Creating Structured Opportunities for Social Engagement to Promote Well-Being and Avoid Burnout in Medical Students and Residents

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Abstract

Increasing attention is being paid to medical student and resident well-being, as well as to enhancing resilience and avoiding burnout in medical trainees. Medical schools and residency programs are implementing wellness initiatives that often include meditation and other mindfulness activities, self-reflection, journaling, and lectures or workshops on resilience tools such as metacognition and cognitive

restructuring. These interventions have in common the creation of opportunities for trainees to become more aware of their experiences, to better recognize stressors, and to regulate their thoughts and feelings so that stressors are less likely to have harmful effects. They often enable trainees to temporarily distance themselves mentally and emotionally from a stressful environment. In this Invited Commentary, the author suggests

that medical school leaders and residency program directors should also create structured opportunities for trainees to establish meaningful connections with each other to provide greater social support and thereby reduce the harmful effects of stress. Social connection and engagement, as well as group identification, have potential to promote well-being and reduce burnout during training.

As increasing attention is being paid to medical student and resident well-being, medical schools and residency programs are examining and implementing many methods to enhance resilience and avoid burnout in medical trainees. 1-5 These wellness initiatives often include meditation and other mindfulness activities, self-reflection, journaling, and lectures or workshops on managing stress and building resilience using metacognition and cognitive restructuring. These interventions have in common the creation of opportunities for trainees to focus more intentionally and deliberately on their inner selves to help them become better aware of their experiences, recognize stressors, and regulate their thoughts and feelings so that stressors are less likely to have harmful effects. They also enable trainees to temporarily distance themselves mentally and emotionally from a stressful environment. In this paradigm

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of resilience enhancement and burnout prevention, the learning environment—and, in particular, the clinical learning environment—is viewed principally as a source of stress rather than as a place that provides social support and connections.

In social psychology, there is an extensive literature on methods of enhancing student well-being and resilience in the face of environmental stress. There is evidence that one important way to reduce the harmful effects of stress is to create a sense in trainees of identification with a group,6 and to enhance social support, social engagement, and meaningful connections with others.7 Although there are several ways in which social support and connections with others are thought to reduce the negative effects of stress, two seem particularly relevant to the medical training environment—namely, social companionship and informational support.8 Affiliation and contact with others (social companionship) allow medical students and residents to discuss events in the training environment that they may perceive as particularly stressful. This social contact may provide useful information (informational support) that allows students and residents to better appraise and cope with potentially stressful events.8 Although turning inward is certainly important to build resilience and avoid burnout, the value of meaningful conversations with others in the clinical learning environment must also be appreciated.

Curiously, opportunities to interact meaningfully with other learners, as well as with faculty, staff, patients, and families, seem to be less common than in years past. Perhaps this is because so much time in the clinical learning environment today is spent in individual activities; in fact, residents now spend nearly half their work hours in front of a computer screen.9 There are few structured opportunities for trainees to gather in the cafeteria, work room, conference room, or library while at work when issues about patient care and the stresses of training might more readily be discussed. It was only a few decades ago that many teaching hospitals provided food for trainees who were in the hospital at night in what was known as the "midnight meal," a practice memorialized in Lowenstein's 10 book The Midnight Meal and Other Essays About Doctors, Patients, and Medicine. As Markel and Stern note in their foreword to the book:

this midnight meal was much more than a convenience in fast food. Instead, young physicians, many of whom might not communicate with each other during the day because they worked on different services ... were forced together at the same time in the same room in the quest of sustenance not only for the body but also for the mind and soul.¹⁰

Although the midnight meal no longer exists in most teaching hospitals, modern analogues have been developed and are important for medical schools and residency programs to consider

implementing. Schwartz Rounds11regularly scheduled meetings that provide a forum for open discussion of the social and emotional issues that health care providers face in caring for patients and families—revisit some of the features of midnight meals and add structure. These rounds, developed by the Schwartz Center for Compassionate Healthcare, help participants explore the impact their work has on them. By ensuring dedicated time and a safe space for health care providers to share personal stories, reflect, and voice their feelings, Schwartz Rounds have been shown to give medical students insight into how others feel about caring for patients and a way to process their emotions.12 As noted in a discussion of the value of these rounds, "integral to personal and professional growth is the ability to connect and communicate with each other, to recognize and draw meaning from our daily interactions with patients and colleagues."13

In a similar vein, Balint group meetings involve structured discussions in which participants make case presentations that focus on patient-provider relationships and are followed by a brief contemplative period to consider responses.¹⁴ These meetings, although primarily intended to address patients' needs, may help teach trainees communication skills. 14,15 They also have the potential to reduce burnout among participants by providing a structure and a safe venue for recognizing and discussing emotionally stressful experiences.¹⁶ Many medical schools have also created college advisory programs and learning communities, in part to promote student wellness.^{17,18}

