**Understanding Social Determinants of Mortality in Preterm Infants: A Mixed Method Study**

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### 1 BACKGROUND

- Despite decades of global progress on child survival, **significant challenges** persist:
  - **1 in 10** babies are born prematurely
  - **1 million children** die each year because of being born prematurely
  - **2.4 million children** die in the first 28 days of their lives
  - **90% of extremely premature babies in low-income settings die** compared to 10% in high income countries

- **Insufficient access** to feasible, cost-effective, and timely healthcare
- **Economic and geographic disparities** in access to neonatal care
- **Incomplete and inaccurate population level data** to estimate burden

### 2 OBJECTIVES

- Examine **social determinants of preterm neonatal mortality** in 25 low- and middle-income countries (LMICs) by analysing data collected through the Demographic and Health Survey (DHS)
- Understand **perspective of policymakers** on preterm neonatal mortality and identifying gaps and barriers in addressing this issue through interviews in selected LMICs

### 3 METHODOLOGY

**Study Design and Site:** Mixed Methods Retrospective Cohort Study

- **Quantitative:** 25 LMICs for which preterm birth data was available in DHS
- **Qualitative:** Interviews in Ethiopia

**Study Participants:**
- Children born prematurely in 25 selected LMICs
- Policymakers in selected LMIC (Ethiopia)

**Study Procedures:**
- Birth records for preterm infants selected from DHS
- Interviews conducted with policymakers in Ethiopia
- Data analysed using survival analysis and thematic analysis

### 4 PRELIMINARY RESULTS

- **330,404** Births Records
- **16,907** Preterm Births
- **2,367** Preterm Deaths

**Survival Curves:**
- **Births Records**
  - Antenatal Care Sought During Pregnancy
  - Child’s Sex

**Policymaker Insights:**
- "The current policies and initiatives have been effective, but the question is **will they take us where we want to be by 2030?**"
- "The key gap is that there is **no implementation strategy** after the policies"
- "It takes 10 minutes to carry a newborn to the paediatric ward and you **have only one minute to resuscitate the baby** – that’s the problem"

**Next Steps:** Complete survival analysis and thematic analysis to develop policy recommendations

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