

s stress, burnout, and mental health issues appear to be on the rise in the United States, efforts to improve wellness have increased. The alarming rates of burnout in healthcare professionals of all settings have been shown to have serious, wide-ranging consequences that range from reduced job performance to medical error and clinician suicide. As a possible intervention strategy to reduce perceived stress and decrease the risk of burnout in healthcare workers, including pharmacists, mindfulness training has received recent attention.

What is Mindfulness?

Given our current climate, the ability to pause, breathe, and self-reflect amid peripheral noise is more important than ever. Developing the skills to achieve this can be done through the practice of mindfulness. According to mindful.org, mindfulness is "the basic human ability to be fully present, aware of where we are and what we're doing, and not overly reactive or overwhelmed by what's going on around us." We all possess the ability to be mindful; we just have to learn how to access that part of ourselves.3 As we learn to get into this present state of mind, we feel better, think more clearly, and appreciate more about our daily lives. Mindfulness has been practiced for centuries, with a more recent mainstream acceptance as many have searched for new coping skills to deal with this long year of pandemic changes, uncertainty, and changing home and work lives. The purpose of this article is to describe the advantages of mindfulness-based practices and provide ideas for how preceptors can incorporate mindfulness into pharmacy rotations.

The Advantages of Mindfulness

Mindfulness has over three decades of evidence-based research helping people to shift their focus to the present and deal more effectively with anxiety, stress, and the demands of everyday life.^{4,5} Studies conducted to examine the impact of mindfulness-based training on healthcare professionals and trainees have provided strong evidence to support the efficacy of mindfulness practice to reduce job burnout, perceived stress, and depression, and to promote resilience in healthcare professionals.^{2,6,7} The mountain of evidence behind the value of mindfulness continues to grow, with exponentially positive results within the studies of this decade.8

The 2019 National Consensus Conference brought together several national pharmacy associations to evaluate factors that contribute to well-being and develop strategies to fuel improvements in resilience.1 Based on recommendations from this conference, pharmacy students at the Medical College of Wisconsin (MCW, since 2020) and Concordia University Wisconsin (CUW, since 2018) are familiar with these practices, as the first year Patient Skills Labs at both schools include a weekly practice with reflection. Survey results from the first two years of this incorporation into the skills laboratory curricula were impressive. The results affirmed that students were receptive to the incorporation of mindfulness techniques. Student responses revealed that mindfulness creates a positive and engaging culture; helps professors build warm, empathetic, and trusting relationships with students; and provides students with valuable resources to aid in their resiliency and well-being. After learning mindfulness practices, students from both schools reported a plan to use some type of mindfulness tool when working with patients in their future practice, with common themes of breathing exercises, active listening, mindfulness of thought, and the use of empathy and selfcompassion. For these reasons, we believe that pharmacy preceptors should be aware of these remarkable skills that students have learned and are currently practicing in both their professional and personal

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TABLE 1. Resources for Suggested Activities

Activity Name	Timing / Duration	Resources
The Maui Habit	10 seconds	Book: BJ Fogg. Tiny Habits: the small changes that change everything. Thorndike Press. May 2020. You tube: https://www.youtube.com/watch?v=2L1R7OtJhWs&t=420s
PRO: Pause, Relax, Open to what matters in this moment	10 seconds	https://elishagoldstein.com/less-stress/
Mindful Eating	Varies	https://www.mindful.org/6-ways-practice-mindful-eating/
Mindful walking	~ 10 minutes	https://ggia.berkeley.edu/practice/walking_meditation
G.L.A.D. Technique or G.L.A.D. Daily Snapshot practice	~ 5 minutes	https://www.psychologytoday.com/us/blog/practical-mindfulness/201908/get-glad-and-scrub-away-rumination-and-anxiety
Breath Micropractice: Stop and take 3 deep, intentional breaths	< 30 seconds	https://siyli.org/downloads/SIY_Handouts_Micropractices_1day.pdf
STOP: Stop, Take a breath, Observe, Proceed	~ 2 mins	Video: https://elishagoldstein.com/videos/the-stop-practice/ Source: https://elishagoldstein.com/audio/mindful-solutions-for-success-and-stress-reduction-at-work/
Mindful Breathing: Many techniques available: square/box breathing, body scans, guided imagery.	~ 1 minute	http://www.freemindfulness.org/download https://www.anahana.com/wellness-blog/breathing/square-breathing
Diaphragmatic Breathing	~ 2 minutes	https://www.lung.org/lung-health-diseases/lung-disease-lookup/copd/patient-resources-and-videos/belly-breathing-video
5-4-3-2-1 Coping Technique for Anxiety	< 5 minutes	https://www.urmc.rochester.edu/behavioral-health-partners/bhp-blog/april-2018/5-4-3-2-1-coping-technique-for-anxiety.aspx

lives. Pharmacy preceptors now have the opportunity to also embed mindfulness techniques into their rotations to nurture positive and engaging relationships with their students and help to keep the focus on patient-centered care.

