



PERSPECTIVE

What Educators Can Learn from the Biopsychosocial-Spiritual Model of Patient Care: Time for Holistic Medical Education

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Medical students and residents experience burnout at a high rate and encounter threats to their well-being throughout training. It may be helpful to consider a holistic model of education to create educational environments in which trainees flourish. As clinician educators, the biopsychosocial-spiritual model of patient care has helped shape the way we care for patients. Using the biopsychosocial-spiritual model of patient care as a framework, we examine the ways in which clinician educators can support the physical, psychological, social, and spiritual needs of their trainees. The current state of trainee well-being in each of these areas is reviewed. We discuss potential interventions and opportunities for further research to help clinician educators develop a contextualized, holistic approach to the formation of their trainees.

KEY WORDS: well-being; biopsychosocial; burnout; medical education; residency; holistic.

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The epidemic of burnout and depression among medical students, trainees, and attendings has long been known.^{1,2} Burnout is associated with a decline in professionalism and altruism, increased medical errors, and worse patient outcomes.^{3,4} The COVID-19 pandemic and the burden it has placed on trainees have importantly revitalized the conversation on improving trainee well-being.⁵ Much of the discourse on trainee well-being, however, has centered on unidimensional aspects of well-being, such as life satisfaction, burnout, or work-life balance.⁶ To equate well-being with unidimensional measures misses critical components of our experience as human beings. As educators, it may be useful to instead view the well-being of our trainees through the lens of “human

flourishing.” Human flourishing brings into view not only happiness and life satisfaction, but also physical health, mental health, meaning, purpose, virtue, and fulfilling relationships.^{7,8} In order to create educational environments in which our trainees flourish as both physicians and human beings, we must take a page from our own playbook as clinicians. Just as we believe it is critical for a physician to understand the patient’s values, beliefs, social-connectedness, and life experience, so too ought we as educators strive to understand those same qualities in our trainees.

For over forty years, the biopsychosocial model of patient care has helped shape the way we care for patients.^{9,10} First introduced by Engel,⁹ biopsychosocially oriented clinical practice calls us to consider the experience of the human being in front of us rather than the patient to be diagnosed. Much has been written regarding strategies for providing care for the “whole person,” recognizing that a patient is not simply a patient or diagnosis, but rather a human being with ambitions, family, relationships, and culture.^{11–13} The biopsychosocial model of patient care has been further expanded to incorporate spirituality, termed the biopsychosocial-spiritual model.^{14,15} Spirituality has been defined as an individual’s “relationship with the transcendent,”¹⁵ which can take many forms, including but not limited to organized religion. In clinical practice, spiritual well-being has been associated with less depression¹⁶ and increased quality of life.¹⁷ As medical educators, there is a lesson here to be learned. We believe that it is time for holistic education for the trainee.

Practically, how might a holistic model of medical education look? Using the biopsychosocial-spiritual model of patient care as a framework, we will examine the ways in which clinician educators can support the physical, psychological, social, and spiritual needs of their trainees (Table 1).

From a physical perspective, a holistic model of education should include an emphasis on a healthy lifestyle, including regular sleep, physical exercise, and healthy eating. As clinicians, we have long known the importance of promoting a healthy lifestyle for our patients. The literature consistently demonstrates its long-term benefits, including more years lived without major chronic diseases, lower likelihood of depression, and attenuation of risk factors for coronary artery

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Table 1. Suggested Strategies for a Biopsychosocial-Spiritual Model of Medical Education

	Individual-level interventions	Institution-level interventions
Physical	<ul style="list-style-type: none"> - Develop a plan for exercise - Establish continuity with a primary care doctor 	<ul style="list-style-type: none"> - Structure rotations and teams to promote healthy sleep rhythms - Allow time off to attend medical visits (preventive and chronic disease management)
Psychological	<ul style="list-style-type: none"> - Incorporate exercises shown to improve subjective well-being into routine practice, such as gratitude exercises¹⁸ and mindfulness¹⁹ - Become familiar with the peer support and professional mental health services available 	<ul style="list-style-type: none"> - Minimize structural barriers to engaging in mental health services - Consider “opt-out” model of employee assistance program check-ins²⁰ - Provide access to Web-based cognitive behavioral therapy programs - Incorporate appreciative inquiry into mentoring relationships
Social	<ul style="list-style-type: none"> - Deepen connection with the community through advocacy work or patient home-visits - Develop concrete plans for strengthening relationships of significance outside of work 	<ul style="list-style-type: none"> - Provide institutional support for house-staff diversity councils²¹ - Fund residency program “family dinners” on a regular basis to facilitate connection outside of the hospital - Explore ways to deepen social connection within work, such as “show-and-tell rounds”²² and program retreats
Spiritual	<ul style="list-style-type: none"> - If you identify with a faith tradition, consider attending services in consistent manner²³ - Seek to align work with intrinsic values, such as through advocacy, community engagement, or peer support 	<ul style="list-style-type: none"> - Create safe places for trainees to meditate or pray - Structure clinical schedules in a way to allow for the observance of religious holy days

