Global Health from the Margins contemplations from students engaging in interdisciplinary research

Opinion Editorial

Lesley Johnston, Public Health and Health Systems, University of Waterloo Lacey Willmott, Geography, University of Waterloo

Climate change, poverty, environmental degradation, and deepening inequality – the future before us offers no end of wicked problems and human health is deeply implicated in them all. This is not the first time we have faced broad-scale public health crises. Hanlon et al. document four previous transitions going back to the Industrial Revolution, which required transformative public health shifts. In each shift was an associated transformation in society's understanding of itself and the way health was conceived within it. ¹

This time, however, the planetary scale of the challenges before us dwarfs previous crises. The Lancet's Commissions on Health and Climate Change², Planetary Health^{3,4} and Global Governance for Health⁵, among others, reveal the broad scope of the research already underway to better comprehend and address the breadth of the challenge. The United Nations' Sustainable Development Goals (SDGs) offer an approach to the needed global transition, outlining the work that must be done to achieve a future in which the planet is protected and no one is left behind.6 As a country deeply complicit in perpetuating the social and environmental injustices that shaped these wicked problems,7 it is our responsibility as Canadians to take action to realize this transition.8 We as young Canadian global health researchers are being called to assist in solving these problems we helped create. To achieve these sustainability goals Horton et al.4

To achieve these sustainability goals Horton et al.⁴ and Kjellstrom and McMichael⁹ urge us to transform our current health practices if we are to respond to the threats before us. Hanlon

et al.¹ finds that a, "fifth wave of public health development is now needed; one which will need to differ radically from its forerunners". In their public to planetary health manifesto, Horton et al.⁴ urge us to incorporate and transcend the lessons from our past practice, and embrace, "a new principle of planetism and wellbeing for every person on this Earth—a principle that asserts that we must conserve, sustain, and make resilient the planetary and human systems on which health depends by giving priority to the wellbeing of all".⁴

Yet what action are we, young global health researchers and practitioners, prepared and able to take to achieve this great and needed public health transition? While called upon to respond to the challenges before us, global health remains a mutable entity often subject to redefinition. In 2009, Koplan et al. proposed a frequently cited common definition; "global health is an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide".8 Eight years later we find that definition to be too narrow to encapsulate, let alone respond to, the challenges before us. Not only is the ecological dimension absent, the social, political, economic and cultural context in which health challenges are experienced may not be recognized, let alone addressed.

If we are to meet these challenges and address the threats before us we will need to develop new ways of thinking, being and doing. Hanlon et al.¹⁰ urges us to embrace an integrative and ecological framework. Where and how do we begin?

We propose the mainstreaming and prioritization of complexity and systems concepts

into global health research, centered on equity (as already articulated in CCGHR's Principles for Global Health Research). We are not the first to introduce this, in fact Hanlon et al. discuss these as emergent qualities of the fifth wave of global health. The adoption of this within broader health communities of research and practice has gained traction. Though a base of evidence in support is established, system centric approaches in global health are the exception, not the norm.

Despite holistic system centric research's contribution to coordinated action, researchers and studies that do adopt this fall at the disciplinary margins of global health research. This does not necessarily happen due to a lack of understanding of complex systems approaches, but rather due to a gap between knowledge and application, as articulated by Salway and Green.¹⁴ We add that a further challenge is persistent disciplinarity, negating opportunities for systems approaches. Compounding this is a standard of evidence (RCTs, Cochrane reviews etc.) that is not well suited to systems approaches. It is often difficult to obtain the necessary training and education on this at early career stages, and faculty able and willing to supervise this research. This, coupled with an often absent critical perspective and a failure to engage with structural forces shaping global health, including persistent underdevelopment and poverty, inequality, globalization and climate change, may result in a lack of engagement with the complexities and interconnectedness of global health issues.

Though working at the margins of global health is logistically difficult across the gamut of securing funding (particularly given Canada's current tri-council funding system), publishing and collaborating, it is our duty to do so as we will not progress global health otherwise – neither as scholars, nor in practice. We call upon our colleagues and the global health research and practice community to prioritize equity centered systems approaches in our work. To do this it is necessary to seek our training and education on systems

and complexity concepts, and transdisciplinary methodologies. We support Salway and Green's assertion that critical, equity centered research ought to be achieved through the integration of social and political theory in systems approaches. 14 The time, resources and support necessary for this are immense, yet ethically we cannot be deterred from this. With the world's greatest challenges requiring true integration and systems wide intervention, our research must be too. We cannot forget that global health research is part of the broader global health system and must support this shift. We call upon the community of global health researchers, particularly early career graduate students to adopt and advocate for this shift in paradigm and practice.

