

The Interface



PHYSICIAN SUICIDE: A Fleeting Moment of Despair

by Randy A. Sansone, MD, and Lori A. Sansone, MD

Psychiatry (Edgemont) 2009;6(1):18–22

This ongoing column is dedicated to the challenging clinical interface between psychiatry and primary care—two fields that are inexorably linked.

ABSTRACT

In this article, we examine the somber issue of suicide among physicians. While there is some variation in the literature regarding prevalence, the majority of studies indicates higher rates of suicide

among physicians than the general population, particularly among female physicians. Potential contributory factors include various Axis I disorders (especially mood, drug use, and alcohol-related disorders), cognitive style,

psychosocial factors, and particular personality characteristics. We urge physicians to be aware of these risk factors.

KEY WORDS

suicide, physician suicide, physician stress

INTRODUCTION

In this edition of *The Interface*, we explore the somber topic of physician suicide. Certainly, much of the literature in this area indicates that there is a higher rate of suicide among physicians compared with the general population, particularly among female physicians. However, are there any reasonable predictors and/or personality factors that predispose physicians to suicide? In the following article, we examine these and other related issues.

SUICIDE RATES AMONG PHYSICIANS

For years, the literature has been peppered with the observation that there appears to be a higher suicide rate among physicians than the general population. For example, in 1971, Ross reviewed the literature on physician suicide over the preceding 75 years, noted high rates, and concluded that, “One cannot avoid pondering what lies behind these startling statistics.”¹ Following a 1976 retrospective analysis of data, Von Brauchitsch noted a number of methodological concerns with existing studies and concluded that there was no convincing evidence that the rates of suicide among physicians were any higher than those encountered in the general population.² In 1987, Bourgeois et al³ examined various national databases and concluded that female, but not male, physicians evidenced a higher rate of suicide. In 2005, Hampton⁴

reviewed the studies over the preceding four decades and concluded that, compared with non-physicians, the prevalence of suicide among physicians is genuinely higher than the general population. In this latter study, the author estimated that the risk was 70 percent higher for male and 250 to 400 percent higher for female physicians. In that same year, Torre and colleagues compared all-cause mortality between physicians and the general population; they found that suicide was the only cause of death where the risk for physicians was higher than the general population.⁵

In addition to the preceding literature reviews, over the past 40 years, a number of epidemiological investigations have taken place, predominantly in the US and Scandinavia. The majority of these studies are summarized in Table 1 (note that this may not be a complete list).⁶⁻¹⁵ In three studies,^{9,11,15} the rates of suicide for male physicians were either no different or lower than the general population. However, in the majority of these empirical endeavors, suicide rates among male physicians were indeed higher than the general population. In contrast, in no study has an investigator reported that the suicide rates of female physicians are lower than rates found in the general population. In addition, in all studies that have examined male and female physicians in comparison with the general population,^{7, 10,11,15} the suicide rates for female physicians have consistently exceeded the rates for male physicians.

Collectively, what does this information tell us? First, compared with the general population, suicide rates among physicians generally tend to be higher. Second, some studies of the suicide rates among

male physicians have found rates equal to or lower than the general population, though these clearly under-number those that have found higher rates. Third, in all studies to date that have compared physician suicide rates with the general population, female physicians consistently have higher suicide rates than male physicians.

CONTRIBUTORY FACTORS TO SUICIDE IN PHYSICIANS

Because suicide is a retrospective and uncommon event, the analysis of the contributory variables is oftentimes characterized by a seemingly unending number of associated factors. These factors seem to vary from study to study as a function of the methodology (e.g., the variables under study, the study population). In the literature on physician suicide, this appears to be the case, as well. However, a number of pragmatic contributory factors have been identified.

Axis I disorders. As in the case of suicide by nonphysicians, suicide among physicians may be associated with a number of mental disorders.^{16,17} However, according to the literature, few physicians receive mental healthcare before their deaths.¹⁸ Among the various Axis I disorders, mood disorders are commonly noted,¹⁹ particularly among women.^{20,21} As an example of the prevalence of depression among physicians, according to a 2006 survey by the American College of Physician Executives, over two-thirds of responding physicians reported burn-out and nearly a third acknowledged current depression.²²

As with suicide in the general population, in addition to depression, alcohol and substance abuse are common factors associated with physician suicides.^{16,23} Alcohol and/or substance usage affect anywhere

from 20 to 40 percent of physician suicide completers.²⁴

Cognitive style. How we humans cognitively process material affects our behavior. In this vein, Duberstein et al²⁵ examined the perceived “rationality” of suicide among 114 primary care physicians. In this sample, 61 percent of participants believed that suicide could be a rational choice under certain circumstances. Interestingly, women were more likely than men to support this view, which echoes the behavioral pattern of higher rates of suicide in women compared with men.