Overcoming Barriers

Precepting, in addition to the responsibilities of clinical practice, can be labor intensive. Additionally, the thought of embedding yet another activity into a learner's rotation can seem intimidating. Fortunately, the process of integrating mindfulness into a learner's daily regimen is easier than anticipated. Most mindfulness techniques, such as the practice of gratitude, guided deep breathing, or selfreflection, take only a few minutes and can have a valuable impact on mindset. Although the type and duration of activity might vary, data shows that even shortduration interventions elicit positive outcomes related to stress and anxiety levels.8

If you are not already using these skills, their newness and the fear of leading these activities can seem daunting. However, comfortability and confidence with mindfulness develops with practice, and these negative feelings quickly diminish. Moreover, many students are already aware of these techniques and have developed these skills. The reinforcement of mindfulness practice throughout their rotations would allow learners to transform their skills into proven abilities as they engage in patient-centered care. Keep in mind that leading these skills does not require you to be an expert. And there are many ways to practice mindfulness. If you are not comfortable taking the lead to initiate these tools, there are many evidence-based meditation apps that can be used for your own practice, and with your family, your patients, and your students (Tables 1-3).

Incorporating Mindfulness

To incorporate mental health and well-being into rotations, look for natural places where a pause can give the preceptor and learner a chance to connect, ground, re-center, and set a mindset for being fully present in the moment. The most common place to take a needed pause for reflection

is before or after an encounter, or at the beginning or end of the day.

A few potential times of day with specific examples are outlined here (see Table 1 for specific activity resources):

1. Start of the workday: As you outline the flow and objectives for the day, consider setting an intention. An intention is "a determination to act in a certain way"9 or "a purposeful awareness of how you want to experience something: how you want to act and feel."10 The intention can be for yourself or can include the learner. It can be something simple, like using the Maui Habit to establish that "it's going to be a great day."11 It can also be more involved such as taking some breaths, connecting with how you are feeling, and then setting an intention for the day's focus. This is not a goal with an outcome but instead allows the individual to set the tone for the day. For example: "This morning is going to be busy; let's take it one patient at a time, with a smile on our face and an open, patient-centered heart."

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TABLE 2. Suggested Apps

Арр Name	WHY the authors love and recommend
The Mindfulness App	Beginners: 5 day guided practice and introduction to mindfulness. Various meditations with different timings available.
Headspace	Beginners: 10 day basics course with animations. Easy to use courses based on user needs. Available on app and website. See Netflix series for more information.
Insight Timer	The largest variety of free guided meditations for a wide range of experiences. Constantly adding new resources - daily habits, discussion groups, learning series.
Smiling Mind	Completely free (no in-app purchases). Developed as a school program in Australia, then expanded to include a wide breadth of exercises on both the app and website. Organized by groups: Adults, Kids, Youth, Families, Classroom, Work, Healthcare. Includes "bite size" meditations
CALM	Includes a large variety of calming exercises, breathing techniques, and a Calm Kids section with options for sleep, music, scenes, and relaxing sounds.
Healthy Minds Program	Beginners: 5 part Foundations course with self-assessment for awareness, connection, insight, and purpose. UW Madison developed and evidence based. Easy to follow "learn" and "practice" sessions.

2. Lunchtime: This is a great time to purposefully promote and rolemodel the importance of breaks to rejuvenate ourselves and build energy and resiliency. An example would be to use the mindful acronym P.R.O. Both you and the student sit down together to practice Pause, Relax your body, and be Open to what matters

most in the moment. Another example would be to practice mindful eating. This is simply savoring your food by noticing the smell, the complexity of taste, and taking a moment of gratitude for all the work it took to get this nourishment from seed to your plate. After eating, a refreshing walk with mindful

- awareness of the beauty around us (even better if you can go outside) is another way to relieve unnecessary tension from your mind and body.
- 3. End of the Day: Preceptors know how much an end-of-day debrief can enhance learners' insight and solidify unsure concepts. Mindful reflection questions can be added to this interaction. For example, consider using G.L.A.D. to address learning, build gratitude, and enhance resiliency through the development of positive mindfulness with less bias and judgment:

When the intention is to practice GLAD at the end of the day, your brain searches for these positive moments to remember for later.

