COVID-19 lockdowns led to sudden changes in birth outcomes, with variations between countries. Pooled results show a significant association between lockdown measures and stillbirth rates.

Figure 1. Forest plot of stillbirths before and during COVID-19 lockdown periods.

RESULTS contd.
Meta- Analyses

- 14 studies were pooled in.
- Lockdown period associated with a significant risk of stillbirth: RR = 1.33 [95% CI 1.04, 1.69] when compared to pre-pandemic period.
- Lockdown measures were not associated with a significant risk of PTB, LBW and VLBW compared to pre-pandemic periods.

CONCLUSIONS and FUTURE RECOMMENDATIONS

- Criteria that led to unexpected changes in LBW, PTB, and stillbirth remains unclear.
- Pooled results show a significant association between lockdown measures and stillbirth rates, but not low birth weight rates.
- Further studies warranted: examine differences in other countries' lockdowns and sociodemographic groups from low to middle-income countries.
- Learning from changes in perinatal outcomes during COVID-19 lockdowns poses an opportunity to reduce the leading causes of childhood mortality worldwide.

STUDIES INCLUDED IN THE REVIEW

- 1967 screened articles, 18 publications included.
- Sample size of pregnant women ranged from 3399 to 1599 547 from 15 countries.

Preterm Birth

- 13 studies, with conflicting results. Odds ratios [95% CI] ranging from 0.09 [0.01, 0.40] to 1.93 [0.76, 4.79].

Low Birth Weight

- 3 studies, 1 statistically significant study, rate ratio of 3.77 [1.21, 11.75].

Stillbirth

- 10 studies, 4 statistically significant studies, adjusted relative risk ranging from 1.46 [1.13, 1.89] to 3.9 [1.83, 12.0].