Physician Suicide Prevention and the Ethics and Role of a Healing Community: an American College of Physicians Policy Paper



Matthew DeCamp, MD, PhD^{1,2}¹⁰ and Mark Levine, MD^{3,4} for the ACP Ethics, Professionalism and Human Rights Committee

¹Center for Bioethics and Humanities, University of Colorado-Anschutz Medical Campus, Aurora, CO, USA; ²Division of General Internal Medicine, University of Colorado-Anschutz Medical Campus, Aurora, Colorado, United States; ³Vermont Department of Health, Burlington, VT, USA; ⁴Department of Medicine, Larner College of Medicine, Burlington, VT, USA.

Suicide is a major global public health issue, and in recent years, there has been increasing recognition of the problem of physician suicide. This American College of Physicians policy paper examines, from the perspective of ethics, the issues that arise when individuals and institutions respond to physician suicides and when they engage in broader efforts aimed at physician suicide prevention. Emphasizing the medical profession as a unique moral community characterized by ethical and professional commitments of service to patients, each other, and society, this paper offers guidance regarding physician suicide and the role of a healing community. The response to an individual physician suicide should be characterized by respect and concern for those who are grieving, the creation of a supportive environment for suicide loss survivors, and careful communication about the event. Because suicide is a complex problem, actions aimed at preventing suicide must occur at the individual, interpersonal, community, and societal levels. The medical community has an obligation to foster a culture that supports education, screening, and access to mental health treatment, beginning at the earliest stages of medical training.

KEY WORDS: physician suicide; medical ethics; professionalism.

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INTRODUCTION

Medicine is a moral enterprise, the medical profession a unique community. The practice of medicine is characterized by the ethical and professional commitment of individual physicians to patient well-being and a shared and common goal of service of the profession to patients and society.¹ Communities of individual professionals have shared responsibilities that are essential for supporting the self-regulation

Prior Presentations None Received January 29, 2021 Accepted April 22, 2021 and effacement of self-interest that are hallmarks of medicine as a profession.²

Suicide is a major global public health issue with devastating impact on individuals, families, and entire communities. Although suicide rates have generally declined globally, they have increased over the past two decades in North America, where suicide is the 10th leading cause of death.³

The medical community is not immune to suicide. Physician suicide is not new.^{4,5} Examining physician suicide rates in different countries, between specialties, and in comparison to the general population or other professions and occupations is challenged by multiple data sources, the absence of systematic or standardized reporting, and likely under-reporting secondary to persistent stigmatization and other factors.⁶ What is known is troubling. Medical students and residents have higher rates of depression than other graduate-level students and frequently experience suicidal ideation.⁷ Suicide is the leading cause of death in male residents.⁸ Physicians die by suicide at higher rates than the general population, with female physicians particularly at risk.^{9–13} Although the rate of physician suicide has declined over time in several European countries, a similar statistically significant decrease has not occurred in the USA.¹³

There is a clear need for improved but sensitive data collection surrounding physician suicide, including among medical students, residents, fellows, and practicing or nonpracticing physicians.^{14–16} Suicide harms both individuals and communities, requiring more intensive study as well as targeted actions. Preventing suicide is ethically necessary whether or not suicide rates are increasing, or how they compare to other populations. This paper applies fundamental ethical precepts to guide how individual physicians and medicine as a community should engage in broader and deeper efforts to address and prevent physician suicide.

METHODS

This paper was developed on behalf of the American College of Physicians Ethics, Professionalism and Human Rights Committee (EPHRC). Committee members abide by the ACP's conflict-of-interest policy and procedures (https:// www.acponline.org/about-acp/who-we-are/acp-conflict-of-interest-policy-and-procedures), and appointment to and procedures of the EPHRC are governed by the ACP's bylaws (https://www.acponline.org/about-acp/who-we-are/acpbylaws). After an environmental assessment to determine the scope of issues and literature reviews, the EPHRC evaluated and discussed several drafts of the paper; the paper was reviewed by members of the ACP Board of Governors, Board of Regents, Council of Early Career Physicians, Council of Resident/Fellow Members, Council of Student Members, and other committees and experts. The paper was revised to incorporate comments from these groups and individuals. The ACP Board of Regents reviewed and approved the paper on 25 July 2020.

