Mindful Practice
Ronald M. Epstein

http://jama.ama-assn.org/cgi/content/full/282/9/833

Correction
Contact me if this article is corrected.

Citations
This article has been cited 283 times.
Contact me when this article is cited.

Related Articles published in the same issue
Teaching Professionalism in Undergraduate Medical Education

Instilling Professionalism in Medical Education

September 1, 1999
*JAMA.* 1999;282(9):909.
Mindful Practice

Ronald M. Epstein, MD

Reflection and self-awareness help physicians to examine belief systems and values, deal with strong feelings, make difficult decisions, and resolve interpersonal conflict.1-2 Organized activities to foster self-awareness are part of many family medicine residency programs2 and some other residency3 and medical school curricula.2-8 Exemplary physicians seem to have a capacity for critical self-reflection that pervades all aspects of practice, including being present with the patient,9 solving problems, eliciting and transmitting information, making evidence-based decisions, performing technical skills, and defining their own values.10

This process of critical self-reflection depends on the presence of mindfulness. A mindful practitioner attends, in a nonjudgmental way, to his or her own physical and mental processes during ordinary everyday tasks to act with clarity and insight.11-15 This article first presents current thinking about the professional aspects of mindfulness. It also explores how mindfulness is integral to the professional competence of physicians and suggests ways to cultivate mindfulness in medical training. In doing so, however, I recognize that mindfulness, although supported by empirical observation of clinical practice,16-21 educational research,22-26 philosophy,11,27 and cognitive science,28-30 is fundamentally personal and subjective.

Mindful practitioners attend in a nonjudgmental way to their own physical and mental processes during ordinary, everyday tasks. This critical self-reflection enables physicians to listen attentively to patients’ distress, recognize their own errors, refine their technical skills, make evidence-based decisions, and clarify their values so that they can act with compassion, technical competence, presence, and insight. Mindfulness informs all types of professionally relevant knowledge, including propositional facts, personal experiences, processes, and know-how, each of which may be tacit or explicit. Explicit knowledge is readily taught, accessible to awareness, quantifiable and easily translated into evidence-based guidelines. Tacit knowledge is usually learned during observation and practice, includes prior experiences, theories-in-action, and deeply held values, and is usually applied more inductively. Mindful practitioners use a variety of means to enhance their ability to engage in moment-to-moment self-monitoring, bring to consciousness their tacit personal knowledge and deeply held values, use peripheral vision and subsidiary awareness to become aware of new information and perspectives, and adopt curiosity in both ordinary and novel situations. In contrast, mindlessness may account for some deviations from professionalism and errors in judgment and technique. Although mindfulness cannot be taught explicitly, it can be modeled by mentors and cultivated in learners. As a link between relationship-centered care and evidence-based medicine, mindfulness should be considered a characteristic of good clinical practice.

Consider a situation that I recently faced with a patient who required an expanded view of professional knowledge and mindful reflection to achieve a satisfactory resolution. A 42-year-old mother of two small girls, despondent over job difficulties, was contemplating genetic screening for breast cancer as she approached the age at which her mother was diagnosed as having the same disease. Aside from the difficulties in taking an evidence-based approach to assigning quantitative risks and benefits to the genetic screening procedure (How much should I trust the available information?) and uncertainty about the effectiveness of medical or surgical interventions (Would knowing the results make a difference, and, if so, to whom?), the case raised important relationship-centered questions about values (What risks are worth taking?), the patient-physician relationship (What approach would be most helpful to the patient?), pragmatics (Is the geneticist competent and respectful?), and capacity (To what extent is the patient’s desire for testing biased by her fears, depression, or incomplete understanding of the illness and tests?).

For me, book knowledge and clinical experience were insufficient. I had to rely on my personal knowledge of the

©1999 American Medical Association. All rights reserved.
Table 1. Professionally Relevant Awareness and Knowledge

<table>
<thead>
<tr>
<th>Levels of Awareness</th>
<th>Types of Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacit (subsidiary awareness)</td>
<td>Propositional</td>
</tr>
<tr>
<td>Explicit (focal awareness)</td>
<td>Personal</td>
</tr>
<tr>
<td></td>
<td>Process (including metaprocessing)</td>
</tr>
<tr>
<td></td>
<td>Know-how</td>
</tr>
</tbody>
</table>

Explicit and Tacit Knowledge

Clinical judgment is based on both explicit and tacit knowledge. Medical decision making, however, is often presented only as the conscious application to the patient’s problem of explicit elements of practice — including the interpretations of medical tests and the affective domain. An attitude of critical curiosity, openness, and connection allowed us to defer the decision and reconsider testing once the immediate crises had passed.

