Strategies to Enhance Wellness in Emergency Medicine Residency Training Programs

Shana Ross, DO, MSc*; E. Liang Liu, MD; Christian Rose, MD; Adaira Chou, MD; Nicole Battaglioli, MD

*Corresponding Author. E-mail: Shana.Elisha@gmail.com, Twitter: @ShanaElisha.

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INTRODUCTION AND SIGNIFICANCE

Burnout syndrome was defined as a separate entity from depression in the 1970s because it was noted to primarily affect an individual's relationship to work. It is defined as the triad of emotional exhaustion, depersonalization, and a sense of low personal accomplishment.[1] Almost half of physicians report burnout, with emergency physicians having the highest rate of burnout, at almost 70%.[2] Emergency physician burnout causes self-reported increases in door-to-physician times, reduced communication of pertinent information with health care teams, and reduced direct communication with patients.[1] Although burnout is only one metric for physician wellness, broad implications for health care systems and society as a whole.[3]

In addition to burnout and career dissatisfaction, physicians are also at higher risk for depression and mental illness.[4,5] Physician suicide rates are estimated at approximately 400 physicians per year, or the equivalent of 3 to 4 medical school classes in the United States annually.[4] On average, physicians are twice as likely as the general population to commit suicide.[6] Specifically, female physicians and young physicians are affected most by mental illness and suicidal thoughts.[1,7] A 2015 meta-analysis revealed that a staggering 20% to 43% of residents at any given time are facing depression or associated symptoms.[8]

Physician wellness is important at all stages of training, and resident depression and suicide has recently gained national attention as a critical problem in residencies across all specialties.[9,10] Despite this, many emergency medicine residencies have little to no devoted time to address wellness in their educational curricula. Residencies have begun to implement wellness activities, which range from rotations in wellness and leadership to wellness retreats, but so far those efforts have been insufficient to stave off the presence of depression and burnout in residency training.[11-13] Here we discuss strategies to improve wellness during emergency medicine residency. Strategies include both interventions at the level of the individual resident and the emergency medicine residency training community.

WELLNESS STRATEGIES

Strategies for Residents

Residency wellness starts with the individual resident. Table 1 outlines specific strategies for the individual.

Sleep, exercise, and nutrition. Sleep loss can have negative effects on multiple dimensions of a resident's professional and personal life, including learning and cognition, professionalism, task performance, and personal relationships.[14] However, because of the nature of residency training, residents have little control over their sleep patterns and may become dependent on sleep aids.[15] Some physicians suggest maintaining anchor sleep to provide a guidepost for the body clock.[16] Sleeping close to the beginning and the end of the normal sleep period maintains an "anchor" to one's circadian rhythm.

Eliminating the true overnight shift in favor of "casino shifts" can help to achieve a more ideal schedule and allow more circadian sleep, with some providers working later (6 PM to 3 AM) and others working earlier (3 AM to noon).[17] Additionally, chronobiologists recommend clockwise shift rotation to permit circadian stabilization. The human circadian rhythm is a little greater than 25 hours, meaning that it is easier to delay sleep than to advance it.[18] Emergency medicine residents often have various shifts in their block schedule. When schedules are available, residents should analyze their pattern of shifts and evaluate for potential violations to the circadian rhythm and be cognizant of this as well when switching shifts.

Long shifts and irregular sleep schedules may make exercise a low priority; however, exercise is one of the only

Table 1. Examples of wellness strategies for emergency medicine residents at the individual level.

