An agenda for climate change and mental health in the Philippines

The latest report[1] from Climate Cares, based at the Imperial College London, is a welcome addition to the small but slowly growing body of knowledge on the interconnections between climate change and mental health.[1] The report identified the different direct and indirect causal pathways, synthesised evidence on current epidemiology and health-system responses from diverse countries, and laid out recommendations for future research, policy, and practice. The report's launch is timely and relevant as the climate crisis intersects with the COVID-19 pandemic, which is also generating a global mental health pandemic.

As one of the world's most climate-vulnerable countries, the Philippines should give increasing attention to the climate change–mental health nexus. As a threat multiplier, climate change undoubtedly exacerbates existing social and physical health inequalities, which will drive mental distress in the long run. Although health is recognised as a priority sector in the country's Climate Change Act and nationally determined contributions, the mental health effects of climate change are yet to be explicitly acknowledged in national climate and health policies and programmes. The mental health consequences of climate-related disasters are already listed in the country's National Unified Health Research Agenda 2017–2022 and should remain part of the agenda's future iterations. However, this narrow focus needs to be expanded. Hence, to further advance scholarship and practice in this emerging planetary health area, we recommend specific areas for further investigation in the next decade.

First, the mental health consequences of both extreme weather events and climate change's slow onset effects should be examined. As the intensity of typhoons and flooding continues to escalate,[2] understanding and responding to post-traumatic stress and other psychological sequelae will remain an important concern. However, the links between mental health and the slow onset effects of climate change—such as a rise in sea level, which is expected to lead to water salinisation and potentially forced displacement in coastal communities, and increasing ambient temperature, which can bring about food and water insecurity—are largely unexamined in the Philippines and other developing countries. Emerging concepts introduced by high-income country scholars to describe long-term mental health responses, such as ecological grief and ecoanxiety, should also be validated in the context of low-income and middle-income countries, or Asian settings.[3] The diversity of the psychological manifestations of climate change should be studied and incorporated in the full-cost accounting of climate-related societal and health impacts.

Second, strengthening mental health services should be an integral part of building health systems that are climate resilient and universal. Before the COVID-19 pandemic, the Filipino government made a political commitment to achieve universal health coverage, which is also a crucial part of health sector adaptation to climate change. Unfortunately, mental health services are yet to be emphasised in the universal health coverage agenda. Only 3–5% of the total health budget is spent on mental health and there is a short supply of mental health workers, with a ratio of 2–3 per 100 000 population.[4] The country's new Mental Health Act of 2019, which hopes to fill these gaps, needs to provide the springboard for establishing a climate-resilient and universally accessible mental health system. Such a system should be built on a strong foundation of family and community supports and a robust cadre of non-specialised first responders such as adequately-trained *barangay* (village) health workers. Telepsychiatry and other digital mental health services that expanded during the COVID-19 pandemic also have the potential to fill gaps in mental health-care access. However, their effectiveness and appropriateness should be evaluated for geo-graphically-isolated climate-vulnerable populations with low internet connectivity.

Third, a holistic, transdisciplinary approach to mental health should acknowledge the interplay between climate change, social media, and other stressors such as COVID-19. Emphasis on the climate change–mental health linkage must not result in a siloed approach, because mental health outcomes are concurrently

influenced by multiple and interrelated factors. For instance, the aggressive lockdowns, physical distancing, and working-from-home arrangements driven by the pandemic have fuelled social isolation and, potentially, a loneliness epidemic. Meanwhile, the increasing digitalisation of social interaction in the Philippines (considered to be the social media capital of the world) is driving mental stress and social anxiety, especially among young people,[5] while also creating new online communities for social support.[6] These new mental and emotional stressors should be considered in climate change and mental health research to inform the design of joined-up preventive and adaptive measures.

Fourth, existing and potential sources of mental resilience to climate change should be explored at individual, community, and societal levels. Traditionally, a deep sense of spirituality and strong family bonds have long been acknowledged as essential resilience measures in predominantly Catholic and family-oriented Filipino society.[7] However, because today's generation survives in an age of climate change, COVID-19, and digital technology, new interventions that are also context-specific and culturally sensitive need to be further explored. Crucial to the discovery of homegrown solutions is the adoption of both modern and decolonial approaches in the study of mental health. The re-examination and continuous development of *Sikolohiyang Pilipino* (Filipino Psychology),[8] a scholarly movement for indigenous psychology that blossomed in the 1970s, and its adaptation to 21st century realities including climate change could be a good starting point.

