

Suicide Among Healthcare Professionals: Challenges for Society as a Whole

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Abstract

Suicide among healthcare personnel is a global health problem that had not been previously studied in Costa Rica. In the current issue of Acta Médica Costarricense, Mora-Torres and colleagues examine its occurrence over a 10-year period in a retrospective sample of autopsies conducted by the Forensic Pathology Section of the Judicial Investigation Agency (Organismo de Investigación Judicial). The most significant identified risk factors are being male, being a nursing or medical professional, and having a history of psychiatric disorders. Some factors that may explain suicide among healthcare personnel include the prevailing medical culture, burnout syndrome, post-traumatic and dissociative phenomena, downward spirals in hostile environments with low academic performance, and the cultural circumstances of current and future medical students. Concrete actions in response to this scenario could include early-stage faculty mentorship, an equilibrium between working hours and the expectations and demands of the system, appropriate availability and normalization of mental health care services, early detection of post-traumatic phenomena, implementation of gender-adapted interventions, and organizational strategies to reduce chronic stress and stigma. Existing resources that can be accessed include psychiatric care at the Medical Specialties Clinic of the Costa Rican College of Physicians and Surgeons (Colegio de Médicos y Cirujanos de Costa Rica) and the Comprehensive Network for the Promotion of Wellbeing and Mental Health Support of the Graduate Studies System (Sistema de Estudios de Postgrado) of the University of Costa Rica.

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Suicide among medical and health personnel is a global and public health problem. A cohort of 1.8 million health workers detected an increased risk of suicide mainly in nursing groups, health technicians and health support teams compared to other professions.¹ This is consistent with the reported increase in suicidal ideation that also occurs in non-medical health personnel compared to the general population.² In a study on the causes of suicide in this population, the medical culture of perfectionism was identified, together with the loss of healthy lifestyles and high work demand as contributing factors,³ which would translate into how the higher level of general work stress significantly and negatively predicts job satisfaction. and how, meaningfully and positively, it determines hopelessness and suicidal cognitions.⁴ Although suicide rates among medical personnel have been decreasing over time, specifically in women there has been an increase.⁵

The phenomenon of suicide in general has been under researched in our environment and specifically in health personnel there are no precedents. In this issue of the Costa Rican Medical Act, Mora-Torres and collaborators⁶ address the occurrence of suicide in health personnel (medicine, microbiology, pharmacy, nutrition, psychology, dentistry, nursing and medical technologies) and in assistants of these professions. The study is based on the autopsy database of the Forensic Pathology Section of the Judicial Investigation Agency of all binding deaths over a period of 10 years, between 01-01-2012 and 31-12-2021. This is a very particular, highly qualified population group, in which the country and the community, through families, have invested numerous resources in the hope of a return in the provision of services.

The percentage of suicides in this population represented 1.26% of the total that occurred during this period of time (3481 cases). The group of researchers describes a slight increasing trend in the number of suicides during the aforementioned period, as well as differences for the male sex between the percentage distribution in general suicide (corresponding to 83.4%) and in health personnel (54.5%). 52.3% of the cases occurred during the decade of 30 to 39 years of age, and 50% of the deaths occurred in nursing and medical professionals. Through post-mortem interviews with acquaintances of the deceased person, it was identified that 36.4% were carriers of some psychiatric condition (depression, personality disorders or schizophrenia are mentioned), 11.4% had a comorbidity with alcoholism, 4.5% suffered only from alcoholism, and 9.1% had some other medical condition. In general, it is suggested that the most important risk factors are the male sex, being a professional in nursing or medicine and having a psychiatric history.

Suicide is a multifactorial phenomenon that is complex to analyze. An approach that considers disease as a process, through the conception of the health-disease continuum, is fundamental for prevention and clinical work.⁷ The present study therefore provides the opportunity to carry out an analysis of the possible triggers for the population in question, define future avenues of research, and draw conclusions applicable to patient care.