ETHICS AND THE ROLE OF THE MEDICAL COMMUNITY

Communities are essential for preventing and responding to suicide. Communities can cultivate the sense of belonging believed critical for prevention efforts that must be tailored to communities' needs.^{17,18} Medicine is a unique professional and moral community that puts patient care above self-interest in acting on a duty of service, teaching and expanding medical knowledge, abiding by ethical standards, self-regulating, and sharing the commitment to foundational ethical and professional values and principles. These include respect for autonomy, beneficence (the duty to promote a patient's best interests), non-maleficence (the duty to do no harm), and justice, the promotion of equitable distribution of the opportunities afforded by health care.¹

As members of a moral community, physicians have obligations not only to their patients but also to themselves, each other, and society.^{1,2} This is consistent with existing American College of Physicians (ACP) policies and core values including the ACP *Ethics Manual*, and declarations of the World Medical Association.^{1,19} Obligations to each other are evident in accepted duties to identify and assist impaired colleagues and to participate in peer review.^{1,20} They should also be evident in how physicians and the medical community engage in efforts to compassionately respond to and prevent physician suicide.

Foundational ethical and professional values and principles to which medicine is committed also offer guidance to address physician suicide. The duty to care for the sick includes care for colleagues, involving shared accountability to each other and collaboration with other health professionals. Respecting privacy and confidentiality, being honest and transparent in communication, and avoiding harm are additional values and principles that bear upon how the community responds to physician suicide.

RESPONDING TO AN INDIVIDUAL SUICIDE

Tragically, attention to preventing physician suicide can arise because of the need to respond to an individual suicide. Although physician suicide has been long recognized as a problem, responses to it have been criticized as perpetuating a culture of silence.²¹ This suggests a need for new approaches as encouraged in a recent ACP resolution on physician suicide that considers *transparen*cy as a means to reduce stigmatization of depression, mental illness, and suicide; that is *collaborative* with the potential to be more effective and better at acknowledging grief; and that emphasizes *accountability* and the potential to support community responsibility and concrete actions.¹⁵

As for deaths by any cause, the response to an individual suicide should be motivated by the ethical principle of respect for the deceased individual and concern for those who are grieving, especially family members, close friends, and colleagues of the deceased.¹⁵ Respect for persons requires respecting the privacy and confidentiality of family members and of the individual as determined by the family/personal representative, as well as their freely made decisions regarding whether and how to participate in "postvention" activities (i.e., the organized response to a suicide). Legally, relevant regulations such as the Health Insurance Portability and Accountability Act (HIPAA), state laws, and, for students, the Family Educational Rights and Privacy Act, will need to be applied. These principles would also apply when considering the medical community's responsibilities to patients of the deceased for their ongoing care and in providing accurate timely information and bereavement support.

In addition to respect and concern for the well-being of family members, an important step in responding to a physician suicide should be creating a supportive and collaborative "environment of psychological safety to support appropriate grieving for peers, colleagues, and members of the community."¹⁵ While all deaths cause grief, grief after suicide may have unique features, such as feelings of abandonment or shame.²² Medicine as a community should be responsible and accountable for supporting its members after a suicide. The goals of this response—which ethically relates to shared obligations of beneficence—include facilitating healing from grief, mitigating negative effects of suicide exposure, and preventing suicide among people who may be at high risk after an exposure (a phenomenon known as "suicide clusters" or "contagion").²³

Individuals do not all grieve in the same way; a safe space should be created for identifying the different needs of those affected by the loss.²⁴ Suicide loss survivors may experience self-blame, whether or not they could have known about, or acted to prevent, the victim's suicidality. For some, stigma or a so-called "toughness mentality" can impede the grief response. Some physicians feel the need to apologize, request permission to grieve, or blame themselves. Others may be very willing to participate in counseling or small group discussions. The community's obligation to protect member well-being must address the potential for complicated and prolonged grief, which can involve preoccupation, avoidance of memories of the deceased, and inadequate adaptation to loss that can link to negative health outcomes and even future suicidal ideation.^{25,26} Forums for shared reflection, such as Schwartz Rounds (formal sessions where participants are free to share their emotions and challenges²⁷), can help foster an environment for compassionate discussion.