Examples of tacit knowledge abound. Riding a bicycle involves tacit knowledge and preattentive processing. While explicit elements of practice are taught formally, tacit elements are usually learned during observation and practice. Often, excellent clinicians are less able to articulate what they do than others who observe them. Nor do they appreciate all of the biases in their own reasoning processes. Subsidiary awareness is a term that describes how the practitioner makes accessible the flow of unprocessed experience and tacit knowledge.

In the words of Anaïs Nin, “We don’t see things as they are, we see things as we are.” Evidence-based medicine offers a structure for analyzing medical decision making, but it is not sufficient to describe the more tacit process of expert clinical judgment. All data, regardless of their completeness or accuracy, are interpreted by the clinician to make sense of them and apply them to clinical practice.

Seasoned practitioners also apply to their practice a large body of knowledge, skills, values, and experiences that are not explicitly stated by or known to them. This knowledge may constitute a different kind of evidence, which also has a strong influence on medical decisions. In everyday life, examples of tacit knowledge abound. Riding a bicycle involves judgments about speed, orientation, and position that are rarely made conscious except when something goes amiss. Similarly, an experienced neurologist can recognize Parkinson disease within moments of meeting a patient, before processing the objective and subjective data to support it. During this preattentive processing, the brain rapidly scans a wide array of perceptions, detects conspicuous features, and relegates some information to the background, all before the content of the perception is analyzed. Clinical skills, such as the depth of insertion of an otoscope, the manipulation of the fetal head during a delivery, and the realization that the patient has given sufficient information to diagnose major depression involve tacit knowledge and preattentive processing.

While explicit elements of practice are taught formally, tacit elements are usually learned during observation and practice. Often, excellent clinicians are less able to articulate what they do than others who observe them. Nor do they appreciate all of the biases in their own reasoning processes. Subsidiary awareness is a term that describes how the practitioner makes accessible the flow of unprocessed experience and tacit knowledge.

In the words of Anaïs Nin, “We don’t see things as they are, we see things as we are.” Evidence-based medicine offers a structure for analyzing medical decision making, but it is not sufficient to describe the more tacit process of expert clinical judgment. All data, regardless of their completeness or accuracy, are interpreted by the clinician to make sense of them and apply them to clinical practice. Experts take into account messy details, such as context, cost, convenience, and the values of the patient. Physician factors such as emotions, bias, prejudice, risk-aversion, and personal knowledge about the patient, such as personality, simply do not fit into predefined categories. To clinicians, these models may resemble computer-generated symphonies in the style of Mozart — correct but lifeless.

Professional Knowledge and Self-awareness

Eraut defines 4 types of professionally relevant knowledge, each of which can be tacit or explicit (TABLE 1). The most familiar is propositional knowledge, or what most people call facts: theories, concepts, and principles, usually acquired from books, electronic media, or instructors. Self-awareness of what one does not know and the appreciation for the transient nature of facts can direct ongoing learning.

Knowledge acquired through experience, or personal knowledge, is a collection of information, intuitions, and interpretations that guides professional practice. Consider the following example. Returning from vacation, I saw one of my patients who was infected with human immunodeficiency virus and said to the resident caring for him, “Mr Charles looks worse. Looks like he might have adrenal insufficiency.” The personal knowledge exemplified in this scenario differs from an anecdote because it is contextualized. I can say that Mr Charles looks worse because I know him as a person, not just because I know about him, and because I recognize a pattern of disease (weakness and skin color change). This knowledge enters into my mind in an inductive, impressionistic way, providing the gestalt or feel of a clinical situation in addition to the propositional facts. However, confusion between personal knowledge and anecdotal information results in both being neglected and discounted during medical training. An example of the uncritical application of a decontextualized anecdote is when a physician who after...
missing a diagnosis of colon cancer, sub-
sequently overtests all of his patients. In
contrast, if he had raised tacit personal
knowledge to awareness, it could have
been subjected to critical reflection.

