



Online article and related content
current as of June 29, 2009.

Confronting Depression and Suicide in Physicians: A Consensus Statement

Claudia Center; Miriam Davis; Thomas Detre; et al.

JAMA. 2003;289(23):3161-3166 (doi:10.1001/jama.289.23.3161)

<http://jama.ama-assn.org/cgi/content/full/289/23/3161>

Correction

[Contact me if this article is corrected.](#)

Citations

[This article has been cited 54 times.](#)
[Contact me when this article is cited.](#)

Topic collections

Psychiatry; Depression; Suicide
[Contact me when new articles are published in these topic areas.](#)

Subscribe

<http://jama.com/subscribe>

Permissions

permissions@ama-assn.org
<http://pubs.ama-assn.org/misc/permissions.dtl>

Email Alerts

<http://jamaarchives.com/alerts>

Reprints/E-prints

reprints@ama-assn.org

Confronting Depression and Suicide in Physicians

A Consensus Statement

Claudia Center, JD

Miriam Davis, PhD

Thomas Detre, MD

Daniel E. Ford, MD, MPH

Wendy Hansbrough, BSN

Herbert Hendin, MD

John Laszlo, MD

David A. Litts, OD

John Mann, MD

Peter A. Mansky, MD

Robert Michels, MD

Steven H. Miles, MD

Roy Proujansky, MD

Charles F. Reynolds III, MD

Morton M. Silverman, MD

ATENTION TO DEPRESSION AND suicide in physicians is long overdue. As early as 1858, physicians in England observed that a higher suicide rate exists among physicians than the general population.¹ Since the 1960s, research confirmed physicians' higher suicide rate and identified depression as a major risk factor.^{2,3} Most strikingly, suicide is a disproportionately high cause of mortality in physicians,⁴ with all published studies^{5,6} indicating a particularly high suicide rate in female physicians.

Inattention to depression and suicide in physicians sharply contrasts with heightened attention to physicians' smoking-related mortality. Since the 1960s, declines of 40% to 60% have oc-

Objective To encourage treatment of depression and prevention of suicide in physicians by calling for a shift in professional attitudes and institutional policies to support physicians seeking help.

Participants An American Foundation for Suicide Prevention planning group invited 15 experts on the subject to evaluate the state of knowledge about physician depression and suicide and barriers to treatment. The group assembled for a workshop held October 6-7, 2002, in Philadelphia, Pa.

Evidence The planning group worked with each participant on a preworkshop literature review in an assigned area. Abstracts of presentations and key publications were distributed to participants before the workshop. After workshop presentations, participants were assigned to 1 of 2 breakout groups: (1) physicians in their role as patients and (2) medical institutions and professional organizations. The groups identified areas that required further research, barriers to treatment, and recommendations for reform.

Consensus Process This consensus statement emerged from a plenary session during which each work group presented its recommendations. The consensus statement was circulated to and approved by all participants.

Conclusions The culture of medicine accords low priority to physician mental health despite evidence of untreated mood disorders and an increased burden of suicide. Barriers to physicians' seeking help are often punitive, including discrimination in medical licensing, hospital privileges, and professional advancement. This consensus statement recommends transforming professional attitudes and changing institutional policies to encourage physicians to seek help. As barriers are removed and physicians confront depression and suicidality in their peers, they are more likely to recognize and treat these conditions in patients, including colleagues and medical students.

JAMA. 2003;289:3161-3166

www.jama.com

Author Affiliations: Employment Law Center and the University of California, Hastings College of Law, San Francisco (Ms Center); George Washington University School of Public Health and Health Services, Washington, DC (Dr Davis); Department of Psychiatry, University of Pittsburgh Medical Center, Pittsburgh (Dr Detre); Departments of Medicine, Epidemiology, and Health Policy and Management, Johns Hopkins School of Medicine, Baltimore, Md (Dr Ford); Department of Education, Research, and Development, University of California Medical Center, San Diego (Ms Hansbrough); American Foundation for Suicide Prevention and Department of Psychiatry, New York Medical College, New York (Dr Hendin); American Cancer Society, Atlanta, Ga (Dr Laszlo); Office of the US Surgeon General, Washington, DC (Dr Litts); Division of Neuroscience, Department of Psychiatry, Columbia University Medical Center, New York, NY (Dr Mann); Committee for Physicians'

