

COVID-19 and Beyond: The Pivotal Role of Health Literacy in Pandemic Preparedness

Frederick M. Burkle Jr.;¹ Amir Khorram-Manesh;^{2,3,4} Krzysztof Goniewicz⁵

1. Global Fellow, Woodrow Wilson International Center for Scholars, Washington, DC USA
2. Department of Surgery, Institute of Clinical Sciences, Sahlgrenska Academy, Gothenburg University, Sweden
3. Learning and leadership for Healthcare Professional, Institute of Health and Care Sciences, Sahlgrenska Academy, Gothenburg University, Sweden
4. Gothenburg Emergency Medicine Research Group (GEMREG), Sahlgrenska Academy, Gothenburg University, Sweden
5. Department of Security Studies, Polish Air Force University, Deblin, Poland

Correspondence:

Krzysztof Goniewicz
Department of Security Studies Polish Air Force University
Deblin, Poland
E-mail: k.goniewicz@law.mil.pl

Conflicts of interest/financial disclosures: The authors have none to declare.

Keywords: COVID-19; health literacy; pandemic; preparedness

Abbreviations:

COVID-19: coronavirus disease 2019
PH: public health

Received: April 26, 2023

Accepted: May 22, 2023

doi:[10.1017/S1049023X23005824](https://doi.org/10.1017/S1049023X23005824)

© The Author(s), 2023. Published by Cambridge University Press on behalf of the World Association for Disaster and Emergency Medicine.

Burkle FM Jr., Khorram-Manesh A, Goniewicz K. COVID-19 and beyond: the pivotal role of health literacy in pandemic preparedness. *Prehosp Disaster Med.* 2023;38(3): 285–286.

The coronavirus disease 2019 (COVID-19) pandemic has served as a reminder of the critical importance of health literacy in managing global public health (PH) crises. Health literacy, defined as the capacity of health professionals and the public to access, understand, evaluate, and apply health information, plays a crucial role in making informed decisions, adhering to PH measures, and promoting overall well-being.¹ Considering the challenges faced during the pandemic, this Editorial offers novel ideas to strengthen health literacy by addressing the availability and quality of health data and enhancing the capacity of PH experts to make informed decisions. Additionally, the role of various stakeholders in promoting health literacy is explored and the need for a well-equipped PH workforce, access to accurate and current data, and the authority to make informed decisions to mitigate the impact of future pandemics are emphasized.

One of the key concerns during the COVID-19 pandemic has been the lack of available, updated, and comprehensive data in many countries, hindering the ability of PH experts to make immediate or long-term pandemic control decisions. In response to this challenge, a continuous globally accessible health database, maintained by PH experts, should be established to include updated information on population data, vulnerability measures, and other crucial health indicators, allowing for the rapid identification of insufficiencies and vulnerabilities.^{2,3}

In addition to addressing data limitations, there is a need to strengthen PH's expertise ability, particularly in the context of acute-onset crises. Historically, PH experts have focused on controlling chronic and infectious diseases, often lacking related specialists on their staff.^{2,3} To address this gap, training programs and resources to equip PH professionals with the skills, experience, and authority needed to manage acute crises should be developed to enable data-driven decisions over political pressures.

The collective efforts of governments, health care providers, educational institutions, and communities are necessary to promote health literacy and mitigate the impact of future PH crises. As part of these efforts, governments should invest in the development of a new PH workforce, trained in the latest data analysis techniques, and equipped with the necessary authority to make informed decisions. Additionally, educational institutions should prioritize health literacy in their curricula, ensuring that both health professionals and the public are adequately informed about relevant health topics.^{4,5}

A One Health approach, recognizing the interconnection between human, animal, and environmental health, can further enhance health literacy initiatives. Incorporating the One Health Core Competency Domains makes the importance of interdisciplinary collaboration and holistic thinking evident in developing and disseminating health information.⁶ This integrated approach can contribute to more effective prevention, preparedness, and response efforts in the face of all PH crises.

Engaging in community-based initiatives is another valuable strategy. Community-based programs can help address local health literacy needs and empower individuals to make informed decisions about their health.^{5,7} By working with community partners and stakeholders, these initiatives can tailor their approach to the specific needs and contexts of the populations, such as serving as trusted sources of information and support and bridging the gap between the health care system and local communities.

