Mindful Practice

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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.

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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 programs[3] and some other residency[4,5] and medical school curricula.[5-8] 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 describes the nature of professional knowledge, competence, and values and then presents current thinking about the philosophical, psychological, and practical 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 *mindful practice*, although supported by empiric observation of clinical practice,[16-21] educational research,[22-26] philosophy,[11,27] and cognitive science,[11,28-30] is fundamentally personal and subjective.

See also pp 830 and 881.

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 2 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

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Table 1. Professionally Relevant Awareness and Knowledge

Levels of Awareness
Tacit (subsidiary awareness)
Explicit (focal awareness)
Types of Knowledge
Propositional
Personal
Process (including metaprocessing)
Know-how

patient (Is she responding to this situation in a way concordant with her previous actions and values?) and myself (What values and biases affect the way I frame this situation for myself and for the patient?) to help us arrive at a mutual decision. These reflective activities applied equally to the technical aspects of medicine (How do I know I can trust the interpretations of medical tests?) and the affective domain (How well can I tolerate uncertainty and risk?). An attitude of critical curiosity,[31] openness, and connection[17,32,33] allowed us to defer the decision and reconsider testing once the immediate crises had passed.

Explicit and Tacit Knowledge

Clinical judgment is based on both explicit and tacit knowledge.[34-36] Medical decision making, however, is often presented only as the conscious application to the patient's problem of explicitly defined rules and objectively verifiable data.[34,37,38] This form of explicit knowledge can be quantified, modeled, readily communicated, and easily translated into evidence-based clinical practice guidelines.

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.[34] 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,[39] 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.[40] 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.[41] *Subsidiary awareness*[35] is a term that describes how the practitioner makes accessible the flow of unprocessed experience and tacit knowledge.

In the words of Anais Nin, "We don't see things as they are, we see things as we are."[42] 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.[43] All data, regardless of their completeness or accuracy, are interpreted by the clinician to make sense of them and apply them to clinical practice.[44] Experts take into account messy details, such as context, cost, convenience, and the values of the patient.[36,43,45,46] Physician factors such as emotions,[47] bias,[48] prejudice,[49] risk-aversion,[50-53] tolerance for uncertainty,[54,55] and personal knowledge of the patient also influence clinical judgment.[50-55] Most of the processes described above remain relatively unconscious to the practitioner.

Clinical judgment is a science and an art.[36] Even those who are uncomfortable with the notion of tacit knowledge recognize that it is impossible to make explicit all aspects of professional competence.[43] Evidence-based decision models are very powerful tools, but clinicians do not always use them, especially in complex situations.[30,56] Information necessary to construct explicit models is frequently incomplete or conflicting. Some important tacit knowledge about the patient, such as personality, simply does 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[57,58] 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 fact: 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.[35] 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.[29] 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, subsequently 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,[59] such as gathering information, performing procedures, making decisions, and planning for the future.[58] Process knowledge also includes metaprocessing, or the process of reflection on one's own mental processes. This is particularly important in practice, because "we do not observe nature as much as we observe nature exposed to our method of questioning."[60] Metaprocessing might be called thinking about thinking or feeling about feelings. It is both a concrete 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 (including the subject who is performing those actions). Metaprocessing allows the physician to uncover areas of unconscious incompetence,[61] the blind spots wherein a physician might not know his or her deficiencies. Fortunately, clinicians can often readily identify these blind spots and gain insight into the influence of the observer, for example, when they review their own videotaped patient visits.[62,63]

Eraut's fourth type of professionally relevant knowledge, know-how, is knowing how to get things done. A resident working in a new setting may know that a diagnostic test is important, but may not know that the test will happen sooner with a friendly call to the radiologist. Learning the steps necessary for getting something done is important in professional development of physicians, but it is often relegated to the informal[64] or hidden[24,26] curriculum.

Mindful Practice

Mindfulness is a logical extension of the concept of reflective practice.[4,12,14] The mindful practitioner is present in everyday experience, in all of its manifestations, including actions, thoughts, sensations, images, interpretations, and emotions.[12,13,65] Mindfulness "leads the mind back from theories, attitudes and abstractions . . . to the situation of experience itself,"[11] which prevents us from "falling prey to our own prejudices, opinions, projections, expectations" and enables us to free ourselves from the "straightjacket of unconsciousness."[66] Mindfulness is attending to the ordinary, the obvious, and the present. Johann Sebastian Bach is reported to have said, when asked how he found melodies: "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 philosophy is fundamentally pragmatic[13] and is based on the interdependence of action, cognition, memory, and emotion. These connections represent a relatively new idea in neuroscience research.[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 psychodynamic psychology has reinforced some of this separation. However, in the East,[11,14] and in phenomenological traditions in the West,[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 mental processes, listen more attentively, become flexible, and recognize bias and judgments, and thereby act with principles and compassion (TABLE 2). Mindful practice involves a sense of "unfinishedness,"[31] curiosity about the unknown and humility in having an imperfect understanding of another's suffering. Mindfulness is the opposite of multitasking. Mindfulness is a quality of the physician as person, without boundaries between technical, cognitive, emotional, and spiritual aspects of practice.