Health, Medical Society of the State of New York, and Department of Psychopharmacology at Albany College of Union University, Albany (Dr Mansky); the Payne Whitney Clinic, Joan and Sanford I. Weill Medical College of Cornell University, New York, NY (Dr Michels); Department of Medicine and Geriatrics, University of Minnesota Medical School, Minneapolis (Dr Miles); Alfred I. duPont Hospital for Children, Wilmington, Del, and Jefferson Medical College, Philadelphia, Pa (Dr Proujansky); Western Psychiatric Institute and Clinic, University of Pittsburgh Medical Center, Pittsburgh, Pa (Dr Reynolds); and National Suicide Prevention Resource Center, Newton, Mass, and Department of Psychiatry, University of Chicago Medical School, Chicago, Ill (Dr Silverman).

Corresponding Author and Reprints: Herbert Hendin, MD, American Foundation for Suicide Prevention, 120 Wall St, New York, NY 10005 (e-mail: hhendin@afsp.org).

occurred in physicians' mortality rates from smoking-related cancer, heart disease, and stroke.^{7,8} Physicians now face lower mortality risks for cancer and heart disease relative to the general population yet higher risk for suicide.^{9,10} During the decades when physicians led the nation by heeding their own prevention advice to patients regarding smoking, they neglected to seek help for depression themselves and to diagnose it in their patients. This is alarming because depression is a leading cause of disability.¹¹ Even though physicians have easier access to depression treatment than the general public, they face more daunting regulatory and workplace barriers.

Addressing depression and suicidality in physicians more decisively may have a multiplier effect for medical students, residents, and patients. Treatment of mood disorders can lead to better physician mental health and productivity,¹² fewer suicides, and better physical health. Depression is a leading risk factor for coronary artery disease in male physicians.¹³ Because physicians' own health habits affect their health and prevention counseling,¹⁴⁻¹⁶ attention to their depression and suicidality may improve their mentoring and training of young physicians and may improve mental health care of patients. Conversely, as physicians become more skillful at caring for their patients' depression and suicidality, they are more likely to get care for themselves.

Depression is among the most common conditions in primary care patients, yet studies¹⁷⁻¹⁹ find that physicians do not adequately detect or treat 40% to 60% of cases. Nearly 40% of those who die by suicide make contact with their primary care physician within a month of suicide.^{20,21} During that last contact, however, the question of suicide is raised infrequently.²²⁻²⁴ Some physicians hold unwarranted fears that asking patients about suicide will trigger suicidal behavior.²⁵ Some are unaware that suicidality is both treatable and preventable through better detection of depression.²⁵⁻²⁸ There is a window of opportunity to prevent suicide because

many patients are symptomatic for several years before death.^{29,30} This consensus statement was developed to encourage treatment of depression and prevention of suicide in physicians by calling for a shift in professional attitudes and institutional policies to support physicians who seek help.

CONSENSUS PROCESS

The American Foundation for Suicide Prevention convened a workshop on October 6-7, 2002, in Philadelphia, Pa, to develop a consensus statement to evaluate what is known and to devise recommendations for treatment of depression and prevention of suicide in physicians. The American Foundation for Suicide Prevention invited 15 participants with expertise in physician health (D.E.F., J.L., P.A.M.), medical education (M.D., T.D., W.H., R.M.), licensing and credentialing issues (C.C., S.H.M., R.P.), public health (D.E.F., D.A.L., M.M.S.), disability law (C.C.), substance abuse (P.A.M.), depression (H.H., J.M., C.F.R., M.M.S.), and suicidology (H.H., J.M., C.F.R., M.M.S.). The planning committee and the participants conducted an extensive literature review. Key articles recommended by participants were distributed in advance along with their presentation abstracts. The workshop consisted of formal presentations by each participant, and 2 breakout groups focused on overcoming barriers to care posed by physicians in their role as patients and by medical institutions and professional organizations. The groups reconvened in a plenary session to reach consensus on research priorities and recommendations for reform. This consensus statement is intended for physicians and institutions and organizations that train, license, accredit, employ, and represent physicians.

