Towards a model of suicidal behavior among physicians Rumo a um modelo de comportamento suicida entre médicos

Suicide is a disproportionate cause of death for physicians relative to both the general population and other professionals¹. Death by suicide is about 70 percent more likely among male physicians in the U.S. than among other professionals, and 250-400 percent higher among female physicians. About 300-400 physicians, the equivalent of at least one entire medical school class, commit suicide in the U.S. every year. A recent international systematic review suggests that physicians' relative suicide risk is 1.1 to 3.4 for men and 2.5 to 5.7 for women when the rates are compared with those for the general population and at 1.5 to 3.8 for men and 3.7 to 4.5 for women when the rates are compared with those for other professionals¹. In all reviewed studies the suicide rates among physicians were higher than those in the general population and among other academic occupational groups.

Suicidal ideation and attempts are also frequent among physicians. A survey of physicians in Norway has shown that the lifetime prevalence of suicide attempts and feelings that life was not worth living were 1.6% and 51.1%, respectively². A study in England has shown a high prevalence of suicidal ideation among general practitioners³. A recent study of American surgeons has demonstrated that, among individuals 45 years and older, suicidal ideation was 1.5 to 3.0 times more common among surgeons than in the general population⁴.

Over 90% of Americans who commit suicide have a significant mental illness. Major depressive disorder, bipolar illness, alcohol and drug abuse and dependence, anxiety disorders, borderline and other personality disorders are the psychiatric disorders most associated with suicide in physicians. Suicide is strongly linked to depression. Major depression accounts for about 60% of suicides. However, the lifetime risk of depression among physicians is similar to that of the general U.S. population⁴. This observation indicates that other factors may contribute to the increased risk of suicide among physicians. Suicidal behavior is usually a result of the coincidence of stressors with a diathesis, or predisposition, for suicidal behavior. Chronic psychiatric disorder such as depression is a predisposing factor for suicidal behavior. This may indicate that physicians face more stress than an average person.

Physicians work hard and make inappropriate self-sacrifices. We work long and irregular hours, are frequently on-call, do night and emergency work, do not sleep enough, treat very sick and

dying patients, deal with their nervous and distressed relatives and friends. We have to deal with distressed colleagues, incompetent administrators, various glitches, and many other things. Physicians frequently feel anxious and insecure. The New York Times⁵ has recently noted that:

"Physicians used to be the pillars of any community. If you were smart and sincere and ambitious, the top of your class, there was nothing nobler you could aspire to become. Doctors possessed special knowledge. They were caring and smart, the best kind of people you could know.

Today, medicine is just another profession, and doctors have become like everybody else: insecure, discontented and anxious about the future."

Physicians frequently experience burn-out, i.e., a state of emotional, mental, and physical exhaustion caused by excessive and prolonged stress. Burnout starts during residency training and worsens once physicians graduate. It has been shown that burnout in surgeons is associated with suicidal ideation⁴.

It has recently been suggested that physicians may have an acquired capability for suicide⁶. The proponents of this theory suggest that during medical training individuals a) become less fearful of pain, injury, and death; b) get accustomed to the suffering associated with injury; and c) build knowledge that facilitates injury, e.g., become familiar with the properties and dosing of potentially lethal medications. These factors may affect suicidality among physicians. However, in my opinion the role of these factors is limited.

Likely, a combination of acute and chronic stress leads to suicidal behavior in vulnerable physicians. This suggests that stress reduction among physicians may help to reduce suicidality in this professional group. Stress management interventions lead to positive effects on both psychological and physical health. There should be an open discussion of the stress encountered in medical careers. This is critical in the successful early detection of impairment, suicidal ideation and behavior among physicians.

Bipolar disorder is frequently associated with suicidal behavior. The prevalence of bipolar disorder among medical professionals and its role in suicide among physicians need to be explored.

Our knowledge of the psychobiology of suicidal behavior among physicians is limited. Suicide risk factors among physicians may

be different from risk factors for suicidal behavior in the general population. We need to do research studies to explore potential risk factors for suicidal behavior among physicians. This may open new avenues of suicide prevention interventions among physicians.

Leo Sher, M.D.

Department of Psychiatry Mount Sinai School of Medicine James J. Peters Veterans' Administration Medical Center

Disclosures

Writing group member	Employment	Research grant ¹	Other research grant or medical continuous education ²	Speaker's honoraria	Ownership interest	Consultant/ Advisory board	Other ³
Leo Sher	-	-	-	-	-	-	-

^{*} Modest

References

- 1. Lindeman S, Laara E, Hakko H, Lonnqvist J. A systematic review on gender specific suicide mortality in medical doctors. *Br J Psychiatry.* 1996;168(3):274-9.
- 2. Hem E, GrŁnvold 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(3):183-9.
- **3.** Caplan RP. Stress, anxiety, and depression in hospital consultants, general practitioners, and senior health service managers. *BMJ*. 1994;309(6964):1261–3.
- 4. Shanafelt TD, Balch CM, Dyrbye L, Bechamps G, Russell T, Satele D, Rummans T, Swartz K, Novotny PJ, Sloan J, Oreskovich MR. Special report: suicidal ideation
- among American surgeons. *Arch Surg*. 2011;146(1):54-62.

 5. Jauhar S. Out of Camelot, Knights in White Coats Lose Way. *The New York Times*. Tuesday, Febr 1 2011: D5.
- **6.** Cornette MM, de Roon-Cassini TA, Fosco GM, Holloway RL, Clark DC, Joiner TE. Application of an interpersonal-psychological model of suicidal behavior to physicians and medical trainees. *Arch Suicide Res.* 2009;13(1):1-14.

^{**} Significant

^{***} Significant: Amounts given to the author's institution or to a colleague for research in which the author has participation, not directly to the author.