Mindful practitioners have an ability to observe the observed while observing the observer in the consulting room. This process, not often discussed in medical practice, is considered essential to musicians, whose task is to perform and listen at the same time,

Table 2. Characteristics of Mindful Practice

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

attending simultaneously to the technical challenges, emotional expression, and overall theoretical structure of the music.[69] The accomplished musician performs midcourse corrections 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 musician were to attempt to control each finger movement while simultaneously analyzing the harmonic structures, rhythms, and silences that constitute expressive playing, playing would become impossible. Thus, focal awareness on the music is accompanied by subsidiary awareness[35] of technique and analysis—a mix of peripheral vision and semiautomatic action that is highlighted only when the unexpected or difficult occurs.

In medicine, consider what a resident in a busy pediatric emergency department might do when he is unable to determine whether an ear examination 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 resident weighs the consequences of misdiagnosis for the patient, the humiliation of having to call an otolaryngology resident out of the clinic, the loss of self-esteem by having to admit incompetence, and the pride in being strong enough to admit his need to learn. An unmindful practitioner who is conscious of the dilemma might judge or blame himself or others. He might base

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,[70,71] 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.[28] Self-awareness of learning needs allows physicians to recognize areas of unconscious incompetence and to develop a means to achieving their learning goals.[61] Ethical self-awareness is the moment-to-moment cognizance of values that are shaping medical encounters. Technical self-awareness is necessary for self-correction during procedures such as the physical examination, surgery, computer operations, and communication.

Often reflection is prompted by a critical incident involving an error, a difficult situation, or an unexpected result of one's actions.[25,72,73] At other times, reflection is prompted by the maturing of an idea rather than by a discrete external event. However, many of these events go unnoticed by all but the most creative thinkers. The discoveries of penicillin, radiation, and the benzene ring were not accidents, but rather the result of someone making what had been considered an outlier (a tainted Petri dish) into data (a useful medication).

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."[12] 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[13] 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[74] 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[75] or the "connected knowing" of ideas, people or things, suggested by Belenky and colleagues.[33] 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.[76] Suchman and Matthews[17] 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.

Mindlessness: 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 knowledge about important aspects of medical care[77] 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[78-81] and why they tend to be less patient-centered[82] and confuse their own perspectives with those of the patient[1,80] in situations that involve conflict and strong emotions.

Curiosity is central both to caring about the patient and to solving problems.[83] Fitzgerald[16] 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's lack of 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.[84,85] For example, Stetten[18] 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.[20] 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.[2,19,21,82,86,87] 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.[88,89]

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.[86]

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.[15] 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.

Table 3. Levels of Mindfulness

Levels	Characteristics
0	Denial and externalization
1	Imitation: behavioral modeling
2	Curiosity: cognitive understanding
3	Curiosity: emotions and attitudes
4	Insight
5	Generalization, incorporation, and presence

Becoming Mindful

Recent articles[1,5,90] 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.[91,92] Critical incident reports written by practitioners about mistakes,[20,93] impairment,[94] ethical dilemmas,[95] 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.[96-99] 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.[37,43,100] 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 of the question to investigate. This personal knowledge should also be considered a form of evidence and could be integrateded 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.[101,102] 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-

havior 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)[103] 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.

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Just being

> The secret of the care of the patient is caring for the patient
>
> *Care of the Patient*
> F PEABODY, 1927[1]

> The secret of the care of the patient is caring for oneself while caring for the patient.
>
> *Medicine and the Family: A Feminist Perspective*
> L CANDIB, 1995[2]

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SELF-CARING AND SELF-KNOWLEDGE

Caring for oneself, like caring for others, is not always a simple matter. This is because caring always involves knowing.[2,3] I am not speaking of *knowing about*, the accumulation of details that constitute medical records and life stories; these descriptors do not necessarily lead to caring. However, *knowing* does, through a deep appreciation of how experiences, desires, and dispositions contribute to daily actions.

For me, the most fruitful means for self-knowledge have been music and meditation. I hesitate to subsume either under the category of self-care or well-being, as I believe that neither discipline should be limited by having to have an end result. Not that end results are unimportant—Plato and the neo-Platonists regarded music, for example, as having aspects that were essential for moral education and reflection as well as entertainment, and the Pythagoreans regarded mathematics and physics as subdisciplines of music.[4] More recently, studies indicate that music education alters brain structure and function,[5,6] and may enhance learning.[7,8] But I do not—and should not—learn to play a Bach fugue just because it improves my problem-solving skills or makes me feel well. There is more—an element of dedication, engrossment, and relationship with the task that is part of the purpose. So, when I learn a Bach fugue, I transmit both the beauty and structure of musical expression while creating relationships among the music, the audience, and myself.