EPIDEMIOLOGY

Depression is as common in physicians as in the general population. The lifetime prevalence is 12.8% for self-reported clinical depression in a prospective study of more than 1300 male medical graduates from Johns Hopkins

University, who were enrolled between 1948 and 1964.¹³ This rate is almost identical to the 12% lifetime prevalence of major depression in US males (ages 45-54 years) in a nationally representative study.³¹ The only difference is in the later age of onset in physicians. The lifetime prevalence is 19.5% for self-identified depression in female physicians in the Women Physicians' Health Study (N=4501), which is a rate comparable with that in women in the general population and women professionals.³² Rates of depression across ethnic groups are similar, except for Asian female physicians, whose rates are lower.³² Cross-sectional rates of depression (15%-30%) are higher in medical students and residents than in the general population.³³⁻³⁵

A systematic review of 14 international studies of suicide in physicians, in articles published from 1963 to 1991, found higher rates of suicide in physicians compared with the general population. The relative risks ranged from 1.1 to 3.4 in male physicians and from 2.5 to 5.7 in female physicians.³ A subsequent large study⁶ from England and Wales (1979-1995) confirmed elevated rates of suicide in female but not in male physicians.

There have been no recent studies of suicide incidence rates for US physicians. In their absence, studies of proportionate mortality (the percentage of deaths in a group due to a particular cause) offer the next best approach. The largest US study⁴ of white, male physician deaths in 28 states during the years 1984 through 1995 found that, compared with white, male professionals, physicians' proportionate mortality ratio was higher for suicide than for all other leading causes of death (FIGURE).

In the general population, the male suicide rate is more than 4 times higher than that in females, whereas in physicians the female rate is as high as the male rate.³ Female physicians have lower rates of suicide attempts than do other females in a nationally representative study.³² A high ratio of suicide completions to attempts may result from phy-

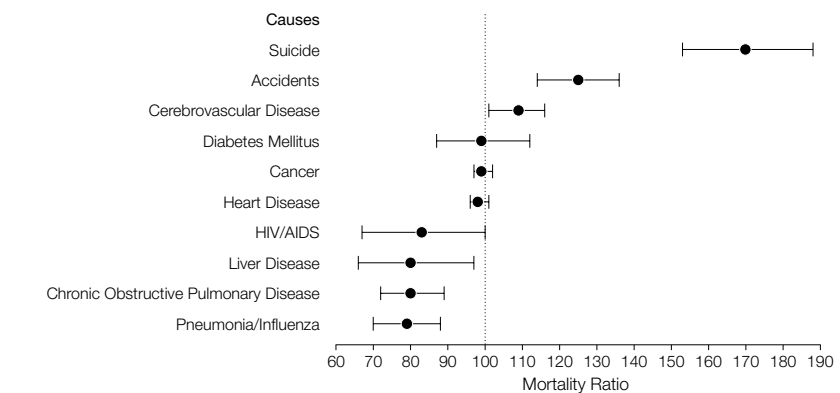
sicians' greater knowledge of toxicology and access to lethal drugs,³ since overdoses of medications, along with firearms, are the 2 most common methods of suicide.^{3,9} The literature suggesting that certain specialists, such as psychiatrists and anesthesiologists, are at increased suicide risk is beset by methodological limitations.³

RISK AND PROTECTIVE FACTORS FOR SUICIDE

Suicide results from a complex interplay of risk and protective factors that are biological, psychological, and social in nature.^{25,36} The major risk factors are mental disorders and substance use disorders. More than 90% of those who die by suicide have at least one of these disorders, most frequently depression (as major depressive disorder or bipolar disorder) and/or alcohol abuse.²⁵ The risk is much greater when both are present. Since most people with these disorders do not die by suicide, additional risk factors are also at play, including stressful events and predisposing factors (eg, impulsivity). Protective factors include effective treatment for mental and physical disorders, social and family support, resilience and coping skills, religious faith, and restricted access to lethal means.^{25,36}

Risk factors for completed suicide are typically examined by psychological autopsy, a process that reconstructs factors that contribute to suicide via semistructured interviews with key informants. Few psychological autopsy studies have been undertaken for physician suicides. One such study³⁷ in Finland during a 12-month period found that all 7 physician suicides in the database had a mood disorder, and 5 also had a disabling physical condition. None had received adequate diagnosis or treatment for their mood disorder. In the United States, the last psychological autopsy study of physicians was conducted approximately 20 years ago.³⁸ In addition to mood and substance use problems, the study found greater likelihood of personal and professional losses, financial problems, a tendency to overwork, and career dis-

Figure. Proportionate Mortality Ratio for White, Male Physicians vs White, Male Professionals, 1984-1995



HIV indicates human immunodeficiency virus. *International Classification of Diseases, Ninth Revision*. Error bars indicate 95% confidence intervals. Data from Frank and Dingle.³²

satisfaction (BOX).^{2,3,38} Anecdotal evidence suggests that even if physicians are treated for suicidality, the quality of treatment, paradoxically, may be compromised because of collegial relationships and deference from the treating clinician who may give more freedom to the physician-patient to control the focus of therapy and to self-medicate.

