

**Virtual Mentor**  
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Ethics of Diagnosing and Treating Addiction

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# Virtual Mentor

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## FROM THE EDITOR

### Addiction: Overlooked and Undertreated

My hands started to shake and I could feel the beads of sweat form on my forehead and trickle down to my brow. I looked up at the clock—10:27. I had been sitting in this meeting for over an hour without a break and my body was screaming for its 10:00 cigarette. At least give me the 10:15 Diet Coke, it pleaded with me. Being stuck in this meeting without so much as a cup of coffee was making me cranky and I was no longer able to focus on the meeting or what was going on around me. I looked at the clock again. It was only 10:28. Maybe this self-denial was a good thing, I thought. I could prove to myself that I didn't need nicotine. I looked down and saw my leg trembling nervously under the table.

And so it goes for the addicted person. Cravings that will not quiet until fed—repeatedly and with greater and greater quantities; discomforts that manifest physically when the craving for a “drug” of choice—be it a legal or illegal substance or even a behavior—is not satisfied; an inability to focus on anything except for the next fix. These are all common characteristics of an addiction. It is to this complicated confluence of problems—the ethical issues associated with diagnosing and treating addiction—that we dedicate this issue of *Virtual Mentor*.

Addiction to alcohol and drugs has long been recognized as a medical condition, complete with physical and psychological components, but treating it successfully has continued to elude many of the best doctors and health experts. The ethical quandaries raised by addiction include the degree to which it can be said to compromise patient autonomy, patient access to appropriate medical care, and how the perceptions that physicians—often subconsciously—have of addicts affects treatment. Many of us are familiar with “traditional” substance abuse, like alcohol or drug use. Indeed, based on a 2006 poll, there are “roughly 40 million American adults with a spouse, parent, sibling or child battling addiction” [1].

In two of our clinical cases, we explore these more well-known addictions. The clinical pearl looks at fibromyalgia, a disease in which addiction can more readily occur due to the constant pain that patients endure and the lack of effective treatment for this syndrome. Recently, and more controversially, gaming (both video and online) has been recognized as potentially addictive and is examined in a third clinical case and the journal discussion.

Although the word “addiction” conjures up many images—some individual, some stereotypic—it can be difficult to define, much less teach about effectively. With

over 50 years of combined teaching experience, our medical education authors share the wisdom of their long careers researching and teaching this topic. Health law examines some of the punitive measures that states have tried to levy against pregnant women who have addictions to drugs or alcohol.

The policy forum questions the usefulness and fairness of insurance-sponsored wellness programs that reward certain health markers such as weight control and smoking cessation. While smoking and overeating have traditionally been considered to be within a patient's control, if they are now medically recognized as rooted in addictions, then are the insured being punished for conditions over which they have little to no control? Following this policy discussion, the medicine and society article explores the two-fold problem of pain. If physicians are too concerned with people becoming addicted to medication they may fail to prescribe affective treatment. Yet physicians tend to neglect these same risks of addiction for certain categories of patients including the rich and famous.

Finally, amid all of this talk of medicine and ethics and the language used to describe addiction, the op-ed takes a more philosophical view, and questions whether we all—doctors, health professionals, and society as a whole—have got carried away with medicalizing what has been traditionally viewed as a vice—a sin—to be overcome. While the author does not advocate condemning or abandoning the addict, he does urge the reader to not be so quick to label everything with a medical tag, recommending instead that we consider ourselves as the human beings that we are, in need always of redemption, but not always of prescription.

In one issue of *Virtual Mentor* we could not cover the entire field of addiction medicine, but it is our hope that you find it informative and thought provoking. I invite you to consider your own ethical quandaries in your clinical or research ventures and if these articles inspire a reaction, we urge you to share your thoughts with us.

### **Reference**

1. Rubin R. In Tim Ryan's family, he is the addict. *USA Today*. July 20, 2006. <http://www.buffalo.edu/news/pdf/July06/USATodayLeonardAddiction.pdf>. Accessed November 27, 2007.

Allison Grady  
American Medical Association  
Chicago

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## Virtual Mentor

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### CLINICAL CASE

#### Why Must Pain Patients Be Found Deserving of Treatment?

Commentary by Jay M. Baruch, MD

Dr. Maier entered the small curtained room in the emergency department and introduced himself to the patient, Mrs. Winter. Then he asked whether the fourth-year medical student with him, Miss Malloy, could be present for the encounter.

“I suppose so,” Mrs. Winter said. “But I can’t promise that I won’t be cranky. I’m in considerable pain.”

“Tell me about it.” Dr. Maier said.

Mrs. Winter explained that her doctor, Dr. Caruso, had diagnosed fibromyalgia about a year ago. She was generally tired, had low energy, and almost always had some pain in her shoulders, neck and head. But the pain flared up from time to time. Right now, her neck was so sore that she couldn’t move it; it even hurt when she walked. When this happened, she said, she just had to give in and spend a few days on the sofa “knocked out” until whatever had caused the painful episode resolved. She used the word “resolved.” Mrs. Winter gestured with her hands as she spoke, letting her manicured finger tips hover over the areas she mentioned as she described the pain. Her several gold bracelets lent a jingling flourish to the account.

When Dr. Maier asked Mrs. Winter to rate the pain from 1 to 10, compared to the worst she had experienced, she said, “8.7. Of course I’ve had worse or I wouldn’t have been able to get here. But I certainly couldn’t wait until Monday to see Dr. Caruso.”

Dr. Maier asked Mrs. Winter a few more questions about the nature of the pain, then examined her to determine whether some injury or inflammatory condition unrelated to her diagnosis could be the cause of her current pain.

Dr. Maier said he had found nothing to indicate that Mrs. Winter was experiencing anything different from the flare-ups she described having had in the past. “What does Dr. Caruso usually prescribe?” he asked.

“He usually gives me Tramadol,” she said. “Twenty-four will get me through the duration of the bout.”

“Well, this is Saturday,” Dr. Maier said. “Suppose I give you a prescription for 10 to get you through Sunday night, and you can call Dr. Caruso on Monday, if you are still in pain. Shall I ask our desk attendant to call this in for you?”

“No. That’s ok. I’ll just stop at the drug store on my way home. I was hoping to avoid making another trip to the doctor on Monday,” Mrs. Winter said. “But if that’s all you can prescribe, I guess I’ll see how I feel by then.” Mrs. Winter winced again as she stepped carefully from the table.

Dr. Maier shook her hand; Miss Malloy said, “Thank you for allowing me to observe. I hope you feel better.”

As Dr. Maier finished his notes and carried the chart to the center desk, Miss Malloy ventured quietly, “Mrs. Winter didn’t get the third degree like Mr. Washington did this morning.”

“What do you mean?”

“You remember Mr. Washington—with the toothache? You asked him what pharmacy he used, and did he always use the same one, and why didn’t he call his dentist for the medication, and had he tried Tylenol. Then you told him to get ibuprofen at the drug store.”

“You mean the gent that looked as though he’d slept in his clothes?”

### **Commentary**

Easing pain strikes me as an elemental human endeavor. But, as this case illustrates, doing so can be complex and nuanced in ways that much of medical treatment is not. The case tells of two emergency department (ED) patients with complaints of pain. The woman with fibromyalgia was treated kindly and left with a narcotic prescription for her pain. The “gent” with the toothache, we’re led to believe, was interrogated and left to find pain relief on his own. The medical student was puzzled by the disparate treatment—medical and personal—for two patients experiencing severe pain.

Inadequate pain treatment, termed oligoanalgesia, was recognized by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) in 2001 as a public health problem [1]. Across health care settings, pain is undertreated; the ED is no exception [2-6]. Physicians and nurses consistently underestimate the pain experienced by ED patients [7], which means that some leave the ED with little if any relief.

Several explanations have dominated the discussion on the widespread causes of inadequate pain management—fear of liability and regulatory sanctions, fear of turning patients into addicts, concerns about drug diversion, and insufficient knowledge about pain treatment [8-10]. But even if these obstacles were surmounted,

I believe oligoanalgesia would persist [11]. The assessment and treatment of pain present many challenges to clinicians, none greater than the profound and unexpected personal feelings these activities evoke. Objective reason and best intentions are often undermined by emotion, intuition, and bias. Treating pain demands medical expertise; treating the *person in pain* demands ethical sophistication because the culture of the ED and the culture of pain often engage each other in an oppositional manner that undermines compassionate care.

### **Why Understanding Pain Is so Difficult**

The ability to tolerate pain ranges widely from person to person. People attach different meanings to the pain, and their lives can be disrupted in profound ways that might seem incongruent to their level of pain. Pain affects relationships, job performance, and the ability to think and reflect clearly; it eventually steals one's identity, autonomy, and capacity to feel any sense of control over the present and future.

Pain is ineffable. Dispassionate but well-intentioned attempts at definition by experts fail to capture the intensity of the experience. The International Association for the Study of Pain defines it as “an unpleasant sensory and emotional experience associated with real tissue or potential tissue damage, or described in terms of such damage” [12].

The patient's experience of pain must be validated and given legitimacy by physicians before it can be treated. But the medical model, with its locus on objectification and identification, is a woefully inadequate strategy for assessing and treating pain, for the sensitive probing of its possible meanings, and for appreciating the relationship between pain and suffering. The task is even more challenging in emergency medicine, which involves caring for strangers under tense circumstances.

JCAHO declared that pain assessment should be considered a “fifth vital sign,” deserving a space beside pulse, respiratory rate, blood pressure, and temperature in the medical record. But there are dangers in translating another's subjective experience onto a scale, a graph, a row of faces ranging from extremely happy to downright miserable [13-17]. Recording data doesn't make the pain empirical, verifiable, or true. It doesn't ensure an appropriate response. What's more, objective language risks stripping pain of the very contextual elements necessary to understand it.

Because the experience of pain is subjective, the only way to fully understand it is through the patient. If we approach pain management from the perspective of power relations, the physician must, to some degree, be submissive to the patient and his or her story and respond with a measure of empathy and trust. Offering pain relief is not only a highly beneficent act, it promotes welfare of persons, fosters their autonomy, and forges trust in the profession.

### **Anonymity, Uncertainty, and Emotions in the ED**

In *The Body in Pain*, Elaine Scarry captures in a single sentence the uncomfortable predicament facing patients in pain and caregivers entrusted to treat them. “To have pain is to have certainty; to hear about pain is to have doubt” [18].

Most patients in pain come to the ED searching for relief and find themselves in a strange, busy, overcrowded place. Often they are frightened and lost in their pain. Their presence in this hostile environment is generally not recognized as testimony to the severity of their pain, which, indeed, it is. Many people experience headaches, but only a small percent leave their homes for treatment in the ED [19]. An empathic attitude that recognizes the rescue role of the ED would regard a patient with fibromyalgia or a man with a toothache and think, “Of course they’re here, they’re in *pain*.” Often, the approach is a less welcoming insinuation, “What do you *really* want?”

The patient’s motive and character get worked-up and analyzed. What can be causing this unexpected level of pain? Is his complaint legitimate? Is she bearing the pain well? Is she being overdramatic? Questions of motive invariably lead to concerns about drug-seeking behavior. Such character judgments compromise communication and trust between physicians and patients, a grave consequence when the problem being treated is rooted in subjectivity. The ineffective treatment and unrelieved pain that may result paradoxically put the patient at risk for an iatrogenic complication—pseudoaddiction [20], leading to requests for higher dosages or a change to a stronger medication, behavior that gets perceived as manipulative and evidence of addiction.

Rarely in clinical medicine does the desire for a readily available treatment serve as a reason to dismiss a symptom. If a patient with a history of recurrent urinary tract infections tells the emergency physician which antibiotic has been effective in the past and which were not, the physician is usually appreciative. But if the same patient has sickle cell disease or a migraine headache and informs the staff that Dilaudid usually works, he or she risks being stigmatized as a drug abuser. And the act of not-acting changes the patient’s condition. Insensitive or inadequate attention to pain devalues the patient. For a profession that pledges to “do no harm,” oligoanalgesia borders on egregiously unethical conduct [21, 22].

### **The Addiction/Diversion Specter**

Narcotic medications are not necessarily expensive and have a high probability of controlling pain. Their greatest potential harm involves constipation and nausea and vomiting, not addiction and risk of drug diversion. Yet drug diversion is a serious problem, as is feeding the habit of a patient with addiction. In 2002, close to 30 million persons aged 12 or older had used prescription pain relievers nonmedically in their lifetime, and about 1.5 million persons aged 12 or older were dependent on or abused prescription pain relievers [23].



This data is of concern, but to what degree should it impact legitimate prescribing practices, especially when appropriate narcotic use in patients without abuse histories rarely results in addiction [24]? The behavior of street addicts can't be the measure for predicting the risk of narcotic use for patients in pain. The street addict uses drugs to escape life. The patient in pain wants to return to his or her previous role and activities [25]. When faced with subjectivity and uncertainty, is it better to err by undertreating patients bearing legitimate pain or to risk being duped by a drug seeker? We overtreat many conditions—examples include the liberal use of antibiotics for ear infections, pharyngitis, and bronchitis and of cough suppressants with unproven efficacy in relieving coughs [26-28]—and these treatments are not without risks and complications.

There are many treatments for pain that don't include narcotics. But knowingly using inferior treatment that offers questionable medical benefits is difficult to defend medically and ethically. At the very least, great therapeutic value can be found in the simple act of respecting and honoring the storyteller.

### **Disrobing the Patient and Physician**

Providing pain relief makes significant demands on physicians. The emotional space between doctors and patients can become uncomfortably close, difficult when no prior relationship exists, and especially challenging when the patient might be unlikable or has an injury or illness resulting from socially unacceptable activities.

Physicians cannot treat pain effectively and compassionately while hiding behind the white coat. Their character, prejudices, and life experiences are reflected in their receptivity to patient's stories and in their treatment decisions. Personal feelings infiltrate the crevices of clinical acumen. It's not *a* patient with fibromyalgia, but *this* particular patient with fibromyalgia at this moment.

In my years of emergency medicine practice, I've observed how patients in pain are sometimes "sized up" and "diagnosed" with a pain stereotype—drug seeker, addict, wimp, histrionic, manipulative, or just crazy. When working through uncertainty, people unknowingly reach conclusions or make decisions based on heuristic strategies [29]. ED physicians encounter patients who are seeking drugs for illicit means. These patients can be difficult, ingratiating, demanding, and threatening. Unfortunately, patients in pain risk being perceived by the degree to which they resemble these notorious, easily recalled, stereotypes [11].

These value judgments are as subjective as the patient's pain, and can compromise care in profound and insidious ways. Blacks and Hispanics, for example, are more likely than others to receive no analgesia for extremity fractures in the emergency department [5].

Workplace pressures between physicians and nurses also impact the treatment of pain. Suppose, for example, the triage nurse believes that a patient with a toothache is seeking drugs. If the physician says, "It's easier to treat him. If he's a drug seeker,

so be it,” the nurse may openly disagree. Soon, the physician gains the reputation as soft, or a sucker, and, in the process, loses the staff’s respect. The opposite situation—the nurses believe the physician is cheap with pain medication—can be more damning.

### **Two Pain Patients in the ED**

Sure, patients can be difficult, but physicians are human, too, and at risk for being equally difficult. I’d be curious to know if the physician in our case scenario, Dr. Maier, was equally attentive and empathic when listening to the two patients’ stories. He treats Mrs. Winter kindly, in a manner that wouldn’t make us think this is anything but his usual demeanor, until the student speaks up. Dr. Maier gives Mrs. Winter a prescription for enough pills to last until her own doctor can see her and coordinate her pain management. We aren’t given much personal information about the two patients. We’re told about her vocabulary, her manicured nails, and her gold bracelets. She has a private physician. With these details, I’ll venture a guess that she belongs to a socioeconomic class with which Dr. Maier might share a certain affinity. Perhaps he knows Dr. Caruso, her physician. He appears eager to find an acceptable solution. If he held any suspicions about her motivation—he did prescribe only 10 ten pills—he definitely gave her the benefit of the doubt.

I wonder whether the “gent”—the term itself colloquial and derogatory—ever had a chance with this doctor. Why did he receive the “third degree?” We’re told he looked like he slept in his clothes. Was he homeless? Was he unkempt? What did he smell like? What was the color of his skin? Did he seem to be in pain? Was his toothache thought to belong to his other struggles and unworthy of stronger medication? Did this patient have a history of frequent visits to the ED for a toothache, with the assumption made that he was a drug seeker, or unmotivated to get definitive care? Does he have the dental insurance required by area dentists, the money for co-payments, or a means of transportation? How did the “gent” feel when he was summarily dismissed? He was twice harmed. First, he wasn’t given attention or respect, and he left the ED with his pain untreated. What if at some future date he develops chest pain, or experiences other worrisome symptoms like difficulty breathing or a severe headache? Will this experience make him reconsider going to an emergency department?

How does Dr. Maier in our case scenario answer the student, who astutely noted that two patients, not widely dissimilar in their need for pain relief, were treated differently? Was he aware of his disparate actions? Will he give serious thought to what the student noticed? Physicians must reflect upon how their personal feelings insinuate themselves into encounters with patients and influence clinical decisions. The experience of pain is extremely personal, both for patients and physicians entrusted to treat them. In the end, we must negotiate that fog between certainty and doubt with compassion and respect.

### **References**

1. Joint Commission on Accreditation of Healthcare Organizations. JCAHO standards. <http://www.jcaho.org/standard/pm.html>. Accessed December 13, 2007.
2. Cordell WH, Keene KK, Giles BK, Jones JB, Jones JH, Brizendine EJ. The high prevalence of pain in emergency medical care. *Am J Emerg Med.* 2002;20(3):165-169.
3. Marks RM, Sachar EJ. Undertreatment of medical inpatients with narcotic analgesics. *Ann Intern Med.* 1973;78(2):173-181.
4. Cleeland CS, Gonin R, Hatfield AK, et al. Pain and its treatment in outpatients with metastatic cancer. *N Engl J Med.* 1994;330(9):592-596.
5. Todd KH, Samaroo N, Hoffman JR. Ethnicity as a risk factor for inadequate emergency department analgesia. *JAMA.* 1993;269(12):1537-1539.
6. Todd KH, Deaton C, D'Adamo AP, Goe L. Ethnicity and analgesia practice. *Ann Emerg Med.* 2000;35(1):11-16.
7. Guru V, Dubinsky I. The patient vs. caregiver perception of acute pain in the emergency department. *J Emerg Med.* 2000;18(1):7-12.
8. Glajchen M. Chronic pain: treatment barriers and strategies for clinical practice. *J Am Board Fam Pract.* 2001;14(3):211-218.
9. Portenoy RK. Opioid therapy for chronic nonmalignant pain: clinician's perspective. *J Law Med Ethics.* 1996;24(4):296-309.
10. Portenoy RK. Opioid therapy for chronic nonmalignant pain: a review of critical issues. *J Pain Symptom Manage.* 1996;11(4):203-217.
11. Baruch JM. Doctor versus patient: pain mismanagement in the ED. *Atrium.* 2007;Summer:10. Some of the ideas in this case commentary are drawn from the *Atrium* article.
12. International Association for the Study of Pain (IASP) Subcommittee on Taxonomy of Pain Terms. *Pain.* 1979;6(3):249.
13. Stahmer SA, Shofer FS, Marino A, Shepherd S, Abbuhl S. Do quantitative changes in pain intensity correlate with pain relief and satisfaction? *Acad Emerg Med.* 1998;5(9):851-857.
14. Todd KH. Clinical versus statistical significance in the assessment of pain relief. *Ann Emerg Med.* 1996;27(4):439-441.
15. Todd KH. Patient-oriented outcome measures: the promise of definition. *Ann Emerg Med.* 2001;38(6):672-674.
16. Gallagher EJ, Liebman M, Bijur PE. Prospective validation of clinically important changes in pain severity measured on a visual analog scale. *Ann Emerg Med.* 2001;38(6):633-638.
17. Bird SB, Dickson EW. Clinically significant changes in pain along the visual analog scale. *Ann Emerg Med.* 2001;38(6):639-643.
18. Scarry E. *The Body in Pain.* Oxford University Press: New York, NY; 1985:13.
19. Barton C. Evaluation and treatment of headache patients in the emergency department; a survey. *Headache.* 1994;34(2):91-94.
20. Weissman DE, Haddox JD. Opioid pseudoaddiction—an iatrogenic syndrome. *Pain.* 1989;36(3):363-366.