MEDITATION

In 1971, I took a daylong course in Transcendental Meditation. The turmoils of adolescence during a turbulent era made advertisements promising inner peace very appealing. Although some of the exotic trappings were a bit much for me, the inner process was engaging. I started a meditation practice to begin each day. I left college temporarily to become a student of Zen Buddhism. Part of the reason I chose Harvard Medical School several years later was to explore the current research on the medical benefits of meditation. Promising studies suggested that meditation could help control blood pressure,[9,10] chronic pain,[11-13] psoriasis,[14] and anxiety.[15] I also sought out other clinicians who would validate my own experiences and help me translate them into a medical culture. This proved less obvious and more difficult then I had hoped. With the exception of some aspects of psychiatric training and Balint groups,[16] I did not see much explicit attention to the self of the practitioner.

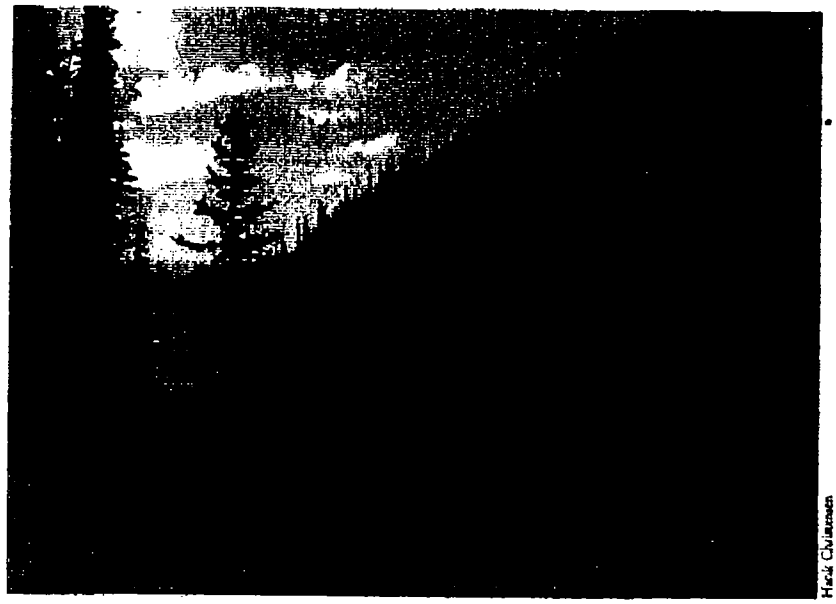
Imperceptibly, meditation has become a habit. Like brushing my teeth each morning, the day feels incomplete without it. It is a habit of practicing presence, just presence—no more, no less. It has been years since I have attended an intensive meditation retreat. For me now, it is a solitary, quiet endeavor. In fact, only some of my friends and a few of my colleagues know about my daily practice. Like many habits, it seems perfectly ordinary. I had always considered it part of my private life. I do have some trepidation about going public, though, in that I do not want to promote one method, especially one that may have religious connotations for some. Nor do I consider myself an expert or a teacher of meditation. There are many other quiet meditators in medicine—I am far from alone.

MINDFULNESS

Mindfulness means paying attention, on purpose, to one's own thoughts, feelings, and judgments[17]—"observing the observer, observing the observed."[18] Buddhist meditation is the practice of mindfulness and requires only the belief that knowing oneself can foster compassion.[19] There is no other requirement, including adherence to any particular cosmology; many people practice meditation and continue to observe Judaism, Christianity, or Islam.

The simplest mindfulness practice involves finding a place free from distractions. With eyes either closed or partially open (depending on the tradition) while in an upright sitting posture, the practitioner pays attention to thoughts and feelings as they arise without trying to change, judge, or categorize them. Some traditions use the breath to focus attention, others use imagery, and some use nothing at all. Buddhist teachers call this "just sitting."[17,19,20]

Rather than a practice of well-being, I prefer to call mindfulness a practice of "just being." That is, as soon as another purpose is assigned (feeling good, lowering blood pressure, and so on), it somehow limits the process. I have to practice just being because it does not come naturally, and my efforts are always imperfect. There are also difficult moments, when insights are neither pretty nor de-



Heidi Christensen

sized. At those moments, and others, a teacher and a community of others involved in similar activities can be very helpful to provide insight, support, and encouragement.