The predominant medical culture historically has been that of high external and internal demand, with a high degree of perfectionism and low tolerance for frustration.^{8,9} In this context, there has been a lack of willingness to support and seek help among colleagues (partly due to confidentiality factors, sometimes due to fear of stigma or the refusal to be seen as incapable of adequately coping with work tasks). It is also possible that medical well-being is a basic determinant both in the health of workers and in the quality of the services provided.⁸ Here it should be added that there are currently many negative accusations towards the

medical profession in the national media, which places the focus of attention on this professional group.

Burnout syndrome has been associated with depression, anxiety, and an increased risk of suicide.¹⁰ In a recent study, it was reported that the impairment of self-esteem as part of the factor of low personal achievement was associated with suicidal behaviors, and that this component also mediated the relationship between the factor of depersonalization and suicidal behaviors and between the factor of emotional exhaustion and suicidal behaviors.¹¹ The main determinant for the development of this phenomenon is the number of hours worked/week; other factors also linked are sleep deprivation, loss of a sense of self-control, the conflict between high responsibility versus low autonomy, inadequate remuneration, barriers to access to mental health care, medical errors and the low quality of support networks.¹²

One of the possible associations between burnout and suicide risk, little reported to date, could occur through the factor of depersonalization, which would be triggered by continuous exposure to traumatic stressors and modulated through the mechanism of dissociation. It is well described that post-traumatic stress disorder alone is also associated with depression, anxiety, and suicide risk.¹³ A factor that can enhance these post-traumatic experiences is the phenomenon of copycat itself, as well as the spectrum of clinical manifestations when exposed to information related to suicidal events,¹⁴ both by the direct care of suicidal patients and by the death of colleagues from this cause.

Another associated element, particularly in the population of resident physicians where a high prevalence of burnout syndrome has been demonstrated in the Costa Rican environment¹⁵ and where suicide has been described as the main cause of death,¹⁶ could be violent and hostile environments at the hospital level. These, once established, would generate greater pressure and attention on the resident, leading to more failures in their performance, with the consequent growing harmful spiral. This dynamic may have mediated the recent suicide of a doctor living in Colombia (Millán-González, Ricardo. Harmful spirals in medical education. Delfino.cr; August 13, 2024 (accessed 14-06-2025). Available at: <https://delfino.cr/2024/08/espiales-nocivas-en-la-educacion-medica>).

Other factors for taking preventative measures include the higher delay discount, lower frustration tolerance, and constant pursuit of automatic gratification associated with continued use of electronic devices.¹⁷ These are common characteristics in the current and future population of medical students. Therefore, the exercise of teacher mentoring must consider these aspects, in addition to the generation of an adequate awareness of the expectations of the profession, how to establish

preventive measures and how to seek help if necessary. It will also remain to be recognized how artificial intelligence will be able to shape these individual responses.

For all of the above, and for the possible little-mentioned relationship between burnout and the flight of specialists from the Costa Rican Social Security Fund,¹⁸ the institutional and individual approach to this phenomenon requires full awareness, a lot of introspective work, as well as energetic and forceful actions to take care of the existing human resources. This would include medical professionals, but also nurses, who in the national study and other research have shown to be at increased suicidal risk.

Basic actions are the reconciliation between the number of hours worked and the expectations and demands of the system, the adequate supply and standardization of mental health care services, the early detection of post-traumatic phenomena linked to the continuous exposure to physical and emotional damage of patients and colleagues, the establishment of gender adapted interventions and the implementation of organizational strategies to reduce chronic stress and the stigma. In this sense, it is worth mentioning the work of psychiatric and psychological care within the medical specialties clinic of the College of Physicians and Surgeons of Costa Rica (Clinic of medical specialties of the College of Physicians and Surgeons of Costa Rica. College of Physicians and Surgeons of Costa Rica; 2025 (accessed June 14, 2025). Available at <https://medicos.cr/web2/clinica-cmc/>), as well as the Comprehensive Network for the Promotion of Well-being and Support of Mental Health of the Postgraduate Studies System of the University of Costa Rica, which organizes and teaches workshops for teaching and student staff on mental health issues. Initiatives like this are fundamental in the process of preventing burnout syndrome and suicide risk.

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