Process knowledge is knowing how
to accomplish a task,99 such as gather-
ing information, performing proce-
dures, making decisions, and plan-
ning for the future.98 Process knowledge
also includes metaprocessing, or the
process of reflection on one’s own men-
tal processes. This is particularly im-
portant in practice, because “we do not
observe nature as much as we observe
nature exposed to our method of ques-
tioning.”60 Metaprocessing might be
called thinking about thinking or feel-
 ing about feelings. It is both a con-
crete action (such as the modification
in a trajectory of light in a mirror) and
an act of self-observation in which the
mind attends to its own actions (in-
cluding the subject who is performing
those actions). Metaprocessing allows
the physician to uncover areas of un-
conscious incompetence,61 the blind
spots wherein a physician might not
know that the test will happen
when asked how he found mel-
dies: “The problem is not finding them,
it’s—when getting up in the morning and
out of bed—not stepping on them.”67

Although mindfulness is a practice that
derives from a philosophical-religious
tradition,12,14,15 the underlying philoso-
phy is fundamentally pragmatic13 and is
based on the interdependence of ac-
tion, cognition, memory, and emotion.
These connections represent a rela-
tively new idea in neuroscience re-
search.28,68 Western approaches to the
understanding of mental processes have
historically separated mental activity
from action in the world, and the schism
between behavioral and psychody-
namic psychology has reinforced some
of this separation. However, in the
East,11,14 and in phenomenological tra-
ditions in the West,11,27 philosophy has
linked cognition to emotion, memory,
and action in the world.

The goals of mindful practice are to
become more aware of one’s own men-
tal processes, listen more attentively, be-
come flexible, and recognize bias and
judgments, and thereby act with prin-
ciples and compassion (TABLE 2). Mind-
ful practice involves a sense of “unfin-
ishedness,”11 curiosity about the
unknown and humility in having an im-
perfect understanding of another’s suf-
f ering. Mindfulness is the opposite of
multitasking. Mindfulness is a quality of
the physician as person, without bound-
aries between technical, cognitive, emo-
tional, and spiritual aspects of practice.

Mindful practitioners have an abil-
ity to observe the observed while ob-
serving the observer in the consulting
room. This process, not often dis-
cussed in medical practice, is consid-
ered essential to musicians, whose task
is to perform and listen at the same time,
attending simultaneously to the tech-
nical challenges, emotional expres-
sion, and overall theoretical structure
of the music.69 The accomplished mu-
sician performs midcourse correc-
tions of finger movements, compares
the sound produced with the imagined
sound, and, at the same time, brings expressive spontaneity to the
performance. However, if the musi-
cian were to attempt to control each fin-
ger movement while simultaneously
analyzing the harmonic structures,
rhythms, and silences that constitute
expressive playing, playing would be-
come impossible. Thus, focal aware-
ness on the music is accompanied by
subsidiary awareness69 of technique and
analysis—a mix of peripheral vision and
semiautomatic action that is high-
lighted only when the unexpected or
difficult occurs.

In medicine, consider what a resi-
dent in a busy pediatric emergency
department might do when he is unable
to determine whether an ear examina-
tion is normal or abnormal and the
attending physician is not immediately
available. The resident has several
options, consideration of which could
be conscious or unconscious. The resi-
dent weighs the consequences of mis-
diagnosis for the patient, the humili-
ating of having to call an otolaryngology
resident out of the clinic, the loss of self-
estem by having to admit incompe-
tence, and the pride in being strong
enough to admit his need to learn. An
unmindful practitioner who is con-
scious of the dilemma might judge or
blame himself or others. He might base

### Table 2. Characteristics of Mindful Practice

<table>
<thead>
<tr>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active observation of oneself, the patient, and the problem</td>
</tr>
<tr>
<td>Peripheral vision</td>
</tr>
<tr>
<td>Preattentive processing</td>
</tr>
<tr>
<td>Critical curiosity</td>
</tr>
<tr>
<td>Courage to see the world as it is rather than as one would have it be</td>
</tr>
<tr>
<td>Willingness to examine and set aside categories and prejudices</td>
</tr>
<tr>
<td>Adoption of a beginner’s mind</td>
</tr>
<tr>
<td>Humility to tolerate awareness of one’s areas of incompetence</td>
</tr>
<tr>
<td>Connection between the knower and the known Compassion based on insight Presence</td>
</tr>
</tbody>
</table>

©1999 American Medical Association. All rights reserved.
his course of action on an external standard of correctness or on expedience. However, little would be learned, and he would be no better prepared for the next situation. A mindful conscious approach would be to cultivate awareness not only of the correct course of action but also of the factors that cloud the decision-making process. The mindful practitioner is mentally and technically better prepared for the next situation.

