

What could integration look like?

Areas for exploration



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Remember to ask...

What does the woman/newborn/family.....

.... at this moment in their life....

....*want and need?*

What does the health worker....

.... in this service delivery point....

....in this health system.....

.....*want and need?*



Objectives

- Overview of critical opportunities to integrate maternal and newborn health care
- Across the maternity care period: pregnancy, labor and delivery, and the postpartum period
- In both normal and complicated scenarios
- Workforce, health system, and delivery model considerations

Objectives of Antenatal Care

USPSTF 1989:

For the pregnant woman:

1. To increase her well-being before, during, and after pregnancy and to improve her self-image and self-care
2. To reduce maternal mortality and morbidity, fetal loss, and unnecessary pregnancy interventions
3. To reduce the risks to her health prior to subsequent pregnancies and beyond childbearing years
4. To promote the development of parenting skills

For the fetus and infant:

1. To increase well-being
2. To reduce preterm birth, intrauterine growth restriction, congenital anomalies, and failure to thrive
3. To promote healthy growth and development, immunization, and health supervision
4. To reduce neurologic, developmental, and other morbidities
5. To reduce child abuse and neglect, injuries, preventable acute and chronic illness, and the need for extended hospitalization after birth

For the family:

1. To promote family development and positive parent-infant interaction
2. To reduce unintended pregnancies
3. To identify treatment behavior disorders leading to child neglect and family violence



Objectives of Intrapartum Care

- Nothing identified through an internet search
- My best ideas:
 - Ensure the health and wellbeing of the mother and fetus/newborn
 - Provide appropriate, competent care, and avoid the provision of unnecessary interventions
 - Anticipate, identify and address potential complications
 - Provide a woman-, baby- and family-centered approach to care
 - Guide and manage an environment for the optimum provision of safe, respectful and effective care

Objectives of Postnatal Care

USAID 2002:

- To support the mother and her family in the transition to a new family through:
 - Prevention, early diagnosis, and treatment of common problems or complications in both mother and infant, including preventing mother-to-infant disease transmission.
 - Referral of mother and infant for specialist care when necessary.
 - Counseling and information for the mother on newborn care and breastfeeding.
 - Support of optimal breastfeeding practices.
 - Education of the mother and her family concerning maternal nutrition and supplementation if necessary.
 - Counseling and provision of contraceptives before the resumption of sexual activity.
 - Immunization of the infant.

Parent Death & Child Survival in Bangladesh

- Cumulative probability of survival of child to age 10 years

Mother alive: 88.9%

Mother dead: 23.8%

Father alive: 88.6%

Father dead: 89.3%

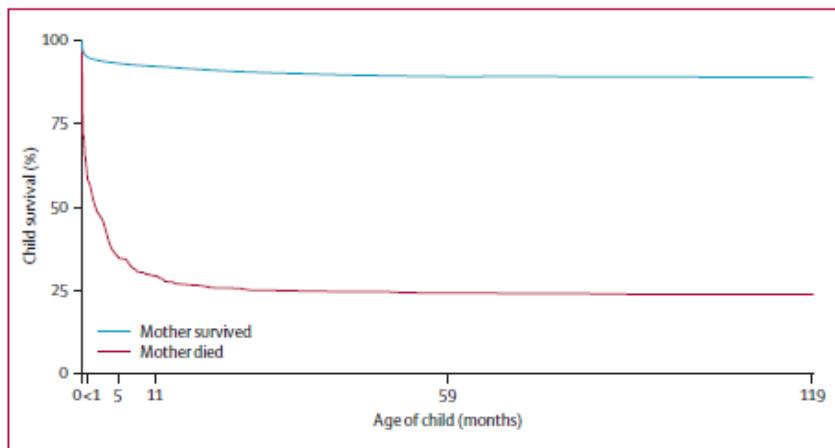


Figure 2: Kaplan-Meier survival curve from birth according to survival status of mother
Numbers at risk for months 0, <1, 5, 11, 59, and 119 were 144 861, 137 156, 128 994, 122 736, 87 427, and 60 381, respectively.

