

**Authors' reply**

We appreciate the comments by Olga Joos and colleagues, in response to our Article,<sup>1</sup> on prioritising stillbirth reporting and registration within civil registration and vital statistics (CRVS) system strengthening efforts. Improving data collection and data quality in low-income and middle-income countries (LMICs) is key since far too many of these countries have very scarce or no quality data on stillbirths. Integrating stillbirths in the vital registration process will allow us to produce better and more timely estimates of the risk of stillbirth and analyse inequities at the subnational level. We hope that the resources<sup>2,3</sup> mentioned by Joos and colleagues can contribute to the improvement of stillbirth data collection through registration. In particular, the involvement of the health system can have a crucial role in improving the registration and recognition of stillbirths. UNICEF, WHO, and members of the Core Stillbirth Estimation Group contributed to the health sector guidance on stillbirth registration and are working closely with countries on the ground to implement it.

We agree with Ankan Mukherjee Das and Rajiv Janardhanan that health service interruptions and other factors related to the COVID-19 pandemic might increase the risk of a stillbirth. Mukherjee Das and Janardhanan point to the limitations caused by data quality issues of stillbirth estimates, particularly in LMICs. Since our estimates were based on all available data to estimate the stillbirth rates in countries that met the data quality criteria, we believe that they represent the best possible estimate at the current time. We aimed to reflect the data situation in a country in the uncertainty intervals around the estimates. In the case of India, the

uncertainty bounds are large given the estimated variance in the subnational population study data. We agree that further investment in strengthening routine data systems to better capture stillbirths and consistent application of standard international definitions is needed to improve the quality of stillbirth estimates in the future.

We appreciate Mukherjee Das and Janardhanan highlighting the importance of the three delays during pregnancy and childbirth.<sup>4</sup> Pathways to stillbirth can be a complex multifactorial process. We agree that ending preventable stillbirths will require addressing barriers to availability of and access to high-quality care, while addressing stigma and context-specific cultural norms. UNICEF, WHO, and partners are working with countries on these important areas to save the lives of women and babies and prevent stillbirths.

We declare no competing interests. The authors are contributing in their individual capacity and not on behalf of their institutions.

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- 1 **Hug L, You D, Blencowe H, et al. Global, regional, and national estimates and trends in stillbirths from 2000 to 2019: a systematic assessment. *Lancet* 2021; **398**: 772–85.**
- 2 Schwid A, Sferrazza L, Frederes A, et al. Civil registration, vital statistics and identity management (CRVSID): legal and regulatory review toolkit. April 19, 2021. <https://advocacyincubator.org/wp-content/uploads/2021/04/CRVSIDToolkit.pdf> (accessed Aug 31, 2021).
- 3 WHO, UNICEF. Health sector contributions towards improving the civil registration of births and deaths in low-income countries: guidance for health sector managers, civil registrars and development partners. Geneva: World Health Organization, 2021.
- 4 Thaddeus S, Maine D. Too far to walk:

maternal mortality in context. *Soc Sci Med*  
1994; **38**: 1091-110.