21. Cherney NI, Catane R. Professional negligence in the management of cancer pain. A case for urgent reforms. *Cancer*. 1995;76(11):2181-2185.
22. Johnson SH. Relieving unnecessary treatable pain for the sake of human dignity. *J Law Med Ethics*. 2001;29(Spring):11-12.
23. Substance Abuse and Mental Health Services Administration. *The NSDUH Report: The Nonmedical Use of Prescription Pain Relievers*. May 21, 2004. <http://www.oas.samhsa.gov/>. Accessed November 24, 2007.
24. Porter J, Jick H. Addiction rare in patients treated with narcotics. *N Engl J Med*. 1980;302(2):123.
25. Vallerand AH. Street addicts and patients with pain: similarities and differences. *Clin Nurse Special*. 1994;8(1):11-15.
26. Leape LL. Unnecessary surgery. *Annu Rev Public Health*. 1992;13:363-383.
27. Gold HS, Moellering RC. Antimicrobial-drug resistance. *N Engl J Med*. 1996;335(19):1445-1453.
28. McCaig LF, Hughes JM. Trends in antimicrobial drug prescribing among office-based physicians in the United States. *JAMA*. 1995;273(3):214-219.
29. Tversky A, Kahneman D. Judgment under uncertainty: heuristics and biases. *Science*. 1974;185(4157):1124-1131.

Jay M. Baruch, MD, is an emergency physician and director of the ethics curriculum at the Warren Alpert Medical School of Brown University in Providence, Rhode Island. His first book of short fiction, *Fourteen Stories: Doctors, Patients, and Other Strangers*, was published in 2007 by The Kent State University Press.

#### **Related in VM**

[Double Standard for Access to Pain Management](#), January 2008

[Symptoms, Diagnosis, and Treatment of Fibromyalgia](#), January 2008

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# Virtual Mentor

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## CLINICAL CASE

### Communicating with Patients about Harmful Behaviors

Commentary by Carol R. Schermer, MD, MPH

“Come on in, Travis,” said Dr. Kennedy. “Looks as though that could be a nasty scrape.”

“Yeah, well thanks for working me in,” said Travis, holding a bloody bandana to his head. “We’re laying sewer pipe for the city and the crane operator can’t see us too well. A pipe grazed me going down,” he said. “I guess my timing’s off today. It kind of rang my bell.”

“Let me take a look.” Dr. Kennedy, examined his temple and the skin around the orbital area and eye. “I can patch this up for you, and then we’ll send you for some X-rays.”

While he was at work on Travis’s temple, Dr. Kennedy asked for more information about the accident. “Why is your timing off? Are you getting enough sleep? Were you hung over?”

“Maybe.”

“How many drinks do you have in a week?” Dr. Kennedy asked calmly.

“I don’t know. I don’t count ’em. Three or four a day maybe. Not on the job, though.” Travis replied.

“Well I smell whiskey on your breath now and I’m worried. You could have gotten a concussion down there today—or worse.”

“Easy on the sermons, OK? The other guys bought me one for the pain today. I can handle the drink,” Travis said.

“OK, Travis,” said Dr. Kennedy, exasperated. “But we need to see what problems you’re having that could be related to your drinking. You might need to cut back, and some people need to do that under supervision.”

## Commentary

The case presented here is a perfect opportunity for a brief intervention about the patient’s alcohol use. The most successful brief intervention trials have been based

on the principles of motivational interviewing described by William R. Miller and Stephen Rollnick [1]. Motivational interviewing is designed to enhance a person's *intrinsic* motivation to change behavior through skillful reflective listening on the part of the professional. The hallmark of most successful brief interventions is that they are nonconfrontational and give the patient the opportunity to come up with his or her own reasons, motives, and methods for change. Although in this vignette Dr. Kennedy may be concerned and well intentioned, his style of questioning and his immediate assumption that Travis needs formal alcohol treatment lead to a difficult conversation without the desired outcome.

Dr. Kennedy starts by asking three questions in a row, two of which are presumptuous of Travis's condition: "Why is your timing off? Are you getting enough sleep? Were you hung over?" Rather than waiting for the response to the open-ended, "Why is your timing off?" which would give the patient the opportunity to discuss the potential "whys" such as his alcohol use, the rapid firing and automatic assumptions that the patient was either tired or hung over have engendered some resistance.

Dr. Kennedy then immediately flows into questions about the patient's alcohol consumption. Travis states that he thinks he has three or four drinks at a time but seems resistant or reluctant when he states, "I don't know. I don't count 'em," and then tries to clarify his drinking by stating "not on the job though." At that point, Dr. Kennedy does not follow up on the notion that Travis clearly thinks drinking on the job is not OK. Dr. Kennedy goes on to offer information about alcohol treatment without asking Travis if he wants it, thinks he needs it, or is ready for it.

Instead of taking his cues from Travis or waiting to hear the answers to his questions, Dr. Kennedy says, "Well I smell whiskey on your breath now and I'm worried. You could have gotten a concussion down there today—or worse." Although he expresses concern, he is also accusatory, again engendering resistance rather than eliciting the information he seeks from Travis who responds with, "Easy on the sermons, OK? I can handle the drink." Travis is made to feel that he is being yelled at and lectured to by a person who seemingly is not at his level but who speaks from a top-down position as a parent might to a child. Dr. Kennedy not only assumes that Travis is drinking, but also that he does not know the potential consequences of drinking on the job or even of his head injury. The idea that only the doctor knows what is going on (that drinking occurred before the injury and that head injuries can be bad) will not motivate Travis to change his behavior. Dr. Kennedy is judging him and trying to force him to admit to drinking on the job rather than letting Travis tell him what happened and how episodes like this could be avoided in the future.

There is ample opportunity even at this point in the conversation to reverse the negative tide and to let Travis describe what happened, or even to get him to expand on and acknowledge that he might have some alcohol tolerance issues, as seen by his saying "I can handle the drink." Unfortunately, the conversation deteriorates further when an exasperated Dr. Kennedy says, "OK, Travis, but we need to see what

problems you're having that could be related to your drinking. You might need to cut back, and some people need to do that under supervision." Dr. Kennedy is once again jumping way ahead of the patient's readiness. Travis has just finished saying what he believes: he only has about three or four drinks, doesn't drink at work, does not want to be lectured to, and can tolerate his alcohol. He does not seem to associate his drinking with his injury, nor does he believe that his drinking places him at risk for future injury.

To force this patient into action and expect him to be ready to sign up for treatment when he is showing no signs of readiness will not bring about the desired results. Although Dr. Kennedy may want to reach an agreement about the need for behavior change, he should spend his time helping Travis decide why this would be in his best interest while increasing his motivations, readiness, and confidence for such a change. Dr. Kennedy should let Travis come up with reasons and ways to modify his behavior that work for him. Dr. Kennedy now must undo all of the resistance that has come about purely from his conversation style.

#### **Does Dr. Kennedy Have a Duty to Disclose his Findings to Travis's Employer?**

Dr. Kennedy has no evidence that Travis is endangering his life or causing imminent harm to others. The only legal question in our case is whether Dr. Kennedy should report Travis's visit and its discovery to his employer, since this is a job-related injury. Unless the employer has a zero-tolerance policy regarding alcohol consumption on the job or one that specifies that workers will be tested under certain conditions (e.g., for all workplace injuries), physicians are not allowed to report suspicion of intoxication. Patient confidentiality should only be overruled in this case if Travis consented to such policies when he decided to work for the company.

State laws vary about whether workplaces must be alcohol and drug free and whether benefits can be denied based on a positive test. If the patient is intoxicated on the job, and the employer's health insurance is paying for the visit to the doctor, then the employer probably has the right to know that the patient is intoxicated. The employer may then be able to offer an employee assistance program but also, depending on the state and company, may be able to deny health care benefits. Six states have mandatory reporting for intoxicated drivers or members of professions in which licensure is affected. Federal law has specifically protected substance abuse to encourage those with problems to seek treatment and avoid the stigma and implications of reporting in these instances. This federally protected information can only be released under court order.

In the absence of company zero-tolerance and testing policies of the sort described above, it would be unethical for Dr. Kennedy to threaten Travis with reporting his alcohol consumption to his employer. But Dr. Kennedy has so botched his communication with Travis that he now must work to establish a better rapport with him and learn whether his alcohol use indeed contributed to his injury or places him at risk for other adverse events (whether due to drinking on the job, being hung over, or even being out late and sleep deprived). If the assessment *is* that Travis is at risk

and wants to hear about some ways to help himself, then they can continue to discuss options for treatment. If Dr. Kennedy deems Travis at risk from his drinking, it is certainly appropriate for him to advise Travis to quit, cut down, or even to seek further treatment. This should be done by expressing concern for Travis's well-being rather than by issuing an order. Dr. Kennedy must also make himself and Travis aware of any obligation that he has to the company that Travis works for and of any duty to report that he has because of the workplace injury.

### **Reference**

1. Miller WR, Rollnick S. *Motivational Interviewing: Preparing People for Change*. 2nd ed. New York, NY: The Guilford Press; 2002.

Carol R. Schermer, MD, MPH, is a trauma surgeon at Loyola University Medical Center in Maywood, Illinois. She is the chair of the injury prevention and control committee of the American College of Surgeons Committee on Trauma. Her primary area of research is the effectiveness of brief interventions for alcohol use disorders to decrease injury recidivism.

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# Virtual Mentor

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## CLINICAL CASE

### **Lost in the Web: Compulsive Videogaming**

Commentary by Michael Brody, MD

In early October, Joe, a second-year medical student, approached the dean of students. Midterms were about to begin, and Joe complained that he could not study properly in his room or even sleep because his roommate, Bob, also a second-year student, was up all night at his computer playing an online video game. Joe was concerned that Bob had become too involved in the game. The two had roomed together during their first year, when Bob had gone to class, studied, and slept regularly. Joe now hardly recognized his roommate who appeared tired, distant, and uncommunicative.

After listening to Joe's report and asking him some questions, Dr. Hammond, dean of students and a physician, suspected that Bob's gaming activity had taken a compulsive, possibly addictive hold of Bob's life. Since Bob was also a medical student, the dean was particularly concerned about his health and well-being. Joe had not thought about his roommate's behavior as an addiction, and he was reluctant to bring the topic up with Bob. It also occurred to Joe that maybe Dr. Hammond was too old to understand how much a part of young people's lives the computer was. At the same time, Joe was worried about his friend.

### **Commentary**

The Internet, with e-mail and electronic communities like Facebook and MySpace, provides new forms of connection and self-expression for a younger generation. This evolving technology also has a down side, sometimes enabling unhealthy compulsive behaviors. Pornography has taken time and money from young males, as "cybersex" can—and often does—become compulsive, displacing real relationships and professional pursuits. Gambling has also come online. Students have the access to money, their own computers, the need to distract themselves, and the ability to bet heavily in the privacy of their rooms.

Administrators in higher education are now worried that a large percentage of students—mostly male—are pathologically involved with the Internet [1]. Away from home and parental guidance, students are particularly vulnerable to the trappings of cyberspace. Faced with constant social and career decisions, tests, alcohol, and lack of experience, their egos can easily become overwhelmed. The desire to reduce these tensions is now fulfilled through online experiences, which are immediate, uncensored, constant, and unregulated.

Online video gaming, a multibillion dollar industry the revenues of which surpass those of the music and film industries, is one of the most common and available forms of Internet activity. While a Kaiser Family Foundation study found that 80 percent of boys aged 8-14 years have at least one video game console, often in their bedroom [2], the Entertainment Software Association (an industry-funded group) has now declared that the average gamer (players of either or both online and television-based games) is closer to 30 years of age [3].

Game playing is entertaining and engrossing. It is an immersion medium where the player becomes a part of the game's world through visual, audible, and physical integration. Blood, decapitation, guns, knives, mutilations, and death are presented in color, sound, and ever more realistic three-dimensional graphics. Piaget showed decades ago that learning and assimilation is enhanced with sensorimotor activity, and this finding has been exploited through the development of the joy stick, mouse, and, now, the wand. Repetitive actions using these "weapons" become habits that are further reinforced through communal game playing. As I heard Jane Healy, a well known educational psychologist, explain, "Habits of the mind become structures of the brain."

Most popular are "first-person shooter games," like Halo or Doom, where scores reflect the number of objects killed. Video game play correlates with aggression, which is a primary emotional response to prolonged playing. The world of video games is Darwinian, paranoid, and controlled. There is no empathy. Studies have even shown that those who play video games contribute less to charities than nonplayers [4]. Research has also demonstrated that these games create intense autonomic effects—rapid heart rate, higher blood pressure, and an increase in aggressive thoughts [4]. There is no altruism in *Twisted Metal* or *Resident Evil*. One wins only by killing. Is it any wonder that the military uses these games to simulate combat? Video gaming requires a Zen-like approach—there is no time to celebrate a score or curse a miss. One must quickly move on to the next obliteration. This pace, with its emphasis on reaction rather than thought, serves to desensitize the player to violence.

In the summer of 2007, the American Medical Association's House of Delegates decided to defer to the American Psychiatric Association's opinion to classify excessive video game playing as an addiction [5]. This matter is already being explored by the various sections charged with the creation of the new 2012 edition of the *Diagnostic and Statistical Manual of Mental Disorders*, the "bible" of American psychiatry.

As someone who has written and testified before Congress about this subject, I believe that, like most extreme behaviors, excessive video game play functions as a cover or adaptive mechanism for underlying anxiety and depression. This certainly appears to be the case with Bob, as his work, friendships, and health are all suffering. Compulsive gaming, like all pathological solutions (alcohol, drugs, gambling) makes a bad situation worse. One can ask whether entertainment and other distractions have

risen to the level of addiction for Bob. In the absence of a specific psychoactive substance that has a physiological pleasure-inducing effect on the brain, video game addiction would be considered more of a behavioral addiction. The playing becomes preoccupying and obsessive; the behavior affects mood changes; more of the behavior is required to feel satisfied (tolerance); when the behavior is limited or withdrawn, excruciatingly unpleasant feelings occur.

In sum, when the behavior craved has its importance denied and cannot be controlled, major problems can arise in work, studies, interpersonal relationships, or self. This creates, as indicated in Bob's situation, pathology. Whatever the label—addiction, compulsion, or abuse—the boundaries between one's real world and online world are blurred, and this causes difficulties, made worse by increased isolation and lack of monitoring. The multiplayer online games are particularly seductive because the real identity of the player merges with a character in the game. Individual distinctiveness fragments as the retreat into an alternate world becomes more satisfying and more pleasurable than reality. Community-based online activities provide a feeling of belonging and a way to avoid dealing with internal demons. Classes seem boring, and friendships are harder to maintain; even eating and sleeping are chores.

As a physician, I would want to understand what Bob was trying to avoid, and to look for an underlying loss or life change. I would also consider referring Bob to a psychiatrist who could help him recognize the role and influence that gaming has, and I would certainly appreciate that, when online gaming for some students, like Bob, stops being a virtual world and is now their only world, they become lost in cyberspace.

## References

1. Brody M. Internet addictions. *AACAP News*. 2000;31(5):213-215.
2. Roberts DF, Foehr G, Rideout V. *Generation M: Media in the Lives of 8-18 Year-olds*. Washington, DC: Henry J. Kaiser Family Foundation; 2005. <http://www.kff.org/entmedia/upload/Generation-M-Media-in-the-Lives-of-8-18-Year-olds-Report.pdf>. Accessed November 15, 2007.
3. Entertainment and Software Association. *2005 Essential Facts About the Computer and Video Game Industry*. Washington, DC: The Entertainment and Software Association; 2006. <http://www.theesa.com/files/2005EssentialFacts.pdf>. Accessed November 12, 2007.
4. Anderson CA, Bushman BJ. Effects of violent games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal and prosocial behavior: a meta-analytic review of the scientific literature. *Psychol Sci*. 2001;12(5):353-359.
5. Bang L, Mao AR. Video game controversies. *AACAP News*. 2007;38(5):246-248.

Michael Brody, MD, is a psychiatrist in private practice in Potomac, Maryland. He is the chair of the Television and Media Committee of the American Academy of Child and Adolescent Psychiatry. He also teaches a course entitled Children and the Media at the University of Maryland and is liaison to The American Academy of Pediatrics Council on Media and Communications.

**Related in VM**

[A Disorder by Any Other Name: Excessive Computer Game Playing](#), January 2008

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# Virtual Mentor

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## MEDICAL EDUCATION

### Teaching about Substance Abuse

Richard A. Yoast, MA, PhD, William J. Filstead, PhD, Bonnie B. Wilford, MS,  
Susan Hayashi, PhD, Jennifer Reenan, MD, and Jorie Epstein

Substance use disorders (SUDs) are a major public health and medical problem. Overall, substance abuse accounts for 1 in 4 deaths in the United States each year, and results in more lives lost, illnesses, disabilities, and family and workplace disruptions than any other preventable condition [1]. This takes a huge toll on the health and safety of individuals and communities and places enormous, often unrecognized, burdens on health care.

Despite this striking impact upon society, substance abuse education for U.S. medical students and residents is insufficiently effective in addressing the medical, psychological, social, and economic complications of this crisis. As the report from the White House Leadership Conference on Medical Education in Substance abuse notes, “[d]edicated training in SUDs is rarely offered” [2]. While 119 of the 125 U.S. accredited medical schools that responded to the 1998-1999 LCME (Liaison Committee for Medical Education) survey reported that they provided substance abuse education as part of a larger required course, only 12 had a separate required course, and only 45 schools offered a separate elective course [3]. Clearly, medical students need more mandatory exposure to this important topic, as well as more opportunity for voluntary learning.

As the LCME report confirms, lectures and other curricular activities about substance abuse are typically “add-ons” to a standing medical school course, such as a second-year psychiatry sequence, or a single grand rounds lecture in internal medicine that may represent the particular interests of the faculty member who happens to be teaching. For all practical purposes, the frequency and depth in which substance abuse is discussed is linked to the interests of the faculty. Even when there are faculty “champions,” the topic is often dealt with unevenly and sporadically due to fierce competition within the medical school curriculum. Without a prominent faculty advocate, inclusion in the curriculum is marginal at best.

The inconsistent and limited education received by medical students contributes to inadequate assistance for patients in need, despite a growing number of effective medications and intervention strategies and low costs for their use. A study of 1,419 patients from health maintenance organization primary care clinics found a prevalence of 7.5 percent for hazardous drinking and 3.2 percent for nonmedical drug use. The 10 percent of patients with one of the two problems is similar to the

rates for hypertension and diabetes [4]. It is well documented that patients with SUD have higher rates of comorbidity and utilization of health care services [5, 6]. Yet, the 1998 national Healthcare for Communities survey [7] found that only 13 percent of patients reported being screened and counseled for nondependent problem drinking, and only 48 percent of problem drinkers reported receiving any follow-up (most being told to “stop drinking”).

### **The Role of Physicians**

Research indicates that physicians can play a positive role in influencing patients’ health decisions about substance abuse. Screening and brief intervention can help change the course of an individual’s harmful drinking when offered by primary care physicians [8] and has also been shown to be effective in trauma settings [9, 10].

Many professional medical societies including the American Psychiatric Association, American Academy of Pediatrics, and the American College of Obstetrics and Gynecology have adopted policies that call upon physicians to be knowledgeable, trained, and involved in prevention, screening, and intervention for SUDs. American Medical Association (AMA) policy encourages all physicians, particularly those in primary care, to be educated in all phases of intervention with this patient population. The AMA has also encouraged in-depth qualitative studies to better prepare physicians to care for patients with SUDs and to identify, disseminate, and implement certification and accreditation activities and successful educational programs [11]. Further, a National Academy of Science report recommended, “all treatment professionals should have some knowledge of basic neuroscience and how alcohol, nicotine, and other drugs work on the brain pathways, influence behavior, and interact with diverse conditions” [12].

