# Identifying and Assisting the Impaired Physician

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**ABSTRACT:** An impaired physician is one unable to fulfill professional or personal responsibilities because of psychiatric illness, alcoholism, or drug dependency. Current estimates are that approximately 15% of physicians will be impaired at some point in their careers. Although physicians may not have higher rates of impairment compared with other professionals, factors in their background, personality, and training may contribute and predispose them to drug abuse and mental illness, particularly depression. Many physicians possess a strong drive for achievement, exceptional conscientiousness, and an ability to deny personal problems. These attributes are advantageous for "success" in med-

icine; ironically, however, they may also predispose to impairment. Identifying impairment is often difficult because the manifestations are varied and physicians will typically suppress and deny any suggestion of a problem. Identification is essential because patient well-being may be at stake, and untreated impairment may result in loss of license, health problems, and even death. Fortunately, once identified and treated, physicians often do better in recovery than others and typically can return to a productive career and a satisfying personal and family life. **KEY INDEXING TERMS:** Impairment; Substance abuse; Depression; Alcohol abuse; Physician impairment. [Am J Med Sci 2001;322(1):31–36.]

These are the duties of a physician: First. . . to heal his mind and to give help to himself before giving it to anyone else.—Epitaph of an Athenian doctor, AD 2.

Praditionally, being a physician has involved ac-L cepting responsibilities and meeting the expectations of patients, peers, and society. Today more than ever, physicians must demonstrate high levels of clinical competence, not to mention the new onus of practicing in a fast-paced, cost-efficient manner. Therefore, any behaviors or practices that might compromise a physician's skill need to be identified, addressed, and corrected. In addition, physicians owe it to themselves, their families, and their colleagues, to possess sound mental and physical health. Physician impairment is a situation and a set of behaviors, typically caused by a disease, that can harm both physicians and their families and compromise patient care. If not identified and treated, the impaired physician is likely to experience the loss of license and career, destruction of family and personal life, and even death through overdose, suicide, or other complications of the disease.1

The American Medical Association (AMA) defines an impaired physician as one who is unable to fulfill professional or personal responsibilities because of psychiatric illness, alcoholism, or drug dependency.<sup>2</sup> Although the AMA definition addresses only substance abuse and mental illness, virtually any significant medical problem that affects judgment and performance could compromise the ability to provide correct medical care, producing an impaired physician. However, this article will focus upon substance abuse and also address depression, particularly because the 2 conditions commonly coexist.<sup>3</sup> Impaired physicians in both training and practice settings will be discussed, and methods for identification and assistance will be outlined.

## Magnitude of the Problem

The exact number of impaired physicians in America is unknown and will probably remain that way for several reasons. First, many impaired physicians are not correctly identified or treated. In addition, some that have sought help and entered treatment have done so confidentially and have avoided becoming a statistic because they are not brought to the attention of a state medical association or licensing group. Last, the general definition is imprecise, and impairment may not be an all-ornone phenomenon. For most physicians who become impaired, the process is an evolving one; for example, alcohol consumption may be significant and

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stable for years but at some point becomes abuse and later dependence.

Prevalence rates in the literature for physicians impaired by drugs or alcohol are also imprecise, and range from 2 to 14%.4,5,6 A large national survey of 9600 physicians indicated that 2% had reported substance abuse or dependence problems in the prior year and 8% at some time in their lives. However, 9.3% reported having 5 or more drinks a day at least once in the previous month.<sup>4</sup> A higher rate, 12.9%, comes from self-reports of 1014 male Johns Hopkins University Medical School graduates, aged 52 to 68.5 The Medical Board of California also estimates that 18% of physicians in the state abuse alcohol or other drugs during their lifetime and 2% should be in treatment at any one time. 6 These higher values are more consistent with the 13.5% rate of alcohol disorders in the adult population reported from the National Institute of Mental Health study.<sup>3,7</sup>

The prevalence of depression among physicians is even more difficult to quantify. Retrospective studies of physician admissions to psychiatric hospitals and clinics suggest that doctors have higher rates of depression than the general population. So A landmark prospective study followed Harvard sophomores over 30 years. Forty-seven became physicians, and compared with their peers, they showed higher rates of poor marriages, drug and alcohol abuse, and use of psychotherapy. In another study comparing physicians with lawyers, 20% of the doctors revealed depressive illness and endorsed more depressive feelings in response to both personal and professional stressors.