Area of Focus	Examples
Sleep Exercise Nutrition	Maintain "anchor sleep"
	Watch for circadian violations in shift schedule
	Organize team sports (eg, soccer, kickball, volleyball, flag football)
	Form groups to go hiking or biking
	Group exercise classes (eg, cross-fit or circuit)
	Spend 10 min a day being physically active
	Eat balanced meals and healthy snacks
	Minimize intake of simple sugars
	Pack meals for shifts that can be made in bulk and easily stored
	Take a break during shifts to eat a snack
	Sign up for meal preparation classes
	Provide healthy options in the resident lounge
	Join a food co-op market
	Sign up for a food delivery service
	Eat more meals at home or with others
	Avoid eating immediately before sleep
Personal health	Establish care
	Make routine doctor's appointments
	Avoid self-diagnosis and self-treatment
	Know available mental health and counseling resources
Life outside of residency	Establish work-related boundaries
	Set aside an hour each day to destress and decompress
	Set aside a block of scheduled time for personal use
	Spend some technology-free time each day
	Plan vacations to be work free
	Devote and prioritize time to family and friends
Mindfulness	Take time for personal reflection
	Learn meditation
	Join or form a support group
	Write in journal daily
	Incorporate tools or apps such as Insight Timer, Aura, Stop, Breathe & Think, and Headspace
Positivity	Spend 2 min a day writing gratitude-based e-mail
	Reflect on 3 things a day one is grateful for
	Notice and vocalize when others have helped you
	After each shift, reflect on the meaningful effect you have had

interventions shown to improve rejuvenative sleep, reduce stress, and treat and prevent depression.[19-21] Physicians, residents, and medical students who participate in regular exercise are sick less frequently and are better equipped to handle the stress of their schedules.[22] Exercise has shown to improve memory and cognitive function.[23] A goal of at least 150 minutes per week of moderate-intensity aerobic exercise is considered ideal for overall health, but if time is restricted, 75 minutes per week of high- or vigorous-intensity training may be more likely to fit into time-limited schedules, with similar benefit.[24]

Variables in schedules, sleep, and exercise can lead residents to develop poor eating habits, which can lead to a pattern of poor food choices.[25] Balanced meals and healthy snacking are essential to maintain energy without peaks and troughs in glucose and insulin levels, which can cause feelings of fatigue and concentration difficulty during work. Some simple mitigating tips to promote healthier choices include minimizing intake of simple sugars, having healthier choices available in the cafeteria, or packing meals from home.[26] Taking even a 15-minute break to eat on shift can offer an opportunity to refuel and improve efficiency.[27] Departments might also use meal funds or encourage faculty to bring in healthy snacks for the residents in the emergency department (ED) instead of the frequently found chips and candy.

Personal health. Physicians are no more immune to infections or injury than the general population and should continue to seek regular care, including routine preventive care and mental health counseling if needed. One study showed that 71% of physicians surveyed were too embarrassed to consult another physician for evaluation and treatment.[28,29] In addition, physicians who experience depression are less likely to seek help, disclose their level of mental stress, or consider counseling. Too often physicians try to self-diagnose and self-treat, which can be potentially dangerous, especially if treatment involves alcohol and drugs.[30] Some health systems have started requiring that physicians establish a primary care physician and receive annual physicals to ensure that their physicians are receiving much-needed preventive care.[31] Physicians must be encouraged to seek help and allow someone else to manage their physical and mental health, but must also budget the time to do so.

Life outside of residency. It is important for emergency medicine residents to consider work-life balance and to establish boundaries. High-status, professional jobs can lead to blurred boundaries between work and home. Contributing factors include increased time demands, autonomy, excessive work pressures, lack of schedule control, and decisionmaking authority.[32] Mental health professionals suggest that individuals with stressful jobs set aside an hour each day devoid of work-related activities to refocus and decompress. Individuals who are unable to devote this time to decompression because of time constraints outside of residency can implement other techniques to establish work-home boundaries. Such strategies include prioritizing time for social or family obligations over work demands, scaling back on all obligations, and time blocking, which focuses on scheduling dedicated blocks of time to nonwork and nonclinical tasks.[32] Striving to finish charting on shift and dedicating time to address e-mail and administrative duties while in the hospital also helps more clearly separate the line between work and home. Resident physicians should consider using vacation time as a work-free opportunity for rest, relaxation, and reconnecting with friends and family.