

# Effect of a community-based maternal and newborn health intervention package on maternal and newborn care practices: findings from *Projahnmo*, a cluster-randomized intervention trial in Sylhet District of Bangladesh

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## Projahnmo: Description 1

- Projahnmo was designed primarily to improve newborn health outcomes, in part through more healthful maternal care practices
- Evaluating the effectiveness of a community-based maternal and newborn care intervention package
- Study outcomes: mortality, knowledge, practices, equity
- Expecting to improve maternal & newborn care practices and reduce neonatal mortality by 40%
- Cluster randomized trial: 24 clusters, each of approximately 20,000 population; randomly allocated to
  - Home care (HC) arm
  - Community care (CC) arm
  - Comparison arm

## Projahnmo Intervention 4

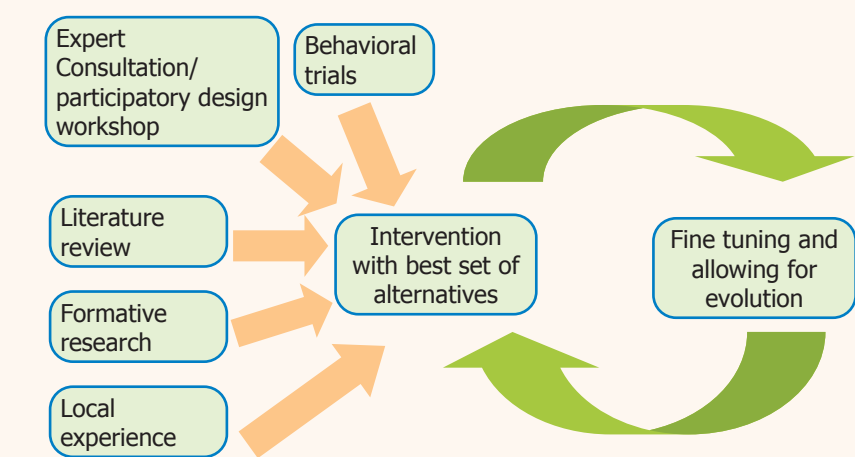
- Components
  - Message dissemination, education, counseling and negotiation to improve maternal and newborn care practices and care-seeking
  - Management of newborn illness
  - Strengthening of existing GOB/NGO health facilities
- Primary Providers
  - Community-based Health Workers (CHWs): in Home Care Arm, working at household level, each serving a population of 4,000
  - Community Mobilizers- male & female: in both Home care and Community care arms

## Critical findings from formative research 2

- Lack of planning/preparedness for birth**
  - No planning for delivery
  - No preparation for emergencies
- Unclean delivery site**
  - Kitchen/makeshift arrangements for delivery
  - Floor as usual delivery surface
- Role of actors at delivery – newborns neglected**
  - Senior female family members are key actors
  - Care of newborn immediately after delivery – no-one's job
- Newborn care**
  - Newborn unattended, delayed cord cutting, drying, wrapping
  - Improper cord care- application of various substances
  - No recognition of danger signs
  - Allopathic medicines are thought to be too strong for newborns