Particularly alarming are the high rates of depression and suicide among female physicians. A 1979 study comparing the lifetime prevalence of affective illness in female physicians with a group of matched women with Ph.D.s yielded an astonishingly high rate of 39% among the women with M.D.s versus 30% among the women with Ph.D.s.<sup>12</sup> These rates exceed the highest estimate of lifetime affective disorder prevalence among women in the general population, 23.9%.13 Studies of the mental health of medical students and house officers have also revealed high rates of depression during training, particularly during the most stressful periods. 14-18 Whether this illness in training is transient and stress-related or a reflection of major psychiatric impairment is not clear.

The most tragic outcome for the impaired physician is suicide, often coupled with depression and substance abuse. A 1996 comprehensive review reported that suicide rates among physicians were higher than both the general population and other professionals. Most striking is the high rate in female physicians, found in 1 study to be 3 to 4 times that of women in the general population. Last, there is increasing concern that the increasing levels of stress, physician frustration and even burnout in

contemporary medical practice may further aggravate the above problems.

# **Development of the Problem**

Predisposing factors for substance abuse and subsequent impairment may begin early for the health professional. Genetic predisposition toward substance abuse, rearing in a dysfunctional family, and possessing a strong internal drive for achievement and acceptance by others are not uncommon backgrounds for the aspiring professional student.21 Also, more than 70% of Americans drink alcohol and most substance abuse starts with alcohol during the teen years. Because of obvious selection criteria, students entering medical school are unlikely to have been seriously involved with drug-seeking peers and criminal behavior during adolescence, although heavy drinking, often of a binge nature, is common among both college men and women.<sup>22</sup> Most preprofessional students "graduate" from both their college course work and drinking excesses, although previously established drug experimentation and/or drinking patterns may continue into medical school and beyond. Continued experimentation with drugs, particularly marijuana and even cocaine, as well as prescription medication, is not uncommon among medical students.<sup>23,24</sup> Medical students, like their peers outside medicine, are fascinated by drugs, and in their early medical education tend to overestimate their understanding of pharmacology and underestimate, or fail to comprehend, what addiction is and means. Overconfident in their belief that they can maintain "control" over drugs and alcohol, and deluded that addiction is only a problem of "street people," medical students may continue to use and abuse throughout medical school and into residency. Other factors that may place medical students at risk include depression, drinking as a means of coping with stress, lack of self-awareness, denial of stress related problems, and avoidance in seeking help because of fear of loss of confidentiality-factors that also affect residents in training.<sup>25</sup> A large national survey of 1785 residents in training also showed that a high proportion of them had experimented with marijuana, alcohol, cocaine, benzodiazepines, and amphetamines, and more than 70% began their use in college, high school, or earlier, although self-reported actual drug abuse was low.<sup>26</sup> A significant minority also began using benzodiazepines and opiates during their residency years, the period in physicians' training when they first receive prescribing privileges. Some of this drug usage may be to compensate for the stresses and demands of training, including long hours, fatigue, professional disillusionment, lack of emotional support, and limited time to spend with friends and family.

With the completion of residency training, the substance-abusing physician, if not already truly

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drug dependent, begins a professional career that usually includes a clinical practice. Unfortunately, the new practitioner quickly finds the stresses of professional training have merely changed their form in the modern world of medical practice. These new stresses may include demanding patients, families, colleagues and administrators, endless bureaucratic paperwork, and countless telephone calls to wage war against penurious third-party payers, to name but a few. And even if the physician now realizes that it is "time to care for myself and my family," this is usually superficially translated into a new home or better car, because no new insight or understanding of the fundamental problems, including drug dependency, has been gained.

In the spectrum of substances that are abused, alcohol remains foremost, probably because of availability, social acceptance, ease of use with other substances, and its standing as the drug with which most adults have "grown up." Some medical specialties have more dependence problems with certain drug groups, presumably because of availability. Oral medications, such as mood-altering drugs, are available to all physicians, but parenteral narcotics such as meperidine (Demerol) are much more accessible to practitioners engaged in medical and surgical interventions, even though these substances can also be found in the drug cabinet of almost every clinical practice. Fentanyl, a potent mind altering anesthetic with high dependence potential, is readily available to anesthesiologists.<sup>27</sup> Cocaine and marijuana are usually obtained through the same illicit channels used by persons not employed in the health professions.