Psychosocial factors. A number of psychosocial factors have been identified as contributory to physician suicides. These include role strain as well as role conflicts^{26,27} and physician dissatisfaction with career choice.²⁷ The first of these, role strain, may include excessive occupational demands as well as the lack of personal support.²⁸ Competing life responsibilities appear to be an important factor in role strain, particularly with regard to household responsibilities. As an illustration, despite the evolving and changing gender roles in providing parenting, women still tend to dominate childcare. This observation, coupled with the demands of medicine, may explain the considerable stress with which women struggle in their earnest efforts to balance family and career.²⁹

As for role conflicts and career dissatisfaction, these may be particularly relevant for physicians practicing in contemporary times. Physicians must struggle with ever-increasing educational debt, unrealistic patient expectations, pressures for higher patient quotas, questionable performance assessments and rankings by insurers, dwindling reimbursements,

TABLE 1. Summary of major publications on physician suicide since 1973

AUTHOR(S)	PUBLICATION YEAR	SAMPLE CHARACTERISTICS	SUICIDES (N)	SUICIDE RATE*
Rose, Rosow ⁶	1973	US (California) 1959–1961	51	69/100K; 2X greater than the general population
Steppacher and Mausner	1974	US 1965–1970 (<i>JAMA</i> obituary listings)	530	Males: 1.15 X greater risk than general population
				Females: 3 X greater risk than general population
Pitts et al ⁸	1979	US 1967–1972 females only (AMA records)	Females: 49	40.7/100K
				4X rate in same-age females
Rich and Pitts ⁹	1979	US 1967–1972 males only	Males: 544	3.03% deaths; 35.7/100K; not different than other men over the age of 25
Arnetz et al ¹⁰	1987	Sweden 1961–1970	42	Males: SMR**=1.2 90% CI
				Females: SMR**=5.7 90% CI
Lindeman et al ¹¹	1997	Finland 1986–1993	Males: 35	Males: 54/100K; SMR**= 0.9 (0.6-1.2) 95% CI
			Females: 16	Females: 35/100K; SMR**= 2.4 (1.5-4.0) 95% CI
Aasland et al ¹²	2001	Norway 1960–1989	Males: 73	Males: 47.7/100K
			Females: 9	Females: 32.3/100K; both greater rates than those with other or no university education
Stack ¹³	2004	US 1990 National Mortality Detail Files	6,198	Physicians with 2.45 X greater suicide risk than general population
Hem et al ¹⁴	2005	Norway 1960–2000	Males: 98	Males: 43.0/100K person-years
			Females: 13	Females: 26.1/100K person-years; both greater than other graduates or general population
Petersen, Burnett ¹⁵	2008	US 26 states 1984–1992	Males: 181	Males: 27.2/100K; SRR*** = 0.80 (0.53-1.20) 95% CI
			Females: 22	Females: 5.7/100K; SRR***=2.39 (1.52-3.77) 95% CI

*Shaded segments represent suicide rates that are comparable to or less than others/general population; **standardized mortality rate; ***age standardized suicide rate ratios; Note: AMA = American Medical Association; CI = confidence

medical malpractice worries, demands for continuing education, loss of social status, and competition from nonphysician providers. All of these burdens have potentially deep-seated effects on morale. Indeed, among the physicians surveyed by the American College of Physicians in the Physician Morale Survey in

2006, nearly 60 percent indicated that they had at some point “considered leaving medicine.”²² Other psychosocial contributory variables to physician suicide include divorce,¹⁶ physical disability,¹⁷ and domestic violence.²¹

Personality stylings of physicians. In addition to the presence of Axis I disorders,

specific cognitive stylings, and psychosocial factors, the personality traits or characteristics of physicians may function as vulnerability factors for suicide. Using various types of comparison groups, the personality characteristics of physicians have been described as obsessive compulsive,³⁰ dysthymic,³⁰

Physicians must struggle with ever-increasing educational debt, unrealistic patient expectations, pressures for higher patient quotas, questionable performance assessments and rankings by insurers, dwindling reimbursements, medical malpractice worries, demands for continuing education, loss of social status, and competition from nonphysician providers. All of these burdens have potentially deep-seated effects on morale.

achievement-oriented,³¹ conscientious,³¹ introverted,³² and anxious,³² as well as self-blaming and sensitive.³³ According to the literature, physicians-at-risk tend to avoid “crying out for help,”³⁴ over-emphasize their professional identity,³⁵ lack adequate self-integration (i.e., the outer persona does not match the inner psyche),³⁶ are overly self-reliant,³⁷ and tend to deny personal distress or psychological discomfort.³⁸ These types of characteristics and personality features seem to suggest excessive self-reliance, high expectations of self, and nondisclosure of personal distress. Thus, during times of personal crisis, physicians might be less likely than others to seek help.