Reimbursement has been a commonly identified barrier to physicians’ ability to address SUD concerns with their patients. Recently, this obstacle was partially overcome by the approval of two new diagnostic treatment codes for screening and brief intervention, specifically, two new Level 1 CPT (current procedural terminology) codes, 99408 and 99409. Effective January 2008, these codes will streamline reporting and reimbursement for doctors who perform screening and brief intervention for alcohol or substance abuse (other than tobacco). The Centers for Medicare and Medicaid Services also announced two new HCPCS (healthcare common procedures coding systems) procedure codes for Medicaid services, effective January 2008: H0049 Alcohol/Drug Screening—alcohol and drug screening, and H0050 Alcohol/Drug Service 15 min—alcohol and drug service, brief intervention (15 minutes). These new codes heighten the need for appropriate physician training.

### **What Do Physicians Need to Know and Be Able to Do?**

The Institute of Medicine’s Committee on Behavioral & Social Sciences in Medical School Curricula examined medical education, training, and strategies related to a broad range of behavioral and social health issues, including SUDs [13]. The

committee recommended identifying critical knowledge domains as an effective way to organize such education.

In general, the critical competencies needed to address SUDs rely on thorough understanding of basic biomedical sciences (e.g., molecular biology and pharmacology) and clinical sciences (e.g., patient interviewing, physical assessment, and psychosocial counseling techniques) [14, 15].

These competencies should include, at a minimum, knowledge and skills in:

1. Prevention, screening, and brief intervention. Physicians should know how to screen for substance use disorders (i.e., classic signs and symptoms) and when and how to perform counseling, brief intervention, and referral, using tested and validated instruments when available.
2. Recognizing co-occurring medical and psychiatric disorders. All physicians should understand the medical and psychiatric comorbidities and complications of SUDs (including use of multiple drugs). This central assessment may entail referral to a specialized treatment resource that matches the clinical needs of the patient. Follow-up by the referring physician is vital to ascertain whether assistance was obtained. Physicians should be prepared to meet the ongoing medical needs of this patient population.
3. Appropriate prescribing of drugs with abuse potential. Physicians need to know, monitor, and assess the prescription of medications with abuse potential to help minimize the risk of inducing or perpetuating prescription drug misuse or abuse. This topic is typically neglected or minimized when SUDs are discussed.

In addition to ensuring competency in these skills, physician education can and should be tailored to specific practice situations, settings, and patient populations.

### **Barriers to Improving Medical Education**

At its 2007 annual meeting, the American Association of Medical Colleges held a substance abuse education session in the very last time slot on the last day of the meeting. The three presenters spoke to an audience of two, one of whom was a co-author of this paper; the other was a substance abuse professional. One would be hard pressed to identify any other condition or disease that impacts such an array of medical problems, interpersonal difficulties, and socioeconomic consequences as SUDs and is relegated to an after-thought among medical educators. Why does this occur?

1. By all accounts, positive attitudes toward patients with SUDs deteriorate over the course of medical school education and residency training [16, 17]. The apparent reason for this is physicians' perceived ineffectiveness in their ability to treat ("cure") substance abuse. Their success in managing other

diseases stands in sharp contrast to their feelings of inadequacy when treating SUD patients. The disappointment in being unable to “correct or fix” substance abuse behavior results in frustration on the part of the physician who may also blame the patient for not wanting to change or recover.

Even when residents are trained in how to conduct brief interventions, the training has marginal impact on their acquisition of the requisite attitudes and skills [17]. This failure may also reflect on the teaching abilities and biases of those providing the training and on student exposure that is too limited to allow them to observe success.

Treatment and management of SUDs is comparable in characteristics and effectiveness to management of other chronic diseases, and expectations of cure and immediate change must be replaced with more realistic, long-term chronic care or disease management plans and revised definitions and expectations regarding success. That is, recovery, in the traditional sense, does occur but may require long-term strategies; unsuccessful efforts to quit smoking are indicators of progress, not failure. Physician attitudes about SUD patients clearly have a negative impact on how these patients are cared for. Other chronic diseases create great ongoing costs and use of resources, lead to physician frustrations, pose treatment difficulties, and involve relapses in patient conditions and behaviors. Yet it is unlikely that a patient with diabetes, high blood pressure, or other chronic conditions would not be cared for, not receive repeated and long-term services, or be accused of not wanting to get better when relapse occurs. Nor would such conditions go unidentified as often as SUDs. The lack of screening and early interventions only make medical complications more likely and treatment more difficult.

2. Patients with SUDs are a heterogeneous patient population. Some suffer from a disease (alcoholism) while others are not dependent but engage in risky use (e.g., binge drinking). Physicians looking only for dependence are likely to miss numerous other use-related problems. This diversity of substance abuse patterns, consequences, and health challenges requires individualized strategies in addition to the standardized approaches that are appropriate to the clinical scenario. Unfortunately education about SUDs tends to minimize this complexity in favor of a set of standardized approaches. It is imperative that treatment plans be tailored to the patients’ clinical situations, but learning to do so takes time and requires clinical skills that may be neglected so that other competencies—deemed more important—are taught. Again, if SUD treatment were viewed as another instance of disease management or chronic care, numerous skills and individualized treatment would not seem unusual.
3. The high health-risk behaviors often associated with SUDs require interventional components—e.g., behavioral and motivational counseling, risk assessment, referral to community based services—that are not employed in managing the health conditions that many physicians feel most



comfortable or skilled in treating. While physicians are accustomed to treating illness by prescribing medications, less severe SUDs may not require these. Research suggests that support for and training in behavioral change techniques such as communication and motivational skills continue to be areas in which medical education needs to improve. In conjunction with physician education, practice systems should be established so that someone, if not the physician, sees to these patient needs [19].

4. The personal health beliefs and practices of physicians may affect their care of patients with SUDs. A national survey of physicians found that those who had directly encountered problems with alcohol or other drugs (through friends or family members) were more likely to screen, diagnose, and conduct brief interventions for SUDs than physicians who had not had such direct experiences [20]. Moreover, culturally shared values, attitudes, and beliefs shape physicians' understanding and treatment of SUDs. Physicians, like everyone else, have value judgments about responsibility and self-control that serve as a backdrop to their education and their practice. While individual choice is a component of initial drug use and an element in achieving abstinence, current understanding of the genetic, environmental, familial, and biochemical factors that lead to SUDs and their consequences creates a need to alter physician attitudes, knowledge, and perceptions regarding these disorders.
5. Physicians may lack an understanding of the health care cost savings associated with treating patients with SUDs. Two randomized control trials demonstrated that each dollar spent in intervention realized a future health care cost savings of \$4.30 [21] and a \$3.80 reduction in medical costs [22]. The Partnership for Prevention found that the annual medical cost of service for problem drinking screening and brief counseling was only \$8.00 per year.

### **One Approach to Better Physician Education**

The American Medical Association and the National Institute on Drug Abuse (NIDA), each recognizing the need to better educate and reach out to primary care physicians about substance abuse research and clinical practice and have partnered in a Primary Care Physician Outreach Project managed by JBS International. The research conducted for this project has confirmed what others had been saying—there is a need to improve physician knowledge and skills related to SUDs, beginning in medical school and continuing through graduate and ongoing medical education. To assist in achieving this goal, NIDA recently funded eight medical schools that comprise four Centers of Excellence (CoE) for Physician Information to serve as national models for the advancement of addiction awareness, prevention, and treatment in primary care practices.

The NIDA CoEs are identifying gaps in knowledge about drug addiction, developing educational materials and resources specifically designed for physicians in training to close those gaps, and determining the most effective means of delivering this

information. The ultimate goals are to raise primary care physicians' awareness of drug addiction as a health problem and to facilitate dissemination of knowledge to best prevent and diagnose abuse of prescription and illicit drugs and treat patients who are struggling with it. In their first year of operation, the CoEs:

1. Conducted a formative assessment of medical students and resident physicians to identify how and where they obtain information about medical drug abuse and to identify misperceptions and knowledge gaps.
2. Conducted a curriculum assessment of medical programs that examined how SUDs are addressed at each CoE.
3. Are developing informational and educational materials and training resources to redress the deficiencies identified by the formative assessment.
4. Identified innovative prototypes and delivery systems to impart the necessary knowledge and skills to medical students and resident physicians.

The CoEs also plan to support the development of a cadre of core faculty who exhibit positive attitudes and excellent clinical skills in the screening and treatment of SUDs. These core faculty members will be recognized leaders in their respective institutions who care about this patient population, have influence in the structure and content of the curriculum, and, most importantly, exhibit and demonstrate the attitudes and skills which they are attempting to impart to their students and colleagues.

A large number of medical schools, medical education programs, public health organizations, and federal agencies have begun to collaborate on how to better prepare and encourage physicians to address SUDs in their patients. In December 2004 the Office of National Drug Control Policy convened a collaborative Leadership Conference on Medical Education in Substance Abuse with a follow-up meeting in 2006 and ongoing workgroups to address particular issues [2]. The Association for Medical Education and Research in Substance Abuse (AMERSA) Project Mainstream is also working with these organizations to implement a long action plan to bring SUDs into the mainstream of medical education and physician practice.

## References

1. Hanson GR, Li TK. Public health implications of excessive alcohol consumption. *JAMA*. 2003;289(8):1031-1032.
2. Office of National Drug Abuse Policy. *Leadership Conference on Medical Education in Substance Abuse*. Washington, DC: Office of National Drug Abuse Policy; 2004:37-45.

3. Liaison Committee on Medical Education. *Part 2: Annual Medical School Questionnaire for 1998-1999*. Chicago, IL: The Liaison Committee on Medical Education; 1999.
4. Mertens JR, Weisner C, Ray GT, Fireman B, Walsh K. Hazardous drinkers and drug users in HMO primary care: prevalence, medical conditions, and costs. *Alcohol Clin Exp Res*. 2005;29(6):989-998.
5. Stinson FS, Grant BF, Dawson DA, Ruan WJ, Juang B, Saha T. Comorbidity between DSM-IV alcohol and specific drug use disorders in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Drug Alcohol Depend*. 2005;80(1):105-116.
6. Hasin DS, Hatzenbueler M, Smith S, Grant BF. Co-occurring DSM-IV drug abuse in DSM-IV drug dependence: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Drug Alcohol Depend*. 2005;80(1):117-123.
7. D'Amico EJ, Paddock SM, Burnam A, Kung FY. Identification of and guidance for problem drinking by general medical providers: results from a national survey. *Med Care*. 2005;43(3):229-236.
8. Kaner EF, Lock CA, McAvoy BR, Heather N, Gilvarry E. A RCT of three training and support strategies to encourage implementation of screening and brief alcohol intervention by general practitioners. *Br J Gen Pract*. 1999;49(446):699-703.
9. Dunn C. Brief motivational interviewing interventions targeting substance abuse in the acute medical care setting. *Semin Clin Neuropsychiatry*. 2003;8(3):188-196.
10. Gentilello LM, Rivara FP, Donovan DM. Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. *Ann Surg*. 1999;230(4):473-483.
11. American Medical Association. Council on Medical Education. Report 11 of the Council of Medical Education. The status of education in substance use disorders in America's medical schools and residency programs. Chicago, IL: American Medical Association; 2007. [www.ama-assn.org/ama1/pub/upload/mm/467/cme11a07.doc](http://www.ama-assn.org/ama1/pub/upload/mm/467/cme11a07.doc). Accessed December 13, 2007.
12. Committee to Identify Strategies to Raise the Profile of Substance Abuse and Alcoholism Research; Institute of Medicine. *Dispelling the Myths about Addiction: Strategies to Increase Understanding and Strengthen Research*. Washington, DC: National Academies Press; 1997.
13. Cuff PA, Vanselow N, eds. *Improving Medical Education. Enhancing the Behavioral and Social Science Content of Medical School Curricula*. Washington, DC: National Academies Press; 2007.
14. Fiellen DA, Butler R, D'Onofrio G, Brown RL, O'Connor PG. The physician's role in caring for patients with substance use disorders: implications for medical education and training. In: *Project Mainstream: Strategic Plan for Interdisciplinary Faculty Development: Arming the Nation's Health Professional Workforce for a New Approach To Substance Use Disorders: Part II. Discipline-Specific Recommendations for Faculty*

*Development*. Providence, RI: Association for Medical Education and Research in Substance Abuse; 2002.

15. Wyatt SA, Vilensky W, Manlandro JJ Jr, Dekker MA 2nd. Medical education in substance abuse: From student to practicing osteopathic physician. *J Am Osteopath Assoc*. 2005;105(6 Suppl 3):S18-25.
16. Lindberg M, Vergara C, Wild-Wesley R, Gruman C. Physicians-in-training attitudes toward caring for and working with patients with alcohol and drug abuse diagnoses. *South Med J*. 2006;99(1): 28-35.
17. Bota RG. What we know about ourselves: changing attitudes about treating patients with substance use disorders. *South Med J*. 2006;99(1): 11.
18. Chossis I, Lane C, Gache P, et al. Effect of training on primary care residents' performance in brief alcohol intervention: a randomized controlled trial. *J Gen Intern Med*. 2007;22(8):1144-1149.
19. Hung DY, Rundall TG, Tallia AF, Cohen DJ, Halpin HA, Crabtree BF. Rethinking prevention in primary care: applying the chronic care model to address health risk behaviors. *Milbank Q*. 2007;85(1):69-91.
20. Center on Addiction and Substance Abuse at Columbia University. *Missed Opportunity: National Survey of Primary Care Physicians and Patients on Substance Abuse*. New York: National Center on Addiction and Substance Abuse at Columbia University; 2000.  
<http://www.casacolumbia.org/Absolutenm/articlefiles/29109.pdf>. Accessed December 12, 2007.
21. Fleming MF, Mundt MP, French MT, Manwell LB, Stauffacher EA, Barry KL. Brief physician advice for problem drinkers: long-term efficacy and benefit-cost analysis. *Alcohol Clin Exp Res*. 2002;26(1):36-43.
22. Gentilello LM, Ebel BE, Wickizer TM, Salkever DS, Rivara FP. Alcohol interventions for trauma patients treated in emergency departments and hospitals: a cost benefit analysis. *Ann Surg*. 2005;241(4):541-550.

Richard A. Yoast, MA, PhD, is the director of the American Medical Association office of alcohol, tobacco and other drug abuse prevention in the Division of Healthy Lifestyles in Chicago. Dr. Yoast's work focuses on changing public policy and increasing physician screening and intervention in patient smoking and excessive alcohol use.

William J. Filstead, PhD, is director of iSTEP (Innovative Strategies for Transforming the Education of Physicians), a medical education research collaborative of the American Medical Association in Chicago.

Bonnie B. Wilford, MS, is director of the Center for Health Services & Outcomes Research at JBS International Inc. in Silver Spring, Maryland. She is former director of the Department of Substance Abuse and former acting director of the Division of Clinical Science at the American Medical Association in Chicago.

Susan Hayashi, PhD, is vice president of JBS International, Inc. in Silver Spring, Maryland, and project director of the National Institute on Drug Abuse (NIDA)

Primary Care Physicians Outreach Project, of which the NIDA Centers of Excellence for Physician Information is a part.

Jennifer Reenan, MD, is a senior research associate in ethics at the American Medical Association in Chicago, and project coordinator of the National Institute on Drug Abuse (NIDA) Centers of Excellence.

Jorie Epstein is completing her undergraduate degree at the University of Chicago and is a research assistant in ethics at the American Medical Association in Chicago.

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# Virtual Mentor

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## JOURNAL DISCUSSION

### **A Disorder by Any Other Name: Excessive Computer Game Playing**

Swathi Reddy

**Grusser SM, Thalemann R, Griffiths MD. Excessive computer game playing: evidence for addiction and aggression? *Cyberpsychol Behav.* 2007;10(2):290-292.**

The image is not an unfamiliar one: an adolescent boy, awake at some odd hour of the night, hunched over a keyboard in a dark room lit only by the glow of a computer monitor, across which elves, bards, and Orcs trample. Though this stereotype usually describes the avid computer user as awkward, socially maladjusted, and introverted, the majority of the participants in the Internet and video game revolution view computer use as either a practical necessity or as a recreational activity similar to watching television or listening to music. In fact, even the demographics of video gamers are misconstrued, as the most devoted players are not teenagers, but males above the age of 19, and an increasing proportion of players are female [1].

Nevertheless, in view of the fact that many stereotypes contain an element of truth, that of the withdrawn adolescent spending endless hours in front of the computer in spite of the personal consequences suggests to some that this phenomenon may have more serious social and psychological underpinnings. Although gamers and those who spend excessive amounts of time on the Internet form relationships online, social networks established in this way may come at the expense of face-to-face interpersonal skills and the ability to socialize in the real world. Overuse may also be linked to obsessive-compulsive disorders or undiagnosed cases of anxiety.

This concern has led some psychologists to relate excessive Internet and game playing to the dependency characteristics of compulsive gambling and drug abuse and to coin the phrases “Internet addiction” and “video game addiction.” Although “Internet addiction disorder” is not yet a viable diagnosis according to the *Diagnostic and Statistical Manual-Fourth Edition* (DSM-IV), many would argue that the Internet elicits the same euphoric and withdrawal symptoms as substance and behavioral addictions. There is little consensus among the medical community about the legitimacy of these new addictions, the American Medical Association has not recommended accepting Internet addiction disorder as a diagnosis, and it is unclear whether the American Psychiatric Association will include criteria for diagnosing Internet and video game addiction in the new edition of the DSM. Much of the uncertainty is related to the general reluctance to accept behavioral addictions such as compulsive gambling and sex and television addictions as clinically diagnosable disorders.

It is not surprising that Asian researchers are the most active in this field, since China, Korea, and Japan are the largest Internet and video game markets in the world outside of the U.S. Since the heavily publicized deaths of several Asian men within the last decade after marathon gaming sessions, and because of the increasing prevalence of excessive game play among Asian youths, addressing Internet and video game overuse has become a serious policy concern at both the scientific and governmental levels. Massive counseling efforts, boot camps, and other rehabilitation services are being directed toward addicted adolescents in these countries [2].

### **The Addiction Argument**

Mark Griffiths, a true pioneer in the field of internet addiction and coauthor of the article under review here, continues to contribute to the study of the psychological effects of the Internet and computer games, writing in the journal *Cyberpsychology and Behavior* about the prevalence of addiction among gamers and the possibility of increased aggression [3]. Griffiths' past work highlights the possibility that excessive computer game and Internet consumption have psychological causes and consequences and that the phenomenon—though it only affects a minority of users and has no official status as a disorder—is very real [4]. Considering addiction a potentially increasing possibility in the long run, Griffiths and his coauthors also point out the obligation of psychologists and clinicians to spot behavioral problems, especially in adolescents as their game-playing time reaches abnormal levels [5, 6].

While it is publicly and scientifically accepted opinion that the Internet and video games can be useful and entertaining additions to most people's lives with little disruption, in the article *Excessive Computer Game Playing: Evidence for Addiction and Aggression?* Grusser, Thalemann, and Griffiths continue the argument that, to a minority of users (a proportion that they attempt to define), video games can prove to be addictive. They also address the popular concern that the violent nature of some video games may increase these tendencies in adolescents.

*Methods.* As in most studies of computer use, self-reported data provide the basis for the article's conclusions. Subjects, recruited from readers of a gaming magazine, responded to two questionnaires, one regarding gaming behavior and frequency, and the other exploring possible aggressive tendencies. Using both correlation and regression analyses, differences in attitudes toward gaming, compulsive feelings, and aggressive inclinations between pathologic and nonpathologic gamers were compared.

The World Health Organization's (WHO) diagnostic classifications for mental and behavioral disorders—the ICD-10—were employed by the researchers as a measure of addictive tendencies. This system of classification has six criteria for "dependence syndrome," of which three must be present for a diagnosis [7]. Though the WHO's criteria for addiction are intended for the evaluation of substance abuse, they can easily be applied to behavioral addiction assessment.