## Intervention design process 3

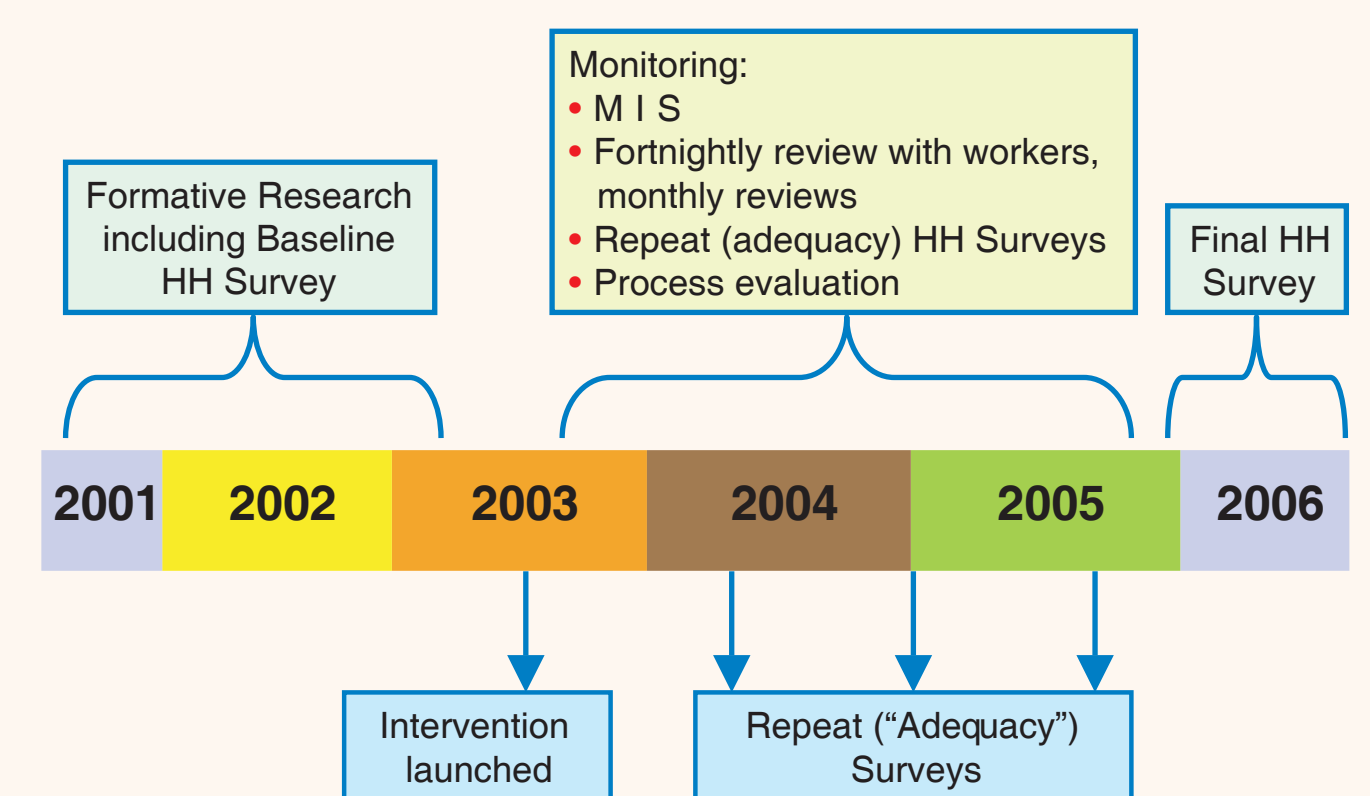
Formative research, behavioral trials, available evidence & expert inputs informed intervention design



## Intervention comparison by study arms 5

Components	HC arm	CC arm	Comp. arm
Pregnancy surveillance	✓		
Education/counseling at home (months 3, 8)	✓		
Community meetings for men/women	✓	✓	
Education for birth attendants	✓	✓	
Newborn Care home visit (days 0,2,6)	✓		
Sick child home screening, referral & management	✓		
Improved routine maternal & neonatal care at health facilities	✓	✓	
Improved management of maternal & newborn complications at health facilities	✓	✓	
Usual existing health care	✓	✓	✓

