

## The global syndemic of obesity, undernutrition, and climate change

The *Lancet* Commission on the global syndemic of obesity, undernutrition, and climate change by Boyd Swinburn and colleagues (Jan 27, published online)<sup>1</sup> brings several global phenomena into focus through application of the term global syndemic. The authors emphasise how one should understand how predatory food industries and industrial waste have contributed greatly to the availability and accessibility of foods for consumption. Addressing the link between food production, a changing climate, and malnutrition is crucial. For instance, Mintz<sup>2</sup> argued that the onus of sugar consumption in the globalised world is on the shoulders of consumers as opposed to the producers, because the insatiability for sugar motivates exploitive production. Mintz stated "As sugar became cheaper and more plentiful, its potency as a symbol of power declined while its potency as a source of profit gradually increased"; the market potential of sugar has expanded globally as its consumption has increased in people living in poverty. The profit of Big Food and Big Soda (food and soda multinational corporations) has affected the welfare of many people around the world, fuelling sugar consumption and convergent syndemics of obesity, type 2 diabetes, hypertension, cardiovascular diseases, and other associated cardiometabolic conditions. Certainly, these factors are closely linked. However, the syndemics, as originally conceived, are much more locally focused.

The *Lancet* Commission's<sup>1</sup> interpretation of a global syndemic diverged from the way syndemic was first described by its architect, Merrill Singer.<sup>3</sup> This divergence in the proposed concept of global syndemic is somewhat surprising given that *The Lancet* published a Series on syndemics in 2017.<sup>4-8</sup> In this Series, we outlined the central tenets of a

syndemic: the clustering of two or more health conditions within a particular context; interaction of those conditions via biological, social, or psychological pathways; and involvement of social, political, economic, or ecological drivers. As used by the Commission,<sup>1</sup> the concept is diluted by its jettisoning of identifiable interaction among health conditions. Further, decades of research on syndemics associated with HIV reveal how differently the virus emerges within certain contexts and interacts with varied social, psychological, behavioural, and biological factors.<sup>4,9</sup> We know from research on diabetes that the disease becomes syndemic differently from one location to another, because variations exist in how diabetes materialises in relation to political and epidemiological histories.<sup>10</sup> Most anthropologists will probably think that the Commission's application of a global syndemic is dissociated from local contexts and too all encompassing. For instance, there are marked differences in the ways in which people think of epidemic and pandemic. Pandemic addresses a global process, whereas epidemic, like syndemic, focuses on a particular context.

Although scientifically divergent from its original conception, thinking about obesity as a global syndemic might have some utility. Obesity exemplifies a pivotal syndemic problem that requires international-level policy interventions to curb the power and influence of multinational corporations, such as Big Sugar and Big Food, which unrelentingly target low-income populations.<sup>1</sup> In this context, arguing for a global syndemic might serve as a political tool to propel positive alliances to take action against multinational corporations. The Commission<sup>1</sup> argues for understanding "systemic drivers that need common actions", proposing that tearing down silos in the academy and health policy, strengthening government action and community voices, dismantling corporate power to better designate who eats what and where, and promoting improved,

more sustainable business models for a healthier future should be syndemic.<sup>1</sup> Although obesity is a very personal experience shaped by culture, society, and politics, targeting the source of sugar politics through collective action is a fundamental starting point.

We declare no competing interests.

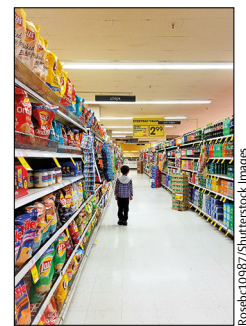
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- 1 Swinburn BA, Kraak VI, Allender S, et al. The global syndemic of obesity, undernutrition, and climate change: The *Lancet* Commission report. *Lancet* 2019; published online Jan 27. [https://doi.org/10.1016/S0140-6736\(18\)32822-8](https://doi.org/10.1016/S0140-6736(18)32822-8).
- 2 Mintz S. *Sweetness and power: the place of sugar in modern history*. New York: Penguin Books, 1985.
- 3 Singer MC. *Introduction to syndemics: a systems approach to public and community health*. San Francisco: Jossey-Bass, 2009.
- 4 Singer M, Bulled N, Ostrach B, Mendenhall E. Syndemics and the biosocial conception of health. *Lancet* 2017; **389**: 941-50.
- 5 Mendenhall E. Syndemics: a new path for global health research. *Lancet* 2017; **389**: 889-91.
- 6 Tsai AC, Mendenhall E, Trostle JA, Kawachi I. Co-occurring epidemics, syndemics, and population health. *Lancet* 2017; **389**: 978-82.
- 7 Willen SS, Knipper M, Abadía-Barrero CE, Davidovitch N. Syndemic vulnerability and the right to health. *Lancet* 2017; **389**: 964-77.
- 8 Mendenhall E, Kohrt B, Norris S, Ndeti D, Prabhakaran D. Non-communicable disease syndemics: poverty, depression, and diabetes among low-income populations. *Lancet* 2017; **389**: 951-63.
- 9 Singer MC, Clair S. Syndemics and public health: reconceptualizing disease in bio-social context. *Med Anthropol Q* 2003; **17**: 423-41.
- 10 Mendenhall E. *Rethinking diabetes: entanglements of trauma, poverty, and HIV*. Ithaca: Cornell University Press, 2019.

## Gender bias in academia

We have previously discussed how societal-level structures might influence scientific publishing processes.<sup>1</sup> We disagree with Jason Boynton and colleagues' assessment (Oct 27, 2018, p 1514)<sup>2</sup> of the evidence we presented. Boynton and colleagues expressed concern that we did not establish causation for the processes through



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