Another important measure to lay the foundation for lifelong learning and informed decision making related to health is to incorporate health literacy education into school curriculums. This approach has the potential to empower future generations with the



knowledge and skills necessary to navigate complex health information and make informed choices about the challenges of global public health crises.^{7,8}

Lastly, utilizing digital technology can improve access to reliable health information and foster engagement with health-related content. Digital platforms, like social media and mobile applications, can be harnessed to provide tailored health information, support behavior change, and promote health literacy, facilitating the rapid dissemination of accurate information during PH emergencies, countering the spread of misinformation, and enabling informed decision making. However, the potential for digital platforms to propagate misinformation must be recognized. Therefore, efforts should be made to ensure that reliable and accurate sources of health information are easily accessible and promoted.^{7,8}

An element of immediacy in addressing these issues is determining who will take the leadership role globally and having the support to make major changes. The COVID-19 pandemic has exposed significant gaps in PH practice, knowledge base, and research, presenting new and challenging responsibilities and roles for PH practitioners. Our health literacy, as tested in board

examinations, defines our specialty. However, it is crucial to question whether PH practitioners are up to the task of addressing these major gaps and adapting to the evolving landscape of PH. Strong and effective leadership is necessary to implement recommended measures and establish a well-equipped PH workforce, develop a robust global health database, and ensure the prioritization of health literacy at all levels of society.⁹

Health literacy is a fundamental aspect of pandemic preparedness and response. Although some of these recommendations may have been applied, the main obstacle to successful implementation is the lack of sufficient financial support.¹⁰ By prioritizing health literacy and implementing the strategies outlined above, we can work towards a more resilient and informed society, better equipped to navigate the complexities of global health challenges. The collective multiagency efforts will be essential in fostering a culture of health literacy that empowers individuals to make informed decisions about their health and well-being. As we continue to grapple with the on-going effects of the COVID-19 pandemic, investing in and prioritizing health literacy builds a stronger foundation for future pandemic preparedness and response efforts, with strong leadership at the helm.

References

1. Peláez-Fernández MA, Rey L, Extremera N. Pathways from emotional intelligence to well-being and health outcomes among unemployed: mediation by health-promoting behaviors. *J Health Psychol.* 2022;27(4):879–889.
2. Burkle FM, Bradt DA, Ryan BJ. Global public health database support to population-based management of pandemics and global public health crises, Part I: the concept. *Prehosp Disaster Med.* 2021;36(1):95–104.
3. Burkle FM, Bradt DA, Green J, Ryan BJ. Global public health database support to population-based management of pandemics and global public health crises, Part II: the database. *Prehosp Disaster Med.* 2021;36(1):105–110.
4. van Kessel R, Wong BL, Clemens T, Brand H. Digital health literacy as a super determinant of health: More than simply the sum of its parts. *Internet Interv.* 2022; 27:100500.
5. World Health Organization. *Shanghai Declaration on Promoting Health in the 2030 Agenda for Sustainable Development.* Geneva, Switzerland: World Health Organization; 2017.
6. Frankson R, Hueston W, Christian K, et al. One Health core competency domain. *Front Public Health.* 2016;4:192.
7. Choukou MA, Sanchez-Ramirez DC, Pol M, Uddin M, Monnin C, Syed-Abdul S. COVID-19 infodemic and digital health literacy in vulnerable populations: a scoping review. *Digit Health.* 2022;8:20552076221076927.
8. Li M, Yu Z. Teachers' satisfaction, role, and digital literacy during the COVID-19 pandemic. *Sustainability.* 2022;14(3):1121.
9. Burkle FM, Devereaux AV. 50 states or 50 countries: what did we miss and what do we do now? *Prehosp Disaster Med.* 2020;35(4):353–357.
10. Paarlberg LE, LePere-Schloop M, Walk M, Ai J, Ming Y. Activating community resilience: the emergence of COVID-19 funds across the United States. *Nonprofit and Voluntary Sector Quarterly.* 2020;49(6):1119–1122.