The object of mindfulness can apply to any aspect of medical practice and within any domain of tacit or explicit knowledge. Intrapersonal self-awareness helps the physician be conscious of his or her strengths, limitations, and sources of professional satisfaction. It helps the individual avoid blind spots, such as a physician who, because his or her parent was an alcoholic, avoids discussions of alcohol with patients. It may clarify deeply held values and motivations for becoming a physician. Interpersonal self-awareness, or social intelligence, allows physicians to see themselves as they are seen by others and helps to establish satisfactory interpersonal relationships with colleagues, patients, and students. Awareness of metaprocessing allows physicians to be aware of their own clinical reasoning, including the necessary connections between cognition, memory, and emotional processing. Self-awareness of learning needs allows physicians to recognize areas of unconscious incompetence and to develop a means to achieve their learning goals.

Mindfulness implies examining the relationship between the knower and the known as suggested in the “I-Thou” relationship of Martin Buber or the “connected knowing” of ideas, people or things, suggested by Belden and colleagues.

Mindfulness enables the practitioner to use a wider set of perceptual resources. The fluidity of mind that can maintain some constant subthreshold awareness of preattentive and subsidiary processes has been described as a “beginner’s mind.” A beginner’s mind is open and allows for new diagnostic and therapeutic possibilities, as may happen when a patient meets a new physician. By contrast, the expert’s mind narrows possibilities, using prior experience to delimit and confine observations. Langer describes mindfulness as a state of “could be,” welcoming uncertainty rather than trying to avoid it. Difficult patients might then become interesting patients; unsolvable problems might become avenues for research. Critical curiosity shows the limits of categories and helps create more meaningful ones. For example, the recognition of panic disorder as a common cause of chest pain might help physicians recategorize these patients from symptom amplifiers to patients with a serious and treatable illness. Expertise is often well served by beginner’s mind, especially in new, unfamiliar, or stressful situations.

Mindfulness implies examining the relationship between the knower and the known as suggested in the “I-Thou” relationship of Martin Buber or the “connected knowing” of ideas, people or things, suggested by Belden and colleagues. Knowledge, then, does not exist independently but rather in relationship to the one observing and using it. Theories are seen as fragile approximations rather than reality itself. Suchman and Matthews have described this as the connexional dimension of medical practice, in which there is a tacit bond between patient and physician that transcends professional roles.

Mindfulness implies examining the relationship between the knower and the known as suggested in the “I-Thou” relationship of Martin Buber or the “connected knowing” of ideas, people or things, suggested by Belden and colleagues. Knowledge, then, does not exist independently but rather in relationship to the one observing and using it. Theories are seen as fragile approximations rather than reality itself. Suchman and Matthews have described this as the connexional dimension of medical practice, in which there is a tacit bond between patient and physician that transcends professional roles.

Mindfulness: Gaps Between Knowledge, Values, and Actions
Physicians make moment-to-moment value-laden decisions that entail cognitive and emotional factors. They decide how much effort to expend in pursuit of knowledge, how much pain medication to prescribe, how much time to spend with each patient, and when to return patients’ telephone calls. These rapid decisions, usually based on personal knowledge, level of skill, efficiency, and values, ultimately result in actions. Thus, objectives for the practice of medicine calling on physicians should include the ability to perform or knowlege about important aspects of medical care as well as the requirement to actually use those practices in daily work.

Self-knowledge is essential to the expression of core values in medicine, such as empathy, compassion, and altruism. To be empathic, I must witness and understand the patient’s suffering and my reactions to the patient’s suffering to distinguish the patient’s experience from my own. Then I can communicate my understanding and be compassionate, to use my presence to relieve suffering and to put the patient’s interests first. Perhaps lack of self-awareness is why physicians more often espouse these values than demonstrate them and why they tend to be less patient-centered and confuse their own perspectives with those of the patient in situations that involve conflict and strong emotions.