- **G = GRATITUDE** What are you grateful for today?
- **L = LEARNING** What was the most profound/interesting/surprising thing you learned today?
- **A = ACCOMPLISHMENT** What did you accomplish today?
- **D = DELIGHT** What brought you a sense of delight today?
- **4. Preparation for communication:** Before entering a room for a patient

TABLE 3. Suggested Websites

Website Name	Resources	WHY the authors love and recommend
Mindful.org	https://www.mindful.org/meditation/mindfulness-getting-started/	An excellent place to start and then to expand learning: filled with resources and practices
Mindfulness Exercises.com	https://mindfulnessexercises.com/mindfulness- exercises-for-beginners/	A variety of exercises for beginners - can choose by topic
National Academy of Medicine: The Clinician Well- being Knowledge Hub	https://nam.edu/clinicianwellbeing/solutions/individual-strategies/	Includes resources and publications specifically related to health care clinicians
UW Madison Center for Healthy Minds	https://centerhealthyminds.org/	A great resource for the science behind well-being and the current research in Wisconsin
Berkeley Greater Good in Action	https://ggia.berkeley.edu/	A large variety of practices in addition to a monthly "happiness calendar" with daily ideas for creating joy
AACP Wellness and Resiliency in Pharmacy Education	https://www.aacp.org/resource/wellness-and- resilience-pharmacy-education	Excellent supportive resource to incorporate well-being into academia
American Mindfulness Research Association	https://goamra.org/	A professional resource with current, evidence based research on mindfulness and its applications
Action for Happiness	https://www.actionforhappiness.org/	Programs and actionable suggestions to create a happier and kinder world
APhA Well-being index	https://app.mywellbeingindex.org/login?id=60	Free resource for pharmacists to assess current levels of well-being, and then utilize resources to improve
The Free Mindfulness Project	http://www.freemindfulness.org/home	Free to download mindfulness meditation exercises

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encounter, preparing to talk with another health care professional, or answering the phone, a simple pause to connect with the breath can be encouraged. For example, S.T.O.P.: "Stop; Take a few deep breaths; Observe your thoughts, emotions, body; then Proceed with awareness."

5. To de-escalate stressful moments:

When you have an overwhelmed learner or patient, one of the easiest ways to engage mindfulness is to focus on the breath. For example, diaphragmatic breathing or "belly breathing" involves taking slow, deep inhalations, followed by an extended exhalation.12 This is a recommended technique to help with shortness of breath from COPD and asthma. It stimulates the vagus nerve and enables the parasympathetic nervous system to affect a state of calm in the body. 13 Other examples include "breath micropractice" (take 3 deep, intentional and attentive breaths), "counting breaths" (breathe naturally and count one for breath in, two for breath out, up to the count of 10), or "square/box breathing" (breath in for count of 4, hold or count of 4, breath out for count of 4, hold for count of 4, and repeat for 1 minute).

- 6. Direct patient care: In addition to helping our COPD and asthma patients, mindful breathing can be an essential tool to teach our patients to overcome stress and anxiety as they face difficult challenges. Mindful breathing can also be helpful for patients making positive, yet difficult, lifestyle changes such as smoking cessation and weight loss. Another technique to use is focusing on the senses for grounding and to decrease anxiety in the moment. The 5-4-3-2-1 Coping Technique includes acknowledging:
 - 5 things you can see
 - 4 things you can touch
 - 3 things you can hear
 - 2 things you can smell
 - 1 thing you can taste
- 7. **Anytime!** Explore the apps, and then use it to lead you through a short (from 1 to 5 minute) practice based on what you are feeling or

needing. This is an excellent way to learn the practices, get comfortable with the thought process, and find go-to meditations that work for you. Suggested times to listen to an app guided meditation include: in the morning while waiting for coffee to brew, while eating, during your commute, during breaks/downtime/ any time you want to center yourself and learn something new. The app practices can be used to connect with family by listening to a practice and then discussing it: after school/work, dinner time, bedtime. If you are a beginner, Headspace, Healthy Minds, and Smiling mind all have beginner foundation curriculum. Table 2 includes free apps with descriptions of their basic functions. Choose one and get started! In addition, Table 3 provides some of the authors' favorite website to further explore mindfulness.

To help sort through the abundance of valuable resources to explore, Tables 1, 2, and 3 provide the authors' favorite resources to explore mindfulness.

Conclusions

Mindfulness is a practice that helps us learn to pay attention and be present in our lives. Though it cannot eliminate life's stresses, it has been shown to improve the well-being of healthcare professionals, including pharmacists and pharmacy students. Therefore, it would be advantageous for preceptors to embrace mindfulness as a tool for themselves and to coach learners on how to use mindfulness throughout the workday to stay centered and provide quality patient care. Preceptors can consider integrating mindfulness into their rotations through specific activities or consider adapting their precepting style to include mindful elements to reduce perceived stress, decrease the risk of burnout, and build resiliency in our future pharmacists.

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