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Response to Letter Regarding Article “Trauma Exposure and Posttraumatic Stress Disorder Symptoms Predict Onset of Cardiovascular Events in Women”

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Disclosures

None

We thank Drs. Durmaz, Kucuk, and Kucuk for their interest in our paper.¹ Their thought-provoking comments speak to the importance of understanding the link between posttraumatic stress disorder (PTSD) and cardiovascular disease (CVD) risk specifically in women, as well as the need to appreciate the link between psychological and physical health.

Durmaz et al. highlight the unique nature of our study sample, which comprised female U.S. nurses from the Nurses' Health Study II (NHS II). They note how certain aspects of being a health professional may impact vulnerability for developing PTSD and, subsequently, influence cardiovascular risk. In our study, we investigated exposure to a wide range of traumatic experiences in this community-based sample of civilian women (e.g., natural disaster exposure, unwanted sexual contact, the sudden and unexpected death of a loved one) and how this trauma exposure and related PTSD symptoms were associated with risk of incident myocardial infarction and stroke over a 20-year period. Durmaz et al. identify an important consideration to keep in mind when studying posttraumatic psychopathology and its consequences for physical health in health professionals, namely that nurses may encounter traumatic experiences as part of their occupation (e.g., treating patients with traumatic injuries). Indeed, multiple investigations aimed at understanding risk for developing PTSD after trauma exposure have studied first responders and emergency service personnel (e.g., firefighters, police officers) given that these individuals are likely to face potentially traumatic duty-related incidents.^{2, 3} Health professionals are an additional group of service providers whose occupational role may have implications for trauma exposure and the onset of psychopathology.

Durmaz et al. further note the importance of appreciating contextual factors more broadly when investigating the link between trauma exposure, PTSD, and cardiovascular risk. In our study, we found that health behaviors and medical risk factors accounted for nearly half of the association between elevated PTSD symptoms and risk for incident CVD,¹ and we are currently investigating the role of physiological mechanisms that may underlie associations between trauma exposure, PTSD symptoms, and CVD in the NHS II. However, it is important to remember that these individual-level processes operate within a larger context. For example, Durmaz et al. highlight the role of cultural factors and how they can influence downstream variables that may have consequences for cardiovascular health, such as post-trauma coping mechanisms.

Ultimately, our work¹ and that of others^{4, 5} suggests that the effects of trauma exposure do not just end with the mind but rather extend to the heart. Durmaz et al.'s comments emphasize that a "one-size-fits-all" model does not necessarily apply when trying to understand these relations. Going forward, research that incorporates both micro- and macro-level factors, and that examines how they play out for women in particular, is needed to comprehensively understand the associations between trauma exposure, PTSD, and CVD risk in women. Ultimately, this information can be used to offset increased vulnerability to poor cardiovascular health in trauma-exposed women.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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