

# Planetary Health: An Adaptive Challenge and a Collective Responsibility

Raudah Mohd Yunus<sup>1,2,\*</sup> and Noran Naqiah Hairi<sup>1</sup>

<sup>1</sup>*Centre for Epidemiology and Evidence-based Practice, Faculty of Medicine, University of Malaya, Malaysia*

<sup>2</sup>*Department of Public Health Medicine, Faculty of Medicine, Universiti Teknologi MARA, Malaysia*

Climate change is undoubtedly one of the most pressing issues facing humanity today and affects all countries and communities. In recent years, climate-induced events have made regular headlines. Such incidents include the drought in Argentina and Uruguay that damaged soy and corn crops in a massive scale and increased their prices worldwide, the extreme cold wave that hit Nepal and took multiple lives, the cholera outbreak in Congo caused by flooding, and the tropical cyclone Ava in Madagascar that killed and displaced thousands of people (Levitt *et al.*, 2018). These natural disasters, environmental degradation and unpredictable weather patterns caused by a warmer climate destroy harvests, deplete fisheries, trigger the proliferation of infectious diseases, and thus threaten the very existence of humans. Referring to the climate change conundrum, the renowned public intellectual Noam Chomsky says that “we have entered a new geological era, the Anthropocene, in which the earth’s climate is being radically modified by human action, creating a very different planet, one that may not be able to sustain organized life in anything like a form we would want to tolerate.” (Polychroniou, 2016).

Human health is directly affected by this catastrophe. Global warming increases the risk of various illnesses and deaths due to extreme heat and poor air quality. With more of our landscapes being scarred by natural disasters such as wildfires, communities are being displaced in big numbers and forced to live in crowded and squalid conditions where resources are scarce and basic services are dysfunctional. Often, such circumstances lead to complex forms of political strife, social unrest and even violence. From the perspective

of health determinants, these are the ‘perfect’ ingredients for all types of health problems, ranging from well-defined conditions such as dengue fever, diarrheal diseases and malaria to more ill-defined issues like non-communicable diseases, mental disorders and chronic malnutrition. For instance, between the mid-1970s to the year 2000, climate change is reported to have caused over 150,000 deaths and 5,500,000 DALYs per year (Ezzati *et al.*, 2002). Likewise, it is projected that an additional 250,000 deaths per year will occur between 2030 and 2050 from malaria, malnutrition, diarrhoea and heat stress, as a result of climate change (WHO, 2019).

We are now living in the Anthropocene epoch, an era in which the earth is fundamentally altered by human activity. Scientists claimed that this era had begun from the 1950s. Given that humanity is mainly responsible for this near-irreversible change, the solution to this quandary has to be dynamic, multi-dimensional and multi-disciplinary. Most importantly, it needs to be human-centric. Conventional methods – such as building larger machines to absorb carbon dioxide or building higher bridges – alone might not be the answer. Such a conundrum calls for a combination of quantitative methods and emotional insights and should be viewed as an adaptive challenge instead of merely a technical one (O’Brien and Selboe, 2015). Simply put, it is not just a matter of figures, formulas or technology. It is a matter of changing the human mindset, beliefs and behaviour.

Given the spectre of these climate catastrophes, the Association of Pacific Rim Universities (APRU) – an international consortium of 45 universities in the region –

\*Corresponding author’s e-mail: raudah.yunus@gmail.com

underscored “Planetary Health: The Next Frontier” as the theme for its 12th APRU Global Health Conference held at the University of Malaya in Kuala Lumpur on 28 – 30 October 2018. This was to demonstrate the enormity of the significance of climate change in today’s global health discourse and to bring together experts from various disciplines to share their findings and insights into climate- and health-related fields. The conference comprised three main panels covering the various angles of climate change and planetary health. It had 306 participants from more than 70 institutions spanning dozens of economies such as Australia, Bangladesh, China, Ethiopia, Hong Kong, India, Indonesia, Japan, Malaysia, Nepal, New Zealand, Nigeria, Pakistan, Rwanda, Singapore, South Korea, Taiwan, Thailand, The Philippines, The United States and Yemen. In addition to the 88 oral and 76 poster presentations, six working group meetings were held. They were themed: a) Global health education and technology; b) non-communicable diseases; c) environmental health; d) mental

health; e) bioethics, and; f) the Kuala Lumpur declaration.

As part of APRU’s commitment to further the agenda of mitigating climate change and sustaining planetary health, this special issue is published to disseminate the latest research findings on climate change and health and bringing the conference dialogues to the next level. Through the interactive sessions held in October 2018 and articles published in this journal issue, important discussions and conversations of the conference are recorded in a structured, academic manner and cross-disciplinary studies are fully capitalized to translate evidence into real policies and interventions. Articles in this special issue were reviewed by the Chief Editor, guest editors and multiple peer-reviewers. Of the 164 presentations, 29 papers (including the Kuala Lumpur declaration) were selected and included in this issue. We register our deepest gratitude to the editors, peer-reviewers and journal and conference staff for their hard work and generous contributions.

## I. REFERENCES

- Ezzati, M, Lopez, AD, Rodgers, A, Vander Hoorn, S & Murray, CJ 2002, ‘Selected major risk factors and global and regional burden of disease’, *Lancet*, vol. 360, 1347-60.
- Levitt, D, Andringa, P, Hulley-Jones, F, Smears, L & Warts, J 2018, *Deadly weather: the human cost of 2018’s climate disasters*, viewed 9 September 2019, <https://www.theguardian.com/environment/ng-interactive/2018/dec/21/deadly-weather-the-human-cost-of-2018s-climate-disasters-visual-guide>
- O’Brien, K & Selboe, E 2015, *Climate change as an adaptive challenge*, Cambridge University Press, 1-23.
- Polychroniou, CJ 2016, *Global warming and the future of humanity: An interview with Noam Chomsky and Graciela Chichilnisky*, viewed 9 September 2019, <http://rozenbergquarterly.com/global-warming-and-the-future-of-humanity-an-interview-with-noam-chomsky-and-graciela-chichilnisky/>
- WHO 2019, *Climate Change*, viewed 9 September 2019, [https://www.who.int/health-topics/climate-change#tab=tab\\_1](https://www.who.int/health-topics/climate-change#tab=tab_1)