Questions regarding the FIRST BREATH Trial (February 16, 2010)

1. What do you plan to do next?

First Breath included implementation of essential care for the newborn. We are now implementing emergency care for pregnant women and their newborns in the same communities. We would also like to expand the First Breath intervention into other communities.

2. Are you disappointed in the findings?

Not at all. Indeed, this is the largest trial of its kind and the large reduction in stillbirth is remarkable, particularly given that the work was done in communities that lack basic health care resources. This study demonstrates that this intervention can reduce perinatal mortality substantially. Among birth attendants, we did find a statistically significant reduction in perinatal mortality.

3. Why did the intervention impact SB more than neonatal death?

Many infants die at birth or just before birth. The Essential Newborn Care course trained birth attendants how to resuscitate these infants and how to keep them alive by providing drying, warmth, early breast feeds, skin to skin care, and care of the sick infant. Thus, infants were revived at birth and kept alive after.

4. Why did you do ENC first?

ENC is a course that includes essential aspects of newborn care. We thought all birth attendants should be trained as soon as possible so they could provide all essential care for the newborns.

5. Why wasn’t NRP effective beyond ENC?

ENC contained the basic aspects of resuscitation that are part of NRP. As these contents are part of ENC and are considered essential care, they were included in the ENC training. NRP contains more in depth resuscitation training which may not be effective in some health care systems once ENC is implemented.

6. How can you tell the difference between a fresh vs. a macerated stillbirth?

Fresh stillbirths look like normal infants at birth but do not breathe or respond to resuscitation. They die just before or at the time of birth. Macerated stillbirths may have skin discoloration, desquamation, and even sloughing as they have been dead for hours or days before birth.

7. Were there site differences?

While quantitative differences are expected in a trial like this, there were no major qualitative differences with all sites showing some benefits following ENC training.

8. Did all the women consent?

Over 99% of the mothers consented. We think this excellent consent rate is the result of community sensitization work done before to introduce the trial to the families, birth attendants, and community leaders.

9. Did you tell the women in the NRP control that they wouldn’t get NRP early?
ENC was already in place, which is what WHO recommends. We were committed to introducing NRP but it was important to test it to see if it is effective once ENC is established.

10. Why do babies die? What happens?

Approximately, 10% of all newborns do not breath at birth. Some breath in response to tactile stimulation. Others breath only after they are helped to breath. Those who do not get stimulated or helped to breath or who do not breath in response to these interventions, die.


We were concerned that the intervention would lead to postponement of death. We were pleased to observe that at least to day 7 after birth when most babies who do not survive die, the babies did not die more often.

12. Why is decreasing SB important?

Babies can die just before birth or in the next few days after birth. Reduction of deaths at any time around birth is just as important. While important reductions in deaths that occur later (1 mos -5 yrs) have been achieved, little reduction has occurred in these deaths which occur around the time of birth.

13. How do you know that the babies that were resuscitated lived / did well?

We followed the babies till days 7 and the neurological assessments on those resuscitated appear mostly normal. We are following these infants until 3 years to make sure they are healthy.

14. Why not do a RCT for ENC?

The active baseline controlled study design used is an innovative design particularly suitable to educational interventions.

15. How many babies do you think could be saved?

Based on the effectiveness in community and institutional births, we think ENC training could result in as many as 1 million lives saved per year worldwide.