## Projahnmo Evaluation – Time Line 6

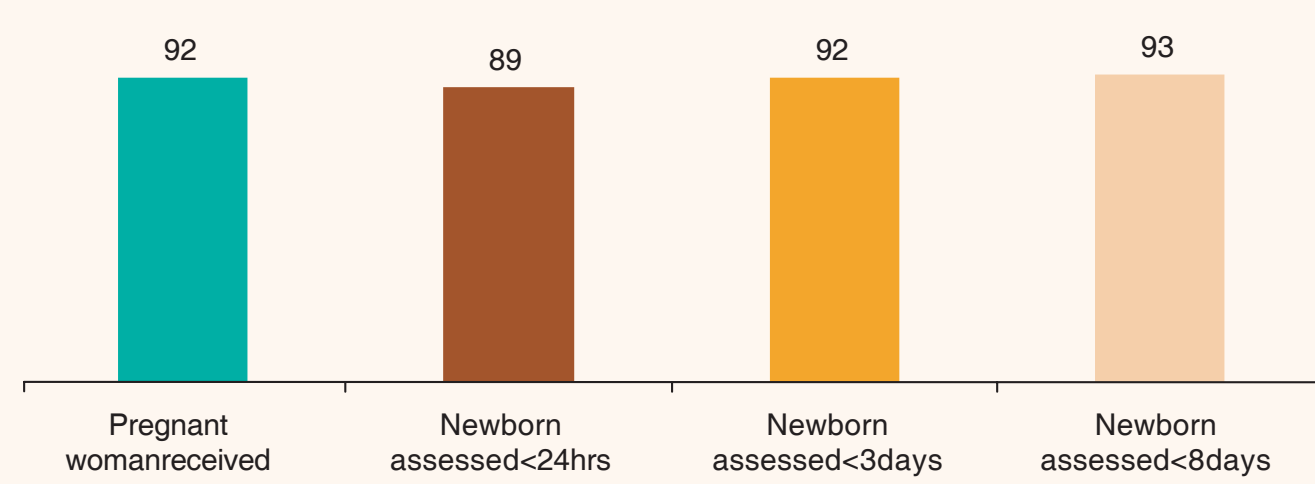


## Early Findings

### Achieved high intervention coverage 7

#### -findings from MIS (Home care arm)-

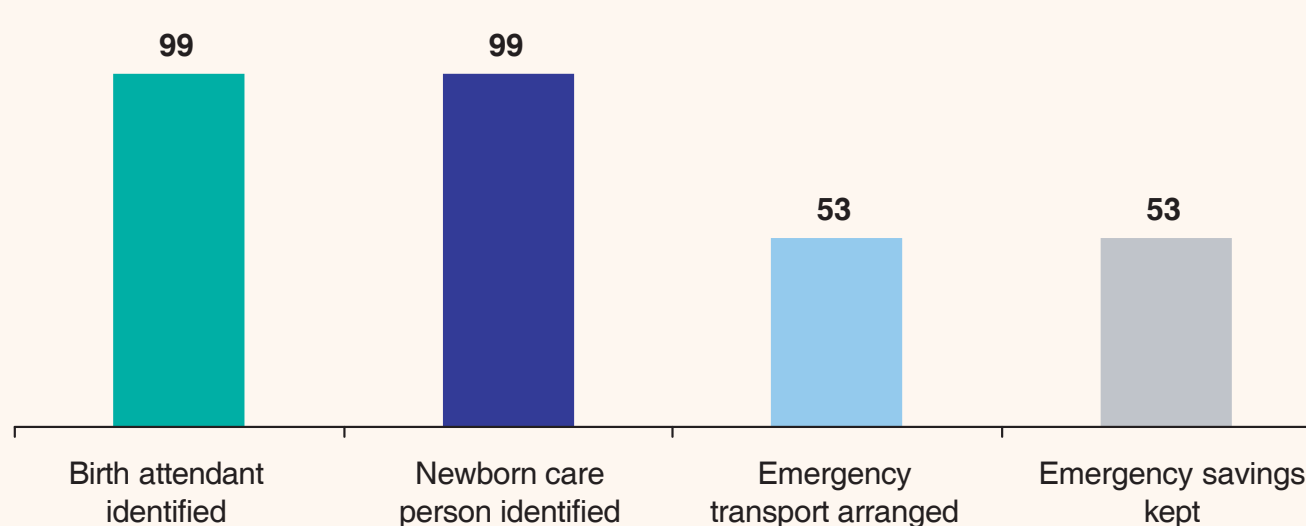
- 9 of 10 pregnant women received 2nd education sessions by CHWs
- Almost 90% newborns were assessed by CHWs within 24 hrs of birth



