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Public health crises and Ukrainian refugees

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Abstract

Conflicts are inevitable, and so are refugees. Due to conflicts in Ukraine, the global refugee population has reached new highs. As people continue to flee Ukraine amid the ongoing pandemic in droves, their exposure to COVID-19 and infectious diseases that are common among the refugee population, such as tuberculosis, is on the rise as well. Also factoring in the fact that Ukraine has a large population living with communicable diseases like HIV and hepatitis C, along with other non-communicable conditions like diabetes and cancer, there is a pronounced need to protect these refugees and local residents from potential public health crises. In this paper, we investigate the challenges that health and government officials face in addressing refugees’ health needs and preferences. Furthermore, we discuss the imperative to provide timely and effective health services to refugees, such as psychoneuroimmunology-based interventions that could help address refugees’ multifactorial and multifaceted health needs and requirements. While conflicts are inevitable, public health crises are not. In light of the renewed imperative to safeguard shared humanity and solidify global solidarity, collaborative actions are needed to ensure fair, kind, and true public health environments are available to refugees of the current conflict and beyond.

Keywords:
COVID-19, Refugees, Psychoneuroimmunology, Infectious diseases, Global health

Conflicts are inevitable, and so are refugees. Refugees are people who lose their homes, often as a result of reasonable fear of natural disasters, persecution, and war. As of April 26, 2022, the United Nations estimated that over 5.26 million Ukrainians have fled the country in five weeks (The United Nations, 2022). What is also traveling with these refugees are their pronounced health needs, as a result of their ingrained health conditions, deepening mental health issues, and infectious diseases that they might have contracted amid the pandemic or during their exodus. Take COVID-19 for instance. Prior to the conflict, most Ukrainians were not vaccinated against COVID-19 as of February 23, 2022, the latest data available, only 36% of people in Ukraine had COVID-19 vaccination (Our World in Data, 2022). To further complicate the situation, available data also indicate that most counties that Ukrainian refugees travel to, ranging from Poland to Belarus, have a noticeably poor COVID-19 vaccination rate by most global standards (see Table 1) (Our World in Data, 2022). While alarming, COVID-19 might not be the only infectious disease threat that the refugees, host countries, and neighborhood nations face in the coming months. Pre-pandemic evidence shows that, in addition to low vaccination rates against COVID-19, measles, and polio, Ukraine also has a large population living with tuberculosis, hepatitis C, and HIV pre-conflict (World Health Organization, 2022).

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Abbreviations: EU, European Union; WHO, World Health Organization.

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Previous research shows that, for instance, psychoneuroimmunology—the brain and the immune system (Pariante, 2015). Interactions between two of the most important networks in the human needs. Psychoneuroimmunology is the study of the communications and mechanisms that fuel these symptoms’ formation, manifestation, and deterioration (Davis et al., 2021), further emphasizes the importance of providing comprehensive psychoneuroimmunology-based interventions to people who are COVID-free, those who contracted the virus are found to have a 2% to 10% greater reduction in grey matter and brain volume, as well as more severe damages in brain tissues (Douaud et al., 2022). This finding, combined with the known symptoms of long COVID (e.g., anosmia and cognitive impairment) and unknown mechanisms that fuel these symptoms’ formation, manifestation, and deterioration (Davis et al., 2021), further emphasizes the importance of providing comprehensive psychoneuroimmunology-based interventions to help address their multifactorial and multifaceted health needs and requirements.

1. Brewing public health crises

In addition to infectious diseases, refugees may also face a kaleidoscope of noncommunicable health challenges, ranging from diabetes to cancer, that could demand greater varieties of complex health services and medical capabilities in quantity to sufficiently address (World Health Organization, 2022). Take refugees’ mental health for instance. The WHO recently estimated that approximately 500,000 refugees from Ukraine entering Poland have mental health disorders, yet lack adequate access to mental health services (Reuters, 2022). While already harrowing, these numbers only represent the portion of Ukrainian refugees who fled to Poland alone—situations could be equally, if not more, pronounced in other host countries. These insights combined suggest that it is reasonable to yield the conclusion that the medical attention and resources that the refugees need can be both acute and enduring, which could be difficult to provide in a timely fashion even for affluent countries amid the COVID-19 pandemic, let alone the host nations, most of which are low- or middle-income countries in terms of economic prowess. For instance, Moldova—a key destination for Ukrainian refugees—is one of Europe’s least economically advanced nations, with its gross domestic product per capita in 2020 being $4,547 (see Table 1).

2. Psychoneuroimmunology-based interventions

Different from other forms of essential needs, health issues often emerge in the form of emergencies that require health professionals’ timely attention and assistance. This means that sufficient doctors and nurses, coupled with advanced and versatile medical equipment, might be a must for host countries to provide. In other words, in order to avoid secondary humanitarian disasters, such as a catastrophic loss of life, triggered by the brewing public health crises introduced by the conflicts in Ukraine, host countries must increase their medical capacity to cope with the ever-increasing health demands of the refugees as more people flee Ukraine. In light of the confluence of issues Ukrainian refugees face, psychoneuroimmunology-based interventions should be prioritized to ensure comprehensive solutions are in place to meet these vulnerable populations’ psychological, neuroendocrine, and immunological care needs. Psychoneuroimmunology is the study of the communications and interactions between two of the most important networks in the human body—the brain and the immune system (Pariante, 2015). Psychoneuroimmunology-based interventions, either in the form of cognitive, affective, or behaviour solutions, have the potential to address people’s diverse and dynamic physical as well as psychological health needs that are often interconnected at the brain and immunity levels. Previous research shows that, for instance, psychoneuroimmunology-based interventions can lower people’s stress hormone levels (e.g., cortisol, epinephrine, and norepinephrine) and decrease inflammatory symptoms they face while coping with conditions like depression, sleep disorder, cancer, HIV, and cardiovascular diseases (Moraes et al., 2018).

Another reason why psychoneuroimmunology-based solutions could be particularly useful for the refugees centres on the complicated health impacts of COVID-19. In addition to pandemic-induced mental health challenges (Santomauro et al., 2021), recent research also reveals that COVID-19 infections could lead to material changes in patients’ brains. In an analysis of 789 brain scans, researchers found that even mild COVID-19 infections could result in pronounced destruction of the brain—compared to people who are COVID-free, those who contracted the virus are found to have a 2% to 10% greater reduction in grey matter and brain volume, as well as more severe damages in brain tissues (Douaud et al., 2022). This finding, combined with the known symptoms of long COVID (e.g., anosmia and cognitive impairment) and unknown mechanisms that fuel these symptoms’ formation, manifestation, and deterioration (Davis et al., 2021), further emphasizes the importance of providing comprehensive psychoneuroimmunology-based interventions to refugees to help address their multifactorial and multifaceted health needs and requirements.

3. Concluding remarks

While conflicts are inevitable, public health crises could be prevented. Considering that infectious diseases seldom stay dormant or domiciled, failing to address these medical emergencies could not only cause secondary humanitarian crises among the refugee populations, but also health risks in the local and broader communities. Understandably, this could be difficult to achieve. Due to COVID-19, along with its resultant crises such as sustained global supply chain strains and eye-watering cost of living surges, many societies across the world have been struggling to meet the health and safety needs of their own citizens, especially those who face chronic health conditions like the elderly and the immunocompromised. Yet in light of the renewed imperative to safeguard shared humanity and solidify global solidarity, with the aid of available tools and techniques, such as psychoneuroimmunology-based interventions, a fair, kind, and true public health environment can be created for refugees of the current crisis and beyond.

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Declaration of Competing Interest

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.

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