



100 seconds to midnight and special thanks to *JPHP* contributors

Elena N. Naumova¹

Accepted: 19 March 2022 / Published online: 20 April 2022
© The Author(s), under exclusive licence to Springer Nature Limited 2022

The Bulletin of the Atomic Scientists now shows the hands of The Doomsday Clock at just "100 s to midnight" – reflecting "the most dangerous situation that humanity has ever faced" [1]. The clock's acceleration, set in motion by Russia's invasion of Ukraine, portrays an imminent risk of nuclear weapons use as the war escalates. The risk is further exacerbated by challenges of the powerplants' safety in conflict zones.

The world is far from having recovered from the COVID-19 pandemics, which severely depleted already scarce resources. The conflict in Ukraine brings a new shockwave with casualties, trauma, migration, and food and medication shortages, with very many consequences. The response from the world public health community in condemning violence and the use of military forces is strong. Yet, it is insufficient to stop the chain of health threats for the directly and indirectly affected populations in Europe and the wider world.

Five years ago, the Editors of *JPHP* invited colleagues around the world to submit original research, analyses, and descriptions of ongoing and emerging threats to population health [2]. We call readers' attention to public health issues-related violence as highlighted in the Special Supplement of 2016 [3]. We want to remind our readers that violent conflict is a public health hazard that can be countered by interventions deployed under a public health approach [4]. The call for research communities to conceptualize and highlight these health threats is now as urgent as ever.

In resource-restricted regions, data on deaths, injuries, diseases, mental health conditions, and malnutrition are difficult to collect. During crisis when one war is chasing another and inequalities are staggering, when many communities are affected by nature-made and man-made disasters, data gathering is understandably a low priority. We want to reinforce the message that in times when reliable channels of information are blocked or health data are distorted, the public is left with guesses, conspiracy theories, and misinformation.

Three editions of the Global Burden of Armed Violence of 2008, 2011, and 2015 initiated detailed reporting of deaths due to violence in both conflict and

✉ Elena N. Naumova
elena.naumova@tufts.edu

¹ Friedman School of Nutrition Science and Policy, Tufts University, Medford, USA



non-conflict settings [5]. Now platforms, like the Armed Conflict Location & Event Data Project (ACLED) [6] – a global real-time repository of disaggregated data on fatalities, are tracking violent events and their characteristics coded by location and time. Yet, the efforts are insufficient given the complexity of counting potential victims of conflicts who are missing from the population rosters after a conflict, whose social networks that could report them dead are destroyed, whose fates as victims are not observed by organizations that monitor the conflict. With later discoveries of mass graves and surfaced information on atrocities, data curators should systematically revise and update the archives [7].

For public health professionals dealing with such archives, behind each number, there is a human – someone who collects, curates, and acts upon available data; and someone whose information is collected, curated, and owned. Thus, health data and ethics are deeply intertwined and linked to human rights to life, dignity, privacy, rights to education, and rights to freedom of thought. In times of conflict, humans violate others' rights, crucial information is often suppressed, and suffering multiplies by misinformation and injustice. Along with the call from physicians, nurses, and other health professionals to stop wars and violence, we also need to join our voices and actions to share health data related to wars and violence.

Data and analytical models – produced with those data – are the instruments created by humans to reflect the past and present and to guide the decisions that affect future generations. These instruments are subject to distortions, misconceptions, and limitations; they require continuous assessment and oversight. Data on health threats related to wars and violence should power the policies and strategies to overcome, mitigate, and prevent conflicts. As we are unable to find non-violent solutions, openly shared data should reveal the price of conflicts that must be paid by future generations.

Data and models are not free, they are monetized, they are expensive, and they require human and natural resources to create and maintain. The cost of data collected but not used is the cost of wasted human capital and resources. As with any capital, the use of public health data should be properly regulated; data ownership should be transparent and properly credited; and the labor involved at all stages of the data life cycle from the design to dissemination should be properly recognized and compensated.

The world's data in any sphere of human activity – communication, transportation, entertainment, business, government, and security – are stored, managed, and distributed by data centers. Data centers require a tremendous amount of energy to operate, water for liquid cooling, and human and natural resources to maintain. The United States houses nearly one-quarter of all data center servers globally, contributing to 0.5% of total US greenhouse gas emissions [8]. In debating sustainability of data centers, we should establish clear priorities for developing and managing health data infrastructure, with understanding of the value for protecting information powering humanity survival.

When the question comes about what to keep in preserving the history of human health, we should have an answer. When history is lost, history repeats, especially wars and conflicts.