Part of creating a supportive environment involves transparent, accurate communication about suicide-a core component of any response, but one that must be interpreted cautiously.²⁸ Sharing of accurate information can alleviate speculation and rumor that exacerbate emotional turmoil after a suicide, but transparency does not mean sharing any and all information as soon as it is available. Confidentiality is a core professional and ethical value; legally, in general, HIPAA protects individually identifiable health information of decedents for 50 years following the date of death (45CFR§164.502).²⁹ Respecting grieving family members and the individual requires communicating thoughtfully with families and carrying out their wishes regarding disclosures of information, including about the cause of and reasons leading to a death. In addition, existing best practices emphasize not sharing too many details about the individual case, for example, because sharing the method of suicide is thought to contribute to future suicides.³⁰

Gathering information into the causes and circumstances of a suicide can help to close the knowledge gap around physician suicide, thereby supporting communication efforts, reducing depression and suicide stigma, and preventing future suicides. However, these information needs do not override ethical obligations to respect the privacy of those involved and protect their well-being during times of grief and beyond. Any request to authorize release of medical information or mental health notes, to participate in interviews, or to contribute other data sources,^{31,32} must be appropriately timed (i.e., in respect to those grieving), avoid placing burdens or pressure on loved ones, and fully respect the choices of those asked, emphasizing voluntariness. When such activities are part of attempts to create generalizable knowledge, issues related to ethics and research with human subjects will also pertain.

When information gathering is appropriate, efforts to do so should attend not only to the circumstances of the event but also to its effects on the community. To avoid blaming the deceased, the interpersonal, organizational, and social or environmental factors that are known to play a role in suicide should be considered,^{17,33} not just individual-level factors (such as mental health disorders, substance use disorders, or recent crises).^{17,33} There may be a need to collaborate with other entities, including the coroner, medical examiner's office, or local law enforcement, which may raise additional legal and ethical issues related to data sharing, privacy, and confidentiality.

The medical community must also respond appropriately to individuals who have attempted suicide. Data in the general population suggest that active contact and follow-up with those who have attempted suicide are critical to preventing future attempts.³⁴ Opportunities for those who have attempted suicide to freely share their story (if they choose, and with

whom they choose) can support the well-being of the individual^{6,35} and suicide prevention efforts of the broader medical community.

TOWARDS BROADER EFFORTS AT PREVENTION

Suicide is a complex problem. Many factors play a role, including medical illness, mental health, personality traits or disorders, history of suicide in the family, psychosocial or environmental factors, and the availability of the means to attempt suicide, among others.³⁶ Pandemics, such as the coronavirus disease 19 (COVID-19), can be associated with suicide risk.^{37,38} Existing technical guides for suicide prevention in the general population draw upon the Social Ecological Model and emphasize the need to address the individual, interpersonal, community, and broader social level factors that can relate to suicide risk and prevention. There is rarely a single, definitive causal factor, whether biological, psychological, or social.¹⁷ The responsibility to prevent suicides is shared among the medical community and its members, including individual physicians, health care organizations, and others.

Individual. Individually, physicians experience many of the same risk factors for suicide, including depression and substance use, as the general population. Limited data suggest that physicians may possess unique protective and risk factors. For example, physicians who die by suicide may be less likely to have experienced a recent death of a friend or family member, less likely to have had a recent crisis, and more likely to have experienced a work-related problem.^{33,39,40} Perhaps because of easier accessibility, physicians who die by suicide may be more likely than the general population to overdose on medications.³⁹ However, it is difficult to generalize across physician suicides. Suicide may be unrelated to work or professional issues altogether, and while some hypothesize that physicians could be more likely to have certain personality traits (e.g., perfectionism, impulsivity, selfsacrifice) that could contribute to suicidality,^{3,41} this is not definitively known.

