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# Adverse professional life experiences may affect mental health among cardiologists

Maria Panagioti & Alexander Hondkinson

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Understanding how adverse professional life experiences affect the mental well-being of cardiologists is important. An unmet and equally important need is to design and implement strategies to prevent emotional harassment and discrimination at health-care workplaces and to effectively support cardiologists who have been exposed to adverse professional life experiences. These strategies are especially needed for female, younger or divorced cardiologists.

REFERS TO Sharma, G. et al. Prevalence and professional impact of mental health conditions among cardiologists. *J. Am. Coll. Cardiol.* **81**, 574–586 (2023).

More than a third of cardiologists in the USA report feeling burned out and nearly 44% are stressed, according to the results of a survey<sup>1</sup> of 2,025 cardiologists published in 2022 and presented at the American College of Cardiology (ACC) Scientific Sessions–World Congress of Cardiology in 2019. Moreover, the 2022 Medscape cardiologist lifestyle, happiness & burnout report, conducted in the USA, found that cardiologists with symptoms of burnout or depression have poorer relationships with patients and colleagues than cardiologists without such symptoms<sup>2</sup>. However, evidence regarding the prevalence of mental health conditions among cardiologists outside the USA is sparse, and even the evidence from the USA has not been based on robust analyses of the association between mental health conditions and adverse experiences in the professional lives of cardiologists.

Sharma and colleagues have now examined the global prevalence of mental health conditions among cardiologists and the associations with demographic characteristics and adverse experiences in professional life<sup>3</sup>. This large, cross-sectional, online survey included 5,931 cardiologists who were members of the ACC and were based across the globe (Africa, Asia, Eastern Europe, European Union, Middle East, Oceania and North, Central and South America). Mental health conditions were self-reported and included psychological distress, major psychiatric disorders or other psychiatric disorders. The investigators applied appropriate statistical methods using multivariable, forward stepwise likelihood ratio logistic regression to examine the association between mental health conditions and adverse experiences in professional life, such as discrimination and emotional harassment. In addition, they controlled for demographic factors to assess which factors independently predict or protect from mental health conditions.

The study found that one in four cardiologists globally experience mental health conditions, with those living in South America reporting the highest prevalence (39%)<sup>3</sup>. Younger cardiologists (aged <55 years) were 1.4 times more likely to experience mental health conditions than older cardiologists, and divorced cardiologists were almost two times more likely to experience mental health conditions than married cardiologists. Women were more likely to experience mental health conditions than men, but the most notable gender-related difference was that the percentage of female cardiologists who thought about suicide in the past year was about two times higher than the percentage for male cardiologists (3.8% of women versus 2.3% of men). Nearly half of cardiologists reporting mental health conditions (44%) were dissatisfied with at least one professional metric, including feeling valued, treated fairly and receiving adequate compensation<sup>3</sup>. Cardiologists with adverse professional life experiences, such as discrimination and emotional harassment, were two to three times more likely to report mental health conditions than those without adverse professional life experiences. Moreover, only about one-third of cardiologists who experienced mental illness sought help; in particular, men were less likely to seek help than women<sup>3</sup>. The key barriers to help seeking were limited privacy and time, as well as concerns about effects on career progression and practice.

## “One in four cardiologists globally experience mental health conditions”

The study by Sharma and colleagues verified that mental health conditions are shockingly prevalent among cardiologists across the globe<sup>3</sup>. Furthermore, the study showed that mental health conditions could lead to thoughts of suicide, particularly in women<sup>3</sup>. The investigators also found that cardiologists with adverse professional life experiences, such as discrimination and emotional harassment, were most at risk of mental health conditions. Several empirical studies and theoretical viewpoints in the past have suggested that the quality of the working environment is critical for the mental wellness of physicians and have called for improvements in the workplace culture of health-care organizations<sup>4,5</sup>. This study substantially advances the current evidence base because it encapsulates a large global sample of cardiologists and highlights the need for strategies and campaigns to specifically address workplace discrimination and harassment and improve help-seeking behaviours for mental health conditions and suicide prevention among cardiologists (Box 1). Future preventative strategies against workplace discrimination and harassment should be designed in partnership with cardiologists and especially women, who are more often affected by such adverse professional life experiences. Similarly, campaigns promoting help-seeking might be more beneficial if they incorporate behaviour-change techniques and

## Box 1

# Take-home messages for cardiologists, cardiology leaders and policymakers

- Female, young and divorced cardiologists and cardiologists living in South America are more often affected by mental health conditions than male, older and married cardiologists and cardiologists living elsewhere, respectively.
- More than 50% of cardiologists with a mental health condition worked in hostile work environments and had adverse professional work experiences, such as discrimination and emotional harassment.
- Mental wellness programmes in cardiology are much needed and should capture the voices of different groups of cardiologists and be designed to include high-risk groups who might benefit most from these programmes.
- The culture of cardiology needs to be more inclusive and supportive of cardiologists affected by mental health conditions.
- Help-seeking for mental health conditions and suicide prevention should be encouraged for all genders: for female cardiologists because they have thoughts of suicide more often than male cardiologists, and equally for male cardiologists because they have poorer help-seeking behaviours than female cardiologists.

address common barriers that prevent from seeking help for mental health issues, especially among male cardiologists.

Effective leadership, peer support and teamwork programmes could be particularly beneficial for cardiologists who experience loneliness or undergo major life events such as divorce<sup>6,7</sup>. The wider literature shows that early-career physicians experience high levels of burnout and are more likely to be involved in patient safety incidents than middle-career and late-career physicians<sup>8,9</sup>. These findings collectively highlight the need for organizational improvements to support the mental health of cardiologists and reduce the stigma associated with help-seeking<sup>10</sup>.

## “The quality of the working environment is critical for the mental wellness of physicians”

One surprising finding by Sharma and colleagues was that the highest prevalence of mental health conditions among cardiologists was in South America<sup>3</sup>. Cultural factors and social factors, such as the regional socioeconomic deprivation index compared with the national average, could be investigated in future studies as potential drivers of this observation.

As the investigators mention when discussing the study's limitations, cross-sectional studies, by the nature of their design, cannot support causal inferences, and the convenience sample of cardiologists who completed the survey might not be representative of the wider population of cardiologists across the globe. Furthermore, a more in-depth understanding of the sources and context of workplace discrimination and harassment could guide the design of appropriate prevention and intervention strategies. For example, it would be interesting to examine whether the leadership team, colleagues or patients were the main sources of workplace discrimination and harassment reported in the study, as well as to identify common circumstances that triggered these adverse professional life experiences. Equally important is the investigation of whether these adverse professional life experiences are associated with career disengagement outcomes for cardiologists, such as burnout, career dissatisfaction, productivity loss and turnover intentions, as well as poor care outcomes for patients, such as patient safety incidents or complaints. This detailed understanding could convey a powerful message to policymakers regarding the disastrous effect of these adverse professional life experiences in health-care organizations and persuade them to invest in appropriate strategies to prevent and address discrimination, emotional harassment and blame culture in health-care workplaces.

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## Competing interests

The authors declare no competing interests.