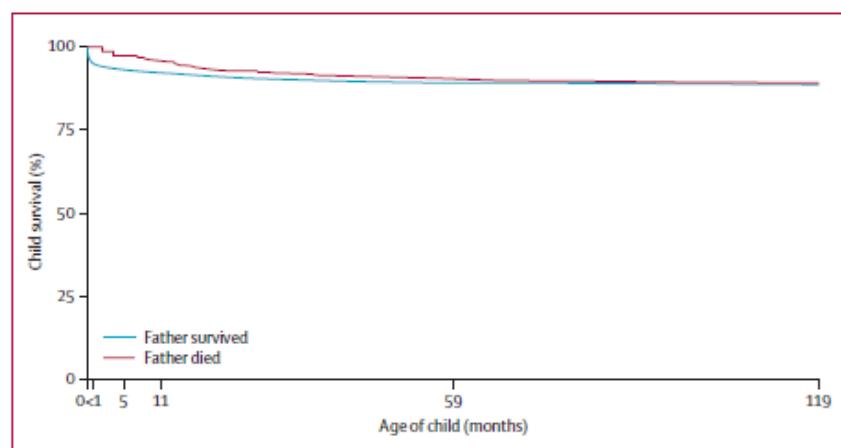


Figure 3: Kaplan-Meier survival curve from birth according to survival status of father
Numbers at risk for months 0, <1, 5, 11, 59, and 119 were 130 007, 122 974, 115 722, 110 025, 77 837, and 53 210, respectively.

Ronsmans *LANCET* 2010

Rates of Utilization of Care

Not enough women receive the recommended frequency of care during pregnancy

Proportion of women (15-49 years old) attended four or more times by any provider during pregnancy, 1990 and 2009 (Percentage)

Southern Asia (excluding India)



Sub-Saharan Africa



Southern Asia



Western Asia



Northern Africa



South-Eastern Asia



Latin America & the Caribbean



Developing regions



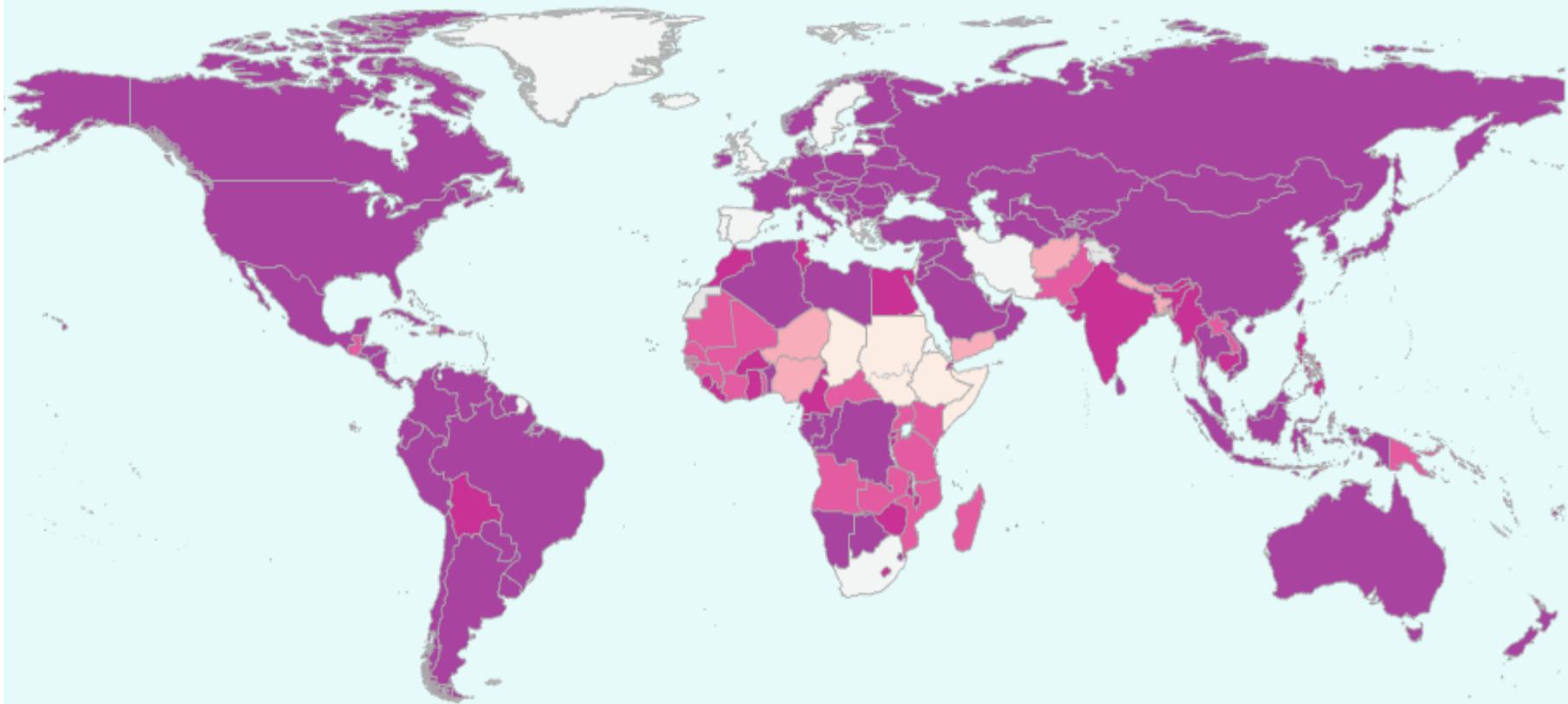
Note: Data for Eastern Asia are not available.