So, why should medical schools and residency programs create additional structured opportunities for trainees to establish meaningful connections with others? In part, because these connections provide greater social support for potentially vulnerable individuals. Several studies in the hospital environment have suggested a relationship between poor social support at work (i.e., feeling unable to share experiences and feelings with colleagues) and burnout, as well as the potential for high levels of social support to reduce burnout. 19-22 Not surprisingly, García-Sierra et al¹⁹ report that for nurses working in a hospital setting, job demands are positively related to

burnout. Importantly, however, high levels of work engagement (i.e., a sense of connection with, and fulfillment in, work activities²³) can moderate this relationship. Social support increases work engagement and reduces burnout even in the face of high work demands.19 Although nursing managers have traditionally focused on reducing work demand as a way to address burnout among their staff, García-Sierra et al19 suggest that a more effective strategy may be increasing work engagement by enhancing social support. There are lessons from these studies for those involved in medical student and resident education, as burnout and depression have, if anything, become greater concerns in the United States since the implementation of duty hours restrictions for trainees.

In summary, there is little doubt that activities like meditation, self-reflection, journaling, and mindful breathing have value in promoting wellness and can help trainees effectively remove themselves from the stressful aspects of the learning and clinical practice environment. However, medical school leaders and residency program directors should also realize the potential for social connection and engagement, as well as group identification, to promote well-being and avoid burnout. In recognition of these benefits, medical schools and residency programs should create structured opportunities for trainees to establish meaningful connections with each other and with others in their learning and work environments.

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References

- 1 Goldhagen BE, Kingsolver K, Stinnett SS, Rosdahl JA. Stress and burnout in residents: Impact of mindfulness-based resilience training. Adv Med Educ Pract. 2015;6:525–
- 2 Slavin S, Shoss M, Broom MA. A program to prevent burnout, depression, and anxiety in first-year pediatric residents. Acad Pediatr. 2017;17:456–458.
- 3 Runyan C, Savageau JA, Potts S, Weinreb L. Impact of a family medicine resident wellness curriculum: A feasibility study. Med Educ Online. 2016;21:30648.
- 4 Satterfield JM, Becerra C. Developmental challenges, stressors and coping strategies in

- medical residents: A qualitative analysis of support groups. Med Educ. 2010;44:908–916.
- 5 Moir F, Henning M, Hassed C, Moyes SA, Elley CR. A peer-support and mindfulness program to improve the mental health of medical students. Teach Learn Med. 2016;28:293–302.
- 6 McNeill KG, Kerr A, Mavor KI. Identity and norms: The role of group membership in medical student wellbeing. Perspect Med Educ. 2014;3:101–112.
- 7 Kim B, Jee S, Lee J, An S, Lee SM. Relationships between social support and student burnout: A meta-analytic approach [published online ahead of print June 22, 2017]. Stress Health. doi: 10.1002/ smi.2771.
- 8 Haslam SA, O'Brien A, Jetten J, Vormedal K, Penna S. Taking the strain: Social identity, social support, and the experience of stress. Br J Soc Psychol. 2005;44(pt 3):355–370.
- 9 Mamykina L, Vawdrey DK, Hripcsak G. How do residents spend their shift time? A time and motion study with a particular focus on the use of computers. Acad Med. 2016;91:827–832.
- 10 Lowenstein J. The Midnight Meal and Other Essays About Doctors, Patients, and Medicine. 2nd rev. ed. Ann Arbor, MI: University of Michigan Press; 2005.
- 11 Schwartz Center for Compassionate Healthcare. Schwartz Rounds. http://www. theschwartzcenter.org/supporting-caregivers/ schwartz-center-rounds/. Accessed December 11, 2017.
- 12 Gishen F, Whitman S, Gill D, Barker R, Walker S. Schwartz Centre Rounds: A new initiative in the undergraduate curriculum— What do medical students think? BMC Med Educ. 2016;16:246.
- 13 Ho CH. Slowing medical education through Schwartz Center Rounds. Acad Med. 2015;90:1290.
- 14 Bar-Sela G, Lulav-Grinwald D, Mitnik I. "Balint group" meetings for oncology residents as a tool to improve therapeutic communication skills and reduce burnout level. J Cancer Educ. 2012;27:786–789.
- 15 Epner DE, Baile WF. Difficult conversations: Teaching medical oncology trainees communication skills one hour at a time. Acad Med. 2014;89:578–584.
- 16 Kjeldmand D, Holmström I. Balint groups as a means to increase job satisfaction and prevent burnout among general practitioners. Ann Fam Med. 2008;6: 139, 145
- 17 Drolet BC, Rodgers S. A comprehensive medical student wellness program—Design and implementation at Vanderbilt School of Medicine. Acad Med. 2010;85:103–110.
- 18 Smith S, Shochet R, Keeley M, Fleming A, Moynahan K. The growth of learning communities in undergraduate medical education. Acad Med. 2014;89:928–933.
- 19 García-Sierra R, Fernández-Castro J, Martínez-Zaragoza F. Relationship between job demand and burnout in nurses: Does it depend on work engagement? J Nurs Manag. 2016;24:780–788.
- 20 García-Izquierdo M, Ríos-Rísquez MI. The relationship between psychosocial job stress and burnout in emergency departments: An exploratory study. Nurs Outlook. 2012;60:322–329.