*Results and the Author's Conclusions.* Of the more than 7,000 subjects, 11.9 percent were found to meet three or more of the ICD-10 criteria [8]. The regression analyses showed that gaming defined as “excessive” had little explanatory power over aggressive tendencies, suggesting that since even overuse of video games leads to such small increases in aggression, average levels of game playing would put an adolescent at almost no risk for increased aggression. The authors claim that, even if one takes into account that the results were drawn from self-reported data and that subjects were recruited from a computer gaming magazine readership, the percentage of addicts is still *remarkably* high.

In addition to justifying the opinion that video games have addictive potential, Grusser et al conclude that the differences between the responses to each of the six criteria by members of two groups (pathologic gamers and nonpathologic gamers) also shows cognitive differences that may either result from excessive gaming or be a contributing cause of it. These cognitive components can be extracted from variations in responses to each of the criteria, and the authors propose that these cognitive differences can be targets for therapeutic interventions [8].

### **So Where Is the Controversy?**

While these results seem to support Griffiths' previously published arguments that video games have a significant addictive potential, debate regarding whether pathologic Internet or video gaming constitutes a true addiction continues in full force. Disputes such as those associated with the qualification of gambling as an addiction continue, in part, because these behavior compulsions have no discernable physiological sources. Opponents of the diagnosis therefore contend that those who engage excessively in this activity would rather spend social energy in games than in the real world and that overuse is merely a result of preference. Further, these “addicts” are very much emotionally and cognitively capable of functioning appropriately outside of video games but are simply drawn to the social environment offered by gaming communities [9].

### **Engagement versus Addiction**

The most significant challenge to the diagnostic classification of Grusser et al is the charge that the WHO addiction criteria—and other widely recognized tools, such as Brown's [10]—do not adequately discriminate between high levels of engagement and addiction. This argument has been used to criticize all classes of behavioral addictions, including gambling.

John P. Charlton voices this concern most thoroughly in his investigation of the applicability of Brown's criteria [10]. His work compares the degree to which Brown's factors apply to computing behavior by comparing supposedly computer-dependent subjects' responses to those of “normal” subjects. The results show that, of the six criteria studied (tolerance, euphoria, salience, conflict, withdrawal, and relapse), three could also be construed as indicative of high levels of engagement (tolerance, euphoria, cognitive salience), rather than harmful dependence. This is



understandable when one considers how a desire to devote ever longer periods of time to an activity, a state of bliss while gaming, or a mental preoccupation with gaming can all be acceptable responses to an enjoyable hobby. In this view, any estimations of the prevalence of Internet or gaming addiction derived from these criteria, including those described above, would be exaggerated [10].

Although defining and redefining addiction may be a necessary anxiety for the sake of analyzing the literature on the topic, the fact remains that observable impairments are found when Internet and video games are used in excess, regardless of how this disorder is classified. In fact, the enormity of the problem in Asia and the subsequent attempts at comprehensive remedy should be a warning and a lesson. The true task is to understand what these conditions are and how to mitigate their effects.

A wide range of psychological disorders— social anxiety, obsessive-compulsive disorders, and attention deficit disorders—has been identified as contributing to excessive gaming, with the strongest correlations being between depressive symptoms and addiction [11]. Seay and Kraut suggest, for example, that depression’s inhibiting effect on self-regulation could result in an inability to monitor and correct one’s time spent gaming [12]. Though paths of causation have not yet been demonstrated, it is significant that a similar range of disorders emerges when one reviews the psychological backgrounds of addicts.

Ultimately, clinicians are responsible for recognizing those who become dangerously absorbed in computer activity and treating the very real symptoms. The evidence that excessive gaming is often indicative of mental and emotional conditions is particularly important and reason for clinicians to be aware of unusual manifestations of anxiety, depression, and obsessive tendencies in the form of pathologic Internet use.

## References

1. Chappel D, Eatough V, Davies MNO, Griffiths MD. Everquest—it’s just a computer game right? An interpretative phenomenological analysis of online gaming addiction. *International Journal of Mental Health and Addiction*. 2006;4(3):205-216.
2. Fackler M. In Korea, a boot camp cure for web obsession. *New York Times*. November 18, 2007.
3. Grusser SM, Thalemann R, Griffiths MD. Excessive computer game playing: evidence for addiction and aggression? *Cyberpsychol Behav*. 2007;10(2):290-292.
4. Griffiths MD, Daves MNO. Does video game addiction exist? In: Raessens J, Goldstein J, eds. *Handbook of Computer Game Studies*. Cambridge, MA: MIT Press; 2005:361-369.
5. Griffiths MD. Internet “addiction”: an issue for clinical psychology? *Clinical Psychology Forum*. 1996;97:32-36.

6. Griffiths MD, Hunt N. Dependence on computer games by adolescents. *Psychol Rep.* 1998;82(2):475-480.
7. World Health Organization. Dependence syndrome. In: *International Classification of Diseases*.  
[http://www.who.int/substance\\_abuse/terminology/definition1/en/](http://www.who.int/substance_abuse/terminology/definition1/en/). Accessed December 11, 2007.
8. Grusser, Thalemann, Griffiths, 291.
9. Ng BD, Wiemer-Hastings P. Addiction to the internet and online gaming. *Cyberpsychol Behav.* 2005;8(2):110-113.
10. Charlton JP. A factor-analytic investigation of computer “addiction” and engagement. *Br J Psychol.* 2002;93(Pt 3):329-344.
11. Ha JH, Kim SY, Bae SC, et al. Depression and Internet addiction in adolescents. *Psychopathology.* 2007;40(6):424-430.
12. Seay AF, Kraut RE. Project Massive: Self-regulation and problematic use of online gaming. In press. *CHI 2007 Proceedings: Proceedings of the ACM conference on human factors in computing systems*.  
<http://www.cs.cmu.edu/~kraut/RKraut.site.files/articles/seay07-GamePlay%26PsychologicalWellbeing.pdf>. Accessed December 12, 2007.

Swathi Reddy is a fourth-year undergraduate at the University of Chicago where she is majoring in biological sciences and political science. She is also an intern for the Council on Ethical and Judicial Affairs at the American Medical Association in Chicago. Her primary research interest is the interplay between socioeconomic conditions and health, and she hopes to pursue a career in medicine along with public policy.

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## Virtual Mentor

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### CLINICAL PEARL

#### Symptoms, Diagnosis, and Treatment of Fibromyalgia

Patrick B. Wood, MD

Fibromyalgia (FM) is a condition characterized by the presence of chronic widespread pain and tenderness upon light manual palpation [1]. It has been estimated to affect as many as 10 million Americans and occurs disproportionately among women [2]. Although references to FM appear in medical literature as early as the turn of the 20th century, it was not until 1990 that the American College of Rheumatology (ACR) formalized the classification criteria for FM (table 1). In addition to chronic pain, patients typically experience a variety of other symptoms involving multiple body systems (table 2) [1, 3].

While FM has been historically considered a musculoskeletal disorder, research conducted over the last 2 decades has increasingly implicated the central nervous system as the seat of FM pathophysiology. Among the most important objective findings associated with FM are abnormalities on sleep electroencephalograms (EEG) [4]; abnormal cerebrospinal fluid concentrations of a variety of neurochemicals related to pain modulation [5-7]; abnormal brain activation in response to noxious stimulation as demonstrated by functional magnetic resonance imaging (fMRI) [8, 9]; an acceleration of normal, age-related cortical brain atrophy [10]; and a disruption of dopaminergic neurotransmission as demonstrated by positron emission tomography (PET) under baseline conditions and in response to tonic pain [11, 12].

#### Clinical Presentation and Diagnostic Considerations

Patients with FM comprise a substantial subpopulation in the primary care setting. The astute clinician should therefore maintain a relatively high index of suspicion for its presence. The first clue may be the difficulty that members of the clinical staff have in eliciting a single chief complaint, given that patients are commonly beset with multiple symptoms involving a variety of systems. A history of present illness typically reveals the insidious onset of a classic constellation of symptoms that includes flu-like achiness, fatigue, muscular stiffness, and chronic early/middle insomnia. To meet formal diagnostic criteria for FM, a patient must have had pain for at least 3 months on both sides of the body and above and below the waistline [1].

Fibromyalgia is commonly considered to be a stress-related disorder due to its frequent development following stressful life events, which may include physical trauma (e.g., motor vehicle accident, often involving neck injury), environmental

exposures, infectious illness, or extreme psychosocial duress [13]. Many of the symptoms of the disorder (including pain) wax and wane in severity, and the experience of additional stress is implicated in symptom exacerbation. Other features to look for are complaints of cognitive dysfunction (e.g., difficulty concentrating, difficulty staying on task, or “environmental overload”), sensitivity to light or sound, functional bowel disturbances, ocular complaints such as dry eyes or difficulty with accommodation (i.e., changing focus), and a history or clinical evidence of anxiety or affective disturbance [3].

Once suspected, a diagnosis of FM is confirmed by conducting a manual tender point examination, which, according to the ACR guidelines, entails the application of pressure of 4 kilograms (typically using the thumb pad of the examiner’s dominant hand) to the prescribed tender points. It may take some practice to calibrate one’s thumb pressure to 4 kg of force. One way to approximate the pressure is to press your dominant thumb into the opposite palm—the pressure at which the nail bed blanches is roughly 4 kg of force. For the test to be considered positive, the examined area has to be painful rather than just tender.

While no laboratory test exists to confirm the diagnosis, there are some studies that may help to identify contributing factors and may, in turn, aid in management. A screening battery of laboratory tests might therefore include:

1. Complete blood count to rule out anemia; low hemoglobin may indicate low iron levels, which are associated with restless leg syndrome (RLS).
2. Metabolic panel to evaluate for liver or kidney disease; establishing baseline values can be important if new medications are added. When risk factors are present or hepatic enzymes are elevated, screening for hepatitis C, which can be associated with FM, should be considered.
3. Erythrocyte sedimentation rate—if elevated, could indicate occult inflammation, which can exacerbate symptoms, or the presence of polymyalgia rheumatica, which mimics the symptoms of FM and is treatable using glucocorticoids such as prednisone.
4. C-reactive protein level (CRP). An elevated CRP may indicate occult pelvic inflammation, subclinical bladder infection, dental caries, or obstructive sleep apnea.
5. Thyroid-stimulating hormone study. Hyper- and hypothyroidism can mimic or exacerbate FM and are readily treatable.
6. Vitamin D-25, OH (hydroxy) study. Data suggest vitamin D deficiency is common in FM patients and may contribute to musculoskeletal pain and anxiety.

The differential diagnosis of chronic musculoskeletal pain and fatigue is lengthy. There are several relatively common conditions that should be given primary consideration. Comorbidity of FM with rheumatologic illnesses is relatively common, and screening for these is warranted when history or physical examination findings are suggestive. Classic red flags such as weight loss or frequent unexplained

infections require specific evaluation. Referral for polysomnography to rule out obstructive sleep apnea (OSA) is recommended when profound fatigue and cognitive dysfunction are present.

A number of other common comorbidities are also associated with FM, the effective management of which may alleviate overall symptoms. For example, myofascial pain syndrome (MPS) is a distinct clinical entity in which the development of discrete areas of exquisite pain (i.e., trigger points versus tender points) causes radiation of pain in stereotypic patterns. MPS may be treated with trigger point injection or manual therapy [14]. Irritable bowel syndrome is likewise common. Recent data suggest that small intestinal bacterial overgrowth, which contributes to bowel dysfunction, is common in FM and that its eradication with antibiotics can therefore be useful in relieving symptoms [15].

Screening for the presence of neuropsychiatric illness can also be fruitful. When psychosocial issues are identified as contributing factors, a behavioral specialist may help the patient with conflict resolution and development of coping skills [16]. Increased rates of anxiety and depression are well known. The biology of depression is distinct from that of FM, and some pharmacological strategies to alleviate depression (i.e., with serotonergic antidepressants) may offer only limited pain relief [17].

### **Treatment Options**

Light aerobic exercise ranks as one of the most effective treatments of FM [18], but patient adherence to exercise regimens has been known to be problematic. Programs tailored to an individual's level of fitness and offered in a structured environment may help with compliance. Cognitive behavioral therapies have also demonstrated utility in managing symptoms [15]. The availability of qualified community resources for behavior and lifestyle therapies can be a limiting factor. Other nonpharmacological interventions that may be useful are weight management, smoking cessation, stress reduction, and dietary interventions [19, 20].

Among the more frustrating aspects of managing FM for clinicians has been the absence of a medication specifically indicated for its treatment. Traditional pain medications (e.g., acetaminophen or nonsteroidal anti-inflammatory drugs) have no utility in FM, although they may alleviate pain associated with comorbid arthritis or inflammatory disorders. To date, the only agent approved by the FDA specifically for the treatment of FM is pregabalin (Lyrica), an atypical anti-epileptic that works, we think, by inhibiting the release of pain-related neurotransmitters [21]. Other classes of medications that have been effective in controlled clinical trials include tricyclic antidepressants and related agents (e.g., amitriptyline, cyclobenzaprine) [22, 23], mixed serotonin/norepinephrine reuptake inhibitors (e.g., duloxetine) [24], dopamine agonists (e.g., pramipexole) [25], and the sedating hypnotic sodium oxybate [26]. There is also considerable evidence for the utility of tramadol, a weak mu-opioid agonist with prominent activity as a mixed norepinephrine/serotonin reuptake inhibitor, in alleviating pain and improving quality of life [27].

Table 1. American College of Rheumatology criteria for fibromyalgia

<i>Pain, on digital palpation, must be present in at least 11 of the following 18 tender point sites:</i>	
<ul style="list-style-type: none"> <li>• Occiput (2)—at the suboccipital muscle insertions.</li> <li>• Low cervical (2)—at the anterior aspects of the intertransverse spaces at C5-C7.</li> <li>• Trapezius (2)—at the midpoint of the upper border.</li> <li>• Supraspinatus (2)—at origins, above the scapula spine near the medial border.</li> <li>• Second rib (2)—upper lateral to the second costochondral junction.</li> <li>• Lateral epicondyle (2)—2 cm distal to the epicondyles.</li> <li>• Gluteal (2)—in upper outer quadrants of buttocks in anterior fold of muscle.</li> <li>• Greater trochanter (2)—posterior to the trochanteric prominence.</li> <li>• Knee (2)—at the medial fat pad proximal to the joint line.</li> </ul>	

Source: The American College of Rheumatology 1990 criteria for the classification of fibromyalgia. Report of the Multicenter Criteria Committee.

Table 2. Common symptoms in fibromyalgia in addition to pain

Chronic fatigue	Anxiety
Sleep disturbances	Depression
Morning stiffness	Cognitive dysfunction
Functional bowel abnormalities	Nondermatomal paresthesias
Dysphagia	Dysautonomia
Non-allergic rhinitis	Restless legs syndrome
Dry mouth	Dizziness/balance problems
Vision problems	Sensitivity to light/sound

**References**

1. Wolfe F, Smythe HA, Yunus MB, et al. The American College of Rheumatology 1990 criteria for the classification of fibromyalgia. Report of the Multicenter Criteria Committee. *Arthritis Rheum.* 1990;33(2):160-172.
2. Wolfe F, Ross K, Anderson J, Russell IJ, Hebert L. The prevalence and characteristics of fibromyalgia in the general population. *Arthritis Rheum.* 1995;38(1):19-28.
3. Mease P. Fibromyalgia syndrome: review of clinical presentation, pathogenesis, outcome measures, and treatment. *J Rheumatol Suppl.* 2005;75:6-21.
4. Moldofsky H, Scarisbrick P, England R, Smythe H. Musculoskeletal symptoms and non-REM sleep disturbance in patients with “fibrositis syndrome” and healthy subjects. *Psychosom Med.* 1975;37(4):341-351.
5. Russell IJ, Orr MD, Littman B, et al. Elevated cerebrospinal fluid levels of substance P in patients with the fibromyalgia syndrome. *Arthritis Rheum.* 1994;37(11):1593-1601.
6. Larson AA, Giovengo SL, Russell IJ, Michalek JE. Changes in the concentrations of amino acids in the cerebrospinal fluid that correlate with

- pain in patients with fibromyalgia: implications for nitric oxide pathways. *Pain*. 2000;87(2):201-211.
7. McLean SA, Williams DA, Stein PK, et al. Cerebrospinal fluid corticotropin-releasing factor concentration is associated with pain but not fatigue symptoms in patients with fibromyalgia. *Neuropsychopharmacology*. 2006;31(12):2776-2782.
  8. Gracely RH, Petzke F, Wolf JM, Clauw DJ. Functional magnetic resonance imaging evidence of augmented pain processing in fibromyalgia. *Arthritis Rheum*. 2002;46(5):1333-1343.
  9. Cook DB, Lange G, Ciccone DS, Liu WC, Steffener J, Natelson BH. Functional imaging of pain in patients with primary fibromyalgia. *J Rheumatol*. 2004;31(2):364-378.
  10. Kuchinad A, Schweinhardt P, Seminowicz DA, Wood PB, Chizh BA, Bushnell MC. Accelerated brain gray matter loss in fibromyalgia patients: premature aging of the brain? *J Neurosci*. 2007;27(15):4004-4007.
  11. Wood PB, Patterson JC 2nd, Sunderland JJ, Tainter KH, Glabus MF, Lilien DL. Reduced presynaptic dopamine activity in fibromyalgia syndrome demonstrated with positron emission tomography: a pilot study. *J Pain*. 2007;8(1):51-58.
  12. Wood PB, Schweinhardt P, Jaeger E, et al. Fibromyalgia patients show an abnormal dopamine response to pain. *Eur J Neurosci*. 2007;25(12):3576-3582.
  13. Clauw DJ, Crofford LJ. Chronic widespread pain and fibromyalgia: what we know, and what we need to know. *Best Pract Res Clin Rheumatol*. 2003;17(4):685-701.
  14. Alvarez DJ, Rockwell PG. Trigger points: diagnosis and management. *Am Fam Physician*. 2002;65(4):653-660.
  15. Wallace DJ, Hallegua DS. Fibromyalgia: the gastrointestinal link. *Curr Pain Headache Rep*. 2004;8(5):364-368.
  16. Bennett R, Nelson D. Cognitive behavioral therapy for fibromyalgia. *Nat Clin Pract Rheumatol*. 2006;2(8):416-424.
  17. Arnold LM. Biology and therapy of fibromyalgia. New therapies in fibromyalgia. *Arthritis Res Ther*. 2006;8(4):212.
  18. Busch AJ, Barber KA, Overend TJ, Peloso PM, Schachter CV. Exercise for treating fibromyalgia syndrome. *Cochrane Database Syst Rev*. 2007;17(4):CD003786.
  19. Rossy LA, Buckelew SP, Dorr N, et al. A meta-analysis of fibromyalgia treatment interventions. *Ann Behav Med*. 1999;21(2):180-191.
  20. Kaartinen K, Lammi K, Hypen M, Nenonen M, Hanninen O, Rauma AL. Vegan diet alleviates fibromyalgia symptoms. *Scand J Rheumatol*. 2000;29(5):308-313.
  21. Crofford LJ, Rowbotham MC, Mease PJ, et al. Pregabalin for the treatment of fibromyalgia syndrome: results of a randomized, double-blind, placebo-controlled trial. *Arthritis Rheum*. 2005;52(4):1264-1273.
  22. Lawson K. Tricyclic antidepressants and fibromyalgia: what is the mechanism of action? *Expert Opin Investig Drugs*. 2002;11(10):1437-1445.

23. Tofferi JK, Jackson JL, O'Malley PG. Treatment of fibromyalgia with cyclobenzaprine: A meta-analysis. *Arthritis Rheum.* 2004;51(1):9-13.
24. Arnold LM, Rosen A, Pritchett YL, et al. A randomized, double-blind, placebo-controlled trial of duloxetine in the treatment of women with fibromyalgia with or without major depressive disorder. *Pain.* 2005;119(1-3):5-15.
25. Holman AJ, Myers RR. A randomized, double-blind, placebo-controlled trial of pramipexole, a dopamine agonist, in patients with fibromyalgia receiving concomitant medications. *Arthritis Rheum.* 2005;52(8):2495-2505.
26. Wood PB. A randomized, double-blind, placebo-controlled, parallel-group, multi-center trial comparing the effects of orally administered Xyrem (sodium oxybate) with placebo for the treatment of fibromyalgia [abstract]. *Pain Med.* 2006;7:181.
27. Bennett RM, Schein J, Kosinski MR, Hewitt DJ, Jordan DM, Rosenthal NR. Impact of fibromyalgia pain on health-related quality of life before and after treatment with tramadol/acetaminophen. *Arthritis Rheum.* 2005;53(4):519-527.