Although it has received less attention than substance abuse, major depression is also a significant cause of physician impairment. The stress of medical training and practice are frequently implicated as causative agents. Although some investigators attribute the high rate of depression among physicians to the unique stresses of a medical career, others argue that persons who are vulnerable to depression are drawn to the profession. 18,28,29 Indeed, depressed physicians are often found to be psychologically vulnerable before entering into training. Frequently they come from families in which there was depression or medical illness. 12,14 The personality characteristics of competitiveness. obsessiveness, and a tendency to isolate under stress have been identified in depressed physicians and are presumed to serve as predisposing factors.<sup>30</sup> It has even been argued that some physicians enter medicine to defend against fears of death or feelings of inadequacy created by adverse childhood experiences. For these persons, the realities of the medical profession can be overwhelming.<sup>29</sup> When physicians who are predisposed because of genetic factors, life history, or personal inflexibility encounter the stress of the profession, clinical depression may be the end result. $^{30}$ 

# **Identifying the Problem**

Identifying impaired physicians is often difficult because the manifestations are so varied and protean. For example, early on, an observer might only notice patterns of high alcohol intake at social events or general irritability. Problems with personal relations may manifest as marital or interpersonal strife, or demonstrations of increasingly variable and inconsistent behavior toward others. In general, impact upon social and personal life, including family affairs, usually precedes observed problems with professional performance, be it during training or in practice. Physicians, always aware of the importance and centrality of medicine in their lives, usually strive to delay or mitigate the impact of impairment upon their career, preferring to first sacrifice personal life and relations. When true impairment in clinical skills is apparent, the illness is usually severe and long-standing.

Differentiating substance abuse from clinical depression can also be difficult. A depressed colleague or house officer may not be outwardly sad or blue. As with the substance abuser, there may be marked irritability, apathy, or interpersonal strife. The physician's quality of work may decline because of sleep problems, fatigue or poor concentration, and he/she may fall behind on record keeping and other administrative duties. Attempts to compensate for low productivity may result in working excessive hours or rounding at unusual times. The depressed physician may withdraw from participation in once enjoyable social activities and may exhibit an increased use of alcohol and drugs. Clearly, there is a considerable overlap between impairment by substances and depression.

However, identifying the reason for unusual behavior in physicians can also be difficult, because they are given more latitude in eccentric behavior than would be tolerated in others. Falling asleep at social events, berating others in the operating room, writing illegible chart notes, or rounding in the hospital at 2 AM may or may not be indicators of substance abuse and impairment. Unfortunately, professional colleagues and even friends and family usually view this behavior as the purview or even the entitlement of the overworked or eccentric-but still "dedicated"—physician. Coupled with the natural tendency to rationalize, devalue, or just ignore the possibility of impairment, the affected physician, professional colleagues or supervisors, and even immediate family unwittingly join the "conspiracy of silence," and nothing is done. Even if a suspicion or real concern exists, the tendency is to believe that the physician will either "work it out" or the problem will somehow disappear. For the affected physician,

there is typically great difficulty in admitting that a problem exists, much less asking for help. This pattern of suppression and even denial is reinforced through the years of professional training, in which one is not supposed to complain or admit to personal desires or needs, much less shortcomings. In essence, denial is the most consistent hallmark of this disease process for both colleagues and the susceptible physician.

Physicians in training are already prone to performance lapses, including errors in treatment and judgment, not to mention episodic anxiety, depression, and chronic fatigue, producing patterns of behavior simulating "impairment" even without drugs, alcohol, or overt mental illness.31 The general problems and stresses of house staff training have been well-documented and are beyond the scope of this article, except to emphasize that program directors must be extraordinarily astute to detect the exaggerated or atypical patterns of impairment from chemicals apart from the usual variations of human performance during stressful training. On the other hand, good training programs provide conscientious supervision and evaluation, and a knowledgeable training director has the ability and authority to identify a problem, assist the physician, and even require corrective action, options not always as available in the world of private medicine.32 For physicians already in practice, significant errors in treatment and judgment should be uncommon, but might be identified by a nurse, colleague, affected patient, chief of a hospital service, or through a malpractice action. As performance-based peer review becomes more widespread, patterns of aberrant clinical behavior should become more discernible.