### Mixed compliance with birth preparedness advices 8

#### -findings from MIS (Home care arm)-

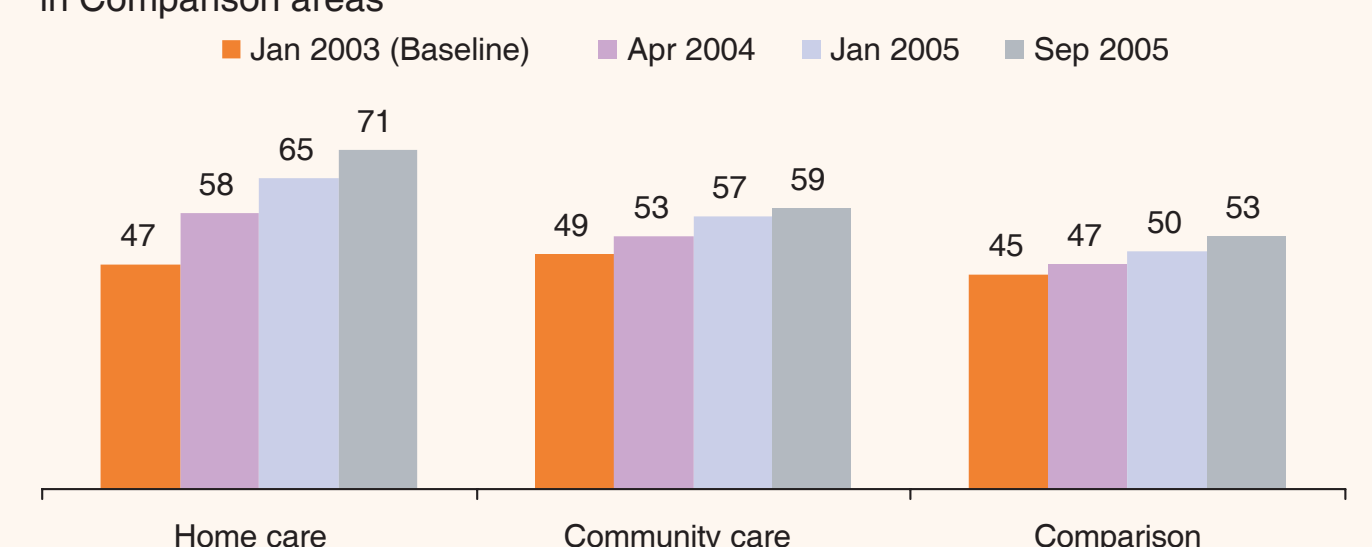
- All families identified a birth attendant & a newborn care person
- Just over half arranged emergency transport and savings



### Increased use of antenatal care services 9

#### -findings from repeat household surveys-

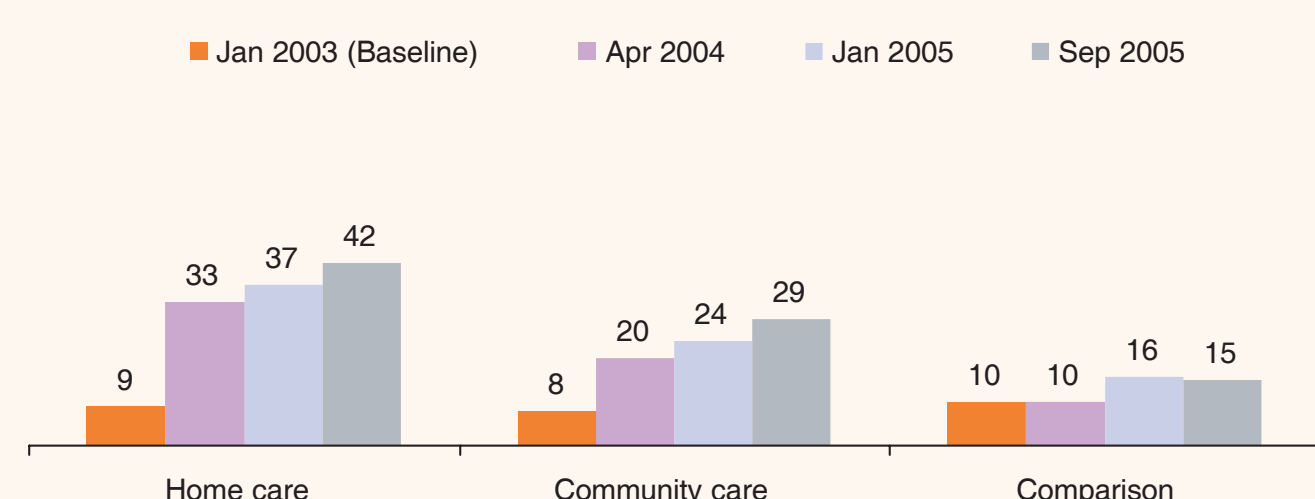
ANC use increased by 24% in Home Care, 10% in Community Care, and 8% in Comparison areas