All of the preceding influences are probably best viewed as risk factors—factors that are potentially additive and cumulative over time.

CONCLUSIONS

While male physicians may or may not have a suicide rate that exceeds that of the general population (they likely do), female physicians appear to have rates that consistently exceed that of male physicians and their nonphysician female peers. A number of factors may contribute to the higher-than-expected rates of suicide in physicians, including Axis I disorders (i.e., mood, alcohol,

substance-use disorders); the perceived “rationality” of suicide; and various psychosocial factors or stressors. These may interface with a physician personality style that tends to be independent and self-sufficient—i.e., one that precludes a willingness to ask for help or be reliant on others for support and care.

Given the current climate of healthcare and the seemingly unending stressors in the practice of medicine, we physicians must be mindful of ourselves and our colleagues. We need to be sensitive to psychological distress in ourselves and others and be willing to obtain and offer support when needed. In many cases, the suicidal impulse is a temporary phenomenon—one that will pass. We must be on guard not to lose ourselves or talented colleagues in a fleeting moment of despair.

REFERENCES

1. Ross M. Suicide among physicians. *Psychiatry Med.* 1971;2:189–198.
2. von Brauchitsch H. The physicians's suicide revisited. *J Nerv Ment Dis.* 1976;162:40–45.
3. Bourgeois M, Peyre F, Delile J-M, Pommereau X. Suicide among medical doctors, psychiatrists, medical and psychiatry students, and doctors' wives. *Psychol Med.* 1987;19:631–633.
4. Hampton T. Experts address risk

- of physician suicide. *JAMA.* 2005;294:1189–1191.
5. Torre DM, Wang N-Y, Meoni LA, et al. Suicide compared to other causes of mortality in physicians. *Suicide Life Threat Behav.* 2005;35:146–153.
6. Rose KD, Rosow I. Physicians who kill themselves. *Arch Gen Psychiatry.* 1973;29:800–805.
7. Steppacher RC, Mausner JS. Suicide in male and female physicians. *JAMA.* 1974;228:323–328.
8. Pitts FN, Schuller AB, Rich CL, Pitts AF. Suicide among U.S. women physicians, 1967–1972. *Am J Psychiatry.* 1979;136:694–696.
9. Rich CL, Pitts FN. Suicide by male physicians during a five-year period. *Am J Psychiatry.* 1979;136:1089–1090.
10. Arnetz BB, Horte LG, Hedberg A, et al. Suicide patterns among physicians related to other academics as well as to the general population: results from a national long-term prospective study and a retrospective study. *Acta Psychiatr Scand.* 1987;75:139–143.
11. Lindeman S, Laara E, Hirvonen J, Lonnqvist J. Suicide mortality among medical doctors in Finland: are females more prone to suicide than their male colleagues. *Psychol Med.* 1997;27:1219–1222.
12. Aasland OG, Ekeberg O, Schweder T. Suicide rates from 1960 to 1989 in Norwegian physicians compared with other educational groups. *Soc Sci Med.* 2001;52:259–265.
13. Stack S. Suicide risk among physicians: a multivariate analysis. *Arch Suicide Res.* 2004;8:287–292.
14. Hem E, Haldorsen T, Aasland OG, et al. Suicide rates according to education with a particular focus on physicians in Norway 1960–2000. *Psychol Med.*