Physician suicide has been correlated with personal, professional, and financial stresses.³⁸ However, a classic study,³⁹ which followed up 47 physicians throughout 30 years, concluded that long hours, demanding patients, and ready access to narcotics were not problems for physicians who did not have preexisting psychological difficulties evident at college entry. More recent studies⁴⁰ found that physicians experienced stress with a changing set of problems, in particular paperwork and administrative hassles, loss of autonomy, and excessive professional demands. Academic physicians have reported stressors such as long working hours, little vacation time, and conflicts between work and personal life.⁴¹ Although stressors may be changing, there is no evidence that links them to the elevated suicide rate among physicians. Nor is there evidence that physicians are subject to more occupational stress than other professionals.

Rather, recent research indicates that stressful events thought to precipitate suicide are themselves often precipitated by the behavior of patients with affective disorders. Even when suicidal patients do not engender stressful events, their experience of being intensely affected by them is often a function of their preexisting depression.⁴²

ACCESS AND BARRIERS TO CARE

Thirty-five percent of physicians do not have a regular source of health care, which is associated with less use of preventive medical services,⁴³ supporting the observation that the medical profession does not encourage physicians to admit health vulnerabilities or seek help.⁴⁴ Physicians' use of mental health services also appears low, but there is virtually no information on patterns of seeking help. Existing data¹³ are outdated because they refer to treatment from 1960-1980, and they do not differentiate self-treatment from treatment by another clinician. More is known about medical students: they have low rates of seeking help, with only 22% of those who had screened positive for depression using mental health services.³⁴ For depressed students with suicidal ideation, only 42% received treatment. The most frequently cited bar-

Box. Profile of a Physician at High Risk for Suicide

Sex: Male or female

Age: 45 Years or older (woman); 50 years or older (man)

Race: White

Marital status: Divorced, separated, single, or currently having marital disruption

Risk factors: Depression, alcohol or other drug abuse, workaholic, excessive risk taking (especially high-stakes gambler, thrill seeker)

Medical status: Psychiatric symptoms or history (especially depression, anxiety), physical symptoms (chronic pain, chronic debilitating illness)

Professional: Change in status—threats to status, autonomy, security, financial stability, recent losses, increased work demands

Access to means: Access to legal medications, access to firearms

Adapted from Silverman.³

riers to care included lack of time (48%), lack of confidentiality (37%), stigma (30%), cost (28%), and fear of documentation on academic record (24%). Although most of these barriers are reported by the general population,¹⁸ concerns about confidentiality and career prospects may weigh more heavily for young physicians,^{45,46} especially because student health plans usually require care in the setting in which they are educated. One study⁴⁷ found that residency prospects were reduced for otherwise qualified students with a history of psychological counseling.

Practicing physicians with psychiatric disorders often encounter overt or covert discrimination in medical licensing, hospital privileges, health insurance, and/or malpractice insurance. One of the authors (S.H.M.) drew attention to the discriminatory policies of his state's licensing board, which required submission of psychiatric records solely on the basis of his bipolar diagnosis rather than on impaired professional abilities, which boards are justified in inquiring about for protection of patients.⁴⁸ The physician refused access to his psychiatric records, arguing that he was receiving effective treatment and was not impaired, that impairment cannot be inferred from diagnosis alone, and that such policies are overly invasive and counterproductive because they deter physicians from seeking help, thereby posing greater risks to patient care from physicians' untreated illness. After a pro-

tracted standoff and threats of legal action, the licensing board eventually changed its policy to focus on impaired professional abilities rather than on diagnosis alone. As early as 1983, the American Psychiatric Association expressed concern that licensing board questions focused on diagnosis or treatment of mental illness would deter physicians from seeking help.⁴⁹

Most, but not all, state licensing boards have moved from questions about diagnosis or treatment toward questions about impaired professional performance at initial licensure and renewals according to surveys conducted in 1993 and 1996.⁵⁰ However, the time frame of the mental health impairment questions in approximately half of surveyed licensure applications is overly broad, ranging from "past 2 years" to "ever impaired."⁵¹ Furthermore, it is not known whether medical boards use the information to covertly discriminate against a physician who was treated or previously impaired but does not report current impairment.