Patrick B. Wood, MD, is chief medical officer at Angler Biomedical Technologies, LLC. He is also an adjunct assistant professor in the Departments of Psychiatry and Anesthesiology at Louisiana State University Health Sciences Center in Shreveport.

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# Virtual Mentor

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## HEALTH LAW

### The Legality of Drug-Testing Procedures for Pregnant Women

Kristin Pulatie

State legislators, law enforcement officials, and physicians have struggled to reach consensus on how to identify, treat, and possibly punish women who abuse illegal substances during pregnancy. Between 1992 and 1995, the number of states that prosecuted drug-addicted pregnant women increased nearly threefold. No state has yet crafted a law specifically criminalizing drug addiction in pregnant women, choosing instead to prosecute women under child endangerment and drug distribution laws [1]. The stakes for pregnant women who abuse drugs are often high; they may face jail time, loss of custody when the child is born, and denial of welfare benefits for the baby [2].

When this effort to crack down on pregnant women who are addicted to illegal drugs enlists physicians to test for these substances and collect evidence, many ethical and legal questions arise. Law centers that specialize in advocacy for women question both the constitutionality and the morality of forcing physicians to fulfill the role of law enforcement officers in the course of treating pregnant women. The Supreme Court has recognized that addiction is an illness, and that criminalizing it is a violation of the Eighth Amendment, which prohibits cruel and unusual punishment [1]. Those working on behalf of pregnant women claim, and the Supreme Court agrees, that hospital policies of drug testing for the purpose of prosecution rather than treatment actually harm fetal health by discouraging women who most need assistance from seeking prenatal care [3].

Studies have shown that pregnant women who abuse drugs are much more likely to give birth to healthy babies if they receive prenatal care, even if they do not stop using drugs during pregnancy [4]. Furthermore, the patient-doctor relationship is compromised, and quality of care may suffer when women cannot fully disclose problems of addiction to their physician for fear of prosecution [5]. Most major medical organizations, including the American Medical Association, the American College of Obstetrics and Gynecology, and the American Academy of Pediatrics oppose using drug tests and punitive measures to manage the problem of addiction during pregnancy. Instead, these groups advocate increased treatment options and improved prenatal care for at-risk women and fetuses [6].

In *Ferguson v. City of Charleston*, the Supreme Court offered guidance for implementing constitutionally sound and ethically appropriate drug testing policies. This 2001 case tested the constitutionality of a Charleston, South Carolina, hospital's

partnership with law enforcement officials to create a procedure to identify pregnant women suspected of drug abuse. The protocol specified operational guidelines from the police, including instructions for the hospital staff on how to maintain a proper chain of evidence. The policy listed criteria for identifying suspicious women, such as lack of prenatal care, late prenatal care, and previously known substance abuse. Hospital staff tested the women's urine for drugs, but they did not act under the power of a search warrant, nor did they receive informed consent from the patients before conducting the tests. The hospital staff then turned over results of the tests and the patients' discharge summaries, which contained confidential medical information, to the prosecutor's office and the police, who then promptly arrested the patients.

The search and arrest policy of the hospital did not lead to a reduction in drug use, offer changes in prenatal care, improve pregnancy outcomes, prescribe special care for newborns, or increase the number of women successfully completing drug treatment programs [6]. In short, it seems that the principal goal was to punish addicted women.

The petitioners in *Ferguson v. City of Charleston* challenged the constitutionality of the drug tests, claiming that performing the tests in the absence of a warrant or informed consent violated the patients' Fourth Amendment protection against unreasonable search and seizure. The Supreme Court agreed, citing several aspects of the policy in their reasoning. First, the program was developed by the hospital in conjunction with police, so that the health professionals who carried out the testing became extensions of law enforcement. The Court reasoned that, when physicians are acting at the behest of the state to collect evidence, they have a special obligation to inform their patients of their constitutional rights. The Court recognized that health care workers might have a duty to report evidence of criminal conduct inadvertently acquired during treatment without informing patients of their Fourth Amendment rights. In the *Ferguson* case, however, the employees were not acquiring evidence of drug use to further treatment goals, but rather for prosecution purposes only, which made them extensions of law enforcement and therefore responsible for informing patients of their rights. While patients might expect that results of testing done in association with their treatment could be turned over to law enforcement, they would not expect that doctors would perform the tests for the sole purpose of obtaining evidence for criminal sanctions.

Second, the Court saw the involvement of prosecutors and police in the actual daily drug testing as clear evidence of the point made above—the policy was not intended to improve treatment options for pregnant women but to gather evidence for law enforcement, bypassing constitutional protections to do so. Third, the Court recognized that this program's central feature was the use of law enforcement to coerce women into drug rehabilitation and not the creation of more treatment options for women and the unborn. The Court acknowledged that the invasion of patient privacy in this case was severe due to the deceit involved in the testing and the unauthorized dissemination of confidential medical information to a third party.

Police received patient records detailing medical treatment and history, not simply drug test results.

### **Legal Drug-Testing Policies**

Based on the Supreme Court's decision in *Ferguson* and recommendations from leading medical organizations, hospitals are now able to craft drug testing and treatment policies that are both constitutional and ethically sound. First, medical professionals should know that, if they perform testing for the specific purpose of gathering evidence of criminal conduct by patients, they have an obligation to inform the patients of their constitutional rights to protection from unreasonable search and seizure [1]. Hospitals that fail to inform patients of their rights may be open to civil liability for monetary damages. Second, testing policies that are developed with law enforcement agencies, employing their protocols, are more likely to be deemed unrelated to treatment and thus be perceived as being used only to further prosecution. To avoid such categorization, hospitals should develop testing procedures based on medical care and treatment options, independent of police or prosecutors. Third, as Lisa Harris and Lynn Paltrow note, "no state authorizes or expects physicians to use medical evidence of addiction for criminal prosecution" [1].

The Supreme Court recognizes that a physician's duty is to provide sound medical treatment to his patient, not to act as an extension of law enforcement. Physicians serve medical—not legal—roles in the treatment of pregnant women. Health care professionals who act on behalf of the state rather than for their patients breach the ethical duties of the patient-physician relationship. Such a breach erodes confidence and trust in the medical community, resulting in poor disclosure by patients, which, in turn, may dramatically reduce the efficacy of diagnosis and treatment. Physicians' duty of care lies first and foremost with the patient. Ultimately, to preserve constitutional rights and the ethical patient-doctor relationship, drug testing policies should encourage open communication between patient and physician, emphasize the availability of treatment options, and advocate for the health of woman and child.

### **References**

1. Harris LH, Paltrow L. The status of pregnant women and fetuses in US criminal law. *JAMA*. 2003;289(13):1697-1699.
2. Cooper CL. Pregnant and punished. *Planned Parenthood*. <http://www.plannedparenthood.org/news-articles-press/politics-policy-issues/public-affairs/pregnant-punished-14792.htm>. Accessed November 27, 2007.
3. *Ferguson v City of Charleston*, 532 US 67 (2001).
4. Racine AD, Joyce TJ, Anderson R. The association between prenatal care and birth weight among women exposed to cocaine in New York City. *JAMA*. 1994;271(15):1161-1162.
5. American College Obstetrics and Gynecology (ACOG) Committee on Ethics. ACOG Committee Opinion. Number 294, May 2004. At-risk drinking and illicit drug use: ethical issues in obstetric and gynecologic practice. *Obstet*

*Gynecol.* 2004;103(5 Pt 1):1021-1031.

6. Center for Reproductive Rights. *The Center's Cases: Pregnant Women's Rights*. [http://www.reproductiverights.org/crt\\_preg\\_ferguson.html](http://www.reproductiverights.org/crt_preg_ferguson.html). Accessed November 27, 2007.

Kristin Pulatie is a third-year student at DePaul University College of Law in Chicago. She is a health law fellow and an associate editor for the *Women's Law Caucus* journal. In 2007 she founded the DePaul chapter of Law Students for Reproductive Justice. She is interested in legal aspects of reproductive health care and is a volunteer for Planned Parenthood of Chicago.

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# Virtual Mentor

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## POLICY FORUM

### Wellness Programs: Legality, Fairness, and Relevance

Laura D. Hermer, JD, LLM

In August 2007 Clarian Health, an Indianapolis-based hospital system employing 13,000 people, announced that it would start deducting a small sum from the paycheck of each employee who failed to meet certain criteria concerning body mass index, cholesterol, blood pressure, smoking, and other health factors [1]. Many employees were angered and, in the face of an outcry, Clarian quickly changed tactics. Now the company plans instead to *reward* employees who meet the targets with a similar sum each pay period [1].

Programs such as Clarian's are, according to reports in the business press, becoming increasingly popular among employers as health care costs continue to rise [2]. Nearly half of all employers who participated in the survey said they offered economic incentives to employees for healthy behavior [2]. A far smaller number impose penalties on workers who fail to meet certain health criteria.

Wellness incentive programs such as these raise a couple of questions. First, are they legal? And second, are they fair?

#### Legality and Fairness

One might think that such programs are prohibited by the 1996 Health Insurance Portability and Accountability Act (HIPAA). HIPAA was, after all, intended in part to prohibit health plans and insurers from discriminating on the basis of health status [3]. The law, however, contained an exception that allowed plans to provide rewards or impose surcharges on members based on whether they complied with bona fide wellness programs [4].

This means that programs such as Clarian's—whether in its carrot or stick incarnation—are legal, as long as they conform to HIPAA regulations. But are they fair? Some programs penalize people if they are obese or addicted to nicotine, both arguably medical conditions [5, 6]. If we treat obesity and smoking as medical conditions, it seems discriminatory to allow health plans to penalize people who have these conditions.

In the view of some, the issue comes down to self-control. To what extent is the individual accountable—culpable—for his weight or smoking behavior? The terms of HIPAA imply that the federal government would limit individual responsibility for conditions deemed to be “medical.” Under HIPAA regulations, a participant must

be notified that she can seek special accommodations if her inability to meet a wellness program's conditions is due to a medical condition [7]. Thus, for example, a person who is addicted to nicotine could avoid a smoking surcharge on his health insurance if he regularly attended a smoking cessation program, regardless of whether he actually quit smoking.

While this may help keep HIPAA congruent with federal disability law, it also goes against many people's instincts. Because obesity and nicotine addiction are considered "medical" conditions, doesn't mean that one has no responsibility in contributing to or controlling them. To many, the notion that someone weighs 50 pounds more than her healthy weight because another individual force-fed her for months or because she was born without any willpower, is, at least in most cases, implausible. Because so many of us feel this way, people who appear to have no reasonable excuse for their weight may be subject to stigma [8]. Even health care workers are not immune to such prejudicial beliefs about their patients [9].

With respect to nicotine addiction, most lawsuits against tobacco companies by smokers seeking damages for injuries to their health failed for years, in large part because jurors believed that the smokers themselves, rather than the company, were ultimately responsible for the smoking-related health consequences. The plaintiffs' fortunes changed, in part, only after industry documents came to light showing that tobacco companies had long known and were expressly aware of the addictive and deadly natures of their products, yet continued to market them [10].

### **Factors beyond Medical Condition and Choice**

Yet to end the analysis here is unfair. Not everyone approaches risk calculations using the same variables. People of lower socioeconomic status are more likely to smoke or to be obese than those of higher socioeconomic status [11, 12], but, some argue this is because those with lower socioeconomic status have less to lose through unhealthy behaviors. So many other factors in their environments are dangerous, economically difficult, and stressful, and all of these together contribute to a shorter lifespan [12]. Further, the dangers of obesity or smoking may pale in comparison to those posed collectively by polluted, dilapidated, and violent neighborhoods, physically taxing or mind-numbing jobs that pay poorly and offer little security, poor schools, and unsafe child care [13]. Lower income neighborhoods, particularly in the inner city, tend to lack stores selling healthy, minimally processed foods and safe areas in which to exercise [14-16].

The impact of advertising and consumer products also must be taken into account. Marion Nestle, a professor in the Department of Nutrition and Food Sciences at New York University, describes how the food industry attempts to induce Americans to eat more than they need, which, she claims, is accomplished not merely through advertising. The food industry influences public agencies such as the U.S. Department of Agriculture to limit the dissemination of information that conflicts with the goals of various sectors of the food industry and encourages the consumption of products of dubious nutritional value. Until recently, for example,

major soda bottlers paid public school districts to sign contracts guaranteeing exclusive product placement [17, 18]. The tobacco industry, of course, is no stranger to the use of morally questionable strategies in advertising its products and influencing their regulation [19, 20].

The foregoing is not intended to absolve individuals of their role in nicotine addiction or obesity. It is, rather, to observe that choice does not occur in a vacuum. Social factors can have more influence on individuals' choices than a small carrot or stick offered by an insurance plan. Such factors relate to larger problems that color many other areas of our lives besides our decision to drink that can of soda or to smoke just one more cigarette. And those factors will remain long after wellness programs have gone out of fashion. Perhaps we should, accordingly, pay less attention to quick fixes such as wellness programs and more to addressing the sort of perennial, overarching forces that help shape our health and our lives.

### Notes and References

1. Andrews M. America's best health plans: desperate to control healthcare costs, employers are rolling out wellness programs with teeth. *U.S. News & World Report*. October 25, 2007. <http://health.usnews.com/articles/health/health-plans/2007/10/25/americas-best-health-plans.html?PageNr=1>. Accessed November 15, 2007.
2. McGregor, J. Sweat more, pay less. *Business Week*. November 5, 2007. [http://www.businessweek.com/magazine/content/07\\_45/b4057083.htm](http://www.businessweek.com/magazine/content/07_45/b4057083.htm). Accessed November 15, 2007.
3. Prohibiting discrimination against participants and beneficiaries based on a health factor. 45 CFR 146.121(b)(1)(i). HIPAA also applies under very narrow conditions to individual health plans. See 42 USC sect 300gg-41(a) & (b).
4. Prohibiting discrimination against participants and beneficiaries based on a health factor: Application for benefits. 45 CFR 146.121(b)(2)(ii), (f).
5. Koob GF, Le Moal M. Drug abuse: hedonic homeostatic dysregulation. *Science*. 1997;278(5335):52-58.
6. NHLBI Obesity Education Initiative Expert Panel. *The Practical Guide: Identification, Evaluation and Treatment of Overweight and Obesity in Adults*. Bethesda, MD: National Institutes of Health; 2000. [http://www.nhlbi.nih.gov/guidelines/obesity/prctgd\\_c.pdf](http://www.nhlbi.nih.gov/guidelines/obesity/prctgd_c.pdf). Accessed November 15, 2007.
7. Prohibiting discrimination against participants and beneficiaries based on a health factor: Wellness programs. 45 CFR 146.121(f)(2)(iv) and (v).
8. DeJong W. The stigma of obesity: the consequences of naïve assumptions concerning the causes of physical deviance. *J Health Soc Beh*. 1980;21(1):75-87.
9. Puhl R, Brownell KD. Bias, discrimination, and obesity. *Obes Res*. 2001;9(12):788-805.
10. LaFrance AB. Tobacco litigation: smoke, mirrors and public policy. *Am J Law Med*. 2000;26(2-3):187-203.

11. Ferraro KF, Kelley-Moore JA. Cumulative disadvantage and health: long-term consequences of obesity? *Am Sociol Rev.* 2003;68(5):707-729.
12. Pampel FC, Rogers RG. Socioeconomic status, smoking, and health: a test of competing theories of cumulative advantage. *J Health Soc Beh.* 2004;45(3):306-321.
13. Phelan JC, Link BG, Diez-Roux A, Kawachi I, Levin B. “Fundamental causes” of social inequality in mortality: a test of the theory. *J Health Soc Beh.* 2004;45(3):265-285.
14. Zenk S, Schulz AJ, Israel BA, James SA, Bao S, Wilson ML. Neighborhood racial composition, neighborhood poverty, and the spatial accessibility of supermarkets in metropolitan Detroit. *Am J Public Health.* 2005;95(4):660-667.
15. Amesty SC. Barriers to physical activity in the Hispanic community. *J Public Health Pol.* 2003;24(1):41-58.
16. Kumanyika S, Grier S. Targeting interventions for ethnic and low-income populations. *Future Children.* 2006;16(1):187-207.
17. Nestle M. *Food Politics: How the Food Industry Influences Nutrition and Health.* Berkeley, CA: University of California Press; 2002.
18. Burros M, Warner M. Bottlers agree to a school ban on sweet drinks. *New York Times.* May 4, 2006.
19. Warner KE. The economics of tobacco: myths and realities. *Tob Control.* 2000;9(1):78-89.
20. McDaniel PA, Malone RE. Understanding Philip Morris’ pursuit of US government regulation of tobacco. *Tob Control.* 2005;14(6):193-200.

Laura D. Hermer, JD, LLM, is an assistant professor of health policy and bioethics in the Institute for the Medical Humanities at the University of Texas Medical Branch in Galveston.

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# Virtual Mentor

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## MEDICINE AND SOCIETY

### Double Standard for Access to Pain Management

Steven D. Passik, PhD, and Kenneth L. Kirsh, PhD

First, do no harm. Clearly, this is one of the tenets of medicine and the allied health professions and is expressed in one of our core ethical principles: nonmaleficence. If we see a patient in pain and we are unable to relieve it, then, at the very least, we should not contribute further to that patient's suffering. This standard has direct ethical implications in the practice of pain management, since the medications used in this endeavor are, in large part, potentially addictive and habit-forming substances [1-3].

### Pendulum Swings in Pain Management

Opioids have been available in one form or another for thousands of years, and yet they have been avoided, and pain has gone undertreated [4]. The fear of creating or worsening addiction has been one of the main reasons for this irrational avoidance of an effective but admittedly "blunt instrument" in the treatment of pain. For many decades, the exaggerated fear that exposure to these medications brought about addiction—and the intent to prevent that consequence—amounted to nonmaleficence gone awry. Paired with, perhaps, an underestimation of the benefits of simply relieving pain (as opposed to being able to correct its underlying etiology), the need to avoid addiction at all costs has led to tremendous, unnecessary patient suffering.

A paradigm shift that has affected the way opioids are used, however, has been occurring for the past 20 years in the U.S. and several other countries. Fueled by the observation that people with cancer seem to be able to take these medications and enjoy good outcomes (analgesia, enhanced activity, tolerable adverse effects, and minimal or no aberrant drug-taking) the thinking about opioid use changed. Implicit in the change is the obvious assertion that having cancer itself did not bestow protection against addiction [5-7].

As this revolution occurred, the clinical practice and rhetoric of aggressive pain management moved faster than the clinical trials, and, when groups of patients who were considerably more diverse than those with cancer were tested, the results were mixed. Unfortunately, the claims of diminished harm from drug use tended to trivialize addiction to the point where it was commonplace to hear that the risk of taking the medications was virtually nonexistent [8]. Thus, beneficence dictated that opioids could not be ethically withheld in many clinical circumstances. Under this new model, the worst thing a physician could do—ethically speaking—was to deny

opioids. This position downplays at best, and trivializes at worst, the suffering, mortality, and devastation of unchecked addiction.

So professionals who treat pain find themselves at a crossroads: in many respects opioids are still the best pain relief medications we have—they have little in the way of end-organ toxicity; they have no pharmacologic ceiling, allowing for titration in the face of worsened symptoms when appropriate; and, for the most part, they are affordable. Yet we have realized that their wider use does pose a serious risk of addiction for certain vulnerable individuals [9]. Paying proper attention to the downside means that in some situations the worst thing physicians could do—ethically—would be to deny opioids; in other circumstances, it would be to provide access to them.

These ethical differences are easy enough to sort out in the theoretical realm. But medical decision making does not take place in a vacuum. Race, social class, and even celebrity can influence how these two potentially harmful outcomes are viewed. So we now turn to these considerations and the two-tiered system of health care that exists in our country and examine the messages that we inadvertently send to all patients by treating pain and addiction differently, based on whether or not the patient is rich and famous.

