

THE BETTERBIRTH STUDY

November 2014–December 2016 | Uttar Pradesh, India

The BetterBirth intervention was designed to improve the quality of facility-based childbirth care for women and infants.

The BetterBirth randomized controlled study combined the WHO Safe Childbirth Checklist with supportive, peer-to-peer, birth attendant coaching and feedback in primary care facilities in Uttar Pradesh, India. We measured the intervention's impact on:

- » Birth attendant delivery of Checklist **essential birth practices**, such as handwashing and taking temperature
- » Rates of **maternal/perinatal death** within seven days of delivery
- » **Maternal complications** within seven days of delivery, including seizures, loss of consciousness for more than an hour, fever with foul-smelling vaginal discharge, hemorrhage, and stroke

Location: Uttar Pradesh (UP), India, population 204 million

- » UP maternal mortality ratio: 258 deaths per 100,000 live births; neonatal mortality rate: 32 deaths per 1,000 live births
- » India's maternal mortality ratio (2015): 174 per 100,000 live births; neonatal mortality rate (2016): 25 per 1,000 live births

Partners:

- » Ariadne Labs
- » Harvard T.H. Chan School of Public Health
- » Governments of India and Uttar Pradesh
- » Community Empowerment Lab (Lucknow, India)
- » Jawaharlal Nehru Medical College (Belgaum, India)
- » Population Services International
- » World Health Organization
- » Supported by the Bill & Melinda Gates Foundation

Study Size:

- » More than 300,000 women and babies
- » 120 primary care centers and first referral units (60 intervention/60 control)
- » 168 birth attendants coached over 8 months and 43 visits
- » More than 60 facility medical officers and 24 district medical officers collaborated on quality improvement

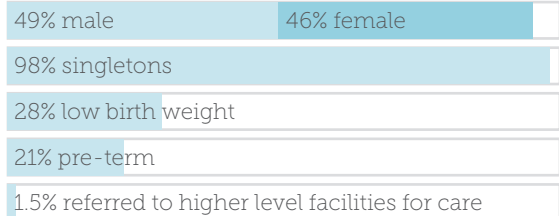
Study Data:

- » Achieved 98.3% data accuracy with an extensive data quality assurance protocol
- » Achieved 99.7% follow-up with women in the study to track 7-day outcomes



The BetterBirth baby

158,637 babies born



The BetterBirth mother

157,689 mothers enrolled

- » On average, 25 years old with 2 children
- » Median time between admission and delivery: 101 minutes



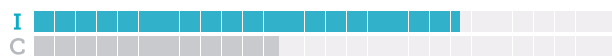
The BetterBirth birth attendant

168 birth attendants coached

- » Nurses or auxiliary nurse midwives
- » On average, 37 years old with 9 years of experience and 4 years since last training

Results

Percent of Checklist essential birth practices completed by **intervention sites and control sites:**



After two months of coaching, **intervention sites** performed **1.7x** the number of essential birth practices as control sites. (Intervention sites completed 73%, while the control sites completed 42%.)



Four months after coaching ended in the **intervention sites**, they performed **1.4x** the number of essential birth practices as control sites. (Intervention sites completed 62%, while the control sites remained unchanged at 44%.)

Overall, **birth attendants who were coached to use the Safe Childbirth Checklist performed significantly more of the essential birth practices that are linked to improved care for women and newborns.**

However, **the intervention had no impact on maternal and neonatal mortality rates or maternal complications.**

To download the Safe Childbirth Checklist and learn more, visit www.ariadnelabs.org/betterbirth