disease and diabetes.^{24–27} Even so, resident physicians exercise less often and sleep fewer hours during training than they did before, and the majority of residents do not have a primary care doctor.^{28–30} Residents cite residency culture, schedule, and obligations as barriers to maintaining a healthy lifestyle.^{28,31,32} Surgical residents on rotations with in-house 24-h calls sleep significantly less than those on rotations with home call and night float.³³ Taken together, these findings suggest that residency training programs ought to prioritize the restructuring of rotations and teams to promote healthy sleep rhythms and allow time for exercise. Trainees should be granted time to attend to their own personal healthcare, including preventive care and chronic disease management, without fear of penalization or stigma. Future research, especially intervention trials, needs to examine strategies for aligning training program structure with the promotion of a healthy lifestyle.

From a psychologic perspective, institutional leadership should prioritize the mental health and psychological well-being of their trainees. Accompanying burnout in trainees are feelings of loneliness, isolation, and depression.³⁴ We need robust resources with access to confidential mental health providers and peer support. Efforts to destigmatize depression, anxiety, and other mental health ailments in medical professionals should be frequent and consistent. Tools exist for educators to learn how to better support trainees with mental illness, and Web-based cognitive behavioral therapy programs have been shown to reduce suicidal ideation in medical interns.^{35–38} Educators should be trained to recognize psychological distress in trainees and equipped to respond appropriately. We need to better understand the barriers our trainees encounter in accessing mental health resources. Institutionally, we need to communicate consistent messages of support to our trainees and to develop comprehensive programs of mental health

resources. At the individual level, educators should strive to foster gratitude, resilience, mindfulness, and joy in their trainees. Interventions to promote active reflection on gratitude have been shown to increase subjective well-being,^{18,39} and similar exercises can be readily incorporated into the clinical learning environment. Efforts to train providers in the practice of mindfulness have been shown to reduce burnout, increase empathy, and enhance attitudes associated with patient-centered care.^{19,40,41} Additionally, residents who identify mentors who instill a growth mindset in feedback sessions report improved learning climates.⁴² One method of promoting a growth mindset is termed “appreciative inquiry.” Appreciative inquiry is a strengths-based approach to cultivating growth in which one is prompted to reflect on the “best of what is” as a launchpad for creating positive change.⁴³ Appreciative inquiry has also been shown to be an effective method for fostering personal and professional growth in trainees.^{44–46} Promoting reflection on gratitude, cultivating a growth mindset, and facilitating appreciative inquiry are evidence-based methods to enhance trainees’ well-being and professional development. Educators should be trained to incorporate these evidence-based methods into their daily work with trainees.

From a social perspective, educators should recognize the importance of community, social identity, and personal relationships in a trainee’s experience of flourishing.⁷ Individuals are deeply enmeshed within a larger framework of social networks—spanning professional colleagues, family, friendships within and external to medicine, and cultural and ethnic identity. Unfortunately, the demands of medical training can often lead to strain and tensions in branches of one’s social network.⁴⁷ Vivek Murthy has written on the epidemic of loneliness he observed during his first stint as the US surgeon general.⁴⁸ Medical trainees have not been immune to the detriment of loneliness; in fact, residents who feel alone are

more likely to experience burnout.⁴⁹ There is no single approach to combating loneliness and enriching trainees' social connection. However, it is critical for educators to recognize that trainees do not come to the wards as line-workers in the healthcare machine but rather are human beings with social relationships of value.