The Americans With Disabilities Act has been successfully deployed in legal challenges to discriminatory policies by medical licensing boards.⁵² Some courts, however, have held that the Americans With Disabilities Act does not apply to state licensing boards. Even if it does, covert forms of discrimination may continue. Furthermore, many hospitals, clinics, and malpractice insurance carriers continue to ask questions that in-

appropriately focus on psychiatric diagnoses and require review of medical records, but the extent of the problem is not known and deserves study.

It is reasonable to infer that physicians' concern about disclosure of mental health records is widespread, although studies are lacking. Breaches of confidentiality also are believed to harm openness between the physician (as patient) and the treating clinician and may result in needless disclosures to coworkers. Those concerns, coupled with professional attitudes that broadly discourage admission of health vulnerabilities, are likely the driving forces behind physicians' disinclination to seek mental health care.

RECOMMENDATIONS FOR RESEARCH

Physician depression and suicidality have received scant research attention. Most research is outdated, considering that the largest and most recent US study of suicide risk factors in physicians was conducted 20 years ago. The literature is also fraught with methodological problems, including case finding, case definition, sampling bias, and statistical rigor.³ Depression studies largely rely on self-reported diagnoses rather than clinical interviews or validated questionnaires. There are few studies of protective factors for practicing physicians with depression, including help-seeking patterns and quality of care. We make the following recommendations for future research.

- Investigate physician patterns of seeking help, barriers to treatment, degree of impaired abilities, risk and protective factors for depression, substance abuse, and suicidality, including the role of medical specialty and personal or professional stressors.
- Conduct a large psychological autopsy study of physician suicides to determine risk and protective factors, patterns of seeking help, quality of care, and adherence to treatment.
- Determine the current incidence rate of completed suicide by US physicians, including the effect of sex, ethnicity, and specialty.

RECOMMENDATIONS FOR PHYSICIANS

We make the following recommendations for physicians:

- Establish a regular source of health care and seek help for mood disorders, substance abuse, and/or suicidality.
- Learn to recognize depression and suicidality in themselves and educate medical students and residents to do likewise.
- Become informed about state and federal protections for confidentiality of medical records and about legal protections for physicians and others with disabilities. For physicians who are impaired, most commonly by substance use disorders, all states should have physician health programs whose functions include outreach, treatment, monitoring, and advocacy.⁵³ However, physicians should not be referred to physician health programs simply because they have a psychiatric diagnosis or are receiving mental health treatment. The American Foundation for Suicide Prevention is creating a Web site to inform physicians about diagnosing depression in themselves and their legal rights if in psychiatric treatment (<http://www.afsp.org/physician>).

- Routinely screen all primary care patients for depression, as recommended by the US Preventive Services Task Force.⁵⁴ Depression often coexists with medical illness particularly in patients older than 60 years, the group at highest risk for suicide. Screening for depression in patients can help physicians recognize depression in themselves. Improved depression screening also prevents suicide.²⁶⁻²⁸ If depression is suspected, ask patients about suicide. Only 58% of primary care clinicians report questioning depressed patients about suicidal thoughts and behavior, even though such questions are routine in a thorough depression evaluation.⁵⁵

RECOMMENDATIONS FOR INSTITUTIONAL CHANGE

The institutions of medicine—medical schools, hospitals, and licensing and accrediting bodies—minimize or disre-

gard the mental health of physicians, despite the high toll of depression and suicide on physicians, families, and the profession. Medical institutions have lagged behind broader societal emphasis on mental health,^{18,28,56} such as a suicide prevention initiative by the leadership of the US Air Force. That program motivates personnel to seek help and enhances protective factors for a cluster of suicide-related risk factors.⁵⁷ Compared with the years before implementation, the program is associated with relative risk reductions for suicide, fatal accidents, severe family violence, and other outcomes (Kerry Knox, PhD, written communication, December 20, 2002). The program provides a useful model for other communities, including schools, universities, and medical schools. The medical profession can exert its leadership via medical school deans and department chairs to create model programs that simultaneously benefit the mental health of young physicians and the patients they care for. The following are our recommendations for institutions.