### Increased use of trained TBAs for assistance at birth 10

#### -findings from repeat household surveys-

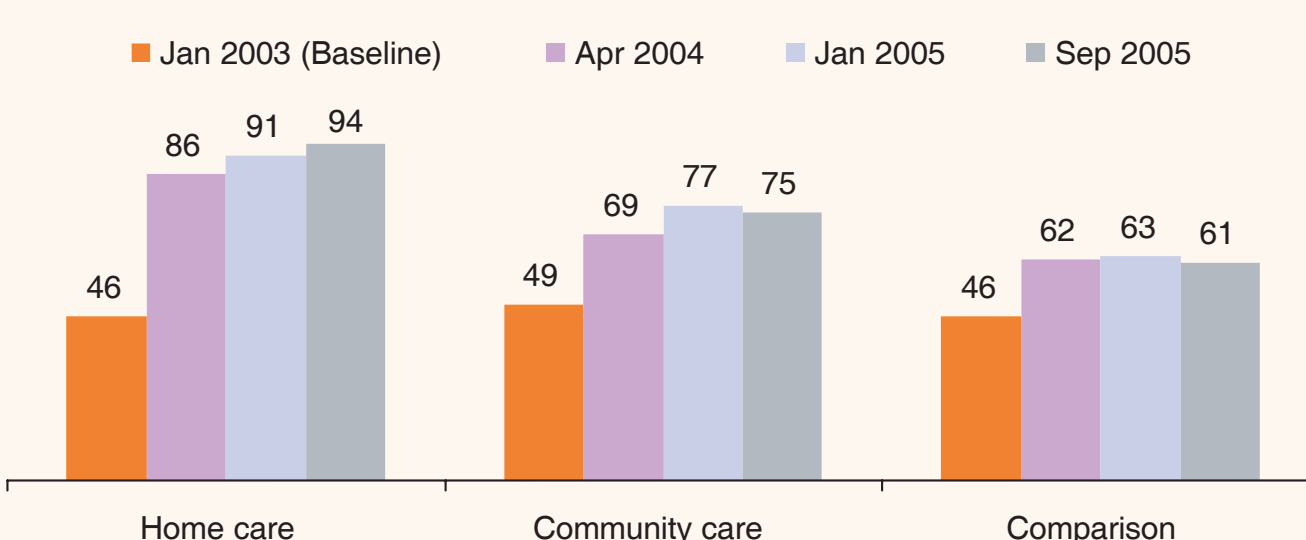
Use of 'trained' TBAs increased by 33% in Home Care, 21% in Community Care, and 5% in Comparison areas



### Increased use of clean cord cutting instruments 11

#### -findings from repeat household surveys-

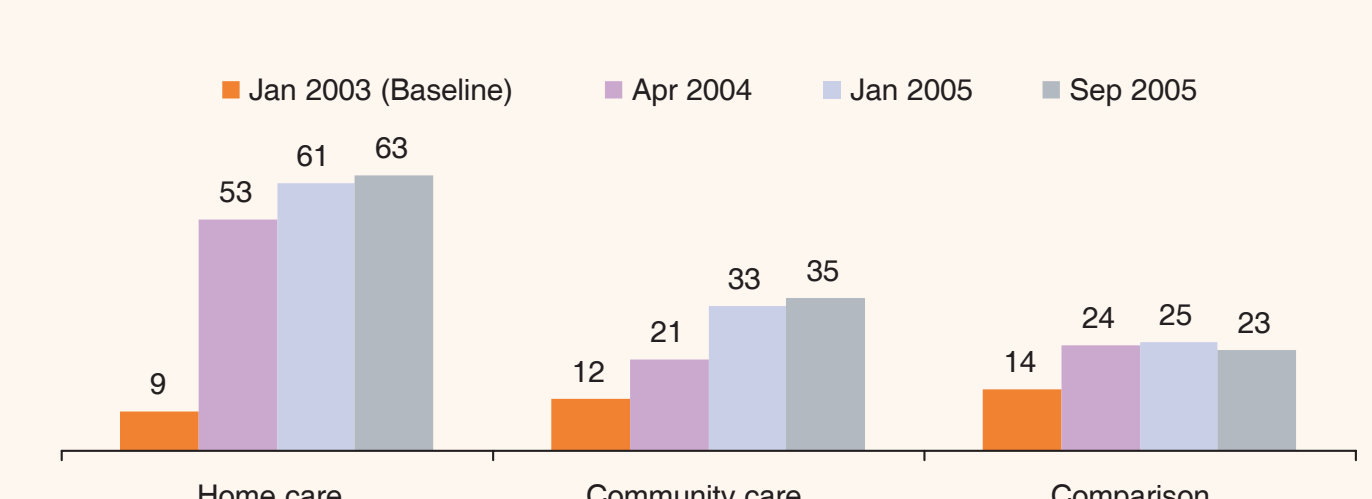
Compared to baseline rates, the use of clean cord cutting instruments increased in all arms, but more so in the intervention areas