Meditation is visceral learning and feedback. The visceral lessons are transferable to clinical and teaching settings. My habit of pausing before I enter a patient's room is a momentary state of repose and stillness, usually invisible to others. I give myself the gift of being present with myself while trying to give my patients my attentive presence. I often experience moments of quiet in the midst of action. By allowing me to be more present and less distracted, I believe these moments contribute both to the patient's feelings of having been heard, as well as to my own feelings of satisfaction at the end of the day. These moments also contribute to creative thought and writing. In administrative meetings, mindful practice is more difficult for me to achieve. Perhaps it is because the purpose of such meetings is not always to foster healing, satisfaction, or presence. But I do believe that it is possible and especially necessary to cultivate mindfulness in such settings.

MUSIC

Musical practice has had a different influence. Because I trained first as a musician, then later as a physician, I was surprised in my otherwise excellent medical education by a striking lack of attention to the self of the practitioner. In contrast, in music study, which can be as theoretically and technically complex as any medical specialty, the self of the performer is an object of constant study and reflection. While the performer must [illegible] music must move and speak to a listener. There is l room for error; even the inattentive mind catches wr notes. Music requires observation-in-action and the ab to hear the sound—in one's mind—before it is produ The performer's presence creates a relationship with listener. In that way, musical performance is a bit m like being with patients, and meditation is more like silences in between.

BEING WELL

There are many ways for health professionals to enha well-being, to reflect, and to be mindful. A recent st indicates that mindfulness meditation training for med students improved their psychological and spiritual w being and also improved their capacity for empathy

Organizations that offer instruction in mindfulness, meditation, well being, and self-care

The Center for Mindfulness in Medicine
University of Massachusetts
Phone: (508)856-2656; www.umassed.edu\cfm

Offers programs for professionals, patients, and the lay public

The Omega Institute
Rhinebeck, NY
Phone: (845) 266-4444; www.eomega.org

Offers seminars, workshops, and intensive courses for health professionals and the lay public

The National Association for the Clinical Application of Behavioral Medicine
Mansfield Center, CT
Phone: (860) 456-1153; www.nicabm.com

Offers conferences several times per year that include lectures and workshops

The San Francisco Zen Center
San Francisco, CA
Phone: (415) 863-3136; www.sfzc.com

Provides opportunities for training in meditation and is engaged in community and healthcare projects

Insight Meditation Society
Barre, MA
Phone (978) 355-4378; www.dharma.org

Offers training and retreats in Vipassana Buddhist meditation

John Christensen, PhD
Portland, OR
Phone: (503) 413-3544; christej@ohsu.edu and
Penny Williamson, ScD
Baltimore, MD
Phone: (410) 235-0344

Offer workshops to enhance physician life fitness and well-being

Meditation is not for everybody, however, nor is studying music. The Greeks advocated that music study be balanced with gymnastics. They felt that too much music softens the soul and too much wrestling hardens it. This seems like good advice, not only because of the medical benefits of exercise, but because it is useful to develop mindful practice in more than one sphere of life. There are many other means to become more present, reflective, and caring. These include keeping a journal, exercising, creating art, spending time in nature, and gardening.

What will it take for medicine to become a more reflective, mindful practice? In my view, more important than developing reflection groups in medical school and residency will be the collective work of individuals who are willing to let themselves be known. The commitment to develop and use self-knowledge may be as important in promoting self-caring and compassion as the insights gained. I am impressed by the number of physicians who do practice mindfully, but do so in isolation. Perhaps they feel that to reveal their inner lives would threaten their credibility as professionals. Mindfulness underlies all efforts to be with, to know, and to care. We have something to learn from musicians in that regard, for whom public demonstration and performance of a mindful activity is at the core of their profession.

Acknowledgments: I thank Tim Quill, John Christensen, and Deborah Fox for their helpful comments on the manuscript. I am indebted to some fine, committed teachers for transmitting their own means of knowing themselves as well as for encouraging me to find my own ways, including, but not limited to Jon Barlow, Kenneth Maue, Ed Brown, Richard Baker, Leston Havens, Marguerite Britten, George Engel, Dan Duffy, Tim Quill, and most of all, my children, Eli and Malka, for whom just being is effortless.