Curiosity is central both to caring about the patient and to solving problems. Fitzgerald describes a trainee who reported a patient as having had a history of “BKA” (below-the-knee amputation) without noting that the patient, in fact, had both feet. A transcriptionist had mistranscribed DKA (diabetic ketoacidosis) and the assertion went unchallenged. The student lacked curiosity, or overconcreteness, led to mistaking the chart for the patient. Similarly, caring requires an interest in the patient as a person rather than as an abstraction of disease. For example, Stetten described how his physicians were uninterested in his adaptation to blindness while they attempted to treat his macular degeneration; they saw the disease but not the person.
Mindlessness accounts for many deviations from professionalism, which seem to occur more often in emotionally charged situations, during situations of uncertainty, and under pressure to resolve problems. For example, many medical students and residents, and presumably practitioners as well, report findings that were not observed and do not seek correction for errors. Actions diverge from professional knowledge and values because of attempts to be efficient, a desire to please supervisors, feelings of embarrassment, and a sense of being overwhelmed. Practitioners may not think to apply knowledge gained in a classroom context (such as an ethics course) in a stressful clinical environment. Deviations often involve avoidance of difficult issues, rationalization, externalization, or frank denial rather than the healthy processing of emotional feelings toward patients.

Levels of Mindful Practice

To guide physicians’ professional development, I would like to propose 5 levels of mindfulness, each of which subsumes the previous level and is subject to verification in future observational studies (Table 3). At the extreme of mindless practice, the practitioner’s response is denial (level 0). By making the problem “out there,” the practitioner may avoid responsibility and reflection or describe the situation (or the patient) in ways that are contrary to the evidence.

Level 1 describes practitioners who do not necessarily use reflection but take some responsibility for the situation and solve it by conforming to an external standard of behavior. For example, a practitioner might deal with his attraction to a patient by reciting a rule, such as “sexual intimacy with patients is wrong,” but may not seek understanding of the factors that put physicians at risk for misconduct.

Level 2 describes medical decision analysis based on the assumption that explicit cognitive models guide physician behavior and the key to change is the transfer of information. While curiosity and reflection are required to generate hypotheses and important questions, physicians at this level ignore personal knowledge, tacit knowledge, and emotions. Level 3 includes curiosity about feelings, thoughts, and behaviors without attempting to suppress or label them as good or bad. By including emotions and personal knowledge, the clinician has more tools available to promote patient care. Level 4, insight, has 3 facets: understanding the nature of the problem, understanding how one attempts to solve it, and understanding the interconnectedness between the practitioner and the knowledge that he or she possesses. Insight facilitates the calibration of mental processes, in addition to correction of the external problem. Finally, practitioners at level 5 can use their insight to generalize, overcome similar challenges in the future, incorporate new behaviors and attitudes, express compassion, and be present.

Becoming Mindful

Recent articles have described a variety of ways for becoming more self-aware. Individually, practitioners might keep a journal, practice meditation, review videotapes of sessions with their patients, and use learning contracts. In medical education, self-evaluation forms for students and residents have been important adjuncts to the evaluation process. Learners can compare their perceptions with those of a teacher or mentor. Peer evaluations have been useful in bringing awareness to aspects of professionalism and social skills for students, residents, and practicing physicians. Critical incident reports written by practitioners about mistakes, impairment, ethical dilemmas, and difficult situations can be discussed in small group settings and raise awareness about common situations and one’s reactions to them. Sharing of family information and cultural background, using genograms or illness narratives, can help practitioners learn about the expectations, biases, strengths, and tendencies that influence clinical care. These approaches, historically focused on the emotional aspects of medical practice and the patient-physician relationship, usually consist of exercises separated in space and time from actual clinical practice. Mindfulness training goes one step further. It applies to all aspects of practice, from looking up references to performing physical examinations, from tying sutures to giving bad news.

Mindfulness can link evidence-based and relationship-centered care and help to overcome the limitations of both approaches. The success of evidence-based approaches depends on the ability of the practitioner to decide which issues require further investigation and how to frame a question. These, in turn, require that the practitioner identify his or her own biases and the influences of the patient-physician relationship on framing the question to investigate. This personal knowledge should also be considered a form of evidence and could be integrated into decision making to incorporate patients’ preferences. Evidence-based data that are not specific to one patient-physician relationship would then be applied in a more mindful way.