To that end, trainees should have opportunities to deepen connections with communities and relationships of import in their lives. Successful strategies to facilitate connection and friendship in the learning environment have included show-and-tell rounds,²² learning colleges,⁵⁰ and program retreats.⁵¹ In show-and-tell rounds, the speaker during an educational conference spends the first five minutes of the presentation to share with the audience "something that brings you joy outside of medicine."²² In learning colleges, a medical school class is subdivided into learning communities with the goal of promoting mentoring faculty relationships, augmenting peer to peer support, and fostering a welcoming and diverse community.⁵⁰ With regard to cultural, racial, and ethnic identities, programs and institutions must foster cultures of inclusivity. Both the AAMC and the ACGME offer resources to help program leaders and institutions better cultivate and celebrate diversity, equity, and inclusion.^{52,53} Institutional support for house-staff diversity councils may be one strategy to foster community and a sense of belonging among underrepresented in medicine trainees.²¹ Additionally, trainees should have opportunities to deepen their connection in the communities they serve. Deeper community engagement through patient home visits and agency partnerships increases clinical knowledge and overall excitement for medicine.^{54,55} For relationships external to medicine, strategies should be sought to help trainees deepen their relationships with families and spouses, whether through family engagement in training program activities, equitable parental leave policies, asynchronous learning, or flexibility in clinical scheduling. It is a long journey to become a physician; the road should not be travelled alone.

From a spiritual perspective, it has been argued that character, virtue, and a sense of purpose are integral aspects of human flourishing.⁷ While trainees will have a diversity of perspectives, it is critical for educators to recognize the importance of one's value system and the sources from which one draws meaning. The AAMC has previously emphasized the importance of one's individual spirituality, stating that one of the objectives of medical school curriculum on spirituality is to foster "an understanding of their [students'] own spirituality and how it can be nurtured as part of their professional growth, promotion of their well-being, and the basis of their calling as a physician."⁵⁶ In a study of internal medicine residents, increased spiritual attitudes, especially humility and forgiveness, was associated with lower burnout and increased job satisfaction.⁵⁷ Furthermore, openness to spirituality has been shown to be independently associated with empathy in medical students.⁵⁸ Advisors and mentors may, with a trainee's permission and from a perspective of pluralism, elicit one's religious or spiritual preferences in order to help facilitate and

encourage connection with meaningful communities of shared values. Institutions should create safe places for trainees to meditate or pray, and wherever possible, structure schedules in a way to facilitate the observance of religious holy days. Trainees should also have access to opportunities to align one's clinical work and professional identity with their intrinsic values, whether through advocacy training, patient outreach, clinical ethics, or chaplaincy support.

In our residency training program, we have aimed to adopt a holistic approach to training our residents. Discussions around physical health, well-being, purpose, and social relationships are weaved into the rhythm of resident check-ins with the program director (B.D.). Residents have direct phone access to a psychiatrist whose specific job duties are to support resident mental health. Our program events are a family affair, incorporating significant others and children into the heart of who we are as a community. Ambulatory blocks include protected time to engage in work that resonates with a resident's passion and values, such as advocacy, community engagement, or peer support. While there is much more work to be done, we have found these simple strategies to be helpful in creating a culture where residents develop not just as clinicians, but as human beings.

Critics of the biopsychosocial-spiritual approach to medical education might claim that we are coddling our trainees. A training program is not designed to address the biopsychosocial-spiritual needs of its trainees. It is common to hear things like, "medicine is tough, and the hours long. Medicine demands sacrifice." And yet, this perspective has fostered a system where burnout is high and many physicians question their career choice.^{2,59} Others may argue that a holistic approach to medical education is too personal. Educators should not bear the responsibility of ensuring a trainee's physical, psychological, social, and spiritual needs are met. A similar argument was made regarding the clinician's responsibility to patients when the biopsychosocial model was first introduced. And yet, studies have shown the benefits of a holistic, patient-centered model of care.^{60,61}

The goal of medical education is not only to produce technically proficient and clinically competent physicians, but also to cultivate the formation of physician healers who provide the very best, holistic care of their patients. We cannot do this if we do not model for our trainees the very values of biopsychosocial-spiritually oriented patient care that we endorse. We must add to our traditional frameworks of competency and milestone assessment a genuine investment of time and attention into developing a contextualized, holistic approach to the formation of our trainees. Undergirding it all is the simple message to trainees: who you are as an individual, as a human being, matters.

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