Professional Organizations for Physicians, Residents, and Medical Students

- Educate physicians, state licensing boards, hospitals, group practices, and malpractice insurers about the public health benefits of encouraging physicians to seek treatment for depression and suicidality. Consider developing model regulations and policies for state licensing boards, hospitals, and malpractice insurers that encourage physicians to seek help.

- Provide boards with a model relicensure mailing that encourages help seeking for all health conditions and asks screening questions about depression and suicidality, along with other health questions (eg, have you checked your blood pressure?). The answers should be solely for personal use and should not be returned.

State Licensing Boards

- Ensure that licensure regulations, policies, and practices are nondiscrimi-

natory and require disclosure of misconduct, malpractice, or impaired professional abilities rather than a diagnosis (mental or physical).

- Encourage development of continuing medical education curricula on physician depression, suicidality, and risk and protective factors.

Medical Schools and Residency Programs

The Liaison Committee on Medical Education and the Accreditation Committee on Medical Education should mandate that medical schools educate medical students and residents about depression and suicidality, encourage them to seek help, and offer social support for any student or resident who seeks help.

Hospital and Health Care Accrediting Organizations

Impose health system accountability through the Joint Commission on Accreditation of Healthcare Organizations for detection and treatment of depression in all primary care patients, in accordance with the recommendation of the US Preventive Services Task Force.⁵⁴

All Medical Organizations and Institutions

Hold a summit on physician mental health to foster a shift in the culture of medicine to encourage physicians to seek help, treatment of depression or other mental health problems and for prevention of suicide. Inculcate the view that greater priority to mental health of physicians, medical students, and residents serves as a model for patient care at a time of heightened public health attention to depression and suicide.

CONCLUSION

The culture of medicine accords low priority to physician mental health despite evidence of untreated mood disorders and an increased burden of suicide. Barriers to physicians in seeking help are often punitive, including discrimination in medical licensing, hospital privileges, and professional advancement. Professional attitudes and institutional policies need to be changed to encourage

physicians with mental health problems to seek help. As barriers are removed and physicians confront depression and suicidality in their peers, they are more likely to recognize and treat these conditions in patients, including colleagues and medical students.

Author Contributions: All authors contributed to the design of the project, the analysis of data, and final revision of the manuscript. Drafting of the manuscript was performed by Davis, Hendin, Laszlo, Mann, and Reynolds.

Funding/Support: This workshop was supported by the Bob and Lynn Bernard Charitable Fund of the Ayco Charitable Foundation.

Acknowledgment: We thank Danielle Nappi, MSW, of the American Foundation for Suicide Prevention for administrative support.

