Increased Suicide of Iranian Resident Physicians in the COVID-19 Pandemic

Somayeh Nazari¹, Hamed Ghazvini ², Seyyed Masoumeh Seyedhosseini Tamijani ³ and Raheleh Rafaiee ², *

¹Student Research Committee, School of Advanced Technologies in Medicine, Mazandaran University of Medical Sciences, Sari, IR Iran
²Department of Neuroscience, School of Advanced Technologies in Medicine, Mazandaran University of Medical Sciences, Sari, IR Iran
³Psychiatry and Behavioral Sciences Research Center, Addiction Institute, Mazandaran University of Medical Sciences, Sari, IR Iran

*Corresponding author: Department of Neuroscience, School of Advanced Technologies in Medicine, Mazandaran University of Medical Sciences, Sari, IR Iran. Email: rachel.rafaie@yahoo.com

Received 2021 July 05; Revised 2021 November 10; Accepted 2021 November 14.

Keywords: Iran, Physicians, Suicide, COVID-19

Dear Editor,

The suicide rate among physicians has been reported to be higher than that among the public as a whole (1). Several factors, including the knowledge of the lethal doses of medications, increased access to potentially lethal medications, and untreated or inadequately treated mental illnesses (eg, depression and anxiety), increased the rates of suicide completion among physicians (2). This increased rate is often associated with long working hours, the high-stress culture of medicine, the relative neglect of self-care, and spending less time with family and friends (3).

Medical students and physicians in residency programs appear to be at higher risk of burnout, depression, and substance abuse (4). A meta-analysis reported that there is an increase of 15.8% in depressive symptoms in the first year of residency. Over the course of training, 20.9 - 43.2% of residents showed depressive symptoms. Rotenstein et al. reported that the prevalence of suicidal ideation among medical students was 11.1% (5).

Medical literature suggests that the enhanced rate of suicide during and after a stressful environment due to pandemics is not unusual (6, 7). Jahan et al. reported about coronavirus disease 2019 (COVID-19)-related suicides among healthcare professionals the most common reason for which was infection with COVID-19, followed by a stressful and heavy workload, the fear of COVID-19 infection, anxiety related to the transmission of the virus and mortality of patients, and increased emotional stress (8). Although several publications anticipated having higher healthcare providers' suicidality due to the COVID-19 pandemic, there is no systematic information on residents’ and physicians’ suicides due to the current pandemic (9, 10).

The present study was carried out in June 2021. This study reviewed Iranian news websites addressing the suicide of Iranian resident physicians observed through the use of the Google search engines by searching Persian equivalents of key terms (eg, suicide, physician, resident, and medical student). The results showed that Iranian news agencies reported that the number of suicides among physicians/residents was 15 from 2019 to June 2021. Detailed results are presented in Table 1.

In numerous countries, suicide is a silent epidemic due to the culture of silence. Exposure to public suicide-related information could make others start thinking about self-harm, suicidal thoughts, and suicidal plans (11). On the other hand, suicide issues remain poorly understood in resident physicians, and their problems are mostly neglected. According to the report of the Iranian Students News Agency from Iran’s Medical Organization spokesman, work pressure, particularly in the COVID-19 pandemic, and economic pressure are the problems faced by medical students and residents (12).

In Iran, economic pressure has been increased in recent years, with negative impacts on mental and physical health, thereby threatening the life of Iranians (13). The reinforcement of protective factors for suicide, including access to health care, experience in conflict resolution, support of family and community, and religious beliefs, should be addressed. The mental health of residents and timely screening should be considered before they attempt suicide.
Footnotes

**Authors’ Contribution:** All the authors had equal roles in performing the study and contributed to writing the paper.

**Conflict of Interests:** The authors declare that they have no conflict of interest.

**Funding/Support:** None declared.

**References**

1. Sheikhmoonesi F, Zarghami M. Prevention of physicians’ suicide. Iran J Psychiatry Behav Sci. 2014;8(2):3–13. [PubMed: 25053951]. [PubMed Central: PMC4105598].
2. Cornette MM, deRoon-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):3–14. doi: 10.1080/13811110802578801. [PubMed: 19121905].
3. Lacy BE, Chan JL. Physician Burnout: The Hidden Health Care Crisis. Clin Gastroenterol Hepatol. 2018;16(3):311–7. doi: 10.1016/j.cgh.2017.06.043. [PubMed: 28609661].
4. Stehman CR, Testo Z, Gershaw RS, Kellogg AR. Burnout, Drop Out, Suicide: Physician Loss in Emergency Medicine, Part I. West J Emerg Med. 2019;20(3):485–94. doi: 10.5811/westjem.2019.4.40970. [PubMed: 31235501]. [PubMed Central: PMC6520812].
5. Rotenstein LS, Ramos MA, Torre M, Segal JR, Peluso MJ, Guille C, et al. Prevalence of Depression, Depressive Symptoms, and Suicidal Ideation Among Medical Students: A Systematic Review and Meta-Analysis. JAMA. 2016;316(2):2214–36. doi: 10.1001/jama.2016.17124. [PubMed: 27921088]. [PubMed Central: PMC5613659].
6. Okusaga O, Yolken RH, Langenberg P, Lapidus M, Arling TA, Dickerson FB, et al. Association of seropositivity for influenza and coronaviruses with history of mood disorders and suicide attempts. J Affect Disord. 2011;130(1-2):220–5. doi: 10.1016/j.jad.2010.09.029. [PubMed: 21030990]. [PubMed Central: PMC3043166].
7. Rahman A, Plummer V. COVID-19 related suicide among hospital nurses; case study evidence from worldwide media reports. Psychiatry Res. 2020;291:112727. doi: 10.1016/j.psychres.2020.113272. [PubMed: 32886958]. [PubMed Central: PMC7333553].
8. Jahan I, Ullah I, Griffiths MD, Mamun MA. COVID-19 suicide and its causative factors among the healthcare professionals: Case study evidence from press reports. Perspect Psychiatr Care. 2021;57(4):1707–12. doi: 10.1111/ppc.12739. [PubMed: 33547666]. [PubMed Central: PMC8147578].
9. Gulati G, Kelly BD. Physician suicide and the COVID-19 pandemic. Occupational Medicine. 2020;70(7):514. doi: 10.1093/occmed/kqaa204.
10. Mamun MA, Akter T, Zohra F, Sakib N, Bhuiyan A, Banik PC, et al. Prevalence and risk factors of COVID-19 suicidal behavior in Bangladeshi population: are healthcare professionals at greater risk? Heliyon. 2020;6(10). e05259. doi: 10.1016/j.heliyon.2020.e05259. [PubMed: 33070276]. [PubMed Central: PMC7554485].
11. Mars B, Heron J, Biddle L, Donovan JL, Holley R, Piper M, et al. Exposure to, and searching for, information about suicide and self-harm on the Internet: Prevalence and predictors in a population based cohort of young adults. J Affect Disord. 2015;185:239–45. doi: 10.1016/j.jad.2015.06.001. [PubMed: 2615098]. [PubMed Central: PMC4550475].
12. Iranian Student News Agency (ISNA). Iran Launches Inquiry Into Suicide Among Medical Students Iran. Iranian Student News Agency; 2021. Available from: https://old.iraniml.com/en/iran-in-brief/iran-launches-inquiry-suicide-among-medical-students/?page=1
13. Murphy A, Abdi Z, Harirchi I, McKee M, Ahmadnejad E. Economic sanctions and Iran’s capacity to respond to COVID-19. Lancet Public Health. 2020;5(5):e254. doi: 10.1016/s2468-2667(20)30089-9.