For individual physicians, obtaining help for depression and suicidal ideation should be facilitated by their own involvement in health care, but this does not appear to be the case. Physicians have the same rates of depression as the general population⁴² but for a variety of reasons may be reluctant to access mental health care.⁴³ Many physicians lack a regular source of health care. Stigma, lack of confidentiality, licensure requirements, and damage to career prospects are cited as barriers to seeking mental health treatment.^{20,44} Eliminating barriers to care is likely to benefit both physicians and patients. Depression overall remains tragically undertreated.⁴⁵ Physicians' health-related behaviors appear to affect how they care for patients.⁴⁶ Facilitating physicians' access to care and treatment may result in better care of their patients; for instance, improving physician mental health self-care can help physicians' ability to detect risk, empathize with and effectively address suicide prevention for their patients.^{47,48} Physicians should care for themselves,^{19,20} and this may help support caring for others, but can only be fully realized by looking beyond the individual to the community of medicine.

Interpersonal. Physician suicide prevention efforts can be informed by the Interpersonal Psychological Theory (IPT) of suicide.⁴⁹ This theory suggests three "necessary and sufficient" factors underlying suicidal ideation among physicians: "perceived burdensomeness" (belief that one is a liability to others and feeling of self-hatred), "thwarted belongingness" (loneliness), and the "acquired capability" for suicide.

The IPT implies how members of the medical community relate to each may help prevent suicide by reversing perceptions of burdensomeness and promoting belongingness. And yet, in the current practice environment, where time pressures and practice patterns may result in fewer interactions between physicians, there is arguably a need to re-foster a deeper sense of collegiality and community in the medical community. Less time in the "bunker" with the EHR⁵⁰ and more time with each other (e.g., in the tradition of the "doctors' lounge," at the nurses' station with the team, or other forums)⁵¹ could create more social support and community with opportunities to also discuss, share and manage practice challenges.

Nevertheless, it is important not to conflate burnout with suicidality. The focus should be on physician well-being comprehensively understood, rather than the overly narrow concept of burnout that risks placing the onus on physicians simply to be more individually resilient.²⁰ Going back to Osler's days and beyond, the practice of medicine has been demanding and other-directed.⁵²

Today, many trainees and physicians are experiencing deprofessionalization, depersonalization, emotional exhaustion, and reduced personal accomplishment in their day-to-day practices.⁵³ Time pressures, bureaucratization, and other structural and external factors can be barriers to professionalism and meaning, distancing physicians from their patients. The relationship between burnout, depression, and suicidality requires further study⁵⁴; rates of burnout appear to be increasing^{42,55} while suicide rates have not clearly increased. A common measure of burnout, the Maslach Burnout Inventory for medical personnel, assesses emotional exhaustion, depersonalization, and personal accomplishment. Although burnout measures may correlate with suicidal thoughts, causation has not been established, and the exact relationship to suicide or depression is unknown.⁵⁶

Just as physicians are taught how to inquire of patients in a sensitive manner about suicide, they should use these communication skills with one another. Formal screening tools may be helpful,⁵⁷ but in everyday interactions, simple, open-ended questions such as "How are you?" or validating questions such as "Sometimes, when things are tough, it can help to talk to someone. Do you want to talk?" can be just as beneficial.⁵⁸

Regarding physician or patient safety, not every physician who may be struggling must be reported (e.g., to supervisors or licensing boards). A stepwise approach that starts with reaching out to the physician and progresses, if necessary, to reporting may be appropriate if those struggles risk imminent harm to the physician or the physician's patients.²⁰

Community. As a moral community, the professional culture of medicine has an important role in preventing suicide. The importance of community-level interventions is illustrated by the suicide prevention program in the US Air Force, one of the best-studied and most successful programs. It emphasizes leadership involvement and a community-oriented approach.⁵⁹ Those within the culture of medicine have a positive obligation to create a community that promotes collegiality and community and supports professionals in their duty of service, a duty which can bring meaning to the practice of medicine.¹

Preventing suicide requires that the community emphasize education, screening, and access to mental health treatment. Because of the important role of leadership in suicide prevention efforts,⁵⁹ leaders of practices, hospitals, health systems, and medical schools should receive formal education in suicide prevention. A community-oriented approach also requires involving other health care professionals (e.g., nurses, social workers, and others) and employees in prevention efforts.⁵⁹ The medical community must act to change its culture around mental health issues of its members and counter barriers that prevent physicians from seeking care. It is important to emphasize that impairment (i.e., an inability of a physician to care for patients safely and effectively) is distinct from either diagnosis or treatment of mental illness.²⁰

For medical students and postgraduate trainees, the medical community must address the unique environment and stressors that can arise during training.^{60,61} This requires examining the informal curriculum (i.e., *ad hoc*, interpersonal learning interactions outside formal instruction) and the hidden curriculum (i.e., institutional structure and culture) that may inadvertently undermine policies that promote self-help.

