthcare Workers during the First COVID-19 Pandemic Peak Period”. *Healthcare* 9.5 (2021): 510.
5. Duarte I., *et al.* “Burnout among Portuguese healthcare workers during the COVID-19 pandemic”. *BMC Public Health* 20.1 (2020): 1885.
6. Raudenská J., *et al.* “Occupational burnout syndrome and post-traumatic stress among healthcare professionals during the novel coronavirus disease 2019 (COVID-19) pandemic”. *Best Practice and Research. Clinical Anaesthesiology* 34.3 (2020): 553-560.
7. De Golia SG., *et al.* “Faculty Development for Teaching Faculty in Psychiatry: Where We Are and What We Need”. *Academic Psychiatry* 43.2 (2019): 184-190.
8. West CP., *et al.* “Physician burnout: Contributors, consequences and solutions”. *Journal of Internal Medicine* 283.6 (2018): 516-529.

9. Shanafelt TD and Noseworthy JH. "Executive Leadership and Physician Well-being". *Mayo Clinic Proceedings* 92.1 (2017): 129-146.
10. Swensen S., et al. "Physician-Organization Collaboration Reduces Physician Burnout and Promotes Engagement: The Mayo Clinic Experience". *Journal of Healthcare Management* 61.2 (2016): 105-127.
11. West CP, et al. "Interventions to prevent and reduce physician burnout: A systematic review and meta-analysis". *The Lancet* 388.10057 (2016): 2272-2281.
12. ACGME "AWARE" wellbeing resources. (n.d.) (2022).
13. Pollack J and Pollack R. "Using Kotter's Eight Stage Process to Manage an Organisational Change Program: Presentation and Practice". *Systemic Practice and Action Research* 28.1 (2015): 51-66.
14. Maslach C and Jackson SE. "The measurement of experienced burnout". *Journal of Organizational Behavior* 2.2 (1981): 99-113.
15. Smith BW, et al. "The brief resilience scale: Assessing the ability to bounce back". *International Journal of Behavioral Medicine* 15.3 (2008): 194-200.
16. Cooke GP, et al. "A survey of resilience, burnout, and tolerance of uncertainty in Australian general practice registrars". *BMC Medical Education* 13 (2013): 2.
17. Robertson HD, et al. "Resilience of primary healthcare professionals: A systematic review". *The British Journal of General Practice: The Journal of the Royal College of General Practitioners* 66.647 (2016): e423-e433.
18. Zwack J and Schweitzer J. "If every fifth physician is affected by burnout, what about the other four? Resilience strategies of experienced physicians". *Academic Medicine: Journal of the Association of American Medical Colleges* 88.3 (2013): 382-389.
19. Epstein RM and Krasner MS. "Physician resilience: What it means, why it matters, and how to promote it". *Academic Medicine: Journal of the Association of American Medical Colleges* 88.3 (2013): 301-303.
20. West CP, et al. "Resilience and Burnout Among Physicians and the General US Working Population". *JAMA Network Open* 3.7 (2020): e209385.
21. Yu F, et al. "Physical activity and personal factors associated with nurse resilience in intensive care units". *Journal of Clinical Nursing* 29.17-18 (2020): 3246-3262.
22. Fortney L, et al. "Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: A pilot study". *Annals of Family Medicine* 11.5 (2013): 412-420.
23. Goodman MJ and Schorling JB. "A mindfulness course decreases burnout and improves well-being among healthcare providers". *International Journal of Psychiatry in Medicine* 43.2 (2012): 119-128.
24. Wald HS, et al. "Promoting resiliency for interprofessional faculty and senior medical students: Outcomes of a workshop using mind-body medicine and interactive reflective writing". *Medical Teacher* 38.5 (2016): 525-528.
25. Wallace JE, et al. "Physician wellness: A missing quality indicator". *Lancet* 374.9702 (2009): 1714-1721.

26. Brown GM., *et al.* "A National Faculty Development Needs Assessment in Emergency Medicine". *Canadian Journal of Emergency Medicine* 18.3 (2016): 161-182.
27. Heard JK., *et al.* "Assessing the needs of residency program directors to meet the ACGME general competencies". *Academic Medicine: Journal of the Association of American Medical Colleges* 77.7 (2002): 750.
28. Stefan A., *et al.* "Faculty development in the age of competency-based medical education: A needs assessment of Canadian emergency medicine faculty and senior trainees". *Canadian Journal of Emergency Medicine* 21.4 (2019): 527-534.

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