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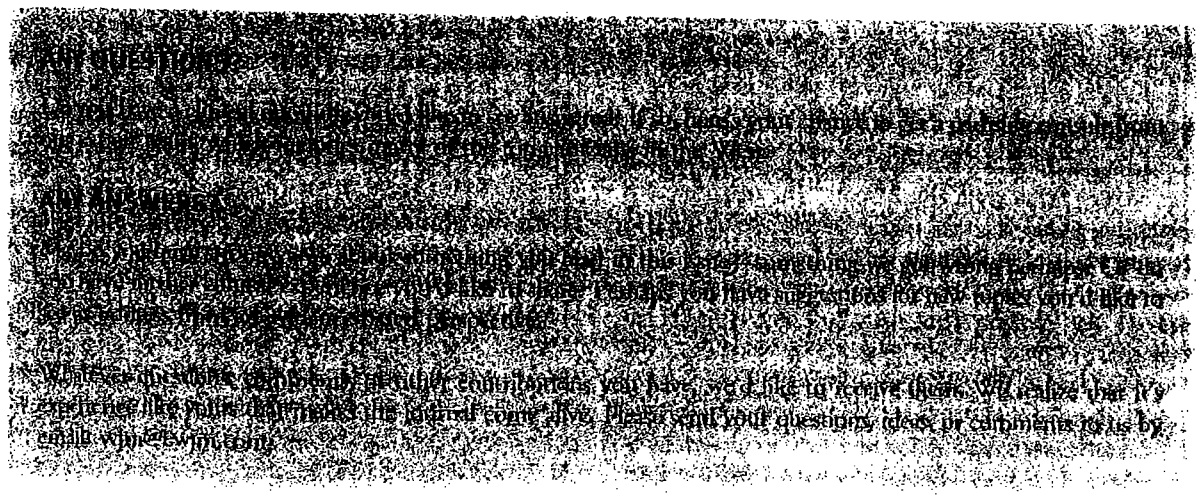

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ORIGINAL RESEARCH

A Retrospective Assessment of Network Care Using a Survey of Self-Rated Health, Wellness and Quality of Life.

Robert H. I. Blanks, Ph.D,[1,2]
Tonya L. Schuster, Ph.D,[3] *Marnie Dobson, B.A.*[1]

Abstract — The present study represents a retrospective characterization of Network Care, a health care discipline within the subluxation-based chiropractic model. Data were obtained from 156 Network offices (49% practitioner participation rate) in the United States, Canada, Australia, and Puerto Rico. Sociodemographic characterization of 2818 respondents, representing a 67-71% response rate, revealed a population predominately white, female, well-educated, professional, or white collar workers. A second objective of the study included the development and initial validation of a new health survey instrument. The instrument was specifically designed to assess wellness through patients' self-rating different health domains and overall quality of life at two "time" points: "presently" and retrospectively, recalling their status before initiating care ("before Network"). Statistical evaluation employing Chronbach's alpha and theta coefficients derived from principle components factor analyses, indicated a high level of internal reliability in regard to the survey instrument, as well as stable reliability of the retrospective recall method of self-rated perceptions of change as a function of duration of care. Results indicated that patients reported significant, positive perceived change ($p < 0.000$) in all four domains of health, as well as overall quality of life. Effect sizes for these difference scores were all large (>0.9). Wellness was assessed by summing the scores for the four health domains into a *combined wellness scale,* and comparing this combined scale "presently" and "before Network." The difference, or "wellness coefficient" spanning a range of -1 to +1, with zero representing no change, showed positive, progressive increases over the duration of care intervals ranging from 1-3 months to over three years. The evidence of improved health in the four domains (physical state, mental/emotional state, stress evaluation, life enjoyment), overall quality of life from a standardized index, and the "wellness coefficient," suggests that Network Care is associated with significant benefits. These benefits are evident from as early as 1-3 months under care, and appear to show continuing clinical improvements in the duration of care intervals studied, with no indication of a maximum clinical benefit. These findings are being further evaluated through longitudinal studies of current populations under care in combination with investigation of the neurophysiological mechanisms underlying its effects.

Key Words: Network spinal analysis, vertebral subluxation, chiropractic, self-rated outcomes assessment, wellness, overall quality of life.

Introduction

Network Care is a health care discipline within the subluxation-based chiropractic model[1] practiced by members of the Association for Network Chiropractic (ANC), nationally and internationally. Building from a base of consistent clinical observations, and repeated anecdotal reports of health benefits, the present study was conducted to fulfill the following three objectives: (1) to characterize the patient population undergoing Network Care; (2) to develop a new survey instrument of sufficient design and scope to allow assessment of a non-medical health discipline, and (3) to assess changes in patients' self-rated health, wellness, and overall quality of life.

Network Care is founded on the premise that individuals free of the complex of factors precipitating from, or leading to, vertebral subluxation experience a greater range of inherent adaptability and, hence, a greater sense of relative health or wellness. In a large percentage of individuals, Network Care evokes spontaneous self-perpetuating contractions of the paraspinal musculature.[1] The movements may be subtle, barely perceptible, or very

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March 27, 2001
The White House Commission on Complementary and Alternative Medicine Policy
Hyatt Regency Hotel on Capitol Hill, 400 New Jersey Avenue, NW, Washington, DC

Pancreatic Cancer Action Network, Inc. (www.pancan.org)
For information: Contact Julie Fleshman, JD- Executive Director 310.791.5214

Text of remarks by Lisa Stancik on behalf of the Pancreatic Cancer Action Network

"Good afternoon ladies and gentlemen, My name is Lisa Stancik, and I am here today as a volunteer representing the Pancreatic Cancer Action Network, also known as "PanCAN." PanCAN was founded in 1999 as the first and only national advocacy patient benefit organization for pancreatic cancer. As we move into our 2nd year of service, our handful of inaugural grassroots volunteers has grown to become a staff of three along with now thousands of volunteers united as PanCAN TEAM HOPE ADVOCATES. We are working with everyone we can to increase awareness and bring attention to the urgent need for well designed medical research with positive outcomes.

