WARWICK
THE UNIVERSITY OF WARWICK

Manuscript version: Author's Accepted Manuscript
The version presented in WRAP is the author's accepted manuscript and may differ from the published version or Version of Record.

Persistent WRAP URL:
http://wrap.warwick.ac.uk/173095

How to cite:
Please refer to published version for the most recent bibliographic citation information. If a published version is known of, the repository item page linked to above, will contain details on accessing it.

Copyright and reuse:
The Warwick Research Archive Portal (WRAP) makes this work by researchers of the University of Warwick available open access under the following conditions.

Copyright © and all moral rights to the version of the paper presented here belong to the individual author(s) and/or other copyright owners. To the extent reasonable and practicable the material made available in WRAP has been checked for eligibility before being made available.

Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

Publisher's statement:
Please refer to the repository item page, publisher's statement section, for further information.

For more information, please contact the WRAP Team at: wrap@warwick.ac.uk.

warwick.ac.uk/lib-publications

We must value and safeguard human health if we are to have a sustainable future

Neena Modi, professor of Neonatal Medicine, Imperial College London;[1,] Sonia Bhalotra, professor of Economics, University of Warwick[2]; Flavia Bustreo, vice-chair of the Board[3]; Mark Hanson, emeritus professor of Human Development and Health[4]

1 Section of Neonatal Medicine, School of Public Health, Imperial College London, Chelsea and Westminster Hospital campus, 369 Fulham Road, SW10 9NH, London, UK

2 Department of Economics, University of Warwick, UK

3 Fondation Botnar, Basel, Switzerland

4 Institute of Developmental Sciences and NIHR Biomedical Research Centre, University of Southampton and University Hospital Southampton, UK

Do policy makers value human health? Although the immediate answer may be "yes," reflection indicates a more nuanced response is warranted. During the covid-19 pandemic, many policy makers presented preservation of health and economic growth as opposing choices. There have also been troubling displays of vaccine nationalism from leaders seemingly unable to comprehend that no one is safe until everyone is protected. Meanwhile, around the world, cultures and religions, supported by legislation, continue to obstruct efforts to improve reproductive health by barring access to contraception and abortion. Earlier this year, the United States, in an extraordinary reversal of societal progress, has overturned the landmark Roe versus Wade ruling and severely restricted access to safe abortion (1).

In richer countries, people die principally from *preventable* physical and mental health conditions, while in poorer countries they still die in enormous numbers from *treatable* diseases as well. Human health affects quality of life, productivity, the wellbeing of successive generations and ultimately the economy, but policy does not reflect these realities sufficiently, nor has the aim of securing "health in all policies" gained sufficient traction.

Life expectancy in many parts of the UK and the US is declining and the gap between the most and the least affluent is widening (2, 3). Before the covid-19 pandemic, awareness was growing of the rising prevalence of chronic non-communicable physical and mental diseases around the world, debilitating conditions now responsible for 71% (41 million) of annual global deaths (4). The pandemic also highlighted health interrelationships because individuals with non-communicable diseases were more likely to die or suffer adverse effects from covid infection. Equally, conditions during the pandemic resulted in a worsening of child obesity, with 25.5% of children in year 6 in the UK now obese (5). Overweight and obesity in late adolescence or early adulthood, even in apparently healthy individuals, accounts for approximately 60% of the incidence of type 2 diabetes before the age of 40, and a decrease in life expectancy by as much as 20 years (6). Estimates of the global cost of non-communicable diseases from 2011 to 2025 in terms of lost productivity are in the region of US$47 trillion (7). In comparison, the global costs of climate change in

developing countries have been placed at around US$1.4 trillion over an equivalent period (8).

Governments cling to growth in Gross Domestic Product (GDP) as the ultimate measure of success, despite widespread and increasing acceptance that this is a flawed measure with serious limitations. (9, 10). GDP is a measure of products, outputs and services that have monetary value even if they damage health, and does not assign monetary value to activities that improve health. Additionally, GDP does not recognise health as human capital with a valuable future yield. These factors perpetuate the invisibility of activities that contribute to health and wellbeing, and impede efforts to make health a policy focus. Though many economists accept the need for a new framework, reliance on GDP persists.

Previously, population health improved as countries became wealthier. Wealth led to more stable food supplies, cleaner water, better housing and education, and therefore to less infant mortality, infection, starvation, and longer lifespans. However, the tight relationship between health and wealth has weakened. The United States is one of the wealthiest countries in the world, but stands towards the bottom of the league table for health (11). One reason for this is the view that wealth drives health through ability to purchase healthcare. However, current estimates suggest that overall, healthcare explains only around 10-20% of the variance in health in high income settings and about 50% in low and middle-income countries (12, 13). The wide acceptance of "*universal healthcare*" as a commodity with a cost and a primary solution to the world's health problems has distracted from investment in health capital. In addition, the use of the words "*cost-effective*" and "*best-buy*" by the World Health Organisation to describe approaches to combat non-communicable diseases (14) is a marker of the prevalence of the commodification of health.

Reversing the decline in human health from non-communicable diseases, as well as improving the health of left-behind populations that remain disadvantaged by poor nutrition, sanitation, low vaccination rates, and the toll of childbearing requires a clear focus on prevention. It means rejecting the cries of those who promote healthcare as the principal solution, in what is all too often a self-serving activity because they stand to benefit from the commodification of healthcare. It also means incentivising activities such as parenting

and caring, which improve health, but all too often impose a financial penalty on the parent or carer. The world needs a framework to safeguard human health by according it value, recognising the long-term benefits for individuals, and society. This means replacing GDP with a more nuanced metric, or accepting additional metrics when making policy decisions.