Finally, nature-based health solutions should be harnessed for improved mental wellbeing in a changing climate. There is growing evidence of the mental health benefits of nature. For instance, exposure to blue–green spaces has been shown to buffer the negative mental health effects of pandemic-related lockdowns.[9] Meanwhile, initial evidence of the mental health benefits of nature to Filipinos is just starting to emerge.[10] Furthermore, inequalities in access to quality blue–green spaces, especially among the urban poor who live in slums or are forcibly displaced because of gentrification, cannot be neglected. The Philippine government's Green, Green, Green infrastructure assistance programme needs to ensure that future investments in communal open spaces are enjoyed by all, especially the poor and marginalised.

In advancing the climate and mental health agenda, special attention should be given to geographically isolated, displaced, and marginalised populations, including climate migrants, indigenous communities, people with disabilities, children, women, older people, and the urban poor, among others, recognising that there is no one-size-fits-all approach. This agenda will only succeed through multidisciplinary and transdisciplinary inclusive action, bringing together psychologists, health professionals, social scientists, ecologists, climatologists, and other specialists, as well as policy makers, community leaders, and patient groups.

Ultimately, although adaptation to climate-related mental illness is necessary, advocating for rapid, widespread, and fair decarbonisation—which is mental health promotion on a planetary scale—cannot be ignored. Realising the Paris Agreement goals and protecting natural ecosystems will ensure the long-term sustainability of both the planet and of people's health—not just physical, but mental and emotional too.

*Renzo R Guinto, Julius Cesar P Alejandre, Marianne K Bongcac, Johnrev Guilaran, Sena S Salcedo, Jun Angelo Sunglao
guinto.rl.f@slmc-cm.edu.ph

Planetary and Global Health Program, St Luke's Medical Center College of Medicine of William H Quasha Memorial, Quezon City 1112, Philippines (RRG, MKB); PH Lab, Manila, Philippines (RRG, MKB); Sunway Centre for Planetary Health, Sunway University, Selangor, Malaysia (RRG); Department of Civil Engineering and Environmental Management, School of Computing, Engineering, and Built Environment, Glasgow Caledonian University, Glasgow, UK (JCPA); Division of Social Sciences, College of Arts and Sciences, University of the Philippines Visayas, Miagao, Philippines (JG); Mental Health First Response, Manila, Philippines (SSS); St Arnold Center for Integral Development, Quezon City, Philippines (SSS); Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK (JAS); London School of Hygiene & Tropical Medicine, London, UK (JAS)

1   Lawrance E, Thompson R, Fontana G, Jennings, N. The impact of climate change on mental health and emotional wellbeing: current evidence and implications for policy and practice. May 13, 2021. https://doi.org/10.25561/88568 (accessed June 7, 2021).
2   Cinco TA, de Guzman RG, Ortiz AMD, et al. Observed trends and impacts of tropical cyclones in the Philippines. *Int J Climatol* 2016; **36:** 4638–50.
3   Cunsolo A, Harper SL, Minor K, Hayes K, Williams KG, Howard C. Ecological grief and anxiety: the start of a healthy response to climate change? *Lancet Planet Health* 2020; **4:** e261–63.
4   Lally J, Tully J, Samaniego R. Mental health services in the Philippines. *BJPsych Int* 2019; **16:** 62–64.
5   Schønning V, Hjetland GJ, Aarø LE, Skogen JC. Social media use and mental health and well-being among adolescents—a scoping review. *Front Psychol* 2020; **11:** 1949.

6   Ku R. Despite teleconsultations, access to mental health services remains limited. *Rappler*, Oct 10, 2020. https://www.rappler.com/moveph/despite-teleconsultations-access-to-mental-health-services-remains-limited (accessed June 18, 2021).

7   Samaco-Zamora MC, Fernandez, KT. A grounded theory of Filipino wellness (kaginhawaan). *Psychol Stud* 2016; **61:** 279–87.

8   Pe-Pua R. Sikolohiyang Pilipino: teorya, metodo at gamit—Filipino psychology: theory, method and application. Quezon City: University of the Philippines Press; 2015.

9   Pouso S, Borja Á, Fleming LE, Gómez-Baggethun E, White MP, Uyarra MC. Contact with blue–green spaces during the COVID-19 pandemic lockdown beneficial for mental health. *Sci Total Environ* 2020; **756:** 14398.

10   Villanueva CP, Labao RB, Tran KR, et al. Resilience and green spaces: association with stress among contact centre agents in the Philippines. *medRxiv* 2020; published online June 16. https://doi.org/10.1101/2020.06.14.20131276 (preprint).