Unable to find rates for PNC...

Source: United Nation Millennium Development Goals Report, 2011.



Rates of Skilled Attendance at Birth



Rates of utilization of skilled care at birth are still too low in many countries.

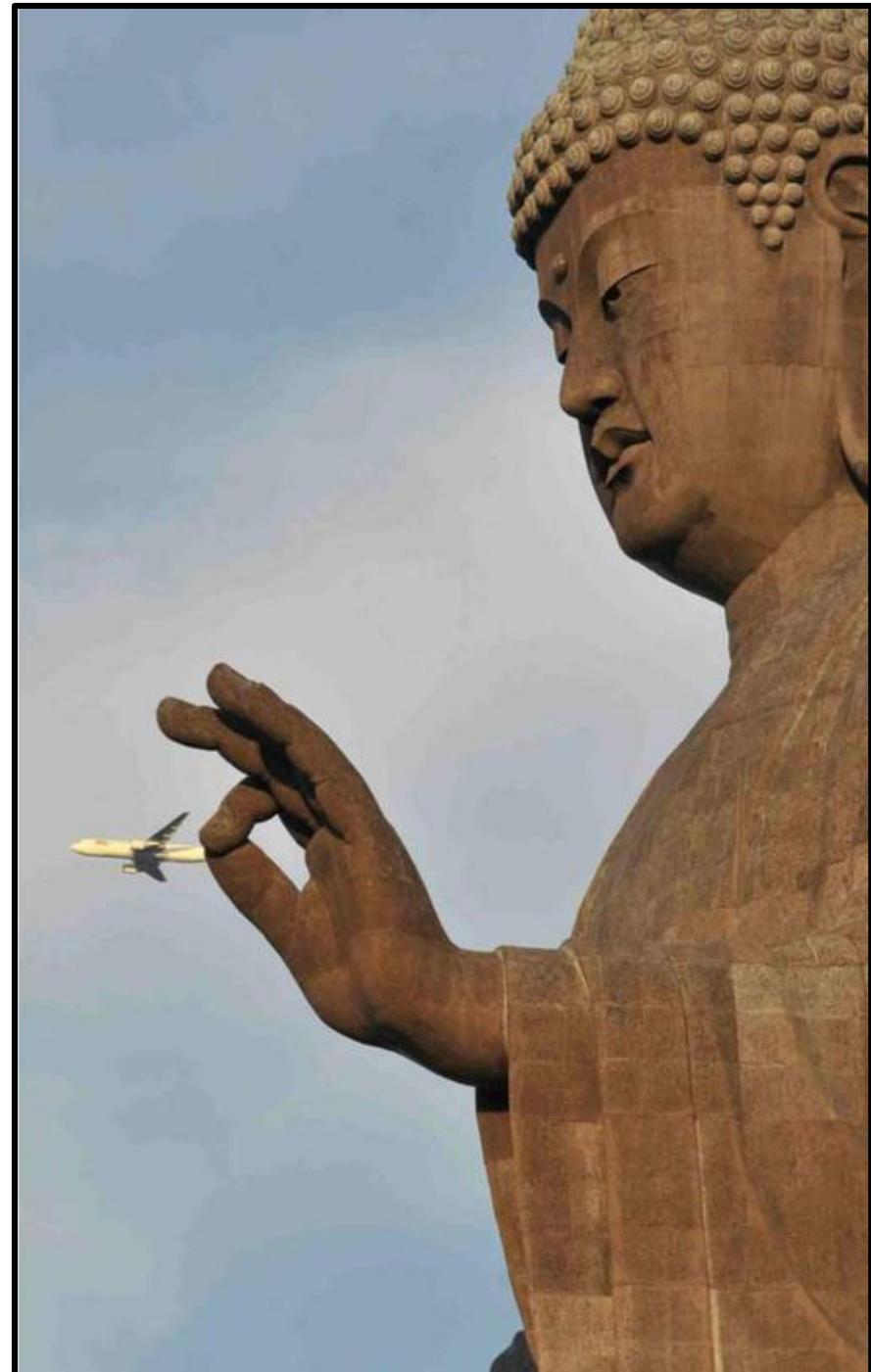
What Do Women & Families Want? What Improvements Are We Seeking?



