

Practical Applications of Mindfulness: Tools for Managing Stress, Navigating Milestones, and Fostering Professional Growth

Educators face many challenges as they fulfill clinical duties, teach residents in the clinical setting, perform learner assessments, and monitor educational progress. Residents must manage work hours, provide clinical care, fulfill educational requirements, and maintain work-life balance. Balancing these responsibilities can become a source of stress for both residents and educators, which can lead to burnout (1-4). Educators must provide a learning environment that stimulates residents to take ownership of their education, but they must do so in a way that minimizes stress and burnout.

Additionally, as the novice resident works toward becoming competent physicians, the role of the educator is vital in helping them move through the stages of learning (Figure 1) (5,6). Through thoughtful and compassionate coaching, educators guide an unconsciously incompetent novice toward unconscious competence. However, to help the resident reach expertise, we suggest the role of the educator in this learning continuum should be to help the resident go a step above—to mindful competence. In other words, not only must residents learn to be competent at their art, but they should also learn the ability to

continuously recognize their own challenges and commit to lifelong learning.

With the goal of achieving mindful competence and mitigating stress, we present several tools to develop skills of self-reflection and mindfulness. We feel that these skills are invaluable for the personal and professional development of both residents and their educators.

Mindfulness

Mindfulness in the context of medical practice has been described as the practice of maintaining openness, curiosity, and compassion while focusing on an individual encounter, and this idea can be extended to medical education (7,8). Epstein described the four habits of the mind that lead to a mindful clinical experience: attentive observation, curiosity, beginner’s mind, and presence (9) (Figure 2). In the era of social media and hyperstimulation, residents can have difficulty maintaining focus (attentive observation and presence) on their learning process. Further, due to advances in technology and the easy attainability of information, learners can also have problems taking responsibility for their own education (beginner’s mind and curiosity).

FIGURE 1. Stages of Learning

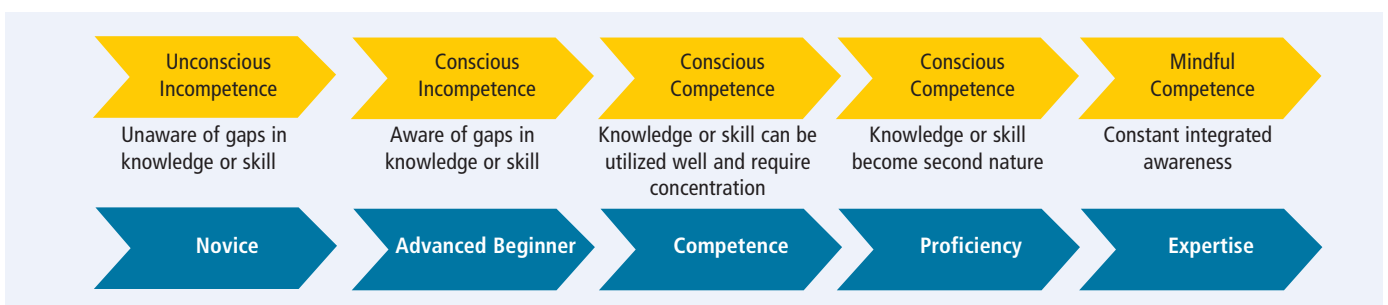


FIGURE 2. Four Habits of the Mind

Attentive Observation	Simultaneously observing oneself, the patient, and the clinical problem in such a way that one could “observe the observed while observing the observer”
Critical Curiosity	Having the courage to see the world as it really is rather than as one wants it to be; being willing to ask the question, “why,” while being open to new information and surprises; applying critical curiosity to oneself to learn new things, avoid succumbing to personal biases, and become open to new experiences
Beginner’s Mind	The ability to see a situation in a fresh way with the willingness to set aside preconceived notions and start with a blank slate
Presence	A purposeful willingness to simply be there, undistracted and focused on the task at hand