### More families were applying nothing to the umbilical stump 12

#### -findings from repeat household surveys-

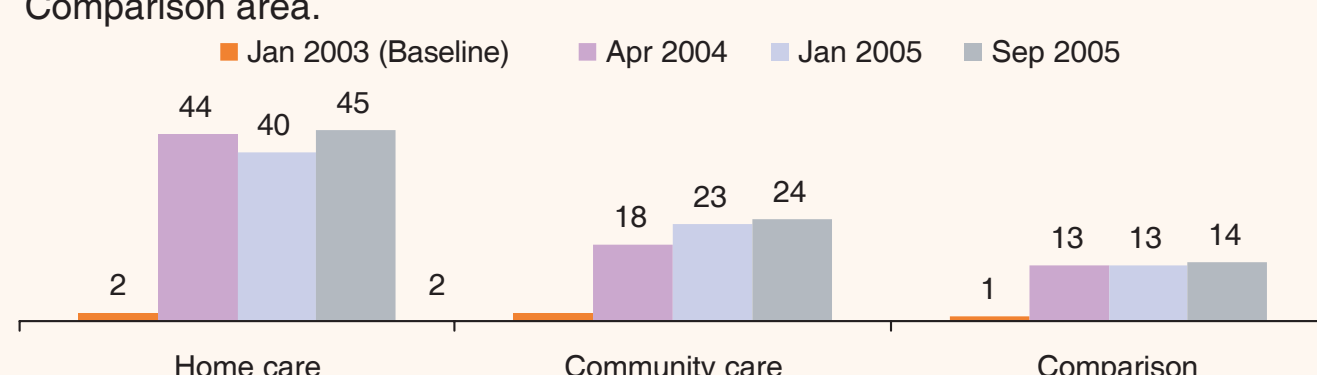
Practice of applying nothing to the umbilical stump increased by 54% in Home Care, 23% in Community Care and 9% in Comparison areas



### Increased adoption of delayed bathing after birth (> 3 days) 13

#### -findings from repeat household surveys-

There was a substantial and sustained increase in families in Home Care area who were delaying the first bath of the baby by >3 days. There was a smaller increase in the Community Care area, with some increase also in the Comparison area.



## Projahnmo – what have we learned? 14

- A cadre of Community-based Health Workers (CHWs) can
  - gain high acceptance in the community with the information they provide
  - reach the families and achieve changes in practices
  - detect and manage illness in the community
- Ante-partum contacts are critical in building relationship
- Community mobilization is important in creating enabling environment
- CHWs' image as provider is newborn care oriented, so there is less consultation for delivery care by the community resulting in fewer delivery-attendance
  - Implications on reducing deaths due to asphyxia
  - Critical role of family birth attendants/TBAs & newborn care persons
- Targeting is critical: communities, families vs. individual women, pre-terms & LBW infants, identifying danger signs during pregnancy contacts

#### Implementation Partners:

Government of Bangladesh ICDDR,B Johns Hopkins University, Dhaka Shishu Hospital Shimantik Institute of Child and Mother Health  
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