Community-level activities aimed at improving well-being (e.g., ACP's Physician Well-being and Professional Fulfillment initiative, the NAM's Action Collaborative on Clinical Well-Being and Resilience, AMA's STEPS Forward program, and AAIM's Collaborative for Healing and Renewal in Medicine) may also support suicide prevention. They foster physician well-being, reduce major risk factors for suicide (such as substance abuse⁶²), and encourage collegiality and communication among peers. These activities can create and sustain mutual accountability to each other and reinforce membership within a shared professional community. Nevertheless, dedicated suicide prevention efforts among medical trainees and practicing physicians will still be necessary.

Societal Level. The goal of preventing physician suicide is best achieved when it is informed by, and done in collaboration with, broader efforts and evidence-based models for suicide

prevention. The Henry Ford Health System's groundbreaking "Zero Suicide" approach for patients with depression⁶³, for example, is highly successful and structured approach to risk assessment, referral, and treatment founded on the presumption that all individuals may be at risk for suicide. Vermont's Suicide Prevention Coalition emphasizes universal, societal-wide preventive measures (such as increasing overall access to mental health care, promoting the message that suicide is preventable, and sponsoring media campaigns to reduce mental health stigma). The medical community has an obligation to learn from and support these kinds of broader efforts.

Proven approaches to suicide prevention in the general population should be effective for physicians as well. However, additional research is needed to generate an evidence base surrounding interventions specific to preventing physician suicide. Identifying individuals at risk, creating connected and protective environments, and encouraging physicians to access mental and other health care are key components of prevention programs for all people.^{17,63,64} The American Medical Association has developed a four-step program that emphasizes open discussion of suicide;⁶⁵ the University of California - San Diego's medical school program includes destigmatizing outreach, anonymous web-based screening, and in-person assessment and referral.^{66,67} More research is needed to determine the generalizability of these programs.

CONCLUSION: SEEK HELP, HELP EACH OTHER

Suicide is a major global and societal public health issue that affects physicians at disproportionately higher rates than the general population. The medical community's commitment to foundational ethical principles and professional values, including the duty to care for the ill, shared accountability, respect for privacy and confidentiality, and transparent and honest communication, can help transform it into a true healing community that also encourages self-care and physicians caring for one another. Guided by these values, the profession should compassionately respond to events, learn from the experience, and attempt to direct its efforts to the prevention of future suicides. The medical community can reduce stigma and, in a unified manner, acknowledge grief, support its members in a safe environment, and better develop interventions and future preventive actions. Still, efforts to better understand the fundamental causes of suicide and its prevalence cannot override the ethical obligation to respect the privacy, confidentiality, and well-being of those colleagues and their loved ones who are grieving.

When the medical community at large is activated after an event, broader efforts at prevention should integrate a socioecological model. Such efforts should examine the individual factors unique to the episode but must also move upstream to consider the interpersonal factors that contribute to how physicians relate to one another, the role of a collaborative and collegial professional community in fostering well-being, and the impact at a societal level of existing evidence-based prevention and early detection models. These models have proven efficacy in the general population and need to be applied and examined in the medical community.

Acting without further delay is critical at this time of heightened awareness, attention, and concern on the part of the house of medicine regarding all aspects of the mental health of its practice community and trainees. It is indeed an ethical imperative.

NOTE: If you are depressed or contemplating suicide, please reach out to a friend, the National Suicide Prevention Lifeline (1-800-273-TALK (8255) or text HOME to 741741), a therapist, or an employee assistance program. If you are concerned that a colleague is suffering from depression or contemplating suicide, please reach out, ask, listen, and assist the individual in finding help. For international support, find a 24/7 hotline at: https://www.iasp.info/resources/Crisis Centres/.

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Corresponding Author: Matthew DeCamp, MD, PhD; Center for Bioethics and Humanities, University of Colorado-Anschutz Medical Campus, Aurora, CO, USA (e-mail: matthew.decamp@cuanschutz. edu).