### **The Haves**

In a recent article [10], we discussed the role of celebrity and media attention in the perceptions of pain management and addiction in this country by highlighting the case of Elvis Presley. Elvis suffered for years with debilitating chronic pain from Crohn's disease [11], and, in addition to long-term steroids for this inflammatory disease, he was prescribed a plethora of medications to manage side effects.

Celebrity, power, and money bring with them many benefits, one of which often is open access to opioids where they might otherwise be contraindicated without strict oversight and management. We chose Elvis as an exemplar of this because he had a history of abusing drugs and alcohol, reported chronic feelings of emptiness, had a parent whose death was suspected to be due to complications of alcoholism, and his early life was marked by his father's bootlegging and incarceration [12]. Given this history, Elvis was at a high risk for addiction, and he probably would have scored off the charts on any screening tool used in pain management, including the Opioid Risk Tool [13]. Thus, while his health problems would not have precluded opioid therapy for pain, he should only have been prescribed them in the context of a defined structure and control.

As we all know, however, this was not the case, largely because Elvis was rich, powerful, and famous. His addiction became the stuff of myth, viewed not entirely negatively but rather as another example of a lifestyle of excess that included his appetite for attention, food, and women. He was larger than life. The distorted public image of Elvis's suffering and excess probably says a good deal about how our society views its heroes, on the one hand, and how we feel about not-so-famous

overweight people and those dependent on medications, on the other. Suppose Elvis had been a poor, Cushingoid person with vertebral body fractures, pain, and insomnia or agitation from steroids? And suppose he had the same personal and family history of addiction? Might the ethical principles have been applied differently?

We might wonder why it is that different rules regarding access to pain management apply to celebrities and the rich. At one level, it might be a matter of believing that successful people are able to take medications without risk simply because they have been able to achieve fame or success in other realms of their lives. Physicians may assume that whatever talent or trait led their famous patient to be “special,” has a halo effect over all aspects of that person’s life. These same physicians might inherently trust the patient, or at least recognize that it is difficult to put strict management guidelines in place for a person who is travelling the world and probably has several medical professionals at his beck and call. Even recommended levels of risk management [14], such as opioid agreements and urine toxicology screens, might be avoided for fear of upsetting this extraordinary patient. Thus, the trappings of fame might exacerbate an early downfall in individuals prone to problems of substance abuse or misuse.

### **The Have Nots**

What about the rest of us? What rules do we have to live by when it comes to pain medications and the specter of drug abuse and addiction? For one thing, it is clear that a great deal of fear exists about the use of opioids among patients, caregivers, and families [15-17]. When celebrities are treated without proper controls, those of them who are vulnerable to abuse and addiction eventually get into trouble, creating spectacular headlines that only serve to heighten this fear of drug addiction in the general public. People often look up to celebrities as heroes—potentially superhuman—and tend to put them on a pedestal far above themselves. Thus, when a celebrity has an addiction, those without a proper framework to understand what made the celebrity vulnerable in the first place quite naturally tend to assume that the medications are too powerful for everyone.

Celebrity headlines combined with other media pieces about opioid abuse and addiction in general [18, 19], send a strong cumulative message that these medications are dangerous and should be avoided at all costs. Health care professionals and the general public must be taught that the addiction results from a complex interaction between medications and people [20]. This interaction defies simple, one-dimensional solutions such as avoiding the use of pain medicines.

In addition to increased fear of addiction from pain medications prompted by media attention, there is an underreported problem of inadequate access to proper pain management for many in society’s lower tiers. Physicians, too, are influenced by the media and some aspects of “opiophobia” are bound to transfer into their prescribing practices for the general public. Certain statistics seem to confirm this suspicion of inadequate pain treatment, especially among those who are members of ethnic

minorities and those with little education. For instance, Hispanics are half as likely as whites to receive pain medications in emergency rooms when they have the same long bone fractures [21]; older women of color have the highest likelihood of being undertreated for their cancer pain [22, 23], and being uneducated is a risk factor for poor pain care in AIDS patients [24].

### **Setting Standards for Practice**

Discrepancies certainly exist in access to and treatment for pain. A method must be developed that can be used to approach all patients with pain concerns regardless of socioeconomic status or celebrity. First, physicians must recognize that the problem of prescription drug misuse is not simply media hype, nor is it confined to remote areas of the country like eastern Kentucky, nor does it only exist among the poor [25]. Second, with this in mind, physicians should perform an appropriate evaluation of each patient before writing the first prescription for a controlled substance, including opioids. This entails medical evaluation of the pain complaint and also an assessment for vulnerability to misuse or aberrant drug-related behavior.

An understanding of the patient's potential risk factors in the areas of chemical dependency history, psychiatric comorbidities, social and familial situation, genetic loadings, and spirituality must be reached. The results of this assessment are not to be used necessarily to exclude patients from opioid therapy, but they may dictate the level of agreed-upon boundaries that should be put in place or the amount of outside help that might be required to effectively manage the patient's pain. Third, physicians must be honest with themselves about which patients they can handle alone and which patients need more intensive care. In the latter case, they should make referrals to services that can effectively monitor patients. Finally, when drug therapy is initiated, it should be done in the context of a treatment plan based on informed consent to the risks and benefits of all medicines prescribed.

Physicians owe it to their patients to discuss realistic expectations about pain reduction and should help formulate functional goals that the rational pharmacology is meant to achieve. Helping the patient understand how success or failure is to be measured—in terms of pain control but also in terms of function (stabilized or improved), toxicities (manageable or none), and aberrant behaviors (few or none)—is crucial for gaining compliance and understanding of the goals of therapy.

### **References**

1. Haddad A. Ethics in action. The postop orders for a patient who is also a substance abuser. *RN*. 2000;63(1):21-24.
2. Haddad A. Ethics in action. Your cancer patient's pain. *RN*. 1997;60(11):21-22, 24.
3. Haddad A. Ethics in action. What would you do? A doctor admits a female patient with acute lower back pain and orders only normal saline injections. *RN*. 1993;56(3):21, 23-24.
4. Katz N. Opioids: after thousands of years, still getting to know you. *Clin J Pain*. 2007;23(4):303-306.

5. Passik SD, Weinreb HJ. Managing chronic nonmalignant pain: overcoming obstacles to the use of opioids. *Adv Ther.* 2000;17(2):70-83.
6. Passik SD, Kirsh KL, Whitcomb L, et al. A new tool to assess and document pain outcomes in chronic pain patients receiving opioid therapy. *Clin Therap.* 2004;26(4):552-561.
7. Passik SD, Kirsh KL, Whitcomb L, et al. Monitoring outcomes during long-term opioid therapy for non-cancer pain: results with the Pain Assessment and Documentation Tool. *J Opioid Manag.* 2005;1(5):257-266.
8. Passik SD. Same as it ever was? Life after the OxyContin media frenzy. *J Pain Symptom Manage.* 2003;25(3):199-201.
9. Hojsted J, Sjogren P. Addiction to opioids in chronic pain patients: a literature review. *Eur J Pain.* 2007;11(5):490-518.
10. Passik SD, Kirsh KL. King of pain: what Elvis' death tells us about media coverage of celebrities and the pain/addiction interface. *J Opioid Manag.* 2007;3(2):69-70.
11. Higginbotham A. Doctor feelgood. *The Observer.* August 11, 2002. <http://observer.guardian.co.uk/magazine/story/0,11913,772041,00.html>. Accessed January 8, 2007.
12. Tracy K. *Elvis Presley: A Biography.* Westport, CT: Greenwood Press; 2006.
13. Webster LR, Webster RM. Predicting aberrant behaviors in opioid-treated patients: preliminary validation of the Opioid Risk Tool. *Pain Med.* 2005;6(6):432-442.
14. Gourlay DL, Heit HA, Almahrezi A. Universal precautions in pain medicine: a rational approach to the treatment of chronic pain. *Pain Med.* 2005;6(2):107-112.
15. Acello B. Facing fears about opioid addiction. *Nursing.* 2000;30(5):72.
16. Paice JA, Toy C, Shott S. Barriers to cancer pain relief: fear of tolerance and addiction. *J Pain Symptom Manage.* 1998;16(1):1-9.
17. Radbruch L, Sabatowski R, Elsner F, Loick G, Kohlen N. Patients' associations with regard to analgesic drugs and their forms for application—a pilot study. *Support Care Cancer.* 2002;10(6):480-485.
18. Carreyrou J. Narcotic 'lollipop' is big seller despite FDA curbs. *Wall Street Journal.* November 3, 2006. <http://www.post-gazette.com/pg/06307/735399-114.stm>. Accessed December 7, 2007.
19. Hancock CM, Burrow MA. OxyContin use and abuse. *Clin J Oncol Nursing.* 2002;6(2):109-110.
20. Passik SD, Kirsh KL, Portenoy RK. Pain & addictive disease. In: Von Roenn JH, Paice JA, Preodor ME, eds. *Current Diagnosis & Treatment of Pain.* 1st ed. New York, NY: McGraw-Hill; 2006:78-84.
21. Todd KH, Samaroo N, Hoffman JR. Ethnicity as a risk factor for inadequate emergency department analgesia. *JAMA.* 1993;269(12):1537-1539.
22. Cleeland CS. Undertreatment of cancer pain in elderly patients. *JAMA.* 1998;279(23):1914-1915.
23. Cleeland CS, Gonin R, Baez L, Loehrer P, Pandya KJ. Pain and treatment of pain in minority patients with cancer. *The Eastern Cooperative Oncology*

Group Minority Outpatient Pain Study. *Ann Intern Med.* 1997;127(9):813-816.

24. Breitbart W, Passik S, McDonald MV, et al. Patient-related barriers to pain management in ambulatory AIDS patients. *Pain.* 1998;76(1-2):9-16.
25. Hays L, Kirsh KL, Passik SD. Seeking drug treatment for Oxycontin abuse: a chart review of consecutive admissions to a substance abuse treatment facility in the bluegrass region of Kentucky. *J Natl Compr Cancer Network.* 2003;1(3):423-428.

Steven D. Passik, PhD, is the associate attending psychologist in the Department of Psychiatry and Behavioral Sciences at Memorial Sloan-Kettering Cancer Center in New York City and assistant professor of psychology in the Department of Psychiatry at Cornell University Medical College. In 2007 he was awarded a MayDay Fund Pain & Society Fellowship, given the Academy of Psychosomatic Medicine Visiting Professor Award, and the American Psycho-Oncology Excellence in Clinical Care Award. In 2008 Dr. Passik will receive the Elizabeth Narcessian Award for Outstanding Educational Achievements.

Kenneth L. Kirsh, PhD, is an assistant professor in the Department of Pharmacy Practice and Science at the University of Kentucky College of Pharmacy in Lexington. A licensed clinical psychologist, he is interested in chronic pain management, pain and its interface with abuse and addiction, and symptom management and palliative care for people with cancer.

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# Virtual Mentor

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## OP-ED

### Addiction and Sin: Recovery and Redemption

Hans Madueme, MD, MDiv

Many complain that our culture is too beholden to biological psychiatry and genetic reductionism. Much of the discussion on addiction forms part of this cultural background. Thus we inherit, or even construct, different ways of thinking about ourselves, about health and disease, about weal and woe. But not every popular assumption is sober truth. The concern of many Christians, myself included, is the tendency to “medicalize” behavior, such that sin and vice become addiction and disease. This need not be unduly conspiratorial or atavistic. The point is that an older generation was far more likely, on balance, to understand itself and its social world in terms of sin and virtue, vice and godliness. Lack of self-control and weakness of will, for instance, were moral failings to be avoided (with divine help). That sort of language has fallen on hard times. Perhaps there have been attendant gains, but there have also been losses.

What we may have lost is a truer sense of our world’s moral texture. The modern discourse of addiction commits us to specific ways of understanding our world and our selves. It has assumptions about whether (and how) my neighbor, or even God, makes *moral* claims on me, and what—if anything—can be done about it. These are not trivial issues [1]. The relationship between addiction and the Christian doctrine of sin is our interest here. Christian theologian Cornelius Plantinga gives us a helpful definition of sin:

Let us say that a sin is any act—any thought, desire, emotion, word, or deed—or its particular absence, that displeases God and deserves blame. Let us add that the disposition to commit sins also displeases God and deserves blame, and let us therefore use the word sin to refer to such instances of both act and disposition [2].

What then is a Christian attitude towards addiction? Do we condemn addicts because of sinful habits, or are they morally blameless for something beyond their control [3]? To put the question this way is already to invite criticism. In a culture awash in Internet gambling, lotteries, horse racing, food, and sex, it seems harsh to suggest that addicts are to blame for their misery. Glib moralisms are indeed insensitive and naive.

And yet we must take sin seriously. As we suggested, popular discourse often deploys addiction as the explanatory panacea for all kinds of besetting sin and vice.

Addiction brain science itself can quickly undermine, or qualify, confidence in traditional views of moral responsibility. The American Society of Addiction Medicine, for instance, describes addiction as a “primary, chronic, *neurobiological disease*, with genetic, psychosocial, and environmental factors influencing its development and manifestations” (emphasis added) [4]. This need not entail reductionism, especially when addiction is nuanced as “a polygenic disorder that results from interactions between the environment and the effects of a large number of genes, each with a small effect” [5]. Our neuroscientific age, however, raises the reductive questions in a sharp way [6], and I personally worry that the idiom of biological psychiatry exerts an undue influence on addiction research [7]. In any case, it seems hard to deny that the cumulative social and cultural effect of addiction research, rightly or wrongly, calls into question the Christian doctrine of sin.

This doctrine entails a robust notion of moral responsibility or culpability; God is pleased or displeased with us. Catching a cold is a very different thing from coveting my neighbor’s wife; the latter is sin, the former is not. But many addicts feel as if they do not have voluntary control of their behavior. If sins are understood only as self-conscious and high-handed acts (like premeditated murder, rape, or lying), it seems wrong to call addiction sin. Yet, as Edward Welch points out, sin is also a much broader, more insidious and enslaving *condition* [8]. “In sin, we are both hopelessly out of control and shrewdly calculating; victimized yet responsible. All sin is simultaneously pitiable slavery and overt rebelliousness or selfishness. This is a paradox to be sure, but one that is the very essence of all sinful habits” [9].

The relationship between sin and addiction is like the overlapping circles of a Venn diagram. In the smaller, nonoverlapping areas of the circles, we have addictions that involve no sin (e.g., a baby affected by intrauterine cocaine addiction [10]) and sins that have no addictive component (e.g., cheating on my yearly income tax). In most other instances, sin and addiction are coextensive [11]. “Addicts are sinners like everybody else,” Plantinga reminds us, “but they are also tragic figures whose fall is often owed to a combination of factors so numerous, complex, and elusive that only a proud and foolish therapist would propose a neat taxonomy of them.” There must be no trace of “typically judgmental and typically permissive accounts of the relation between sin and addiction: we must say neither that all addiction is simple sin nor that it is inculpable disease” [12]. Such discriminating calls for wisdom and humility.

Now to the main question: Is it possible for addiction research to be happily integrated with Christian perspectives on sin? Here we wade into complex territory. Part of the problem is sociological; addiction research is advocated, discussed, and applied in secular clinical and institutional settings, whereas Christian theology is rooted in churches and seminaries. The other problem is deeper; addiction scientists often may not share the same metaphysical or theological assumptions as the Christian community. So genuine conversation is difficult. One way to begin dialogue is to observe that addiction *per se* does not rule out moral responsibility. Many Christians would argue that we can assign the addict responsibility *proportional* to the voluntary dimension of his actions, recognizing mitigating



factors (e.g., impaired judgment). Other Christians [13] instead would emphasize that you are still responsible for those early binges that triggered your current alcoholism; addictions are ultimately more about our own idolatries than about mitigated responsibility [14]. In any case, virtually all Christians agree that medical and psychiatric professionals can and should help genuine addicts back onto a path of recovery [15]. This gives a clearer picture of the devastating nature of sin—not only does it enslave us spiritually, but it can also enslave us physically. If health care professionals can broadcast this message, one poignant effect may be a prophylaxis for our youth: “Go home, and sin no more.”

In the words of St. Augustine, “you have made us for yourself, and our heart is restless until it rests in you” [16]. By that he meant that all human beings yearn for communion with the living God. We are designed to think, speak, and live in the presence of God. But Augustine also observed our sinful plight; we generally seek happiness apart from God. Our tragedy is that we love the wrong things, or we love the right things disproportionately—and are ultimately *enslaved* by those loves. Our words and actions, our thoughts and imaginations, consistently fall short of the holiness of the Lord. And those of us who claim to be Christians are also guilty—no one is morally blameless—and despite our most valiant efforts, we sin daily. The irony is that Christians, in the spirit of Augustine, believe both in moral responsibility *and* in our (ultimate) moral inability. In a metaphorical idiom, we are all addicts. The experience of addiction is thus not far from any one of us. There’s no room for judgmentalism.

In short, we all need redemption.

### Notes and References

1. In Christian theology, these assumptions relate, roughly, to ontology, anthropology, hamartiology, and soteriology.
2. Plantinga C Jr. *Not the Way It's Supposed to Be: A Breviary of Sin*. Grand Rapids, MI: Wm. B. Eerdmans; 1995:13.
3. The question is posed rhetorically; there are other graded options between these two examples.
4. American Academy of Pain Medicine, the American Pain Society, and the American Society of Addiction Medicine. *Definitions Related to the Use of Opioids for the Treatment of Pain*. <http://www.ampainsoc.org/advocacy/opioids2.htm>. Accessed November 10, 2007.
5. Hall W. Avoiding potential misuses of addiction brain science. *Addiction*. 2006;101(11):1530.
6. For one discussion in the area of law, see Rosen J. The brain on the stand. *New York Times*. March 11, 2007. <http://www.nytimes.com/2007/03/11/magazine/11Neurolaw.t.html?pagewanted=1&ei=5070&en=1e6478172091cfdd&ex=1175918400>. Accessed November 20, 2007.

7. For an illuminating critique of biological psychiatry, from a biopsychosocial perspective, see Ross CA, Pam A. *Pseudoscience in Biological Psychiatry: Blaming the Body*. New York, NY: John Wiley & Sons; 1995. A Christian theologian wants to say much more than this.
8. Welch ET. *Addictions: A Banquet in the Grave: Finding Hope in the Power of the Gospel*. Phillipsburg, NJ: P&R Publishing; 2001:32-36.
9. Welch, 34.
10. This example does not mean to deny that the mother, broader family, and others, are sinfully implicated in this situation. My point is that the baby is not responsible for any ensuing cocaine addiction.
11. Plantinga, 144.
12. Plantinga, 140.
13. One can hardly point to a consensus, but there is some overlap in the way different Christian groups understand addiction.
14. Although this diagnosis can be construed as overly harsh, proponents argue that it actually ennobles and humanizes persons. For a pastoral attempt to make this case, see Welch ET. *Addictions: A Banquet in the Grave: Finding Hope in the Power of the Gospel*.
15. For a dissenting (and iconoclastic) opinion, see Dalrymple T. *Romancing Opiates: Pharmacological Lies and the Addiction Bureaucracy*. New York, NY: Encounter Books; 2006. But see the assessment in Harris L. Drug addiction and the open society. *The New Atlantis*. 2007;17:79-94. <http://www.thenewatlantis.com/archive/17/harris.htm>. Accessed November 20, 2007.
16. Saint Augustine. *Confessions*. Chadwick H, trans-ed. Oxford: Oxford University Press; 1998:1,1,1.

Hans Madueme, MD, MDiv, completed a residency in internal medicine at the Mayo Clinic in Rochester, Minnesota, and is now a PhD student in theological studies at Trinity Evangelical Divinity School in Bannockburn, Illinois. He works part time as a research analyst for the Center for Bioethics and Human Dignity and is also a research fellow for the Henry Center for Theological Understanding.