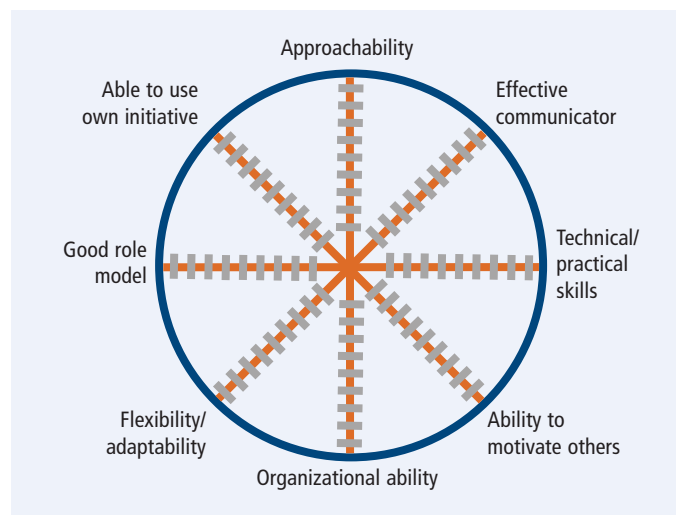
Self-Reflection

Self-reflection is a powerful medium for promoting focused self-directed learning (10,11). Kolb's theory of experiential learning describes that a concrete experience results from a process of reflective observation, abstract conceptualization, and active experimentation (12). Therefore, self-reflection is vital to learning from doing. Furthermore, the Accreditation Council for Graduate Medical Education (ACGME) milestones project explicitly encourages the use of self-reflection in practice-based learning, quality improvement, and professionalism (13). Several techniques have been described in the medical education literature on the use of self-reflective exercises to promote clinician skills such as empathy, stress relief, and communication (14). Gibbs' reflective cycle is often used as a basis for such exercises (15). We have been utilizing a self-reflection tool to facilitate understanding of learner needs (16) (Figure 3). In this exercise, learners rate their skills in the context of their practice, and they are then coached to discuss what they do well and how they wish to improve. Subsequently, the coach helps the learner create a focused plan for improvement within a specified time. Our experience with this exercise has been valuable in determining not only the needs of learners, but also where they are on the learning spectrum. It has empowered our residents to take ownership of the process and intent of learning. Additionally, we have utilized this tool in engaging our faculty in professional development.

Stress Reduction

As a complement to the applications of self-reflection discussed, self-reflection exercises can also engender awareness of our reactions in the work setting. Reflecting on both positive and negative interactions is vital in exploring our reactions to challenging situations. We can facilitate

FIGURE 3. Self-Reflection Exercise (16)



this reflection by asking learners to recall events at work that were perceived as negative or positive. By reflecting on how the events affected them, what they learned from the situation, and specific ways in which they have changed as a result of that interaction (that is, how they managed or would like to manage similar situations), learners may begin to recognize their own reactivity in situations that did and did not meet their expectations (15).

Since we are trained and expected to diagnose and mend problems, clinicians and educators often set expectations for how interactions are "supposed to" occur. However, recognizing that certain situations cannot be controlled is important. Stress can occur when outcomes do not match expectations. In every stressful situation, there are "three options: remove yourself from the situation, change it, or accept it totally" (17). Comparing what is happening in the moment (for example, a patient refuses discharge) to what should have happened (the patient promised he or she would leave today) takes us out of the present moment, into thoughts about how and why things are not going as we had hoped. This speculation about things we cannot change leads to stress and suffering, and in these stressful situations, we often react in ways that we may regret (for example, reacting angrily when the patient refuses discharge).

These stress reactions are a result of our body's evolutionary response to threatening situations; we may inaccurately perceive negative events as threats,

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FIGURE 4. Tips on Mindful Practice in Medicine (19)


- Focus on your breath while you are walking.
- Voluntary simplicity: turn off your email while you are charting.
- Slow down.
- When with a patient or with learners, avoid thinking about all of the other things you need to do or already did. You can't change the past or future, so stay with the present task at hand.
- When you feel your "fight or flight" reaction, pause, pay attention to your breathing, and check in with all five senses.
- Listen to your patients, not your thoughts about your patients.
- Give yourself a break.
- The 90/10 principle: 10% of life is made up of what happens to you; 90% of life is decided by how you react to it.
- Allow yourself to accept help.
- Notice the different ways you handle stress when you are and are not incorporating mindfulness into your daily practice.
- Eat mindfully. Turn off everything and concentrate on the sensations involved.
- In difficult interpersonal interactions, focus on one positive aspect of the individual(s) involved.
- Try not to take things personally.

