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Correspondence

Reply to: "The spoils of war and the long-term spoiling of health conditions of entire nations"



To the Editor,

We would like to share our thoughts on "The spoils of war and the long-term spoiling of health conditions of entire nations" [1] published in *Atherosclerosis*.¹ According to Navarese et al., cardiovascular disease is one of the major health risks for the conflict-affected Ukrainian population due to significant limitations in access to health care and disruptions in the supply of medicines and resources, and the excess mortality observed during the COVID-19 pandemic, due to a combination of viral illness and chronic disease states, is bound to increase exponentially from poorly treated on communicable diseases [1].

We can all agree that conflict has a tremendous impact on everything in that industry, including the healthcare system. The authors seek to convey firsthand viewpoints from Indochina, a country with a history of violence towards minorities. Our previous condition, in which there was no organized healthcare system, is akin to the current situation in Ukraine, in which hospitals are being targeted. There were no medical facilities available during the fight. At the time, the only operating healthcare system was a field hospital on the border of a neighboring country, which was primarily responsible for treating war-related casualties. There are limited or no facilities for treating heart disease. Many people died as a result of cardiac problems during the war, but there was no specific statistics because the country's health-recording system was completely interrupted at the time.

In the context of the Ukraine crisis, there are trends of several concerns, including rising infectious disease [2]. Handling a cardiac problem directly in a battle zone is obviously challenging, if not impossible. However, we must continue to prioritize the health of refugees. Right now, the health of people evacuated from crisis zones is a big issue. Cardiovascular disorders among refugees are not uncommon, according to our experience in Indochina, although they are not routinely documented and recorded [3]. There was also a developing infection-related cardiac illness, such as rheumatic heart disease, among the Indochina refugees [4]. These scenarios could play out in Ukraine during the current conflict. Given the possibility of cardiac disorders among refugees, there should be adequate screening and care for war refugees with heart problems.

Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- [1] E.P. Navarese, K. Grzelakowska, F. Mangini, J. Kubica, M. Banach, M. Benn, C. J. Binder, J. Borén, A. Catapano, F. Kronenberg, Z. Mallat, P. Moulin, K. Öörni, K. K. Ray, J.E. Roeters van Lennepe, S. Romeo, L. Tokgozoglul, A. von Eckardstein, A. Zambon, P. Raggi, The spoils of war and the long-term spoiling of health conditions of entire nations, *Atherosclerosis* 352 (2022) 76–79, <https://doi.org/10.1016/j.atherosclerosis.2022.05.012>. May 21.
- [2] R. Mungmunpantipantip, V. Wiwanitkit, Science, War and Current Disease Outbreak, *Science*, 2022. Available online at, <https://www.science.org/doi/10.1126/ebf567-cdc6-479e-adba-3751af31886b/full/>.
- [3] M.Z. Sharif, K. Biegler, R. Mollica, S.E. Sim, E. Nicholas, M. Chandler, Q. Ngo-Metzger, K. Paigne, S. Paigne, D.H. Sorkin, A health profile and overview of healthcare experiences of Cambodian American refugees and immigrants residing in southern California, *J. Immigr. Minority Health* 21 (2) (2019) 346–355. Apr.
- [4] R.K. Mutagaywa, A.M. Wind, A. Kamuhabwa, M.J. Cramer, P. Chillo, S. Chamuleau, Rheumatic heart disease anno 2020: impacts of gender and migration on epidemiology and management, *Eur. J. Clin. Invest.* 50 (12) (2020), e13374. Dec.

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