In this issue, we share our experiences in assembling health records from 2016 to 2019 on the cholera epidemic during the ongoing Yemeni war and illustrating the value of and the needs for collective efforts to exchange health information during military conflicts [9]. In the presented paper, we arrange the records to show the dynamics of the outbreak and ACLED-reported casualties as a set of animated maps exposing how both processes were unfolding during the war. We compiled a comprehensive dataset of health records from epidemiological bulletins of the World Health Organization. When shared with public, these records are typically presented in various formats preventing automatic vetting and merging. Even minimal agreements among the data holders on preparing data for public use could substantially reduce the workload for many people who collect and examine health records. Such agreements on data standardization will also help us to develop and use new tools to communicate the public health messages effectively and clearly.

With the growing assortment of tools to collect and disseminate various information, we invite readers and contributors:

- to suggest new strategies to better recognize potential threats to health;
- to share new ideas for how we can validate and verify health-related information, store and reexamine historic health records, develop, and implement data-driven action plans to protect health.

We are launching several initiatives. First, the *JPHP* is joining cross-journal efforts to address a major public health concern related to a rapid spread of false or misleading health information. Second, we assembled a collection of papers published by the *Journal* over the last 30 years underscoring the ongoing and emerging threats to health. With these two new topical collections on ‘Misinformation and Health’ and ‘100 Seconds to Midnight: Global Threats and Public Health,’ we aim to stimulate actions and discussions from those working in public health research, policy, and practice.

In response to geopolitical conflict, I want to remind readers, reviewers, and authors the principles developed by the World Association of Medical Editors in 2004 [10], to which we adhere:

“Decisions to edit and publish manuscripts submitted to biomedical journals should be based on characteristics of the manuscripts themselves and how they relate to the journal’s purposes and readers. Among these characteristics are importance of the topic, originality, scientific strength, clarity and completeness of written expression, and potential interest to readers. Editors should also take into account whether studies are ethical and whether their publication might cause harm to readers or to the public interest.

Editorial decisions should not be affected by the origins of the manuscript, including the nationality, ethnicity, political beliefs, race, or religion of the authors. Decisions to edit and publish should not be determined by the policies of governments or other agencies outside of the journal itself.

Editors should defend this principle, as they do other principles of sound editorial practice, and enlist their colleagues’ support in this effort if necessary.”



In 2021, we received another record of **638** submissions from more than **75** countries. We received ten or more submissions from the contributors residing in United States of America (146), India (70), China (46), Turkey (27), Iran (24), Saudi Arabia (21), the United Kingdom (19), Italy (18), Germany (17), Pakistan (17), Brazil (15), Canada (13), Korea (South) (13), Bangladesh (10), and Indonesia (10). Authors from Australia, Colombia, Egypt, Ethiopia, Greece, Hong Kong, Iraq, Israel, Japan, Jordan, Kuwait, Malaysia, Mexico, Nepal, The Netherland, Palestine, Poland, Portugal, Poland, Russia, Spain, Sweden, Switzerland, and Taiwan contributed three or more manuscripts (see Fig. 1).

In March of 2020, we set up the Topical Collection on Public Health Response to COVID-19 and as of March 18, 2022 we have published **34** Original Articles, Viewpoints, and Letters to the Editors highlighting the challenges, recommendations, and achievements of public health professionals. As expected, many our contributors and reviewers experienced the pressure of being on the frontline and we are immensely thankful for their committed time and dedication.

We thank the constructive guidance and timeliness provided by **100** reviewers representing Australia, Brazil, Canada, China, Ecuador, France, Germany, India, Indonesia, Israel, Italy, Malaysia, Mexico, New Zealand, Nigeria, Saudi Arabia, Switzerland, United Kingdom, and USA, who completed **135** reviews over the past year. We would like to express our gratitude to:

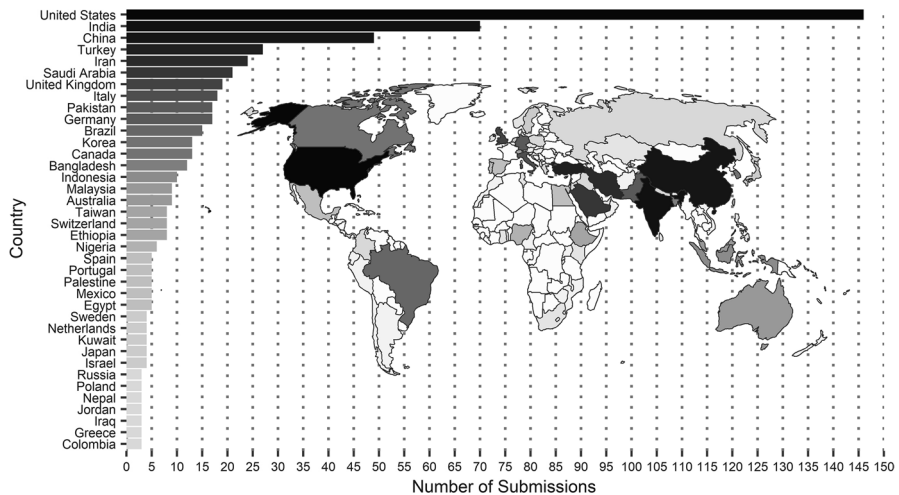


Fig. 1 *JPHP* received three or more manuscripts from 638 countries in 2021



Anthonia Adindu	Sarah Hill	Peter Orris
Farida Ahmad	Allen Hogge	Marcin Orzechowski
Tania Mercedes Alarcon- Falconi	Jennifer Horney	Al Ozonoff
Shelly Arora	Priyadarshini HR	Deepak Pateel
Debasis Bagchi	Richard Isralowitz	Sanghamitra Pati
Peter Baker	Shelley Jacob	Enrico Pavignani
Ruchita Bhattacharya	JessicaJeffrey	Carl Reddy
Irene Bosch	JessicaJones-Smith	Samuel Reis-Dennis
Larissa Calancie	Patrece Joseph	Doris Rocha Ruiz
Francois Castonguay	KamalKasturi	Lauren Rossen
James Chauvin	Susan Koch-Weser	Rajiv Sarkar
Ilana Cliffer	Alexandra Kulinkina	David Sclar
JeanneCoffin-Schmitt	Ted Kyle	Remmy Shawa
Steven Cohen	RobynLandry	Apurba Shil
Arantxa Colchero	Laura Lara-Castor	Noureen Siraj
Alessandro Colombo	DavidLegge	Lindsey Smith-Taillie
Jordan Covvey	Peter Levine	Merianne Rose Spencer
Richard A. Daynard	Yihong Liu	Neil Squires
Harshal Deshmukh	Jon Macy	Heather Stobaugh
Elizabeth Erdman	Kristine Madsen	Shreyas Tikare
BerthaEstrella	NithinManchery	Catherine Troisi
Iro Evlampidou	Adolfo Martinez Valle	Andre Verani
Kirk Evoy	Santi Martini	RachelVickers-Smith
David Fedson	David Michaels	Maria Fernando Vinuesa- Veloz
Kay Franks	Carlos Molina	Wendy Wagner
Sarah Frise	Alicia Monroe	Edward Wallace
Lance Gable	Rob Moodie	John Walley
Neil Gordon	Matthew Neilson	Michelle Wood
Allison Groom	Paul Newton	Yong Yang
David Gute	Ariadne Nichol	Mustafa Younis
Guanghua Han	Mollent Okech	Guanyang Zou
Josh Havens	Charles Olatubara	
Ira Helfand	Stephen Onufrak	

As we live in the troubling times and divided world, I have a special plea: be willing to listen different points of view without rushing to judge and to be proactive in offering help, kindness, knowledge, and skills to those need them the most.

Elena N. Naumova, Editor-in-Chief.

References

1. Science and Security Board. Bulletin of the Atomic Scientists. 2022 Doomsday Clock Statement. At doom's doorstep: It is 100 seconds to midnight. Posted 20 January 2022. <https://thebulletin.org/> . Accessed 11 March 2022
2. Freeman P, Robbins A. Editorial and CALL for papers: human survival in a new era. *J Public Health Pol.* 2017;38(2):163–6. <https://doi.org/10.1057/s41271-017-0072-1>.
3. *J Public Health Pol:* Volume 37, Issue 1 Supplement, September 2016. <https://link.springer.com/journal/41271/37/1/suppl/page/1>



4. Whitaker S. Preventing violent conflict: a revised mandate for the public health professional? *J Public Health Pol.* 2013;34(1):46–54. <https://doi.org/10.1057/jphp.2012.65>.
5. Geneva Declaration on Armed Violence and Development. Global Burden of Armed Violence Reports. Geneva: Geneva Declaration Secretariat. <http://www.genevadeclaration.org/measurability/global-burden-of-armed-violence.html>. Accessed 11 March 2022
6. Armed Conflict Location & Event Data Project (ACLED). About ACLED. 2021. <https://www.acled.com/about-acled/>. Accessed 11 March 2022
7. The Global Registry of Violent Deaths (GReVD). <https://grevd.org/>. Accessed 11 March 2022
8. Siddik AB, Arman Shehabi A, Marston L. The environmental footprint of data centers in the United States. *Environ Res Lett.* 2021;16(6):064017. <https://doi.org/10.1088/1748-9326/abfba1>.
9. Simpson RB, Babool S, Tarnas M, Kaminski PM, Venkat A, Hartwick MA, Naumova EN. Dynamic mapping of the cholera outbreak during the Yemeni Civil War, 2016–2019. *J Public Health Pol.* 2022;43:2.
10. The World Association of Medical Editors. Geopolitical Intrusion on Editorial Decisions. Posted 23 March 2004. <https://wame.org/geopolitical-intrusion-on-editorial-decisions>. Accessed 11 March 2022

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