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REFERENCES

 Sulmasy LS, Bledsoe TA, for the American College of Physicians Ethics, Professionalism and Human Rights Committee. American College of Physicians Ethics Manual: Seventh Edition. Ann Intern Med. 2019;170(2):S1-S32.

- Pellegrino ED. The medical profession as a moral community. Bull NY Acad Med. 1990;66(3):221–32.
- 3. Fazel S, Runeson B. Suicide. N Engl J Med. 2020;16;382(3):266-74.
- Legha RK. A history of physician suicide in America. J Med Humanit. 2012;33(4):219–44.
- Gunter T. Death by suicide: problems seeking stakeholder solutions. Arch Depress Anxiety. 2016;2(1):20–5.
- Hill AB. Breaking the stigma a physician's perspective on self-care and recovery. N Engl J Med. 2017;376(12):1103–5.
- Goebert D, Thompson D, Takeshita J, Beach C, Bryson P, Ephgrave K, et al. Depressive symptoms in medical students and residents: a multischool study. Acad Med. 2009;84(2):236–41.
- Yaghmour NA, Brigham TP, Richter T, Miller RS, Philibert I, Baldwin DC, et al. Causes of death of residents in ACGME-accredited programs 2000 Through 2014: implications for the learning environment. Acad Med. 2017;92(7):976–83.
- 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.
- Frank E, Biola H, Burnett CA. Mortality rates and causes among U.S. physicians. Am J Prev Med. 2000;19(3):155–9.
- 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(2):259–65.
- Torre DM, Wang N-Y, Meoni LA, Young JH, Klag MJ, Ford DE. Suicide compared to other causes of mortality in physicians. Suicide Life Threat Behav. 2005;35(2):146–53.
- Dutheil F, Aubert C, Pereira B, Dambrun M, Moustafa F, Mermillod M, et al. Suicide among physicians and health-care workers: A systematic review and meta-analysis. PLoS ONE. 2019;14(12):e0226361.
- American Medical Association Council on Medical Education. Report 6 of the Council on Medical Education (A-19) Study of Medical Student, Resident, and Physician Suicide (Resolution 959-I-18) (Reference Committee C). 2019. [cited 10 July 2020] Available from: https://www.amaassn.org/system/files/2019-07/a19-cme-6.pdf.
- American College of Physicians. Resolution 3-F18. Developing ACP Policy Calling for Transparency and Community Learning towards Physician Suicide Prevention.
- Leung TI, Snyder R, Pendharkar SS, Chen C-YA. Physician Suicide: A Scoping Review to Highlight Opportunities for Prevention. Global Psychiatry. 2020;3(2):1-16. DOI: https://doi.org/10.2478/gp-2020-0014.
- Stone D, Holland K, Bartholow B, Crosby A, Davis S, Wilkins N. Preventing Suicide: A Technical Package of Policy, Programs, and Practices. Atlanta: National Center for Injury Prevention and Control; 2017. [cited 20 July 2020] Available from: https://www.cdc.gov/violenceprevention/pdf/suicideTechnicalPackage.pdf
- World Health Organization. Preventing suicide: a community engagement toolkit. Geneva: World Health Organization; 2018. [cited 20 July 2020] Available from: https://apps.who.int/iris/handle/10665/272860
- WMA The World Medical Association-WMA Declaration of Geneva. [cited 20 July 2020] Available from: https://www.wma.net/policies-post/wmadeclaration-of-geneva/
- Candilis PJ, Kim DT, Sulmasy LS, for the ACP Ethics, Professionalism and Human Rights Committee. Physician impairment and rehabilitation: reintegration into medical practice while ensuring patient safety: a position paper from the American College of Physicians. Ann Intern Med. 2019;170(12):871-879.
- Thomas JC. Re-Visioning Medicine. J Med Humanit. 2014;35(4):405-22.
- Jordan JR, McIntosh JL. Is Suicide Bereavement Different? A Framework for Rethinking the Question. In: Jordan JR, McIntosh JL., editors. Grief after Suicide. New York: Routledge; 2011. pp. 19–42.
- U.S. National Guidelines Suicide Prevention Resource Center. Responding to Grief, Trauma, and Distress After a Suicide. [cited 20 July 2020] Available from: https://www.sprc.org/resources-programs/respondinggrief-trauma-and-distress-after-suicide-us-national-guidelines
- 24. Orford N. Grief after suicide. JAMA. 2018;320(18):1861–2.
- 25. Simon NM. Treating complicated grief. JAMA. 2013;310(4):416-23.
- Linde K, Treml J, Steinig J, Nagl M, Kersting A. Grief interventions for people bereaved by suicide: A systematic review. PLoS ONE. 2017;12(6):e0179496.
- Lown BA, Manning CF. The Schwartz Center Rounds: evaluation of an interdisciplinary approach to enhancing patient-centered communication, teamwork, and provider support. Acad Med. 2010;85(6):1073–81.