REFERENCES

- Bucknill JC, Tuke DH. *A Manual of Psychological Medicine*. London, England: John Churchill; 1858.
- Holmes VF, Rich CL. Suicide among physicians. In: Blumenthal S, Kupfer D, eds. *Suicide Over the Life Cycle: Risk Factors, Assessment, and Treatment of Suicidal Patients*. Washington, DC: American Psychiatric Press Inc; 1990:599-615.
- Silverman M. Physicians and suicide. In: Goldman LS, Myers M, Dickstein LJ, eds. *The Handbook of Physician Health: Essential Guide to Understanding the Health Care Needs of Physicians*. Chicago, Ill: American Medical Association; 2000.
- Frank E, Biola H, Burnett CA. Mortality rates and causes among US physicians. *Am J Prev Med*. 2000; 19:155-159.
- Lindeman S, Laara E, Hakko H, Lonnqvist J. A systematic review on gender-specific suicide mortality in medical doctors. *Br J Psychiatry*. 1996;168:274-279.
- Hawton K, Clements A, Sakarovich C, Simkin S, Deeks JJ. Suicide in doctors: a study of risk according to gender, seniority and specialty in medical practitioners in England and Wales, 1979-1995. *J Epidemiol Community Health*. 2001;55:296-300.
- Centers for Disease Control and Prevention. Current trends smoking-related mortality decline among physicians—Rhode Island. *MMWR Morb Mortal Wkly Rep*. 1990;39:656-658.
- Nelson DE, Giovino GA, Emont SL, et al. Trends in cigarette smoking among US physicians and nurses. *JAMA*. 1994;271:1273-1275.
- Carpenter LM, Swerdlow AJ, Fear NT. Mortality of doctors in different specialties: findings from a cohort of 20 000 NHS hospital consultants. *Occup Environ Med*. 1997;54:388-395.
- Torre D, Wang NY, Mead LA, et al. Mortality in a prospective study of physicians. *J Gen Intern Med*. 2000; 15(suppl 1):150.
- World Health Organization. *The World Health Report 2001—Mental Health: New Understanding, New Hope*. Geneva, Switzerland: World Health Organization; 2001. Available at: <http://www.who.int/whr2001/2001/main/on/pdf/whr2001.on.pdf>. Accessed December 1, 2002.
- Simon GE, Barber C, Birnbaum HG, et al. Depression and work productivity: the comparative costs of treatment versus nontreatment. *J Occup Environ Med*. 2001;43:2-9.
- Ford DE, Mead LA, Chang PP, Cooper-Patrick L, Wang NY, Klag MJ. Depression is a risk factor for coronary artery disease in men: the precursors study. *Arch Intern Med*. 1998;158:1422-1426.
- Wells KB, Lewis CE, Leake B, Ware JE Jr. Do physicians preach what they practice? a study of physicians' health habits and counseling practices. *JAMA*. 1984;252:2846-2848.
- Cummings KM, Giovino G, Sciandra R, Koenigsberg M, Emont SL. Physician advice to quit smoking: who gets it and who doesn't? *Am J Prev Med*. 1987; 3:69-75.
- Frank E, Kunovich-Frieze T. Physicians' prevention counseling behaviors: current status and future directions. *Prev Med*. 1995;24:543-545.
- Simon GE, VonKorff M. Recognition, management, and outcomes of depression in primary care. *Arch Fam Med*. 1995;4:99-105.
- US Department of Health and Human Services. *Mental Health: A Report of the Surgeon General*. Rockville, Md: US Dept of Health and Human Services; 1999.
- Young AS, Klap R, Sherbourne CD, Wells KB. The quality of care for depressive and anxiety disorders in the United States. *Arch Gen Psychiatry*. 2001;58:55-61.
- Pirkis J, Burgess P. Suicide and recency of health care contacts: a systematic review. *Br J Psychiatry*. 1998; 173:462-474.
- Luoma JB, Martin CE, Pearson JL. Contact with mental health and primary care providers before suicide: a review of the evidence. *Am J Psychiatry*. 2002; 159:909-916.
- Appleby L, Amos T, Doyle U, Tomenson B, Woodman M. General practitioners and young suicides: a preventive role for primary care. *Br J Psychiatry*. 1996; 168:330-333.
- Matthews K, Milne S, Ashcroft GW. Role of doctors in the prevention of suicide: the final consultation. *Br J Gen Pract*. 1994;44:345-348.
- Isometsa ET, Heikkinen ME, Marttunen MJ, Henriksson MM, Aro HM, Lonnqvist JK. The last appointment before suicide: is suicide intent communicated? *Am J Psychiatry*. 1995;152:919-922.
- Goldsmith SK, Pellmar TC, Kleinman AM, Bunney WE, eds. *Reducing Suicide: A National Imperative*. Washington, DC: National Academies Press; 2002.
- Rutz W, von Knorring L, Walinder J. Frequency of suicide on Gotland after systematic postgraduate education of general practitioners. *Acta Psychiatr Scand*. 1989;80:151-154.
- Rutz W, von Knorring L, Walinder J. Long-term effects of an educational program for general practitioners given by the Swedish Committee for the prevention and treatment of depression. *Acta Psychiatr Scand*. 1992;85:83-88.