Pancreatic cancer is the 4th leading cause of cancer death for men and women in this country. 29,000 Americans die each year from this horrible disease. The typical pancreatic cancer patient is diagnosed with stage IV metastatic disease and has a life expectancy of a mere three to six months. I know the devastation of pancreatic cancer first hand as I watched it claim the life of my mother much too soon. Pancreatic cancer has NO early detection method, treatment options are severely limited and generally palliative. It has the highest mortality rate of all cancers. The common symptoms of pain, severe weight loss, and fluid retention become quite overwhelming and tough to manage as the disease runs its course. You can see that our pancreatic cancer community desperately needs effective treatments. We are not prejudiced as to whether they should be traditional or complementary. We just want safe and effective methods.

We thank you for initiating and inviting discussion as you continue to develop and implement Federal Policy in the areas of complementary and alternative practices. Let's work together to turn this discussion into action that benefits all of us.

Many people are perplexed about complementary and alternative medicine. On one side of the fence, folks wonder why more people don't use complementary methods. Many people swear by these methods, many methods are older than this country, and multi- millions of dollars pour into

treatments and products that rely on personal and anecdotal experience. Then, on the other side of the fence, these folks wonder why so many people use complementary methods. Methods that are unproven and not validated through accepted scientific practice, there is no oversight or safety mechanisms to protect the consumers. Methods that are often referred to as the modern day equivalent of snake oil.

Regardless of which side of the fence one stands, the fact remains that the use of complementary and alternative practices whether alone or combined with traditional methods brings more questions than answers exist. These are questions, that when answered will bring opportunity. An opportunity to develop well balanced and combined approaches that keep patient protection and safety at the forefront while the science of these methods is researched and validated. An opportunity to develop the critical and necessary information and resource tools that allow patients and consumers to make informed decisions with confidence based on real science and not hearsay and conjecture. And what this community hopes for is, an opportunity for treatments regardless of origin that will benefit patients.

This is a complicated issue that is only going to grow in size unless we work to address the gap that exists from one side of the fence to the other. The Pancreatic Cancer Action Network feels this issue is important enough that the White House Commission should convene a series of meetings with the people in the trenches and the people in the labs. A good first step would be to bring all groups to the table with the goal of developing criteria and process for effective validation methods. Then once these practices are validated or invalidated there is a joint ethical and moral responsibility to communicate this information to the consumer.

The bottom line is, we must find a way to provide patients with the best treatments, the most options, and the greatest hope without undermining the safety and efficacy of new drug development and discovery, or validation of an age old method in a new frontier. In today's age of discovery and application anything less than this, is simply unacceptable.

Thank you very much.

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Roe

Divider Title: _____

American Association of Naturopathic Physicians
White House Commission on Complementary and Alternative Medicine Policy
Testimony Presented by: Jennifer Roe

My name is Jennifer Roe and I am the Director of Membership and Publications for the American Association of Naturopathic Physicians.

The topics covered at this meeting concern the public's need for CAM information, self-care and wellness. Germane to these topics, I would like to suggest some policy recommendations on the behalf of the American Association of Naturopathic Physicians.

Allow patients to have equal access to all licensed provider types, and allow licensed providers equal opportunity to participate in all federal healthcare programs.

Fund research centers at CAM institutions to help support the necessary development of research and academic infrastructure.

Encourage the formation of a coalition of licensed and emerging CAM provider groups to work together on CAM information development, dissemination, self-care and wellness, as well as other objectives of the Commission. Towards this end, we urge the Commission to call for the establishment of an Office on CAM and Integrated Health Care at the assistant secretary level at the U.S. Department of Health and Human Services with the authority to: oversee, coordinate and direct all federal CAM activities through this office; and direct and oversee incorporation of CAM in all federal benefits programs.

Prohibit distance learning programs from awarding doctoral degrees in naturopathy and naturopathic medicine. These degrees create the false impression in the mind of the consumer that the provider of health information is, in fact, a doctor, when in reality she/he has had no clinical training whatsoever, has not passed a licensing examination, and does not hold a medical license.