- Isaacs KH. The mental health hazards of reading about physician suicide. JAMA Intern Med. 2020;180(4):481-2.
- HIPAA Administrative Simplification. Regulation Text. US Department of Health and Human Services Office for Civil Rights; 2013 Mar. Report No.: 45CFR164.502. [cited 20 July 2020] Available from: https://www.hhs. gov/sites/default/files/hipaa-simplification-201303.pdf.
- Sinyor M, Schaffer A, Nishikawa Y, Redelmeier DA, Niederkrotenthaler T, Sareen J, et al. The association between suicide deaths and putatively harmful and protective factors in media reports. CMAJ. 2018;190(30):E900–7.
- Lindeman S, Heinänen H, Väisänen E, Lönnqvist J. Suicide among medical doctors: Psychological autopsy data on seven cases. Archives of Suicide Research. 1998;4(2):135–41.
- Hawton K, Malmberg A, Simkin S. Suicide in doctors. A psychological autopsy study. J Psychosom Res. 2004;57(1):1–4.
- 33. Fridner A, Belkić K, Minucci D, Pavan L, Marini M, Pingel B, et al. Work environment and recent suicidal thoughts among male university hospital physicians in Sweden and Italy: the health and organization among university hospital physicians in Europe (HOUPE) study. Gend Med. 2011;8(4):269–79.
- 34. Inagaki M, Kawashima Y, Yonemoto N, Yamada M. Active contact and follow-up interventions to prevent repeat suicide attempts during highrisk periods among patients admitted to emergency departments for suicidal behavior: a systematic review and meta-analysis. BMC Psychiatry. 2019;19(1):44.
- 35. Frey LM, Drapeau CW, Fulginiti A, Oexle N, Stage DL, Sheehan L, et al. Recipients of suicide-related disclosure: the link between disclosure and posttraumatic growth for suicide attempt survivors. Int J Environ Res Public Health. 2019;16(20):3815.
- Mann JJ. A current perspective of suicide and attempted suicide. Ann Intern Med. 2002;136(4):302–11.
- Reger MA, Stanley IH, Joiner TE. Suicide mortality and coronavirus disease 2019-a perfect storm? JAMA Psychiatry. 2020 Apr 10.
- Gunnell D, Appleby L, Arensman E, Hawton K, John A, Kapur N, et al. Suicide risk and prevention during the COVID-19 pandemic. Lancet Psychiatry. 2020 Apr 21.
- Gold KJ, Sen A, Schwenk TL. Details on suicide among US physicians: data from the National Violent Death Reporting System. Gen Hosp Psychiatry. 2013;35(1):45–9.
- Iannelli RJ, Finlayson AJR, Brown KP, Neufeld R, Gray R, Dietrich MS, et al. Suicidal behavior among physicians referred for fitness-for-duty evaluation. Gen Hosp Psychiatry. 2014;36(6):732–6.
- Miller NM, McGowen RK. The painful truth: physicians are not invincible. South Med J. 2000;93(10):966–73.
- 42. Shanafelt TD, Hasan O, Dyrbye LN, Sinsky C, Satele D, Sloan J, et al. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. Mayo Clin Proc. 2015;90(12):1600–13.
- Gerada C. The Wounded Healer: Report on the First 10 Years of Practitioner Health Service. [cited 20 July 2020] Available from: practitionerhealth.nhs.uk/media/content/files/PHP-reportweb%20version%20final(1).pdf.
- Adams EFM, Lee AJ, Pritchard CW, White RJE. What stops us from healing the healers: a survey of help-seeking behaviour, stigmatisation and depression within the medical profession. Int J Soc Psychiatry. 2010;56(4):359–70.
- González HM, Tarraf W, West BT, Chan D, Miranda PY, Leong FT. Research article: Antidepressant use among Asians in the United States. Depress Anxiety. 2010;27(1):46–55.
- Fletcher J. Exemplary medicine: why doctors should practise what they preach. CMAJ. 2013;185(8):635.
- Center C, Davis M, Detre T, Ford DE, Hansbrough W, Hendin H, et al. Confronting depression and suicide in physicians: a consensus statement. JAMA. 2003;289(23):3161–6.
- Moutier C. Physician mental health: an evidence-based approach to change. J Med Regul. 2018;104(2):7–13.
- Fink-Miller EL. An examination of the interpersonal psychological theory of suicidal behavior in physicians. Suicide Life Threat Behav. 2015;45(4):488–94.
- Verghese A. Culture shock-patient as icon, icon as patient. N Engl J Med. 2008; 359(26):2748–51.
- 51. Jha S. The den. N Engl J Med. 2019;381(21):1992–3.
- 52. Beasley BW. Burnout: of centaurs, poisoned arrows, and nautilus shells. J Gen Intern Med. 2019;34(4):481–3.
- Thomas LR, Ripp JA, West CP. Charter on physician well-being. JAMA. 2018;319(15):1541–2.