Ironically, although treatment options have never been better for impaired physicians, there is the perceived and often real issue of professional, societal, and even legal sanctions. Promised guarantees of "understanding" and "confidentiality" ring hollow to the wary physician who has witnessed, or has heard about, hard-nosed training directors, malpractice lawsuits, and unsympathetic credentialing committees and state licensing boards. Consequently, even if the physician realizes that help is needed, the very real threat of sanctions, job termination, or even the inability to become a physician, if still a student, prevents openness, honesty, and the request for help.

# **Providing Assistance**

Knowledge of the varied manifestations of abuse and addiction or mental illness, as already listed, and an openness to accept the possibility of impairment is required before assistance is possible. The setting in which the problem is first noted often determines how assistance should be provided. For

example, if problems are suspected, but do not obviously involve the workplace, a well-conceived, measured, but corrective response is appropriate and should begin with corroboration. A conversation with another physician colleague, the training director, or even a close personal friend or spouse might start with: "Is it just me or does Jane not seem to be herself recently? Do you think anything is wrong?" If enough evidence is present to warrant further action, a private encounter with the person—perhaps over a cup of coffee—with a sincere inquiry about the physician's change in behavior, mood, or general welfare, is appropriate. Although the typical response will be one of denial of any problem with drugs, alcohol, or depression, an occasional admission of related problems, such as difficulties with family, the medical practice, or training, might be divulged and allow the opportunity to recommend assistance. Initial approaches to help might simply include further discussions, or more concretely, referral to a counselor or other mental health professional. If nothing else, the encounter will allow the expression of personal friendship, sincere concern, privacy, and availability in time of need. But if the problem is job- or performance-related, more immediate measures are required, for 2 reasons. First, as noted before, impairment in the workplace signals a long-standing and usually severe problem. Second, both professional and legal obligations escalate because patients are potentially in jeopardy. If the incident is reported after the fact, an immediate conversation with a more senior professional, or the program director, would begin with the observation of concern or the performance lapse. If the concern is corroborated and substantial enough to warrant action, further steps must be taken. If the situation is an urgent one (for example, a physician is noted to have the smell of alcohol on his or her breath during rounds or is acting inappropriately in the clinic), immediate corroboration and documentation is necessary, particularly because the physician will typically later deny that the situation occurred. If true intoxication impacting performance is suspected, immediate action must also be taken to remove the physician from the clinical responsibilities. Hospital guidelines, usually established through an Employee Assistance Program (EAP), are typically quite clear in this regard, but unfortunately, physicians often refuse to be treated like other employees.<sup>33</sup> That is why hospital staff bylaws must also anticipate this situation so that expeditious action can be taken if necessary. Senior medical and administrative personnel need to have the prior authority to act expeditiously in the truly emergent case to protect the patients and physician from harm. If the physician in question denies that any problem exists, and refuses to seek assistance, even when confronted with documentation, intervention must occur. It is also time to engage other more

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objective professionals practiced in evaluation and intervention, because the skills required at this point are beyond the ability of the amateur, no matter how close a friend or well-intentioned a colleague. Immediate options include contacting a group that has authority over the physician, such as a hospital, school of medicine, a county medical society committee, or program for physician impairment, to discuss a referral. An elaboration of the problems in an objective, sequential, and dispassionate manner, ideally with corroborative information, will substantially help the intervening group and confidentiality can usually be maintained. Detailed descriptions of how these groups function is beyond the scope of this article and may be found elsewhere.<sup>34,35</sup>, In general, they try to work with the physician as advocacy groups, primarily to assist, rather than to sanction, although patient protection must be maintained. A person, group, or center skilled in evaluation of both the nature and extent of substance abuse can also determine whether a coexisting psychiatric problem is present. If the problem is severe and detoxification is required, for example, immediate hospitalization may be required. Usually, however, outpatient treatment is recommended, individualized according to the therapeutic needs of the physician. Having this process already outlined and established, particularly as part of hospital, clinic, or training program regulations or bylaws, makes it difficult for the physician in question to refuse to participate.