A recent tragic example provides a painful illustration of the consequences to safety with such an unlicensed individual. In October of 1999, an 8 year old girl, who was an insulin dependent diabetic, died because her mother was convinced by a charlatan that he was providing safe and effective care for her daughter. This man, who displayed a diploma from a correspondence school selling so-called doctoral degrees in naturopathy, was apparently not educated enough to understand that an insulin dependent child can not be taken off her insulin and treated with herbs. The mother trusted, the child died, and the man is charged with manslaughter. His trial has, or is soon to, begin.

This unfortunate event took place in Asheville, N.C. where there is as yet no licensing for naturopathic medicine. I encourage the commission to take the opportunity to ensure no similar disaster overtakes any other American family, by lending assistance to the promulgation of appropriate, uniform professional standards, including regulation by licensure to the CAM community.

In conclusion, I would like to encourage the media, government, and other agencies disseminating CAM information to utilize the expertise of licensed naturopathic physicians in developing such information. The American Association of Naturopathic Physicians has an established network of physician members who are available for providing information on CAM to the media, governmental agencies and policy-makers.

Thank you so much for allowing me this time to present to all of you.

The principles of naturopathic medicine focus on patient education, self-care and wellness. Naturopathic Physicians recognize an inherent ability of the body to heal itself. It is the role of the naturopathic physicians to facilitate and enhance this process, including serving as a teacher to educate and encourage individuals to take responsibility for their own health. The goal of a naturopathic physician is to establish the highest state of wellness that allows the Innate Healing Power of Nature to express itself.

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Kurtz

Divider Title: _____

George A. Kurtz
President, Feldenkrais Guild of North America

NOTES:
I would like to present a public commentary to address the issues of the role of education particularly somatic education in wellness. The Feldenkrais Method of somatic education has applications in health, fitness and rehabilitation as well as primary and secondary education. I would also like to address the idea of health and well being in terms of somatic education and the work of Moshe Feldenkrais.

NOTES:
Proper research into the safety and efficiency of mass vaccination has not been conducted. The medical profession is apparently not taking charge on this issue with the exception of a few courageous individuals. The CAM practitioner is the most likely force to mandate important safety precautions in the realm of mass vaccination. I will show my method of reaching the masses with this important message.

(11)

Oral comments by George Krutz, President *Feldenkrais* Guild of North America
Presented March 27, 2001

I would like to present some thoughts around the ideas of health, education, and self care from the perspective of a *Feldenkrais* practitioner.

Galileo said, "We cannot teach people anything; we can only help them discover it within themselves."

The *Feldenkrais Method*® is a system of somatic education.. It is not prescriptive or authoritative but experiential in that it is based on careful, systematic observation. Practitioners engage with their students in collaborative research projects. Through the use of movement students becomes aware of their patterns of action and the possibility for change. This sense of self discovery continues long after the session is over. The *Feldenkrais* teacher does not transfer knowledge but instead sets up conditions for learning. The student does not learn a procedure or protocol; instead they develop a more refined sense of themselves and their capabilities.

The *Feldenkrais* practitioner works from the viewpoint that function can be improved, regardless of the level we find it. The approach is the same whether working with a world class athlete or a neurologically impaired infant. Any improvement in function results in greater freedom, autonomy and dignity.

The *Feldenkrais Method* is not a medical approach. It is an inquiry into, and an application of the fundamental processes of learning, It is a valuable resource for the medical community and those who are in their care. It can be used by those recovering from stroke or injury. It can help people in chronic pain to find ways to move through their lives more comfortably and easily. It can aid neurologically impaired people in achieving their full potential. But it is also used in primary and secondary education, the performing arts, athletics and business.

Moshe Feldenkrais held the view that the health was not pathology based. Health is the ability to adapt and respond to the environment in order to fulfill one's needs and desires- to enact our "avowed and unavowed dreams". I would urge the commission to consider this perspective of health. It would, I believe allow for a truly complementary relationship between medicine and other disciplines. Not all health practices are medicine.

Specific recommendations I would encourage are:

That the commission adopts a stance recognizing and respecting of the authority of people's judgment and experience.

That the commission considers carefully the effects and implications of the language it employs.

That the commission encourages the use of learning tools such as the *Feldenkrais Method* in the education of doctors and other health care professionals. It would provide not only an experiential component to complement their training in anatomy and physiology but also a valuable means for their own self care.

Thank You

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Lamp

Divider Title: _____

(10)

WHITE HOUSE COMMISSION ON COMPLEMENTARY AND ALTERNATIVE MEDICINE POLICY (WHCCAMP)

HEARING DATES: March 26-27, 2001

MEETING TOPICS: Information Development and Dissemination; Self-care and Wellness

Hello, My name is Scott Lamp. I am chairman of the American Massage Therapy Association Healthcare Integration Committee.