- Oquendo MA, Bernstein CA, Mayer LES. A key differential diagnosis for physicians-major depression or burnout? JAMA Psychiatry. 2019;76(11):1111–2.
- West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. Lancet. 2016;388(10057):2272–81.
- Rotenstein LS, Torre M, Ramos MA, Rosales RC, Guille C, Sen S, et al. Prevalence of burnout among physicians: a systematic review. JAMA. 2018;320(11):1131–50.
- Sall J, Brenner L, Millikan Bell AM, Colston MJ. Assessment and management of patients at risk for suicide: synopsis of the 2019 U.S. Department of Veterans Affairs and U.S. Department of Defense clinical practice guidelines. Ann Intern Med. 2019;171(5):343.
- Stovall J, Domino FJ. Approaching the suicidal patient. AFP. 2003;68(9):1814–8.
- Knox KL, Pflanz S, Talcott GW, Campise RL, Lavigne JE, Bajorska A, et al. The US Air Force suicide prevention program: implications for public health policy. Am J Public Health. 2010;100(12):2457–63.
- 60. Muller D. Kathryn. N Engl J Med. 2017;376(12):1101-3.
- Goldman ML, Shah RN, Bernstein CA. Depression and suicide among physician trainees: recommendations for a national response. JAMA Psychiatry. 2015;72(5):411–2.
- Earley PH. Physician health Programs and Addiction among Physicians. In: Miller SC, Fiellin DA, Rosenthal RN, editors. ASAM Principles of Addiction Medicine. Sixth Edition. Philadelphia: Wolters Kluwer; 2018.

- Coffey MJ, Coffey CE, Ahmedani BK. Suicide in a health maintenance organization population. JAMA Psychiatry. 2015;72(3):294.
- American Foundation for Suicide Prevention. Healthcare Professional Burnout, Depression and Suicide Prevention. [cited 20 July 2020] Available from: https://afsp.org/our-work/education/healthcare-professional-burnout-depression-suicide-prevention/
- American Medical Association. Physician Suicide and Support. Identify At-Risk Physicians and Facilitate Access to Appropriate Care. [cited 20 July 2020] Available from: https://edhub.ama-assn.org/steps-forward/ module/2702599
- Moutier C, Norcross W, Jong P, Norman M, Kirby B, McGuire T, et al. The suicide prevention and depression awareness program at the University of California, San Diego School of Medicine. Acad Med. 2012;87(3):320–6.
- 67. Haskins J, Carson JG, Chang CH, Kirshnit C, Link DP, Navarra L, et al. The suicide prevention, depression awareness, and clinical engagement program for faculty and residents at the University of California, Davis Health System. Acad Psychiatry. 2016;40(1):23–9.

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