International Maternal Newborn Health Conference

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GAIN Global Action in Nursing

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Reducing intrapartum stillbirths among pregnant women in southeastern Liberia

A nursing and midwifery-led quality improvement initiative

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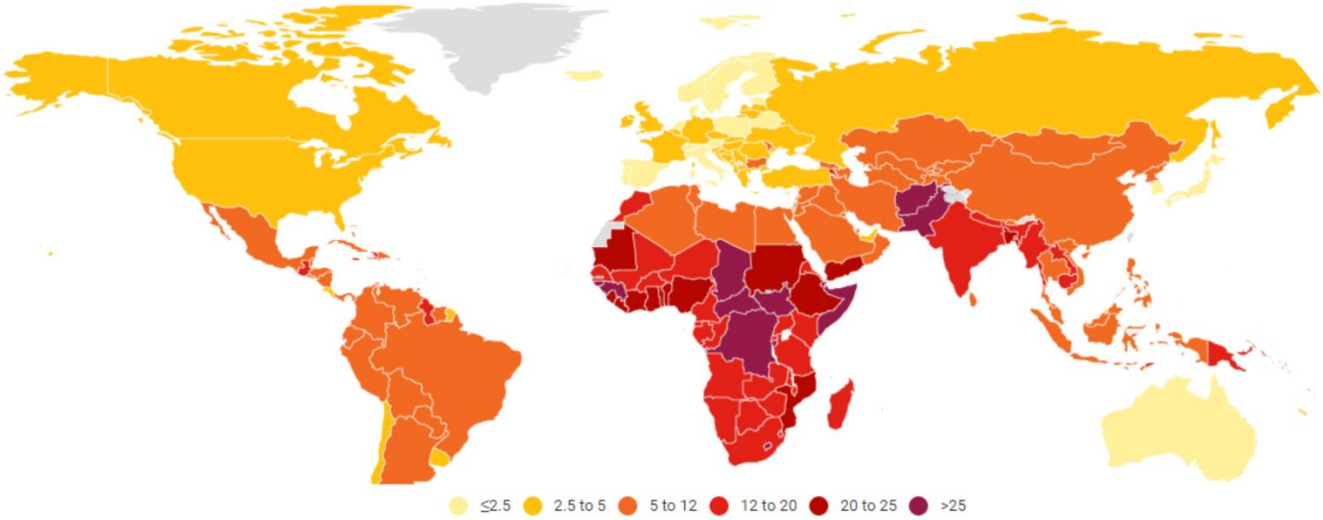
Conflict of interest

- We confirm we have no conflicts of interest to disclose.

Global stillbirth rates

- Of the 2.6 million stillbirths globally, 98% occur in low- and middle-income countries
- Liberia is among countries with some of the highest stillbirth rates
- Fresh stillbirths (FSBs) make up nearly 50% of all stillbirths
- Majority of FSBs are preventable



Stillbirth rates by country (2019) from *A Neglected Tragedy: The global burden of stillbirths – UNICEF DATA*

FSBs in southeastern Liberia

- In 2019, J.J. Dossen Memorial Hospital (JJD) in Liberia reported 46 FSB per 1000 births
  - Target rate: 12/1000 births or less by 2030
- Nurses and midwives led a quality improvement (QI) project aimed to reduce FSB rates by 56.5%
  - Goal: 46/1000 births in 2019 to 20/1000 births in 2021

Methods

- Baseline survey of midwifery practices was conducted in 2019
- Fishbone analysis was used to identify key causes of FSB
- The first Plan-Do-Study-Act (PDSA) cycle ran between January 2020 to December 2021
- Direct observation and chart reviews were used to collect post-intervention data
- Stillbirth audits were done for all cases to identify contributing factors

Causes of high FSB rates at JJD

- The baseline survey found main causes of FSB:
  - Poor shift handover
  - Delays in partograph documentation
  - Challenges calling physicians during emergencies
- Pre-intervention:
  - Bedside handover of fetal heart tones during midwife shift turnover was 0%
  - Timely and consistent use of partograph was 75%
  - Average physician emergency response time was 30 minutes