REFERENCES

- Hanlon P, Carlisle S, Hannah M, Reilly D, Lyon A. Making the case for a "fifth wave" in public Health. Public Health [Internet]. 2011;125(1):30–6. Available from: http://dx.doi. org/10.1016/j.puhe.2010.09.004
- Watts N, Adger WN, Agnolucci P, Blackstock J, Byass P, Cai W, et al. Health and climate change: Policy responses to protect public health. Lancet. 2015;386(10006):1861– 914.
- 3. Whitmee S, Haines A, Beyrer C, Boltz F, Capon AG, De Souza Dias BF, et al. Safeguarding human health in the Anthropocene epoch: Report of the Rockefeller Foundation-Lancet Commission on planetary health. Lancet [Internet]. 2015;386(10007):1973–2028. Available from: http://dx.doi.org/10.1016/S0140-6736(15)60901-1
- Horton R, Beaglehole R, Bonita R, Raeburn J, McKee M, Wall S. Comment From public to planetary health: a manifesto. Lancet. 2014;383(Mm):847.
- Ottersen OP, Dasgupta J, Blouin C, Buss P, Chongsuvivatwong V, Frenk J, et al. The political origins of health inequity: Prospects for change. Lancet. 2014;383(9917):630–67.
- Forum UNHP, Development S. BALANCING THE PILLARS: Eradicating Poverty, Protecting the Planet and Promoting Shared Prosperity BALANCING THE PILLARS: Eradicating Poverty, Protecting the Planet and Promoting Shared Prosperity. 2017;
- Ge M, Friedrich J, Damassa T. 6 Graphs Explain the World's Top 10 Emitters [Internet]. World Resources Institute. 2014 [cited 2017 Sep 27]. Available from: https:// wri.org/blog/2014/11/6-graphs-explain-world's-top-10emitters
- Canada G of. The 2030 Agenda for Sustainable Development [Internet]. 2017 [cited 2017 Sep 18]. Available from: http://international.gc.ca/world-monde/issues_development-enjeux_developpement/priorities-priorites/agenda-programme.aspx?lang=eng
- Kjellstrom T, McMichael AJ. Climate change threats to population health and well-being: The imperative of protective solutions that will last. Glob Health Action. 2013;6(1).
- 10. Hanlon P, Carlisle S, Hannah M, Lyon A, Reilly D. A perspective on the future public health: an integrative and ecological framework. Perspect Public Health [Internet]. 2012;132(6):313–9. Available from: http:// journals.sagepub.com/doi/10.1177/1757913912440781

Global Health Inequalities

- Koplan JP, Bond TC, Merson MH, Reddy KS, Rodriguez MH, Sewankambo NK, et al. Towards a common definition of global health. Lancet. 2009;373(9679):1993–
- CCGHR. Canadian Coalition for Global Health Research CCGHR Strategic Pan 2015–2019 [Internet]. 2015 [cited 2010 Jun 20]. Available from: http://www.ccghr.ca/wpcontent/uploads/2013/04/CCGHR-Strategic-Plan-2015-19. pdf
- Grant RL, Hood R. Complex systems, explanation and policy: implications of the crisis of replication for public health research. Crit Public Health [Internet]. 2017;1596(September):1–8. Available from: http://dx.doi. org/10.1080/09581596.2017.1282603
- 14. Salway S, Green J. Towards a critical complex systems approach to public health. Crit Public Health [Internet]. 2017;27(5):523–4. Available from: https://www.tandfonline.com/doi/full/10.1080/09581596.2017.1368249

Inequities Behind Bars

Opinion Editorial

Eilish Scallan, BSc, Queen's University

Chances are you don't recognize the name Steven Simons.

Incarcerated in Ontario's Warkworth Institution from 1998 to 2010, Simons was infected with hepatitis C when a fellow inmate used his needle to inject. Hepatitis C negatively impacts a person's quality of life, and chronic infection can cause serious health complications such as cirrhosis and liver cancer.1 Now, Simons is leading a lawsuit against the Government of Canada with the support of the Canadian HIV/AIDS Legal Network and a number of other community organizations. The lawsuit aims to get safe injecting equipment into Canada's prisons, arguing that the refusal of Correctional Service Canada to provide access to clean injecting equipment further disadvantages persons in custody who suffer from addiction, and violates basic human rights.2

The United Nations' Basic Principles for the Treatment of Prisoners states that "prisoners shall have access to the health services available in the country without discrimination on the grounds of their legal situation".³ Why are the primary prevention tools that are available to the public, such as needle and syringe programs, not available to persons in custody? Why don't we offer universal screening and treatment to diagnose this infection in all correctional facilities? These questions have ignited quite the debate in Canada – a debate that highlights the apathetic and discriminatory attitudes that our communities and political leaders can hold towards people in custody.⁴⁻⁷

In engaging with this debate, it's important to understand who is inside Canada's prisons. There are more than 250,000 admissions to correctional facilities each year. A quarter of prison admissions are for Indigenous persons, many of whom suffered in residential schools. The majority of female offenders have been physically abused. Most persons report using drugs in the recent past before they were admitted to custody, and many continue to use drugs in prison.^{8,9} Canada's prison population is undeniably disadvantaged and marginalized, and has great need for supportive services. The system is failing them by neglecting to effectively confront the health risks that exist within prison walls.

The reality is that prison could serve as a great opportunity for health intervention. These institutions provide a space in which society's most marginalized populations can be supported. High-risk behaviours, such as injection drug use and tattooing, can be recognized and the risks can be mitigated. A remarkable example of this came in 2005, when Correctional Service Canada (CSC) rolled out a project to make tattooing safer in prisons. Inmate tattoo artists were given access to safe equipment and were trained on infection control. Despite positive health outcomes, the project was shut down by federal Public Safety Minister Stockwell Day, who claimed that the project was a waste of tax dollars.¹⁰

CSC has voiced concerns that needles from prison needle and syringe programs (PNSPs) could