

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Correspondence

Impact of COVID-19 on maternal and child health

Timothy Roberton and colleagues¹ estimate the indirect effects of COVID-19 on maternal and child mortality in low-income and middleincome countries (LMICs) with use of the Lives Saved Tool (LiST), suggesting that reduced provision and use of reproductive, maternal, newborn, and child health-care services might substantially increase maternal and child deaths. Although we commend their efforts, we are concerned that omission of stillbirths from their analyses has resulted in a considerable underestimate of this impact.

Each year, more than 2.6 million stillbirths occur worldwide, similar to the annual burden of 2.5 million neonatal deaths and 2.8 million post-neonatal deaths of children younger than 5 years.² Stillbirths, 98% of which occur in LMICs, remain a substantial, undercounted adverse pregnancy outcome.² While maternal and childhood mortality rates have decreased in most regions, stillbirth rates remain high, and reduction is too slow to meet the global target of 12 per 1000 births by 2030. Moreover, most stillbirths are preventable with access to quality health care, particularly when including the 1.3 million intrapartum stillbirths.2,3

Counting stillbirths is essential when assessing adverse maternal and child outcomes. The causes of maternal and early newborn death are almost inseparable from causes of stillbirth.³ A woman's risk of having a stillbirth is closely associated with her ability to access adequate antenatal and obstetric care. The most vulnerable pregnant women in rural, low-resource, and fragile conflict-affected settings—are at greatest risk because they already have inadequate access to quality care that will decrease even further as the pandemic continues.^{2,3}

Despite their heavy mortality burden and substantial long-term psychosocial and financial effects, stillbirths remain largely invisible, as evidenced by their omission from Roberton and colleagues' study.² The Lancet's stillbirth Series (2011 and 2016) called on governments and other actors to integrate stillbirth prevention within women's and children's health initiatives.²⁻⁴ In these Series, LiST was used to show the triple return on investment that such integrated action can produce.

In the pre-pandemic world, an estimated 823000 stillbirths, 1145000 neonatal deaths, and 166000 maternal deaths could be prevented with universal access to antenatal and intrapartum interventions in 75 high-burden countries.⁴ If Roberton and colleagues had included stillbirths in their analysis, as LiST is designed to do, their findings would have reflected the potential additional loss of life due to COVID-19 more accurately.5 Their exclusion of stillbirths has missed a substantial proportion of deaths that can result because of reduced health-care access during this pandemic.

We declare no competing interests.

Copyright @ 2020 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license.

*Elizabeth M McClure, Mary V Kinney, Susannah Hopkins Leisher, Sara L Nam, Paula Quigley, Claire Storey, Aliki Christou, Hannah Blencowe, on behalf of the Stillbirth Advocacy Working Group bmcclure@email.unc.edu

Research Triangle Institute, Durham 27709, NC, USA (EMM); Save the Children, Cape Town, South Africa (MVK); International Stillbirth Alliance, Millburn, NJ, USA (SHL); Options Consultancy Services, London, UK (SLN); DAI Global Health, London, UK (PQ); International Stillbirth Alliance, Bristol, UK (CS); School of Public Health, University of Sydney, Sydney, Australia (AC); and Centre for Maternal, Adolescent, Reproductive & Child Health, London, School of Tropical Medicine and Hygiene, London, UK (HB) Roberton T, Carter ED, Chou VB, et al. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. *Lancet Glob Health* 2020; **8**: e901–08.

1

5

- 2 Lawn JE, Blencowe H, Waiswa P, et al. Stillbirths: rates, risk factors, and acceleration towards 2030. Lancet 2016; **387**: 587-603.
- Pattinson R, Kerber K, Buchmann E, et al. Stillbirths: how can health systems deliver for mothers and babies? *Lancet* 2011; 377: 1610–23.
- 4 Heazell AEP, Siassakos D, Blencowe H, et al. Stillbirths: economic and psychosocial consequences. Lancet 2016; 387: 604–16.
 - Stein D, Wards K, and Cantamelo C. Estimating the potential impact of COVID-19 on mothers and newborns in low- and middle-income countries. https://medium.com/@ HealthPolicyPlus/estimating-the-potentialimpact-of-covid-19-on-mothers-andnewborns-in-low-and-middle-income-3a7887e4a0ff (accessed May 18, 2020).



Published Online August 3, 2020 https://doi.org/10.1016/ S2214-109X(20)30326-0