- Public Health Service. *National Strategy for Suicide Prevention: Goals and Objectives for Action*. Rockville, Md: US Dept of Health and Human Services; 2001.
- Fawcett J, Clark DC, Scheftner WA. The assessment and management of the suicidal patient. *Psychiatr Med*. 1991;9:299-311.
- Shaffer D, Craft L. Methods of adolescent suicide prevention. *J Clin Psychiatry*. 1999;60(suppl 2):70-74.
- Blazer DG, Kessler RC, McGonagle KA, Swartz MS. The prevalence and distribution of major depression in a national community sample: the National Comorbidity Survey. *Am J Psychiatry*. 1994;151:979-986.
- Frank E, Dingle AD. Self-reported depression and suicide attempts among US women physicians. *Am J Psychiatry*. 1999;156:1887-1894.
- Zoccolillo M, Murphy GE, Wetzel RD. Depression among medical students. *J Affect Disord*. 1986;11:91-96.
- Givens JL, Tjia J. Depressed medical students' use of mental health services and barriers to use. *Acad Med*. 2002;77:918-921.
- Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. *Ann Intern Med*. 2002;136: 358-367.
- Mann JJ. A current perspective of suicide and attempted suicide. *Ann Intern Med*. 2002;136:302-311.
- Lindeman S, Heinanen H, Vaisanen E, Lonnqvist J. Suicide among medical doctors: psychological autopsy data on seven cases. *Arch Suicide Res*. 1998;4: 135-141.
- American Medical Association Council on Scientific Affairs. Physician mortality and suicide: results and implications of the AMA-APA pilot study. *Conn Med*. 1986;50:37-43.
- Vaillant GE, Sobowale NC, McArthur C. Some psychologic vulnerabilities of physicians. *N Engl J Med*. 1972;287:372-375.
- Kaiser Family Foundation. National survey of physicians, part III: doctors' opinions about their profession; 2002. Available at: <http://www.kff.org/content/2002/20020426c/PhysicianSurveypartIII.pdf>. Accessed December 1, 2002.
- Linn LS, Yager J, Cope D, Leake B. Health status, job satisfaction, job stress, and life satisfaction among academic and clinical faculty. *JAMA*. 1985;254:2775-2782.
- Hendin H, Haas AP, Maltsberger JT, Lipschitz A, Weintraub K. Determination of precipitating events in the suicide of psychiatric patients. *Suicide Life-Threatening Behav*. 2003;33:111-119.
- Gross CP, Mead LA, Ford DE, Klag MJ. Physician, heal thyself? regular source of care and use of preventive health services among physicians. *Arch Intern Med*. 2000;160:3209-3214.
- Levine RE, Bryant SG. The depressed physician: a different kind of impairment. *Hosp Phys*. 2000;36:67-71, 86.
- Plaut SM, Maxwell SA, Seng L, O'Brien JJ, Fairclough GF Jr. Mental health services for medical students: perceptions of students, student affairs deans, and mental health providers. *Acad Med*. 1993;68:360-365.
- Roberts LW, Hardee JT, Franchini G, Stidley CA, Siegler M. Medical students as patients: a pilot study of their health care needs, practices, and concerns. *Acad Med*. 1996;71:1225-1232.
- Oppenheimer K, Miller M, Forney P. Effect of history of psychological counseling on selection of applicants for residencies. *J Med Educ*. 1987;62:504-508.
- Miles SH. A challenge to licensing boards: the stigma of mental illness [A Piece of My Mind]. *JAMA*. 1998; 280:865.
- American Psychiatric Association. Position statement on confidentiality of medical records: does the physician have a right to privacy concerning his or her own medical records? *Am J Psychiatry*. 1984;141:331-332.
- Hansen TE, Goetz RR, Bloom JD, Fenn DS. Changes in questions about psychiatric illness asked on medical licensure applications between 1993 and 1996. *Psychiatr Serv*. 1998;49:202-206.
- Sansone RA, Wiederman MW, Sansone LA. Physician mental health and substance abuse: what are state medical licensure applications asking? *Arch Fam Med*. 1999;8:448-451.
- Medical Society of New Jersey v Jacobs*, 1993 US Dist, LEXIS 14294, 1993 WL 413016 (D NJ October 5, 1993).
- Mansky P. Physician health programs and the potentially impaired physician with a substance use disorder. *Psychiatr Serv*. 1996;47:465-467.
- US Preventive Services Task Force. Screening for depression: recommendations and rationale. *Ann Intern Med*. 2002;136:760-764.
- Williams JW Jr, Rost K, Dietrich AJ, Ciotti MC, Zydzanski SJ, Cornell J. Primary care physicians' approach to depressive disorders: effects of physician specialty and practice structure. *Arch Fam Med*. 1999;8:58-67.
- President's New Freedom Commission on Mental Health. Interim Report to the President. Available at: <http://www.mentalhealthcommission.gov/reports/INTERIM.htm>. Accessed December 1, 2002.
- Centers for Disease Control and Prevention. Suicide prevention among active-duty Air Force personnel—United States, 1990-1999. *MMWR Morb Mortal Wkly Rep*. 1999;48:1053-1057.