Mark Carney, the former Governor of the Bank of England, acknowledges a need to measure "*value*" (15), the WHO Council on the Economics of Health for All, led by economist Marianna Mazzucato, calls for rejection of "*the pathological obsession with GDP*" (16), and the British Medical Association highlights the need to recognise the value of health (17). Now, as the world struggles to recover from covid, and faces new challenges with the cost of conflict and the cost of living crisis, and the continued spectre of climate change, would be a good moment to make the case for *valuing health*.

Conflicts of Interest: NM reports current grants outside the submitted work from the National Institute for Health Research, Medical Research Council, Health Data Research UK, Shire Pharmaceuticals, Chiesi Pharmaceuticals, European Health Data Evidence Network, and March of Dimes. NM is a member of the Nestle Scientific Advisory Board; she accepts no personal remuneration for the role. NM is immediate past-president of the British Medical Association, immediate-past-president of the UK Medical Women's Federation, past-president of the UK Royal College of Paediatrics and Child Health, and president-elect of the European Association of Perinatal Medicine. NM is patron of Keep Our NHS Public and Health Prom, and trustee of the charities TheirWorld, David Harvey Trust, Action Cerebral Palsy, and the Academy of Medical Sciences. The views expressed are her own.

SB reports current grants outside the submitted work from the European Research Council under the European Union Horizon 2020 research and innovation programme, Economic and Social Research Council, Italian Social Security Institute, Sexual Violence Research Initiative, National Bureau of Economic Research, Ministry of Science Chile, Innovations for Poverty Action, and Swedish Research Council. SB is a member of the international advisory board of Academics Stand Against Poverty.

FB chairs the Governance and Ethics Committee for the Partnership for Maternal, Newborn and Child Health, hosted by the World Health Organization, and the Advisory Board of the

United Nations Institute of Global Health. She co-chairs the Lancet Commission on Gender-based violence and Maltreatment of Young People. The views expressed are her own.

MH reports grants outside the submitted work for British Heart Foundation, European Union Horizon 2020 LifeCycle Programme and The Royal Society. He Chairs the Knowledge and Evidence Working Group for the Partnership for Maternal, Newborn and Child Health, hosted by the World Health Organisation. The views expressed are his own.

References

1 Understanding Roe v Wade and why it was overturned https://www.independent.co.uk/news/world/americas/roe-v-wade-overturned-supreme-court-justices-b2116042.html; last accessed 080722

2 Woolf SH, Schoomaker H Life expectancy and mortality rates in the United States, 1959-2017 JAMA 2019; 322(20):1996-2016

3 Rashid T, Bennett JE, Paciorek CJ, Doyle Y, Pearson-Stuttard J, Flaxman S et al Life expectancy and risk of death in 6791 communities in England from 2002 to 2019: high-resolution spatiotemporal analysis of civil registration data The Lancet Public Health 2021; 6 (11): e805-e816

4 World Health Organisation https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases; last accessed 080722

5 NHS Digital. National Child Measurement Programme, England 2020/21 School Year. Available from https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2020-21-school-year [Accessed 14 February 2022]

6 Fontaine KR, Redden D T, Wang C, Westfall A O, Allison DB. Years of life lost due to obesity. JAMA 2003; 289:187-193

7 Ghebreyesus TA. Acting on NCDs: counting the cost. Lancet 2018; 391(10134):1973-1974

8 Puig D, Olhoff A, Bee S, Dickson B, Alverson K. The Adaptation Finance Gap Report (Eds.) (2016) United Nations Environment Programme;

https://backend.orbit.dtu.dk/ws/files/198610751/Adaptation_Finance_Gap_Report_2016.pdf last accessed 030422

9 Goldsmith C. Why GDP is no longer the most effective measure of economic success. https://www.worldfinance.com/strategy/why-gdp-is-no-longer-the-most-effective-measure-of-economic-success; last accessed 11-0122

10 Stiglitz JE. GDP is the wrong tool for measuring what matters. Scientific American August 1, 2020 https://www.scientificamerican.com/article/gdp-is-the-wrong-tool-for-measuring-what-matters/; last accessed 11-01-22

11 America's Health Rankings 2016 Annual Report https://www.americashealthrankings.org/learn/reports/2016-annual-report/comparison-with-other-nations; last accessed 11-01-22

12 Hood CM, Gennuso KP, Swain GR, Catlin BB County health rankings: relationships between determinant factors and health outcomes. Am J Prev Med 2016; 50:129-35

13 Kuruvilla S, Schweitzer J, Bishai D et al Success factors for reducing maternal and child mortality Bull World Health Organ 2014; 92(7):533-44B

14 World Health Organisation. Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of non-communicable diseases https://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf?sequence=1&isAllowed=y; WHO 2017; last accessed 11-01-22

15 Carney M. Value(s). Building a better world for all. William Collins 2021

16 World Health Organisation Council on the Economics of Health for All, Valuing Health for All: Rethinking and building a whole-of-society approach, Council Brief No.3; 8 March 2022; https://www.who.int/publications/m/item/valuing-health-for-all-rethinking-and-building-a-whole-of-society-approach---the-who-council-on-the-economics-of-health-for-all---council-brief-no.-3; last accessed 19-03-22

17 British Medical Association, Valuing Health; https://www.bma.org.uk/media/6228/bma-valuing-health-report-final-web-oct-2022.pdf; last accessed 05-11-22