Photo source: Duke Global Health Institute. Focus Group Discussion (FGD) with Dalit women Nepal.

Evolution of PMTCT

- Prevent newborn acquisition of HIV at the time of birth
- Prevent acquisition during pregnancy, at the time of birth, after birth
- Provide ARVs to the sick mother (mother and newborn)
- Prevent acquisition by the woman as well
- Provide care (B+) to the woman and the newborn



What do we mean by integration?

Medical definition of *INTEGRATION*

the combining and coordinating of separate parts or elements into a unified whole as

- coordination of mental processes into a normal effective personality or with the individual's environment
- the process by which the different parts of an organism are made a functional and structural whole

Opportunities for Integration: ANC, IPC, PNC

- ***Care moment***: Clinical interventions and packages
- ***Care models***: individual or group
- ***Care team***: provider(s) and woman/family
- ***Care settings***: community, PHC, mixed
- ***Care structure and system***: funding, programmatic planning, goals and outcomes/measurement

Opportunities in ANC

Care team:

- e.g. Jorge Hermida's care network in Ecuador w/ referral network that spans from TBAs to tertiary care providers



Care settings: e.g.

- SMGL, bridging home/community and facility-based care

Care delivery models: e.g.

- Centering group care
- mHealth, e.g. Jacaranda (patient data, patient-provider interaction, etc.)

Use of the Partograph

- Partograph allows assessment of:
 - Maternal wellbeing
 - Fetal wellbeing
 - Progress of labor
 - Integration of HIV care
- Reduces:
 - Maternal and newborn sepsis
 - Asphyxia
 - Unnecessary intervention
 - Missed opportunities