- 21 Rogers E, Polonijo AN, Carpiano RM. Getting by with a little help from friends and colleagues: Testing how residents' social support networks affect loneliness and burnout. Can Fam Physician. 2016;62:e677–e683.
- 22 Winning AM, Merandi JM, Lewe D, Stepney LMC, Liao NN, Fortney CA, Gerhardt CA. The emotional impact of errors or adverse events on healthcare providers in the NICU: The protective
- role of coworker support. J Adv Nurs. 2018;74:172–180.
- 23 Maslach C, Schaufeli WB, Leiter MP. Job burnout. Annu Rev Psychol. 2001;52: 397–422.

Teaching and Learning Moments **Take-Home Lessons From Abroad**



Amid the tropical heat in Manabí, Ecuador, my peers and I provided care to those devastated by a 7.8 magnitude earthquake. I felt connected to Ecuador, neighbor to my homeland of Colombia, and was heartbroken by the sight of collapsed homes and uprooted crops. Amid this devastation, we established our clinic by a playground.

There, I met two boys, Pablo and Juan, who were interested in using my stethoscope. Wanting to give me something in exchange, they removed the boards from a swing set, leaving the ropes for the other children to climb. I offered them a high five, which they returned with a series of fist bumps and peace signs. Other children joined in this neighborhood handshake. We joked in Spanish, and I found myself transported to my childhood.

Later, the boys approached our clinic to be examined. Juan sat quietly as I auscultated. "What grade are you in?" I asked.

"I should be in second grade, but I had to leave school to work in my family's bakery after the earthquake. I wish I could return. I don't even know what 20 + 20 is."

I was ripped out of the naïve joy of nostalgia and reminded of the difficulties these children endured. I felt ashamed of my privileges. "Forty," I mumbled. Juan screamed excitedly, "Pablo, guess what? 20 + 20 is 40!" They exchanged the familiar handshake.

Before visiting Manabí, I envisioned the Ecuadorians as being in great need

of health care; however, the people I met reminded me that there's more to one's quality of life than health, whether it's an education, social support, or opportunities to work. In Florida, I had tutored children like Juan at a family resource center that was developed in response to the health, educational, and socioeconomic inequalities in Gainesville. I wondered if such programs could ever exist in Manabí, and I felt guilty that we'd soon leave Ecuador without giving Juan a more comprehensive education.

Critics of the short nature of international trips like mine have labeled these experiences as "voluntourism" and argued that physicians do more harm than good. There is an emotional struggle we must face to deliver quality care to patients despite our limited time and resources. How can I safely diurese someone without following up? How can I comfortably gift someone a cane, while noting that she may be mugged because she has such a valued item? Will I make a difference by prescribing metformin if refills are unavailable?

Yet months later, I still think about Pablo and Juan. International trips like mine also motivate participants to improve the health care services in communities like Manabí and extend them beyond our stay. Clinics abroad teach us how to practice medicine in diverse settings, while introducing us to the unique needs of a community. Perhaps Manabí did not have a family resource center, but why couldn't we help them establish one? It was in Ecuador, while answering Juan's

mathematical question, that I recognized our opportunity to help.

While international trips allow us to provide care for underserved communities, they also grant us the chance to build and strengthen health care systems. Working in Ecuador shifted my focus from the diseases to the conditions affecting patients' wellbeing and access to care. Pablo and Juan challenged me to meet the needs of my patients, whether they are directly articulated or implied in conversation. Would it be possible to develop and support longitudinal health care and educational opportunities at clinics abroad? After all, education and health go hand-in-hand.

I returned from Ecuador with an expanded understanding of my role as a physician in society. My time abroad strengthened my resolve to empower my patients, advocate for the underserved, and break down barriers to care.

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Author's Note: The names and identifying information in this essay have been changed to protect the identity of the individuals described.

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