Seminars about difficult topics such as HIV management, delivery of bad news, medical mistakes, professionalism, and adherence to treatment can foster reflection and raise practitioners’ awareness of their own emotions and biases, while, at the same time, attending to the practicalities of the patient’s problem. However, the ability to reflect in a classroom environment is not equivalent to reflection in a stressful clinical environment. For example, ethics courses might increase students’ knowledge base and improve their ability to solve difficult problems, but ethics courses do not necessarily produce physicians whose be-

Table 3. Levels of Mindfulness

<table>
<thead>
<tr>
<th>Levels</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Denial and externalization</td>
</tr>
<tr>
<td>1</td>
<td>Imitation: behavioral modeling</td>
</tr>
<tr>
<td>2</td>
<td>Curiosity: cognitive understanding</td>
</tr>
<tr>
<td>3</td>
<td>Curiosity: emotions and attitudes</td>
</tr>
<tr>
<td>4</td>
<td>Insight</td>
</tr>
<tr>
<td>5</td>
<td>Generalization, incorporation, and presence</td>
</tr>
</tbody>
</table>

©1999 American Medical Association. All rights reserved.
bavior is more ethical than it would be otherwise. Clinician-mentors can help students put ideas into action by modeling a moment-to-moment awareness of their own knowledge and emotions that inform their decisions when values are on the line. Professionals can learn to articulate their personal knowledge by observing their own actions (How do I respond to uncertainty? How do I present risks? How do I self-correct when doing a difficult technical procedure?) Professional knowledge is defined, then, not by its validity, but by how it is used.23

There is an inherent paradox in teaching or writing about mindfulness. The teacher’s task is to invoke a state of mindfulness in the learner, and, thus, the teacher can only act as a guide, not a transmitter of knowledge. In a recent example of a resident about to face a dreaded follow-up visit with an angry patient who thought that earlier treatment of his hepatitis C might have prevented his end-stage cirrhosis, the mentor’s role was complex. He had to help the resident identify his feelings of guilt and defensiveness that might interfere with communicating effectively with the patient, determine the risks and benefits of liver transplantation, and explore the patient’s wishes regarding end-of-life care. The mentor’s approach was to help the resident identify how he psychologically prepares for each visit with a patient, a “centering” process that had been previously tacit, which usually is not explicit for most practitioners, and to use it more effectively. The mentor helped the resident observe himself, effecting a transition from unconscious incompetence to critical reflection and allowing him to come to a satisfactory decision with the patient based on both objective evidence and personal knowledge.

Barriers to mindfulness are numerous in medical training, even in reformed curricula. Fatigue, dogmatism, and an emphasis on behavior (rather than on consciousness)203 close the mind to ideas and feelings. Unexamined negative emotions lead to emotional distance and arrogance. McWhinney identified 3 additional barriers: unexamined negative emotions, failure of imagination, and literal-mindedness (I. R. McWhinney, MD, oral presentation, London, Ontario, October 6, 1995). Failure of imagination limits the curiosity that is the first step in any process of inquiry. Concrete literal mindedness may serve simple diagnostic processes well, but impedes creative problem solving and limits the physician’s view of the patient. Lack of opportunities to learn how to become mindful in practice and the lack of forums to deal with fears and anxieties create further barriers. Finally, some clinicians may fear that mindfulness is the same as excessive self-absorption that would delay necessary clinical actions. They would need to be educated that navel-gazing is antithetical to mindful practice, which has as its goal clarity and attention to the tasks at hand.

Conclusions

Mindfulness, critical reflection, learning, and patient care all “begin with the self as the first, but not the only, object of knowledge.”104 Mindful practice extends beyond examining the affective domains and involves critical reflection on action, tacit personal knowledge, and values in all realms of clinical practice, teaching, and research. Mindfulness is a discipline and an attitude of mind. It requires critical informed curiosity and courage to see the world as it is rather than how one would have it be. Mindful practitioners tolerate making conscious their previously unconscious actions and errors. The goal of mindfulness is compassionate informed action in the world, to use a wide array of data, make correct decisions, understand the patient, and relieve suffering.

Mindful practice requires mentoring and guidance. Recognition of one’s limitations and areas of incompetence can be emotionally difficult and can invite avoidance in even highly motivated practitioners. Although mindfulness is an individual and subjective process, each of us can identify practitioners who embody these attributes, learn from them, and identify unique ways of being self-aware. Educators can take on the task of helping trainees become more mindful by explicitly modeling their means for cultivating awareness.

References

22. Coles C. Approaching professional develop-
57. Meredith L, Stewart M. Physician ineffectiveness in discourse and emotionally charged topics. In: Programs and Abstracts of the 3rd International Conference on Communication in Medicine; July 22, 1999; Chicago, Ill.

©1999 American Medical Association. All rights reserved.

JAMA, September 1, 1999—Vol 282, No. 9

839

Downloaded from www.jama.com at University of Wisconsin -Madison on September 29, 2010