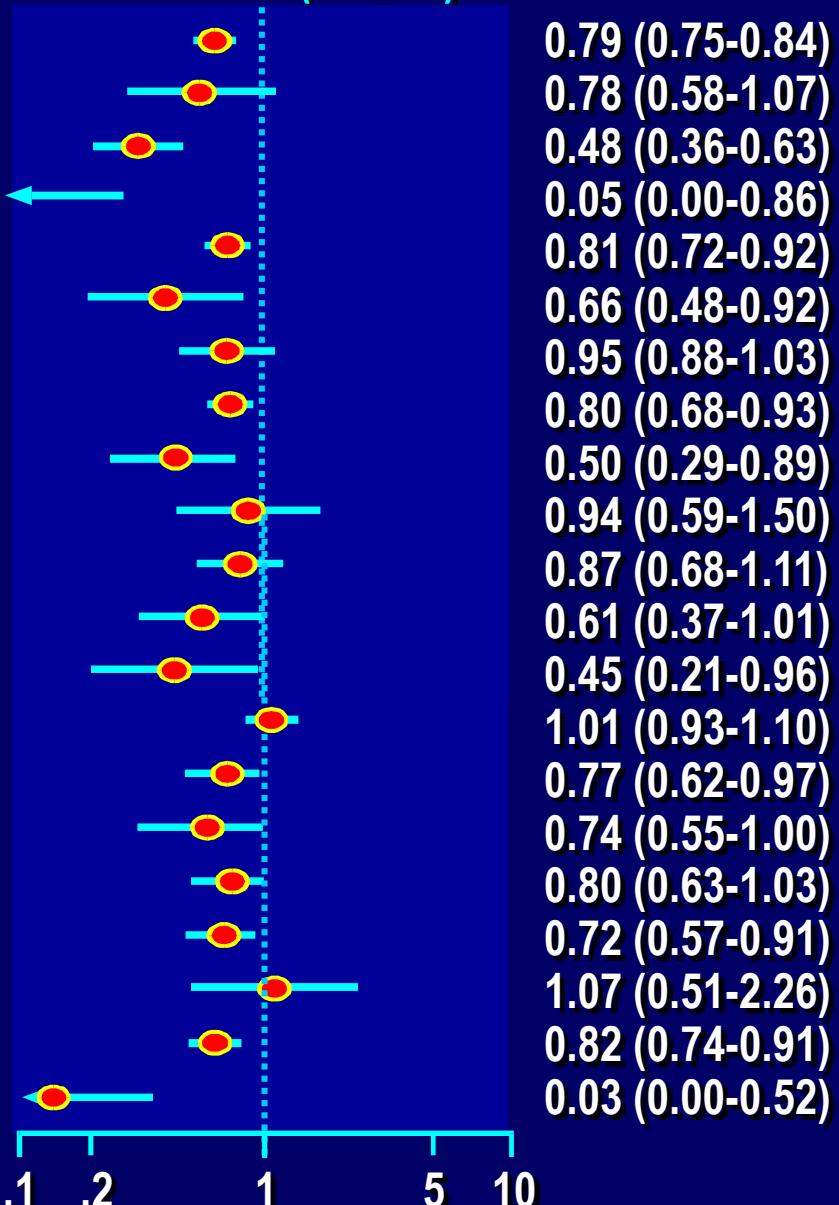
Name	Gravida	Para	Hospital number
Date of admission	Time of admission	Ruptured membranes	hours
203 190 185 170 160			
I gest heart rate	155 140 130		
Amniotic fluid Moulding	120 110 100 90 80		
Cervix (cm) [Plot X]	10 9 8 7 6 5 4 3 2 1 0	Alert	Action
Descent of head [Plot O]	Hours 1 2 3 4 5 6 7 8 9 10 11 12		
Time			
Contractions per 10 mins	5 4 3 2 1		
Oxytocin U/L drops/min			
Drug given and IV fluids			
Pulse ● and BP	180 170 160 150 140 130 120 110 100 90 80 70 60		
Temp °C			
Maternal Neonatal Health	protein acetone volume	Urine	

EMOTIONAL SUPPORT DURING LABOR

14 studies 5021 women

- Use of analgesia/anesthesia during labor
- Electronic fetal monitoring
- Problems during labor
- Prolonged labor
- Operative vaginal birth
- Episiotomy
- Perineal trauma
- Cesarean
- Five-minute Apgar <7
- Newborn need for oxygen
- Admission of Newborn to Newborn Care Unit
- Prolonged hospital stay for newborn
- Newborn sepsis
- Severe pain during labor
- Labor worse than expected
- Struggle in enduring birth
- Feeling of tension and anxiety during labor
- Poor labor experience
- Struggle with medical staff
- Lack of exclusive breastfeeding at 6 weeks
- Severe postpartum depression at 6 weeks

Relative Risk (95%CI)



Opportunities in PNC



- **Care team:** expand the team, add new members (pediatrician, CHW, etc.), e.g. Manoshi project
- **Care settings:** people centered--home, community-based health center, bridge to other primary care services, e.g. Developing Families Center
- **Care models:** e.g. Centering Parenting groups (mother-baby dyad care), drop-in clinics, shared medical appointments
- **Structure of care:** “basket funding”, integrated program planning, e.g. MCSP, shared goals and outcomes, integrated M&E, performance measurement

Conclusions

Integration of maternal and newborn care during ANC, IPC, PNC

- A process, not an intervention
- Multiple dimensions of integration
 - Not vertical or horizontal
- Integration is essential for maternal and newborn survival