Assisting the depressed physician poses many of the same challenges as treating physicians impaired by drug and alcohol abuse. Despite the widespread attempts to remove the stigma of depression and psychiatric treatment, many continue to view depression as a weakness or character flaw rather than as a medical illness. Consequently, physicians will often come to treatment only when no longer able to practice.<sup>35</sup> Some physicians self-medicate with antidepressants, a practice that should be strongly discouraged. Even when accepting of somatic therapies, it is difficult for many physicians to appreciate that stress-reducing lifestyle changes may be equally important to maintain emotional health.<sup>36</sup>

In general, there are several good prognostic indicators as to whether a physician will do well in substance abuse treatment and recovery and be able to return successfully to medical practice or further training. These indicators include an acceptance by the physician that dependency is present and high personal motivation for abstinence and recovery. Second, there need to be supportive family members, significant others, and close friends willing to assist, as well as partners and colleagues willing and able to provide real support at work. Last, there should be minimal problems with legal complica-

tions, issues of licensure, hospital privileges or training regulations, and employment.

#### **Outcome**

Compared with the general population, physicians impaired from substance abuse show better rates of recovery. The reasons for this include high levels of education, motivation, and functioning, and possession of a professional career that provides financial and personal resources that can support and sustain treatment and recovery. Those who are "only" alcoholics do best, with published treatment studies showing recovery rates of 74 to 95% with follow-up from 1 to 6 years. 34,35,37,38 On the other hand, and much like the general population, those using crack cocaine or fentanyl have much higher relapse rates. But whatever the substance or illness, relapse at any time is possible, and given the societal responsibilities of medical practice, aftercare monitoring and follow-up is essential. Follow-up monitoring routinely includes ongoing drug testing, usually through random urine testing, regular attendance at required recovery-based meetings, and periodic evaluations of progress. Usually a written agreement or contract is written between the impaired physician and the supervisor, practice administrator, or the EAP, outlining what is expected from the parties involved and what steps will be taken if and when relapse occurs.<sup>39</sup> Reintegration into the health care environment has to be individualized, and those with dual diagnoses, such as substance abuse and depression, will need additional treatment.40

Although there is no significant body of data regarding the prognosis of physicians who suffer from depression, there is reason to be optimistic. Once a person is diagnosed with major depression and is available for treatment, the therapeutic options are plentiful and effective.

In conclusion, impairment of physicians by both substance abuse and mental illness is common and serious enough to warrant involvement of all health professionals for at least 3 reasons. First, we have a professional and moral obligation to assist our own colleagues in defining and understanding their illnesses and helping them gain needed treatment. Second, we have a professional obligation to protect patients and expect competent care from everyone in our profession. Last, although the great majority of physicians will not become impaired through substance abuse or mental illness, we all share some common traits of personality and behavior that can be both beneficial and destructive to ourselves and others. By trying to understand and help the impaired physician, we gain new insights to ourselves that can only benefit us in our professional and personal lives.

## Acknowledgments

We would like to thank Laura DiPette, past Director of the University of Texas Medical Branch EAP, for her editorial assistance and her Department's committed work to assist impaired health professionals at all levels.

### References

- Coombs RH. Drug impaired professionals. Cambridge (MA): Harvard University Press; 1997. p. 3–30.
- Anonymous. The sick physician. Impairment by psychiatric disorders including alcoholism and drug dependency. JAMA 1973;223:684-7.
- Regier DA, Farmer ME, Rae DS, et al. Comorbidity of mental disorders with alcohol and other drug abuse: results from the Epidemiologic Catchment Area study. JAMA 1990; 264:2511–8.
- Hughes PH, Brandenberg N, Baldwin DC, et al. Prevalence of substance use among US physicians. JAMA 1992; 267:2333-9
- Moore RD, Mead L, Pearson TA. Youthful precursors of alcohol abuse in physicians. Am J Med 1990;88:332–6.
- Medical Board of California. The Medical Board's Diversion Program. Mission statement. Sacramento: Medical Board of California; 1995.
- McAuliffe WE, Rohman M, Breer P, et al. Alcohol use and abuse in random samples of physicians and medical students. Am J Public Health 1991;81:177–82.
- Murray RM. Psychiatric illness in male doctors and controls: an analysis of Scottish hospital inpatient data. Br J Psychiatry 1977;131:1–10.
- Jones RZ. A study of 100 physicians as psychiatric inpatients in a small psychiatric hospital. Am J Psychiatry 1977; 143:1110
- Vaillant GE, Sobowale NC, McArthur C. Some psychologic vulnerabilities of physicians. N Engl J Med 1972;287: 372–5.
- Krakowski AJ. Stress and the practice of medicine. III. Physicians compared with lawyers. Psychother Psychosom 1984;42:143–51.
- Clayton PJ, Marten S, Davis MA, et al. Mood disorders in women professionals. J Affect Disorders 1980;2:37–47.
- Kessler RC, McGonagle KA, Zhao S, et al. Lifetime and 12 month prevalence of DSM-III-R psychiatric disorders in the United States; results from the National Comorbidity Survey. Arch Gen Psychiatry 1994;51:8–19.
- Valko RJ, Clayton PJ. Depression in the internship. Dis Nerv Syst 1975;36:26-9.
- Reuben DB. Depressive symptoms in medical house officers. Arch Intern Med 1985;145:286-8.
- Schneider SE, Phillips WM. Depression and anxiety in medical, surgical, and pediatric interns. Psychol Rep 1993; 72:1145-6.
- Hendrie HC, Clair DK, Brittain HM, et al. A study of anxiety/depressive symptoms of medical students, house staff, and their spouses/partners. J Nerv Ment Dis 1990;178: 204-7.
- 18. Waring EM. Psychiatric illness in physicians: a review. Compr Psychiatry 1974;15:519–30.