- 2005;35:873–880.
15. Petersen MR, Burnett CA. The suicide mortality of working physicians and dentists. *Occup Med*. 2008;58:25–29.
 16. Arana GW. The impaired physician: a medical and social dilemma. *Gen Hosp Psychiatry*. 1982;4:147–153.
 17. Bamayr A, Feuerlein W. Committed suicides of 119 male and female physicians and dentists in Upper Bavaria in the period of 1963 to 1978. *Crisis*. 1984;5:91–107.
 18. Stuber ML. Medical student and physician well-being. In: Wedding D, Stuber JL (eds). *Behavior and Medicine*. Ashland, Ohio: Hogrefe & Huber Publishers, 2006:167–174.
 19. Carlson GA, Miller DC. Suicide, affective disorder, and women physicians. *Am J Psychiatry*. 1981;138:1330–1335.
 20. DeSole DE, Singer P, Aronson S. Suicide and role strain among physicians. *Int J Soc Psychiatry*. 1969;15:294–301.
 21. Doyle JP, Frank E, Saltzman LE, McMahon PM, Fielding BD. Domestic violence and sexual abuse in women physicians: associated medical, psychiatric, and professional difficulties. *J Women's Health Gend Based Med*. 1999;8:955–965.
 22. American College of Physician Executives. Physician Morale Survey. Accessed on July 29, 2008 at: <http://www.acpe.org/Education/Surveys/Morale/morale.htm>, 2006.
 23. Ross M. Suicide among physicians: a psychological study. *Dis Nerv Syst*. 1973;34:145–150.
 24. Bressler B. Suicide and drug abuse in the medical community. *Suicide Life Threat Behav*. 1976;6:169–178.
 25. Duberstein PR, Conwell Y, Cox C, et al. Attitudes toward self-determined death: a survey of primary care physicians. *J Am Geriatr Soc*. 1995;43:395–400.
 26. Holmes VF, Rich CL. Suicide among physicians. In: Blumenthal SJ, Kupfer DJ (eds). *Suicide Over the Life Cycle: Risk Factors, Assessment, and Treatment of Suicidal Patients*. Washington, DC: American Psychiatric Press, Inc., 1990:599–618.
 27. Simon W. Suicide among physicians: prevention and postvention. *Crisis*. 1986;7:1–13.
 28. Robinson GE. Stresses on women physicians: consequences and coping techniques. *Depress Anxiety*. 2003;17:180–189.
 29. Heim E. Stressors in medical professions: do women bear the greater risks for their health? *Z Psychosom Med Psychoanal*. 1992;38:207–226.
 30. Akiskal KK, Savino M, Akiskal HS. Temperament profiles in physicians, lawyers, managers, industrialists, architects, journalists, and artists: a study in psychiatric outpatients. *J Affect Disord*. 2005;85:201–206.
 31. Musson DM. Personality determinants of professional culture: evidence from astronauts, pilots and physicians. *Dissert Abstr Int*. 2004;65:1063B.
 32. Roy DD. Differences in personality factors of experienced teachers, physicians, bank managers and fine artists. *Psychol Stud*. 1995;40:51–56.
 33. Borges NJ, Gibson DD. Personality patterns of physicians in person-oriented and technique-oriented specialties. *J Vocat Behav*. 2005;67:4–20.
 34. Hem E, Gronvold NT, Aasland OG, Ekeberg O. The prevalence of suicidal ideation and suicidal attempts among Norwegian physicians: results from a cross-sectional survey of a nationwide sample. *Eur Psychiatry*. 2000;15:183–190.
 35. Lindeman S, Heinanen H, Vaisanen E, Lonnqvist J. Suicide among medical doctors: psychological autopsy on seven cases. *Arch Suicide Res*. 1998;4:135–141.
 36. Abramowitz SA. Killing the needy self: women professionals and suicide (a critique of Winnicott's False Self Theory). In: Goldberg A (ed). *The Impact of New Ideas*. Hillsdale, NJ: Analytic Press, Inc., 1995:177–188.
 37. Simon W, Lumry GK. Suicide among physician-patients. *J Nerv Ment Dis*. 1968;147:105–112.

AUTHOR AFFILIATIONS: Dr. R. Sansone is a professor in the Departments of Psychiatry and Internal Medicine at Wright State University School of Medicine in Dayton, Ohio, and Director of Psychiatry Education at Kettering Medical Center in Kettering, Ohio; Dr. L. Sansone is a family medicine physician (government service) and Medical Director of the Primary Care Clinic at Wright-Patterson Air Force Base. The views and opinions expressed in this column are those of the authors and do not reflect the official policy or the position of the United States Air Force, Department of Defense, or US government.

ADDRESS CORRESPONDENCE TO: Randy A. Sansone, MD, Sycamore Primary Care Center, 2115 Leiter Road, Miamisburg, OH 45342; Phone: (937) 384-6850; Fax: (937) 384-6938; E-mail: Randy.sansone@khnetwork.org ●