Due to the recognized health benefits and low cost of massage, massage therapists have become primary providers of wellness-oriented therapy for people who are considered healthy by most standards.

From my experience, today's clients expect to receive information on self-care from their massage therapists and most massage therapists feel that part of their job is to educate their clients regarding general wellness issues. In doing so, therapists must stay within the defined scope of practice and not dispense specific medical advice. However, in Ohio (for example), education is considered outside the scope of practice for massage therapy, clearly blocking the flow of information. How can practitioners be expected to help a person with neck tension and not discuss with them the cause of that tension or recommend simple techniques to gain relief? In our efforts to restrict non-medical healthcare providers from prescribing specific medical protocols, we must be sure not to unduly restrict discussion between CAM practitioners and their clients regarding general health and wellness practices that are ubiquitous in the media. I urge the Commission to include in its recommendations that any healthcare provider be allowed to discuss generally-recognized wellness practices, such as taking a warm bath, without fear of being charged with practicing medicine without a license.

As we integrate more with the mainstream healthcare delivery system, many therapists worry that medically-oriented massage will place an added burden on those therapists with cash-based, wellness-oriented practices? We must not allow the escalating costs and professional requirements associated with medically-oriented care to interfere with providing low cost, wellness-oriented massage.

There seems to be little interest and even less money for research into wellness-oriented therapies that do not retail a product. Who will fund research to provide the healthy with continued good health? How will we understand the cost benefit to our society of promoting healthy lifestyles? A massage therapy research agenda has been developed by a workgroup of the AMTA Foundation. They have noted that the effect of regular massage on a healthy population has never been formally studied and recommend that this study be a priority.

In closing, I would like to thank the Commissioners for their efforts and remind you that AMTA serves as a reliable source of information to the media and consumers regarding massage therapy. Anyone can visit our Web site www.amtamassage.org. In addition, AMTA's Find a Massage Therapist[SM] national locator service helps more than 75,000 consumers and physicians each year locate qualified AMTA professionals in their area.

We are currently exploring methods to better serve as an information resource for the medical community and the insurance industry. As chairman of AMTA's Healthcare Integration Committee I would welcome any suggestions offered by the Commission in this regard.

Thank you.

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Adams

Divider Title: _____

(12)

John Adams

We Can Save Thousands Of Lives And Billions Of Dollars By Correcting America's False Perception Of Health

Drug reactions and medical mistakes are the third leading cause of death in the United States, killing more people than handguns and car accidents. As a nation we spend 76 billion dollars a year cleaning up the problems that medical drugs cause. We rank near the lowest of all countries in morbidity and mortality and yet the federal government invests 7 billion dollars a year to train medical residents and gives several billion dollars a year to medical schools for research.

Alternative health care, on the other hand, is extremely safe, cost effective and gets people well. One need only to look at a comparison of malpractice insurance rates between a doctor of medicine and a doctor of chiropractic to see how much safer our non-invasive approach is. There are numerous studies validating the effectiveness of natural health care. A retrospective study of nearly 3000 patients of Network Spinal Analysis practitioners is a perfect example. Over three-quarters of the patients studied reported improvements in all categories assessed, including improved physical state, improved mental/emotional state, improved response to stress, improved life enjoyment and improved overall quality of life.

If a safer and more effective choice for health care exists, why don't the majority of Americans use it? I believe it is due to generations of drug advertising and television programming. From Marcus Welby, M.D. to ER, Americans have been taught a faulty paradigm for decades. They are saturated with the idea that health comes from the outside and nearly always in the form of drugs and surgery.

How do we change this? Through the same medium – TELEVISION.

My first proposal is that we stop advertising DRUGS the same way we stopped advertising tobacco and alcohol. Surely the statistics show that drugs are deadly. Why not treat drugs for what they are and stop portraying people who take them as intelligent, sophisticated and healthy?

12

John Adams

My second proposal is that we teach the public a new concept of wellness through a television drama series featuring and teaching alternative health. Currently the Federal government pumps billions of dollars into a failing medical system. Why not take a small fraction of that money and invest in an exciting and innovative program that demonstrates that true health care begins well before disease starts. This show can teach people that a new and exciting form of health care exists, one that acknowledges and assists their body's innate intelligence to help express their true health potential.

I challenge anyone here to find a faster, more effective and affordable way to change the health paradigm of this nation. If even a fraction of Americans chose this safer and more effective form of health care, potentially billions of dollars and tens of thousands of lives would be saved each year.

I have written a novel called ***The Power***. It is a suspense thriller featuring chiropractic. I have given each of you a copy. I hope that you will read and enjoy ***The Power***, but more importantly, see it as an example of the type of educational entertainment that could help reinvent our nation's health care system.

Distinguished members of the White House Commission on Alternative Medicine, I thank you for your time.

John Adams, D.C.
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