

# Epic measures

One doctor. Seven billion patients.

Reviewed by David Flood and Anita Chary

Jeremy N. Smith. *Epic Measures: One Doctor. Seven Billion Patients*. Harper Wave, 2015. Hardcover, 352 pp., \$26.99. ISBN: 978-0062237507.

*Epic Measures: One Doctor. Seven Billion Patients*, by journalist Jeremy N. Smith, is a biography of physician-economist Christopher Murray. Smith describes Murray as a wunderkind who published his first scientific article in *The Lancet* at age thirteen and headed a World Health Organization (WHO) steering committee while completing a full-time medical residency at Harvard. Portrayed in the popular media as ‘When Moneyball Meets Medicine’ (Smith 2015), *Epic Measures* chronicles Murray’s attempts to measure everything related to health, everywhere in the world. Murray’s quest to measure disease-based morbidity, mortality, and risk factors worldwide leads him to initiate the Global Burden of Disease (GBD) project, to found an elite research center devoted to measuring health, and to make a groundbreaking invention: the disability-adjusted life year (DALY). It would be difficult to understate Murray’s impact, as he has become one of the most cited scientists in the world and has catapulted forward the academic field of health metrics.

While *Epic Measures* is nominally about Murray, the book’s true biographical subject is data. Cold, hard, and fiercely peer-reviewed data are Murray’s obsession; his data-driven approach departs radically from that of ‘missionaries’, a term he uses to designate those who are unserious about data, including WHO bureaucrats and government leaders who proselytize for specific health causes based on cherry-picked numbers. *Epic Measures* is ultimately a

comeback story: thrust from WHO, where his ideas were met with resistance and disregard, Murray ends up launching the new GBD project with a heavy assist from the Bill and Melinda Gates Foundation. His critics and colleagues alike marvel; Richard Horton, editor of *The Lancet*, publishes a special issue of Murray's combined work and compares him to Galileo.

Intended for an educated lay audience, rather than a scholarly or academic one, this book offers a wealth of insights into the modern global health landscape. *Epic Measures* would be useful in undergraduate classes to bring forward the relevance of critical medical anthropology in global health. Several opportunities spring to mind.

First, *Epic Measures* inevitably will be contrasted with the popular biography of Paul Farmer, *Mountains Beyond Mountains: The Quest of Dr. Paul Farmer, a Man Who Would Cure the World* (Kidder 2004). Farmer and Murray were friends and trainees together at Harvard, yet they have become towering figures in what are essentially divergent nosologies of global health. Whereas Murray has pursued technical excellence in measurement – leading to enormous breakthroughs in understanding the burden of diseases like tuberculosis, depression, and cardiovascular disease – Farmer has prioritized explanations for health disparities in the form of geographic, political, and economic structures. Murray's most influential papers on risk factors for disease make no mention of history, power, or oppression, and these omissions could represent a portal of entry to foundational anthropological works about structural inequalities.

Second, *Epic Measures* lays bare the bureaucratic limitations of international institutions like the WHO and the influence of private-sector philanthropists like the Gates Foundation. Murray published his first early-career GBD study in 1993 under the WHO's purview. However, political infighting led to his departure in 2003. Then, in 2007, Murray helped secure a US\$105 million grant from the Gates Foundation to conduct GBD work independent of the WHO, and since that time his efforts on global health measurement have been carried out at the Institute of Health Metrics (IHME), an independent research center affiliated with the University of Washington. The IHME continues to prosper through the largesse of the Gates Foundation, which has contributed US\$445 million in aggregate donations (Doughton 2017).

The rise of IMHE is indicative of a broader trend in global health, namely the privatization of the international health policy apparatus. Crippled by their political dimensions and budget stasis, agencies like the WHO lose influence while private donors like the Gates Foundation – with an annual grant disbursement approximately equal to the WHO's annual budget – become more influential. This is fertile terrain for anthropologic examination. Who

has the social capital to access wealthy donors? To whom are these donors accountable? Is financing Murray's work paradigmatic of the Gates Foundation's emphasis on technological fixes to intractable global health problems? Those seeking deeper engagement might turn to the work of critics of 'philanthrocapitalism', including Sophie Harman, Linsey McGoey, and Michael Edwards, as well as scholars advocating for the strengthening of national health systems over the construction of parallel private systems.

Third, *Epic Measures* can serve as a productive launching point for social scientists interrogating expert knowledge production and practices of evidence uptake. As one example, Murray describes how, when he questioned the reliability of extant vital registries and presented his own improved data sets, WHO bureaucrats' and government officials' political alliances and affective ties to particular health problems impeded objective, evidence-based policy making. Given these themes, this book serves as an excellent platform to dive into the work of social scientists writing about metrics and the increasingly dominant expansion of evidence-based medicine into the sphere of global health decision making. Two recent edited volumes, *When People Come First: Critical Studies in Global Health* (Biehl and Petryna 2013) and *Metrics: What Counts in Global Health* (Adams 2016), provide compelling counternarratives to the idea that metrics are value-neutral and politically unbiased, and suggest ethnography as a vital analytic frame – an 'empirical lantern' – to check the increasing 'metrification' of global health epitomized by Murray's work.

*Epic Measures* is an easy read and a cogent synthesis of the work of a modern global health titan. Familiarity with the topics in this book is important for students of anthropology, public health, and science and technology studies, as well as experienced scholars working at the cutting edge of global-health analysis. Ultimately, like Farmer's biography, the staying power of *Epic Measures* will likely be determined by its potential to inspire a new wave of students and trainees to pursue careers in global health. Although it may seem unlikely that Murray's currency – numbers – will have the same inspirational power as Farmer's currency – stories – the rapidly increasing number of degree and trainee programs for global health researchers and scientists suggests there is already a great thirst for numbers. And, as Murray compels us, we must follow the data.

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