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Developing our residents' curiosity and beginner's mind through self-reflection can encourage self-directed learning. In addition, by facilitating attentive observation and presence, these self-reflection exercises allow residents and educators to watch for reactivity and accept each moment as it comes.

unnecessarily activating our “fight or flight” response (that is, sweating, pulse racing, and so on). For example, during this confrontation with the difficult patient, an enraged resident may notice his or her heart is pounding. One can learn to mitigate these responses by “dwelling in stillness and... observing without reacting and without judging” (18). As we become more mindful of our reactions in each moment, without judging them, we will develop the ability to recognize the visceral sensations associated with these reactions. Now our enraged resident can recognize his or her heart pounding, pause, get present, and respond thoughtfully rather than react. Several simple ways can be used to embed presence into one's practice. (Figure 4).

Conclusion

The techniques described incorporate two aspects of mindfulness—self-reflection and presence—that are vital in cultivating the four habits of mind. Developing our residents' curiosity and beginner's mind through self-reflection can encourage self-directed learning. In addition, by facilitating attentive observation and presence, these self-reflection exercises allow residents and educators to watch for reactivity and accept each moment as it comes. In the ever-changing paradigm of medical education, these powerful tools enable residents and educators to mitigate stress and burnout as they progress toward mindful competence. 

AUTHORS

Shanu Gupta, MD

Assistant Professor
Department of Internal Medicine
Rush University Medical Center

Jill Wener, MD

Director of Education, Division of Hospital Medicine
Department of Internal Medicine
Rush University Medical Center

REFERENCES

1. Shanafelt D, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. *Ann Intern Med.* 2002;136(5):358-367
2. Gundersen L. Physician burnout. *Ann Intern Med.* 2001;135(2):145-148
3. Devi S. Doctors in distress. *Lancet.* 2011;377:454-455. doi: 10.1016/S0140-6736(11)60145-1.
4. Ishak WW, Lederer S, Mandili C, et al. Burnout during residency training: a literature review. *J Grad Med Educ.* 2009;1(2):236-242. doi: 10.4300/JGME-D-09-00054.1.
5. Adams L., *Learning a New Skill Is Easier Said than Done.* 2011. Online. <http://www.gordontraining.com/free-workplace-articles/learning-a-new-skill-is-easier-said-than-done/>. Accessed November 18, 2014.
6. Peña A. The Dreyfus model of clinical problem-solving skills acquisition: a critical perspective. *Med Educ Online.* 2010;15. Online. <http://med-ed-online.net/index.php/meo/article/view/4846>. Accessed November 18, 2014.
7. Dobkin PL, Laliberte V. Being a mindful clinical teacher: can mindfulness enhance education in a clinical setting? *Med Teach.* 2014;36(4):347-352.
8. Epstein RM. Mindful practice. *JAMA.* 1999;282(9).
9. Epstein RM. Mindful practice in action (I): technical competence, evidence-based medicine, and relationship-centered care. *Fam Syst Health.* 2003;21(1):1-9.
10. Sanders J. The use of reflection in medical education: AMEE guide no. 44. *Med Teach.* 2009;31:685-695.
11. Schumacher DJ, Englander R, Carraccio C. Developing the master learner: applying learning theory to the learner, the teacher, and the learning environment. *Acad Med.* 2013;88:1635-1645.
12. Kolb DA. *Experiential Learning: Experience as the Source of Learning and Development.* Englewood Cliffs, NJ: Prentice Hall, 1984.
13. *The Internal Medicine Milestones Project.* Published October 2014. Online. <https://www.acgme.org/acgmeweb/Portals/0/PDFs/Milestones/InternalMedicineMilestones.pdf>. Accessed November 18, 2014.
14. Dobkin PL, Hutchinson TA. Teaching mindfulness in medical school: where are we now and where are we going? *Med Educ.* 2013;47:768-779.
15. Gibbs G. *Learning by Doing: A Guide to Teaching and Learning Methods.* Online. <http://www2.glos.ac.uk/gdn/gibbs/>. Accessed November 17, 2014.
16. Harvey-Lloyd J. Using a self-assessment wheel to facilitate reflection. *PBLH.* 2013;1(2).
17. Tolle E. *The Power of Now: A Guide to Spiritual Enlightenment.* Vancouver, BC: Namaste Publishing 1997.
18. Freeborn DK. Satisfaction, commitment, and psychological well-being among HMO physicians. *West J Med.* 2001;174(1):13-18.
19. Kabat-Zinn J. *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life.* New York, NY: Hyperion, 1994.