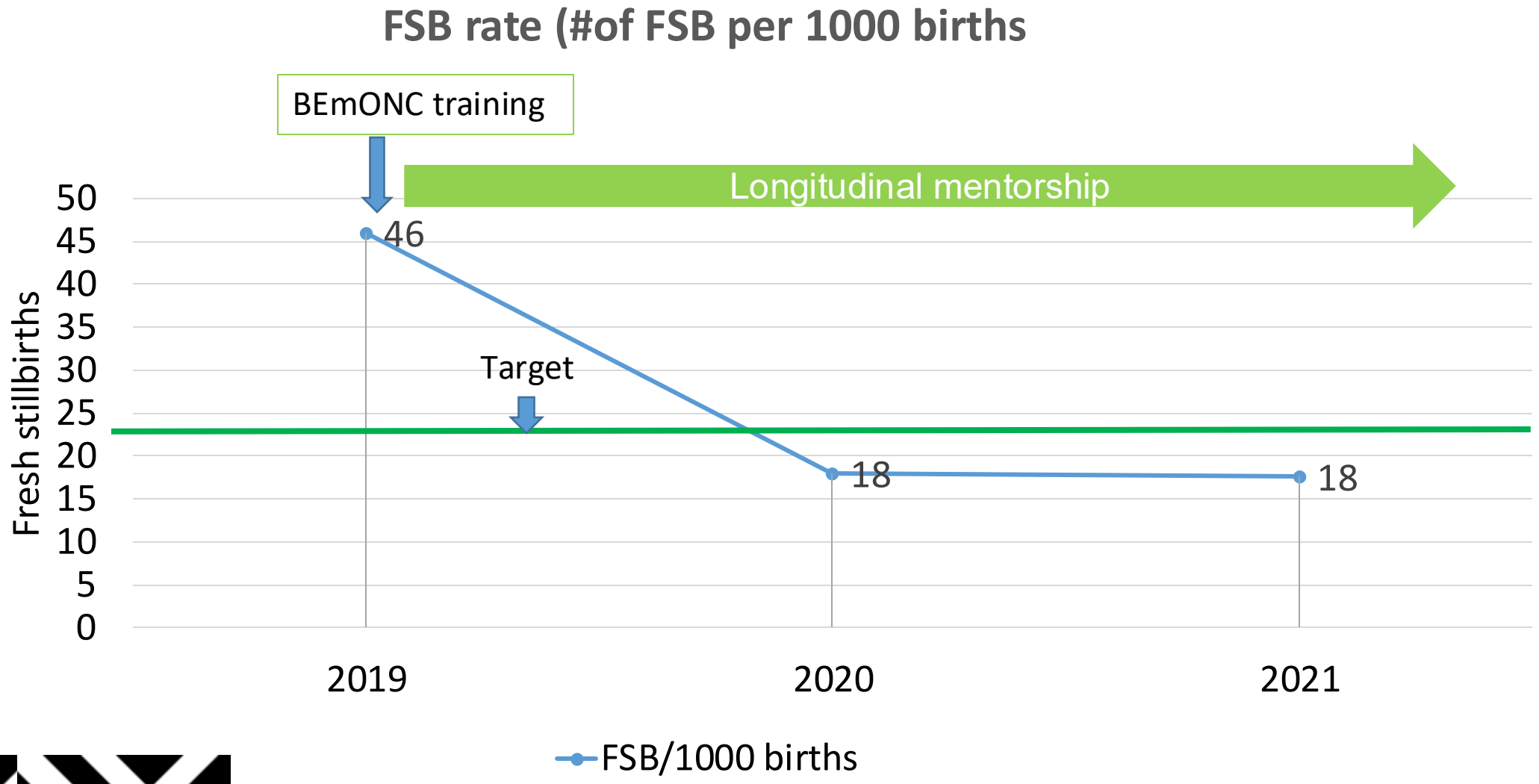
The intervention

- Intervention:
  - Basic Emergency Obstetric and Newborn Care (bEmONC) training
  - Longitudinal clinical mentorship
  - Update admission, labor management, and shift handover policies
  - Reinforced team work & communication between the physician and the midwives

Post-QI intervention Results

- FSB dropped by 60.9% to 18/1000 births in 2021 compared to 46/1000 births in 2019
  - Timely partograph use increased to 100%
  - Fetal heart tone assessment during shift turnover improved by 92%
  - Average physician emergency response time dropped to 10 minutes

Post-QI intervention Results



Lessons learnt

- Most causes of FSB are related to gaps in **timely diagnosis and intervention** by providers
- Proper monitoring of labor, timely emergency response, and bedside assessment of fetal heart tones **during shift turnover** are key for reducing FSB
- Team work between the physician and the midwives is vital in improving maternal & neonatal outcomes
- Training and mentorship in bEmONC and CEmONC are necessary for obstetric providers

Conclusion

- Skilled midwives must be at the center of interventions for reducing FSBs
- Nurse & Midwives are the leaders of maternity care in Liberia
- With their dedicated focus, we envision that Liberia can reduce stillbirth to 12/1000 births or less by 2030

Increasing midwifery led interventions by 95% would avert 65% of still births (ICM, 2021)

Thank you!

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