#### **Related in VM**

[Spirituality and Health in a Therapeutic Culture](#), May 2005

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# Virtual Mentor

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## CORRESPONDENCE

### Comments on the West Virginia Pilot Medicaid Plan

A Response to [Smoking and Medicaid Benefits](#)

The State of West Virginia is implementing a new Medicaid plan with two levels of benefits: a scaled-back basic benefit package, and an “enhanced” benefit package available only to those who sign and conform to an agreement with the state [1]. Of note, the basic package eliminates mental health, substance abuse, and dependence-related treatment; diabetes care; and physical and occupational therapies. Further, this level of coverage limits prescriptions; dental, vision, and hearing treatment; skilled nursing care; and transportation services.

All children and parents who receive Medicaid by virtue of low income will receive this limited package unless they sign a “Medicaid Member Agreement” at their primary care physician’s office. These contracts require, for example, that members keep their appointments, take their medications as prescribed, follow health improvement plans, and avoid unnecessary emergency room use. Physicians are expected to track four health markers and report to the state on the patient’s compliance. Beneficiaries who do not fulfill these responsibilities forfeit “enhanced” benefits, and their coverage reverts to the basic plan [2]. The goals are to reduce health-related expenditures and prevent disease.

At first glance, such a policy may appear reasonable and fair. Calling these changes “common sense,” the *Charleston Daily Mail* opined, “All the state is asking is that patients take their medications, follow their doctors’ orders, and show up on time for their appointments” [3]. Sounds simple enough.

Yet closer examination reveals that this plan has both ethical and practical problems. Although personal responsibility is a laudable goal, punishing those who fail to achieve specified health-related objectives is both unfair and most likely ineffective. It is also at odds with current models of the patient-doctor relationship, which is not a directive model but one characterized by an ongoing process of mutually renegotiated goals within a context of increasing knowledge, support, and empathy on the part of the doctor, and trust and growing self-efficacy on the part of the patient [4].

Behavior change occurs in predictable stages [5] which can be facilitated but not directed by the physician. The development of necessary patient competencies is also predicated on having sufficient time for meaningful interaction between patients and physicians, no longer a given in today’s environment [6]. Moreover, evidence

supports the conclusion that economically and educationally less-advantaged patients need more intensive and prolonged interventions. It is ethically problematic to punish patients who have not had a reasonable opportunity to gain the skills or do not possess the means to manage their disease [7].

The complex determinants of such behaviors as compliance with medication, diabetes control, weight loss, smoking cessation, and keeping appointments are not fully understood, and may not be entirely under anyone's control. An estimated 66 percent of U.S. adults are either overweight or obese [8], and achieving lasting weight loss is a relatively rare phenomenon. An identified subpopulation of heavy smokers is unable to stop smoking due to worsening depression [9]. It is highly unlikely that punitive measures will be effective in motivating patients to make complex lifestyle changes. State Medicaid programs would be better advised to make treatment available for tobacco dependence based on guidelines for medications, counseling, and behavioral approaches; currently only one state provides such complete coverage [10].

There are well-understood reasons why Medicaid beneficiaries have poorer health indicators and higher rates of noncompliance than many other patients. The poor are more likely to live in neighborhoods without safe recreational facilities, where stores lack affordable fresh produce, and where advertising for junk food, alcohol, and tobacco products is widespread [11]. Emergency rooms may be the only available alternative after doctors' offices are closed. Public and Medicaid-provided transportation is notoriously unreliable, and the poor have lower literacy, reduced access to child care, more life crises, and higher rates of untreated psychiatric illnesses, all of which can impede getting to appointments and taking medication.

Medicaid beneficiaries are less likely to have had the kinds of successful experiences that lead to confidence in their ability to improve their health. Poor and minority-group patients generally have greater mistrust of the health care system, and their noncompliance may be an expression of disagreement with a physician with whom they lack the confidence to openly disagree. West Virginia is asking the most vulnerable population to do more than other patients with less ability to accomplish what we ask of them [4].

The plan also discriminates against the sickest and least capable of these—the mentally ill, children, substance abusers, the least educated, and most impoverished—who are most likely to lose the benefits they need [4]. Approximately 75 percent are children who depend on parents or guardians for compliance. Persons with psychiatric illnesses that may compromise their willingness or ability to contract with the state or keep appointments stand to lose their mental health benefits because of such lapses. When their psychiatric illnesses are untreated, their physical health will deteriorate as well.

The Physician Charter on Medical Professionalism [11] enumerates three fundamental principles: the primacy of patient welfare, the principle of patient

autonomy, and the principle of social justice. The West Virginia plan potentially violates all three of these ethical principles. Physicians have an ethical responsibility to speak out on how such policies affect their practices and their patients' health.

## References

1. Mountain Health Choices. *BMS Medicaid Redesign Mountain Health Choices*.  
[http://www.wvdhhr.org/bms/oAdministration/Medicaid\\_Redesign/MedRedesign\\_main.asp](http://www.wvdhhr.org/bms/oAdministration/Medicaid_Redesign/MedRedesign_main.asp). Accessed November 10, 2007.
2. Solomon J. *West Virginia's Medicaid Changes Unlikely to Reduce State Costs or Improve Beneficiaries' Health*. Washington, DC: Center on Budget and Policy Priorities; 2006. <http://www.cbpp.org/5-31-06health.htm>. Accessed November 10, 2007.
3. Medicaid changes are common sense. *Charleston Daily Mail*. June 2, 2006:P4A.
4. Bishop G, Brodkey AC. Personal responsibility and physician responsibility—West Virginia's Medicaid plan. *N Engl J Med*. 2006;355(8):756-758.
5. Diclemente CC, Prochaska JO. Toward a comprehensive model of change: stages of change and addictive behavior. In: Miller WR, Heather N, eds. 2nd ed. *Treating Addictive Behaviors*. New York, NY: Springer; 1998:3-24.
6. Ostbye T, Yarnall KS, Krause KM, Pollak KI, Gradison M, Michener JL. Is there time for management of patients with chronic diseases in primary care? *Ann Fam Med*. 2005;3(3):209-214.
7. Redman BK. Accountability for patient self-management of chronic conditions; ethical analysis and a proposal. *Chronic Illn*. 2007;3(1):88-95.
8. Centers for Disease Control and Prevention. Overweight and obesity. <http://www.cdc.gov/nccdphp/dnpa/obesity/>. Accessed November 10, 2007.
9. Glassman AH, Stetner F, Walsh BT, et al. Heavy smokers, smoking cessation, and clonidine. Results of a double-blind, randomized trial. *JAMA*. 1988;259(9):2863-2866.
10. Redmond P, Solomon J, Lin M. *Can Incentives for Healthy Behavior Improve Health and Hold Down Medicaid Costs?* Washington, DC: Center on Policy and Budget Priorities; 2007. <http://www.cbpp.org/6-1-07health.htm>. Accessed November 10, 2007.
11. ABIM Foundation. American Board of Internal Medicine; ACP-ASIM Foundation. American College of Physicians-American Society of Internal Medicine; European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter. *Ann Intern Med*. 2002;136(3):243-246.

Amy C. Brodkey, MD

Assistant professor of psychiatry, University of Pennsylvania School of Medicine  
Medical director, Behavioral Health Service, Family Practice and Counseling  
Network, Philadelphia.

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### Suggested Readings and Resources January 2008

Acello B. Facing fears about opioid addiction. *Nursing*. 2000;30(5):72.

Alvarez DJ, Rockwell PG. Trigger points: diagnosis and management. *Am Fam Physician*. 2002;65(4):653-660.

American Academy of Pain Medicine, the American Pain Society, and the American Society of Addiction Medicine. *Definitions Related to the Use of Opioids for the Treatment of Pain*. <http://www.ampainsoc.org/advocacy/opioids2.htm>. Accessed November 10, 2007.

American College Obstetrics and Gynecology (ACOG) Committee on Ethics. ACOG Committee Opinion. Number 294, May 2004. At-risk drinking and illicit drug use: ethical issues in obstetric and gynecologic practice. *Obstet Gynecol*. 2004;103(5 Pt 1):1021-1031.

American Medical Association. Council on Medical Education. Report 11 of the Council of Medical Education. The status of education in substance use disorders in America's medical schools and residency programs. Chicago, IL: American Medical Association; 2007. [www.ama-assn.org/ama1/pub/upload/mm/467/cme11a07.doc](http://www.ama-assn.org/ama1/pub/upload/mm/467/cme11a07.doc). Accessed December 13, 2007.

Amesty SC. Barriers to physical activity in the Hispanic community. *J Public Health Pol*. 2003;24(1):41-58.

Anderson CA, Bushman BJ. Effects of violent games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal and prosocial behavior: a meta-analytic review of the scientific literature. *Psychol Sci*. 2001;12(5):353-359.

Andrews M. America's best health plans: desperate to control healthcare costs, employers are rolling out wellness programs with teeth. *U.S. News & World Report*. October 25, 2007. <http://health.usnews.com/articles/health/health-plans/2007/10/25/americas-best-health-plans.html?PageNr=1>. Accessed November 15, 2007.

Arnold LM. Biology and therapy of fibromyalgia. New therapies in fibromyalgia. *Arthritis Res Ther*. 2006;8(4):212.

Arnold LM, Rosen A, Pritchett YL, et al. A randomized, double-blind, placebo-controlled trial of duloxetine in the treatment of women with fibromyalgia with or without major depressive disorder. *Pain*. 2005;119(1-3):5-15.

Bang L, Mao AR. Video game controversies. *AACAP News*. 2007;38(5):246-248.

Barton C. Evaluation and treatment of headache patients in the emergency department; a survey. *Headache*. 1994;34(2):91-94.

Baruch JM. Doctor versus patient: pain mismanagement in the ED. *Atrium*. 2007;Summer:10.

Bennett R, Nelson D. Cognitive behavioral therapy for fibromyalgia. *Nat Clin Pract Rheumatol*. 2006;2(8):416-424.

Bennett RM, Schein J, Kosinski MR, Hewitt DJ, Jordan DM, Rosenthal NR. Impact of fibromyalgia pain on health-related quality of life before and after treatment with tramadol/acetaminophen. *Arthritis Rheum*. 2005;53(4):519-527.

Bird SB, Dickson EW. Clinically significant changes in pain along the visual analog scale. *Ann Emerg Med*. 2001;38(6):639-643.

Bota RG. What we know about ourselves: changing attitudes about treating patients with substance use disorders. *South Med J*. 2006;99(1): 11.

Breitbart W, Passik S, McDonald MV, et al. Patient-related barriers to pain management in ambulatory AIDS patients. *Pain*. 1998;76(1-2):9-16.

Brody M. Internet addictions. *AACAP News*. 2000;31(5):213-215.

Burros M, Warner M. Bottlers agree to a school ban on sweet drinks. *New York Times*. May 4, 2006.

Busch AJ, Barber KA, Overend TJ, Peloso PM, Schachter CV. Exercise for treating fibromyalgia syndrome. *Cochrane Database Syst Rev*. 2007;17(4):CD003786.

Carreyrou J. Narcotic 'lollipop' is big seller despite FDA curbs. *Wall Street Journal*. November 3, 2006. <http://www.post-gazette.com/pg/06307/735399-114.stm>. Accessed December 7, 2007.

Center for Reproductive Rights. *The Center's Cases: Pregnant Women's Rights*. [http://www.reproductiverights.org/crt\\_preg\\_ferguson.html](http://www.reproductiverights.org/crt_preg_ferguson.html). Accessed November 27, 2007.

Center on Addiction and Substance Abuse at Columbia University. *Missed Opportunity: National Survey of Primary Care Physicians and Patients on*



*Substance Abuse*. New York: National Center on Addiction and Substance Abuse at Columbia University; 2000.

<http://www.casacolumbia.org/Absolutenm/articlefiles/29109.pdf>. Accessed December 12, 2007.

Chappel D, Eatough V, Davies MNO, Griffiths MD. Everquest—it's just a computer game right? An interpretative phenomenological analysis of online gaming addiction. *International Journal of Mental Health and Addiction*. 2006;4(3):205-216.

Charlton JP. A factor-analytic investigation of computer "addiction" and engagement. *Br J Psychol*. 2002;93(Pt 3):329-344.

Cherney NI, Catane R. Professional negligence in the management of cancer pain. A case for urgent reforms. *Cancer*. 1995;76(11):2181-2185.

Chossis I, Lane C, Gache P, et al. Effect of training on primary care residents' performance in brief alcohol intervention: a randomized controlled trial. *J Gen Intern Med*. 2007;22(8):1144-1149.

Clauw DJ, Crofford LJ. Chronic widespread pain and fibromyalgia: what we know, and what we need to know. *Best Pract Res Clin Rheumatol*. 2003;17(4):685-701.

Cleeland CS. Undertreatment of cancer pain in elderly patients. *JAMA*. 1998;279(23):1914-1915.

Cleeland CS, Gonin R, Baez L, Loehrer P, Pandya KJ. Pain and treatment of pain in minority patients with cancer. The Eastern Cooperative Oncology Group Minority Outpatient Pain Study. *Ann Intern Med*. 1997;127(9):813-816.

Cleeland CS, Gonin R, Hatfield AK, et al. Pain and its treatment in outpatients with metastatic cancer. *N Engl J Med*. 1994;330(9):592-596.

Committee to Identify Strategies to Raise the Profile of Substance Abuse and Alcoholism Research; Institute of Medicine. *Dispelling the Myths about Addiction: Strategies to Increase Understanding and Strengthen Research*. Washington, DC: National Academies Press; 1997.

Cook DB, Lange G, Ciccone DS, Liu WC, Steffener J, Natelson BH. Functional imaging of pain in patients with primary fibromyalgia. *J Rheumatol*. 2004;31(2):364-378.

Cooper CL. Pregnant and punished. *Planned Parenthood*. <http://www.plannedparenthood.org/news-articles-press/politics-policy-issues/public-affairs/pregnant-punished-14792.htm>. Accessed November 27, 2007.

Cordell WH, Keene KK, Giles BK, Jones JB, Jones JH, Brizendine EJ. The high prevalence of pain in emergency medical care. *Am J Emerg Med.* 2002;20(3):165-169.

Crofford LJ, Rowbotham MC, Mease PJ, et al. Pregabalin for the treatment of fibromyalgia syndrome: results of a randomized, double-blind, placebo-controlled trial. *Arthritis Rheum.* 2005;52(4):1264-1273.

Cuff PA, Vanselow N, eds. *Improving Medical Education. Enhancing the Behavioral and Social Science Content of Medical School Curricula.* Washington, DC: National Academies Press; 2007.

D'Amico EJ, Paddock SM, Burnam A, Kung FY. Identification of and guidance for problem drinking by general medical providers: results from a national survey. *Med Care.* 2005;43(3):229-236.

Dalrymple T. *Romancing Opiates: Pharmacological Lies and the Addiction Bureaucracy.* New York, NY: Encounter Books; 2006.

DeJong W. The stigma of obesity: the consequences of naïve assumptions concerning the causes of physical deviance. *J Health Soc Beh.* 1980;21(1):75-87.

Dunn C. Brief motivational interviewing interventions targeting substance abuse in the acute medical care setting. *Semin Clin Neuropsychiatry.* 2003;8(3):188-196.

Entertainment and Software Association. *2005 Essential Facts About the Computer and Video Game Industry.* Washington, DC: The Entertainment and Software Association; 2006. <http://www.theesa.com/files/2005EssentialFacts.pdf>. Accessed November 12, 2007.

Fackler M. In Korea, a boot camp cure for web obsession. *New York Times.* November 18, 2007.

*Ferguson v City of Charleston*, 532 US 67 (2001).

Ferraro KF, Kelley-Moore JA. Cumulative disadvantage and health: long-term consequences of obesity? *Am Sociol Rev.* 2003;68(5):707-729.

Fiellen DA, Butler R, D'Onofrio G, Brown RL, O'Connor PG. The physician's role in caring for patients with substance use disorders: implications for medical education and training. In: *Project Mainstream: Strategic Plan for Interdisciplinary Faculty Development: Arming the Nation's Health Professional Workforce for a New Approach To Substance Use Disorders: Part II. Discipline-Specific Recommendations for Faculty Development.* Providence, RI: Association for Medical Education and Research in Substance Abuse; 2002.

Fleming MF, Mundt MP, French MT, Manwell LB, Stauffacher EA, Barry KL. Brief physician advice for problem drinkers: long-term efficacy and benefit-cost analysis. *Alcohol Clin Exp Res*. 2002;26(1):36-43.

Gallagher EJ, Liebman M, Bijur PE. Prospective validation of clinically important changes in pain severity measured on a visual analog scale. *Ann Emerg Med*. 2001;38(6):633-638.

Gentilello LM, Ebel BE, Wickizer TM, Salkever DS, Rivara FP. Alcohol interventions for trauma patients treated in emergency departments and hospitals: a cost benefit analysis. *Ann Surg*. 2005;241(4):541-550.

Gentilello LM, Rivara FP, Donovan DM. Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. *Ann Surg*. 1999;230(4):473-483.

Glajchen M. Chronic pain: treatment barriers and strategies for clinical practice. *J Am Board Fam Pract*. 2001;14(3):211-218.

Gold HS, Moellering RC. Antimicrobial-drug resistance. *N Engl J Med*. 1996;335(19):1445-1453.

Gourlay DL, Heit HA, Almahrezi A. Universal precautions in pain medicine: a rational approach to the treatment of chronic pain. *Pain Med*. 2005;6(2):107-112.

Gracely RH, Petzke F, Wolf JM, Clauw DJ. Functional magnetic resonance imaging evidence of augmented pain processing in fibromyalgia. *Arthritis Rheum*. 2002;46(5):1333-1343.

Griffiths MD. Internet “addiction”: an issue for clinical psychology? *Clinical Psychology Forum*. 1996;97:32-36.

Griffiths MD, Daves MNO. Does video game addiction exist? In: Raessens J, Goldstein J, eds. *Handbook of Computer Game Studies*. Cambridge, MA: MIT Press; 2005:361-369.

Griffiths MD, Hunt N. Dependence on computer games by adolescents. *Psychol Rep*. 1998;82(2):475-480.

Grusser SM, Thalemann R, Griffiths MD. Excessive computer game playing: evidence for addiction and aggression? *Cyberpsychol Behav*. 2007;10(2):290-292.

Guru V, Dubinsky I. The patient vs. caregiver perception of acute pain in the emergency department. *J Emerg Med*. 2000;18(1):7-12.

Ha JH, Kim SY, Bae SC, et al. Depression and Internet addiction in adolescents. *Psychopathology*. 2007;40(6):424-430.

Haddad A. Ethics in action. The postop orders for a patient who is also a substance abuser. *RN*. 2000;63(1):21-24.

Haddad A. Ethics in action. What would you do? A doctor admits a female patient with acute lower back pain and orders only normal saline injections. *RN*. 1993;56(3):21, 23-24.

Haddad A. Ethics in action. Your cancer patient's pain. *RN*. 1997;60(11):21-22, 24.

Hall W. Avoiding potential misuses of addiction brain science. *Addiction*. 2006;101(11):1530.

Hancock CM, Burrow MA. OxyContin use and abuse. *Clin J Oncol Nursing*. 2002;6(2):109-110.

Hanson GR, Li TK. Public health implications of excessive alcohol consumption. *JAMA*. 2003;289(8):1031-1032.

Harris L. Drug addiction and the open society. *The New Atlantis*. 2007;17:79-94. <http://www.thenewatlantis.com/archive/17/harris.htm>. Accessed November 20, 2007.

Harris LH, Paltrow L. The status of pregnant women and fetuses in US criminal law. *JAMA*. 2003;289(13):1697-1699.

Hasin DS, Hatzenbueler M, Smith S, Grant BF. Co-occurring DSM-IV drug abuse in DSM-IV drug dependence: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Drug Alcohol Depend*. 2005;80(1):117-123.

Hays L, Kirsh KL, Passik SD. Seeking drug treatment for Oxycontin abuse: a chart review of consecutive admissions to a substance abuse treatment facility in the bluegrass region of Kentucky. *J Natl Compr Cancer Network*. 2003;1(3):423-428.

Higginbotham A. Doctor feelgood. *The Observer*. August 11, 2002. <http://observer.guardian.co.uk/magazine/story/0,11913,772041,00.html>. Accessed January 8, 2007.

Hojsted J, Sjogren P. Addiction to opioids in chronic pain patients: a literature review. *Eur J Pain*. 2007;11(5):490-518.