- Lindeman S, Laara E, Hakko H, et al. A systematic review on gender-specific suicide mortality in medical doctors. Br J Psychiatry 1996;168:274–9.
- Steppacher RC, Mausner JS. Suicide in male and female physicians. JAMA 1974:228:323-7.
- Virshup B, Coombs RH, Kohatsu W. The primary prevention of addiction in the physician. J Prim Prevent 1993;14: 29–49.
- Wechsler H, Isaac N. 'Binge' drinkers at Massachusetts colleges: prevalence, drinking style, time trends, and associated problems. JAMA 1992:2929-31.
- 23. **Baldwin DC, Hughes PH, Conrad SE, et al.** Substance use among senior medical students: a survey of 23 medical schools. JAMA 1991:265:2074–8.
- 24. Croen LG, Woesner M, Herman M, et al. A longitudinal study of substance use and abuse in a single class of medical students. Acad Med 1997;72:376–81.
- 25. **Gordon LE.** Mental health of medical students: the culture of objectivity in medicine. Pharos Alpha Omega Alpha Honor Med Soc 1996;59:2–10.
- 26. Hughes PH, Conrad SE, Baldwin DS, et al. Resident physician substance use in the United States. JAMA 1991; 265:2069-73.
- 27. Gallegos K, Browne CH, Veit FW, et al. Addiction in anesthesiologists: drug access and patterns of substance abuse. QRB Qual Rev Bull 1988;14:116–22.
- May HJ, Revicki DA. Professional stress among family physicians. J Fam Pract 1985;20:165–71.
- Johnson WDK. Predisposition to emotional distress and psychiatric illness amongst doctors: The role of unconscious and experiential factors. Br J Med Psychol 1991;64:317–29.
- Borenstein DB. Should physician training centers offer formal psychiatric assistance to house officers? A report on the major findings of a prototype program. Am J Psych 1985;142: 1053–7.
- 31. **Green MJ.** What (if anything) is wrong with residency overwork? Ann Intern Med 1995;123:512–7.
- 32. Aach RD, Girard DE, Humphey H, et al. Alcohol and other substance abuse and impairment among physicians in residency training. Ann Intern Med 1992;116:245–54.
- 33. **Solruch DS.** An EAP program for the health profession. In: Hester TW, editor. Professionals and their addictions. Macon (GA): Charter Medical; 1989. p. 105–17.
- 34. **Skutar C.** Physicians Recovery Network targets attitudes about impairment. Mich Med 1990;89:30-2.
- 35. **Gallegos KV, Norton M.** Characterization of Georgia's Impaired Physician Program treatment population: data and statistics. J Med Assoc Ga 1984;73:755–8.
- 36. **Bittker TE.** Reaching out to the depressed physician. JAMA 1976;236:1713–6.
- Femino J, Nirenberg TD. Treatment outcome studies on physician impairment: a review of the literature. R I Med 1994;77:345–50.
- 38. Alpern F, Correnti CE, Dolan TE, et al. A survey of recovering Maryland physicians. Md Med J 1992;41:301–3.
- 39. O'Connor PG, Spickard A Jr. Physician impairment by substance abuse. Med Clin North Am 1997;81:1037–52.
- Hedberg EB, Ziegler PP, Mansky PA. Physician chemical dependency: trends, issues, treatment and consequences. J Med Pract Manage 1997;12:186–90.

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