Holman AJ, Myers RR. A randomized, double-blind, placebo-controlled trial of pramipexole, a dopamine agonist, in patients with fibromyalgia receiving concomitant medications. *Arthritis Rheum*. 2005;52(8):2495-2505.

Hung DY, Rundall TG, Tallia AF, Cohen DJ, Halpin HA, Crabtree BF. Rethinking prevention in primary care: applying the chronic care model to address health risk behaviors. *Milbank Q.* 2007;85(1):69-91.

International Association for the Study of Pain (IASP) Subcommittee on Taxonomy of Pain Terms. *Pain.* 1979;6(3):249.

Johnson SH. Relieving unnecessary treatable pain for the sake of human dignity. *J Law Med Ethics.* 2001;29(Spring):11-12.

Joint Commission on Accreditation of Healthcare Organizations. JCAHO standards. <http://www.jcaho.org/standard/pm.html>. Accessed December 13, 2007.

Kaartinen K, Lammi K, Hypen M, Nenonen M, Hanninen O, Rauma AL. Vegan diet alleviates fibromyalgia symptoms. *Scand J Rheumatol.* 2000;29(5):308-313.

Kaner EF, Lock CA, McAvoy BR, Heather N, Gilvarry E. A RCT of three training and support strategies to encourage implementation of screening and brief alcohol intervention by general practitioners. *Br J Gen Pract.* 1999;49(446):699-703.

Katz N. Opioids: after thousands of years, still getting to know you. *Clin J Pain.* 2007;23(4):303-306.

Koob GF, Le Moal M. Drug abuse: hedonic homeostatic dysregulation. *Science.* 1997;278(5335):52-58.

Kuchinad A, Schweinhardt P, Seminowicz DA, Wood PB, Chizh BA, Bushnell MC. Accelerated brain gray matter loss in fibromyalgia patients: premature aging of the brain? *J Neurosci.* 2007;27(15):4004-4007.

Kumanyika S, Grier S. Targeting interventions for ethnic and low-income populations. *Future Children.* 2006;16(1):187-207.

LaFrance AB. Tobacco litigation: smoke, mirrors and public policy. *Am J Law Med.* 2000;26(2-3):187-203.

Larson AA, Giovengo SL, Russell IJ, Michalek JE. Changes in the concentrations of amino acids in the cerebrospinal fluid that correlate with pain in patients with fibromyalgia: implications for nitric oxide pathways. *Pain.* 2000;87(2):201-211.

Lawson K. Tricyclic antidepressants and fibromyalgia: what is the mechanism of action? *Expert Opin Investig Drugs.* 2002;11(10):1437-1445.

Leape LL. Unnecessary surgery. *Annu Rev Public Health.* 1992;13:363-383.

Liaison Committee on Medical Education. *Part 2: Annual Medical School Questionnaire for 1998-1999*. Chicago, IL: The Liaison Committee on Medical Education; 1999.

Lindberg M, Vergara C, Wild-Wesley R, Gruman C. Physicians-in-training attitudes toward caring for and working with patients with alcohol and drug abuse diagnoses. *South Med J*. 2006;99(1): 28-35.

Marks RM, Sachar EJ. Undertreatment of medical inpatients with narcotic analgesics. *Ann Intern Med*. 1973;78(2):173-181.

McCaig LF, Hughes JM. Trends in antimicrobial drug prescribing among office-based physicians in the United States. *JAMA*. 1995;273(3):214-219.

McDaniel PA, Malone RE. Understanding Philip Morris' pursuit of US government regulation of tobacco. *Tob Control*. 2005;14(6):193-200.

McGregor, J. Sweat more, pay less. *Business Week*. November 5, 2007. [http://www.businessweek.com/magazine/content/07\\_45/b4057083.htm](http://www.businessweek.com/magazine/content/07_45/b4057083.htm). Accessed November 15, 2007.

McLean SA, Williams DA, Stein PK, et al. Cerebrospinal fluid corticotropin-releasing factor concentration is associated with pain but not fatigue symptoms in patients with fibromyalgia. *Neuropsychopharmacology*. 2006;31(12):2776-2782.

Mease P. Fibromyalgia syndrome: review of clinical presentation, pathogenesis, outcome measures, and treatment. *J Rheumatol Suppl*. 2005;75:6-21.

Mertens JR, Weisner C, Ray GT, Fireman B, Walsh K. Hazardous drinkers and drug users in HMO primary care: prevalence, medical conditions, and costs. *Alcohol Clin Exp Res*. 2005;29(6):989-998.

Miller WR, Rollnick S. *Motivational Interviewing: Preparing People for Change*. 2nd ed. New York, NY: The Guilford Press; 2002.

Moldofsky H, Scarisbrick P, England R, Smythe H. Musculoskeletal symptoms and non-REM sleep disturbance in patients with "fibrositis syndrome" and healthy subjects. *Psychosom Med*. 1975;37(4):341-351.

Nestle M. *Food Politics: How the Food Industry Influences Nutrition and Health*. Berkeley, CA: University of California Press; 2002.

Ng BD, Wiemer-Hastings P. Addiction to the internet and online gaming. *Cyberpsychol Behav*. 2005;8(2):110-113.

NHLBI Obesity Education Initiative Expert Panel. *The Practical Guide: Identification, Evaluation and Treatment of Overweight and Obesity in Adults*. Bethesda, MD: National Institutes of Health; 2000.  
[http://www.nhlbi.nih.gov/guidelines/obesity/prctgd\\_c.pdf](http://www.nhlbi.nih.gov/guidelines/obesity/prctgd_c.pdf). Accessed November 15, 2007.

Office of National Drug Abuse Policy. *Leadership Conference on Medical Education in Substance Abuse*. Washington, DC: Office of National Drug Abuse Policy; 2004:37-45.

Paice JA, Toy C, Shott S. Barriers to cancer pain relief: fear of tolerance and addiction. *J Pain Symptom Manage*. 1998;16(1):1-9.

Pampel FC, Rogers RG. Socioeconomic status, smoking, and health: a test of competing theories of cumulative advantage. *J Health Soc Beh*. 2004;45(3):306-321.

Passik SD. Same as it ever was? Life after the OxyContin media frenzy. *J Pain Symptom Manage*. 2003;25(3):199-201.

Passik SD, Kirsh KL. King of pain: what Elvis' death tells us about media coverage of celebrities and the pain/addiction interface. *J Opioid Manag*. 2007;3(2):69-70.

Passik SD, Kirsh KL, Portenoy RK. Pain & addictive disease. In: Von Roenn JH, Paice JA, Preodor ME, eds. *Current Diagnosis & Treatment of Pain*. 1st ed. New York, NY: McGraw-Hill; 2006:78-84.

Passik SD, Kirsh KL, Whitcomb L, et al. Monitoring outcomes during long-term opioid therapy for non-cancer pain: results with the Pain Assessment and Documentation Tool. *J Opioid Manag*. 2005;1(5):257-266.

Passik SD, Kirsh KL, Whitcomb L, et al. A new tool to assess and document pain outcomes in chronic pain patients receiving opioid therapy. *Clin Therap*. 2004;26(4):552-561.

Passik SD, Weinreb HJ. Managing chronic nonmalignant pain: overcoming obstacles to the use of opioids. *Adv Ther*. 2000;17(2):70-83.

Phelan JC, Link BG, Diez-Roux A, Kawachi I, Levin B. "Fundamental causes" of social inequality in mortality: a test of the theory. *J Health Soc Beh*. 2004;45(3):265-285.

Plantinga C Jr. *Not the Way It's Supposed to Be: A Breviary of Sin*. Grand Rapids, MI: Wm. B. Eerdmans; 1995:13.

Portenoy RK. Opioid therapy for chronic nonmalignant pain: a review of critical issues. *J Pain Symptom Manage*. 1996;11(4):203-217.

Portenoy RK. Opioid therapy for chronic nonmalignant pain: clinician's perspective. *J Law Med Ethics*. 1996;24(4):296-309.

Porter J, Jick H. Addiction rare in patients treated with narcotics. *N Engl J Med*. 1980;302(2):123.

Prohibiting discrimination against participants and beneficiaries based on a health factor. 45 CFR 146.121(b)(1)(i).

Prohibiting discrimination against participants and beneficiaries based on a health factor: Application for benefits. 45 CFR 146.121(b)(2)(ii), (f).

Prohibiting discrimination against participants and beneficiaries based on a health factor: Wellness programs. 45 CFR 146.121(f)(2)(iv) and (v).

Puhl R, Brownell KD. Bias, discrimination, and obesity. *Obes Res*. 2001;9(12):788-805.

Racine AD, Joyce TJ, Anderson R. The association between prenatal care and birth weight among women exposed to cocaine in New York City. *JAMA*. 1994;271(15):1161-1162.

Radbruch L, Sabatowski R, Elsner F, Loick G, Kohlen N. Patients' associations with regard to analgesic drugs and their forms for application—a pilot study. *Support Care Cancer*. 2002;10(6):480-485.

Roberts DF, Foehru G, Rideout V. *Generation M: Media in the Lives of 8-18 Year-olds*. Washington, DC: Henry J. Kaiser Family Foundation; 2005.  
<http://www.kff.org/entmedia/upload/Generation-M-Media-in-the-Lives-of-8-18-Year-olds-Report.pdf>. Accessed November 15, 2007.

Rosen J. The brain on the stand. *New York Times*. March 11, 2007.  
<http://www.nytimes.com/2007/03/11/magazine/11Neurolaw.t.html?pagewanted=1&ei=5070&en=1e6478172091cfdd&ex=1175918400>. Accessed November 20, 2007.

Ross CA, Pam A. *Pseudoscience in Biological Psychiatry: Blaming the Body*. New York, NY: John Wiley & Sons; 1995.

Rossy LA, Buckelew SP, Dorr N, et al. A meta-analysis of fibromyalgia treatment interventions. *Ann Behav Med*. 1999;21(2):180-191.

Rubin R. In Tim Ryan's family, he is the addict. *USA Today*. July 20, 2006.  
<http://www.buffalo.edu/news/pdf/July06/USATodayLeonardAddiction.pdf>. Accessed November 27, 2007.



Russell IJ, Orr MD, Littman B, et al. Elevated cerebrospinal fluid levels of substance P in patients with the fibromyalgia syndrome. *Arthritis Rheum.* 1994;37(11):1593-1601.

St. Augustine. *Confessions*. Chadwick H, trans-ed. Oxford: Oxford University Press; 1998:1,1,1.

Scarry E. *The Body in Pain*. Oxford University Press: New York, NY; 1985:13.

Seay AF, Kraut RE. Project Massive: Self-regulation and problematic use of online gaming. In press. *CHI 2007 Proceedings: Proceedings of the ACM conference on human factors in computing systems*.  
<http://www.cs.cmu.edu/~kraut/RKraut.site.files/articles/seay07-GamePlay%26PsychologicalWellbeing.pdf>. Accessed December 12, 2007.

Stahmer SA, Shofer FS, Marino A, Shepherd S, Abbuhl S. Do quantitative changes in pain intensity correlate with pain relief and satisfaction? *Acad Emerg Med.* 1998;5(9):851-857.

Stinson FS, Grant BF, Dawson DA, Ruan WJ, Juang B, Saha T (2005). Comorbidity between DSM-IV alcohol and specific drug use disorders in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Drug Alcohol Depend.* 2005;80(1):105-116.

Substance Abuse and Mental Health Services Administration. *The NSDUH Report: The Nonmedical Use of Prescription Pain Relievers*. May 21, 2004.<http://www.oas.samhsa.gov/>. Accessed November 24, 2007.

Todd KH. Clinical versus statistical significance in the assessment of pain relief. *Ann Emerg Med.* 1996;27(4):439-441.

Todd KH. Patient-oriented outcome measures: the promise of definition. *Ann Emerg Med.* 2001;38(6):672-674.

Todd KH, Deaton C, D'Adamo AP, Goe L. Ethnicity and analgesia practice. *Ann Emerg Med.* 2000;35(1):11-16.

Todd KH, Samaroo N, Hoffman JR. Ethnicity as a risk factor for inadequate emergency department analgesia. *JAMA.* 1993;269(12):1537-1539.

Tofferi JK, Jackson JL, O'Malley PG. Treatment of fibromyalgia with cyclobenzaprine: A meta-analysis. *Arthritis Rheum.* 2004;51(1):9-13.

Tracy K. *Elvis Presley: A Biography*. Westport, CT: Greenwood Press; 2006.

Tversky A, Kahneman D. Judgment under uncertainty: heuristics and biases. *Science*. 1974;185(4157):1124-1131.

Vallerand AH. Street addicts and patients with pain: similarities and differences. *Clin Nurse Special*. 1994;8(1):11-15.

Wallace DJ, Hallegua DS. Fibromyalgia: the gastrointestinal link. *Curr Pain Headache Rep*. 2004;8(5):364-368.

Warner KE. The economics of tobacco: myths and realities. *Tob Control*. 2000;9(1):78-89.

Webster LR, Webster RM. Predicting aberrant behaviors in opioid-treated patients: preliminary validation of the Opioid Risk Tool. *Pain Med*. 2005;6(6):432-442.

Weissman DE, Haddox JD. Opioid pseudoaddiction—an iatrogenic syndrome. *Pain*. 1989;36(3):363-366.

Welch ET. *Addictions: A Banquet in the Grave: Finding Hope in the Power of the Gospel*. Phillipsburg, NJ: P&R Publishing; 2001:32-36.

Wolfe F, Ross K, Anderson J, Russell IJ, Hebert L. The prevalence and characteristics of fibromyalgia in the general population. *Arthritis Rheum*. 1995;38(1):19-28.

Wolfe F, Smythe HA, Yunus MB, et al. The American College of Rheumatology 1990 criteria for the classification of fibromyalgia. Report of the Multicenter Criteria Committee. *Arthritis Rheum*. 1990;33(2):160-172.

Wood PB. A randomized, double-blind, placebo-controlled, parallel-group, multi-center trial comparing the effects of orally administered Xyrem (sodium oxybate) with placebo for the treatment of fibromyalgia [abstract]. *Pain Med*. 2006;7:181.

Wood PB, Patterson JC 2nd, Sunderland JJ, Tainter KH, Glabus MF, Lilien DL. Reduced presynaptic dopamine activity in fibromyalgia syndrome demonstrated with positron emission tomography: a pilot study. *J Pain*. 2007;8(1):51-58.

Wood PB, Schweinhardt P, Jaeger E, et al. Fibromyalgia patients show an abnormal dopamine response to pain. *Eur J Neurosci*. 2007;25(12):3576-3582.

World Health Organization. Dependence syndrome. In: *International Classification of Diseases*. [http://www.who.int/substance\\_abuse/terminology/definition1/en/](http://www.who.int/substance_abuse/terminology/definition1/en/). Accessed December 11, 2007.

Wyatt SA, Vilensky W, Manlandro JJ Jr, Dekker MA 2nd. Medical education in substance abuse: From student to practicing osteopathic physician. *J Am Osteopath Assoc*. 2005;105(6 Suppl 3):S18-25.

Zenk S, Schulz AJ, Israel BA, James SA, Bao S, Wilson ML. Neighborhood racial composition, neighborhood poverty, and the spatial accessibility of supermarkets in metropolitan Detroit. *Am J Public Health*. 2005;95(4):660-667.

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# Virtual Mentor

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## January 2008 Contributors

### Theme Issue Editor

**Allison Grady** is a senior research assistant and an editor of *Virtual Mentor* at the American Medical Association in Chicago. Prior to her position at the AMA she served as the volunteer and special projects coordinator at the Middlesex United Way in Middletown, Connecticut. She is a 2003 graduate of Smith College and is preparing to pursuing a master's degree in nursing.

### Contributors

**Jay M. Baruch, MD**, is an emergency physician and director of the ethics curriculum at the Warren Alpert Medical School of Brown University in Providence, Rhode Island. His first book of short fiction, *Fourteen Stories: Doctors, Patients, and Other Strangers*, was published in 2007 by The Kent State University Press.

**Michael Brody, MD**, is a psychiatrist in private practice in Potomac, Maryland. He is the chair of the Television and Media Committee of the American Academy of Child and Adolescent Psychiatry. He also teaches a course entitled Children and the Media at the University of Maryland and is liaison to the American Academy of Pediatrics Council on Media and Communications.

**Jorie Epstein** is completing her undergraduate degree at the University of Chicago and is a research assistant in ethics at the American Medical Association in Chicago.

**William J. Filstead, PhD**, is director of iSTEP (Innovative Strategies for Transforming the Education of Physicians), a medical education research collaborative of the American Medical Association in Chicago.

**Susan Hayashi, PhD**, is vice president of JBS International Inc. in Silver Spring, Maryland, and project director of the National Institute on Drug Abuse (NIDA) Primary Care Physicians Outreach Project, of which the NIDA Centers of Excellence for Physician Information is a part.

**Laura D. Hermer, JD, LLM**, is an assistant professor of health policy and bioethics in the Institute for the Medical Humanities at the University of Texas Medical Branch in Galveston.

**Kenneth L. Kirsh, PhD**, is an assistant professor in the Department of Pharmacy Practice and Science at the University of Kentucky College of Pharmacy in Lexington. A licensed clinical psychologist, his areas of interest include chronic pain management, pain and its interface with abuse and addiction, and symptom management and palliative care issues in cancer populations.

**Hans Madueme, MD, MDiv**, completed a residency in internal medicine at the Mayo Clinic in Rochester, Minnesota, and is now a PhD student in theological studies at Trinity Evangelical Divinity School in Bannockburn, Illinois. He works part time as a research analyst for the Center for Bioethics and Human Dignity and is also a research fellow for the Henry Center for Theological Understanding.

**Steven D. Passik, PhD**, is the associate attending psychologist in the Department of Psychiatry and Behavioral Sciences at Memorial Sloan-Kettering Cancer Center in New York City, and assistant professor of psychology in the Department of Psychiatry at Cornell University Medical College. In 2007 he was awarded a MayDay Fund Pain & Society Fellowship, given the Academy of Psychosomatic Medicine Visiting Professor Award, and the American Psycho-Oncology Excellence in Clinical Care Award. In 2008 Dr. Passik will receive the Elizabeth Narcessian Award for Outstanding Educational Achievements.

**Kristin Pulatie** is a third-year student at DePaul University College of Law in Chicago. She is a health law fellow and an associate editor for the *Women's Law Caucus* journal. In 2007 she founded the DePaul chapter of Law Students for Reproductive Justice. She is interested in legal aspects of reproductive health care and is a volunteer for Planned Parenthood of Chicago.

**Swathi Reddy** is a fourth-year undergraduate at the University of Chicago where she is majoring in biological sciences and political science. She is also an intern for the Council on Ethical and Judicial Affairs at the American Medical Association in Chicago. Her primary research interest is the interplay between socioeconomic conditions and health, and she hopes to pursue a career in medicine along with public policy.

**Jennifer Reenan, MD**, is a senior research associate in ethics at the American Medical Association in Chicago, and project coordinator of the National Institute on Drug Abuse (NIDA) Centers of Excellence.

**Carol R. Schermer, MD, MPH**, is a trauma surgeon at Loyola University Medical Center in Maywood, Illinois. She is the chair of the injury prevention and control committee of the American College of Surgeons Committee on Trauma. Her primary area of research is in the effectiveness of brief interventions for alcohol use disorders to decrease injury recidivism.

**Bonnie B. Wilford, MS**, is director of the Center for Health Services & Outcomes Research at JBS International, Inc. in Silver Spring, Maryland. She is former director

of the Department of Substance Abuse and former acting director of the Division of Clinical Science at the American Medical Association in Chicago.

**Patrick B. Wood, MD**, is chief medical officer at Angler Biomedical Technologies, LLC. He is also an adjunct assistant professor in the Departments of Psychiatry and Anesthesiology at Louisiana State University Health Sciences Center in Shreveport.

**Richard A. Yoast, MA, PhD**, is the director of the American Medical Association office of alcohol, tobacco and other drug abuse prevention in the Division of Healthy Lifestyles in Chicago. Dr. Yoast's work focuses on changing public policy and increasing physician screening and intervention in patient smoking and excessive alcohol use.

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