

Choosing the Best Measuring Stick:

Comparing two methods to measure Exclusive Breast-Feeding Rates in Bangladesh



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Plan Bangladesh is an international, humanitarian development
organization working in rural and urban areas of the country.

Eminence is a research organization working in nutrition, health
and development field.

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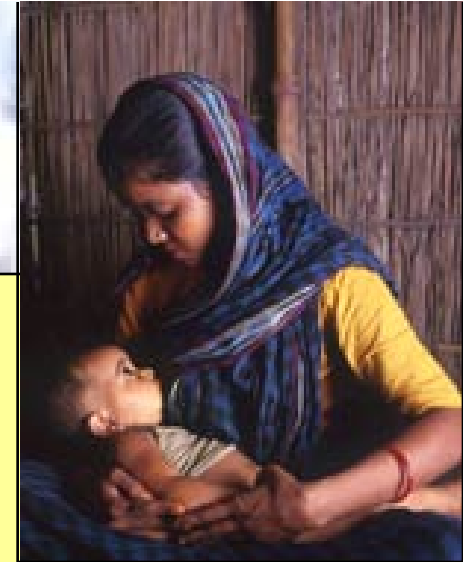


BACKGROUND:

- Exclusive Breastfeeding (EBF) is defined as
 - “ the infant has received only breast milk from his/her mother or a wet nurse, or expressed breast milk, and
 - no other liquids or solids with the exception of drops or syrups consisting of vitamin, mineral supplement or medicine”

*In: Indicators for assessing breastfeeding practices
WHO/CDD/SER/91,14; June 1991.*

- EBF is one of the most potent practices to prevent childhood illness and death.
- Therefore, its accurate measurement among children is crucial to measure their risk.



In Bangladesh, two definitions of EBF are currently used in two population surveys:

- ✓ **24 hour recall:** EBF children receive only breast milk (not even water) in last 24 hours before the survey. Promoted by World Health Organization's definition (WHO) and applied in the 2005 Bangladesh DHS.
- ✓ **Since birth recall:** EBF children are fed only breast milk from birth to last day of interview. Promoted by several Bangladeshi agencies, including the National Nutrition Program, NNP.





Questionnaire for the *24 hour recall* (as applied in the 2005 Bangladesh DHS)

- Did (Name) drink anything from a bottle with a nipple in the last 24 hours?
- Did you give (Name) anything else to eat solid/semi-solid foods beside breastmilk in the last 24 hours?

Questionnaire for the *Since Birth Recall* (as applied by the NNP)

- Are you still exclusively breastfeeding (Name)? I mean, do you still not give him/her anything else, even plain water, other than breastmilk?
- At anytime since birth, has (Name) eaten or taken anything other than breastmilk?
- At any time since birth, was (Name) given any other liquids including cow's or goat's milk, water, or semi-solid or solid foods besides breastmilk?

OBJECTIVE OF THIS PRESENTATION

- ✓ To compare the EBF rates obtained by applying both the *24 hour recall* and the *since birth recall* in the same population.
- ✓ For this purpose, the data of the baseline study (2005) and midterm evaluation (2006) of **Plan Bangladesh's Integrated Nutrition Program** was used.



Plan Bangladesh's Integrated Nutrition Program

Duration: From July 2004 to
December 2007

Objectives:

1. Improved nutritional status of U-5 children
 - ❖ through increased access and consumption of adequate and appropriate food.
 - ❖ through increased awareness and access to quality health services.
2. Pregnant and lactating mothers will have improved health and better outcome of pregnancy.
3. Increased hygiene practices and access to sanitation facilities
4. Increased advocacy and dissemination of project results.



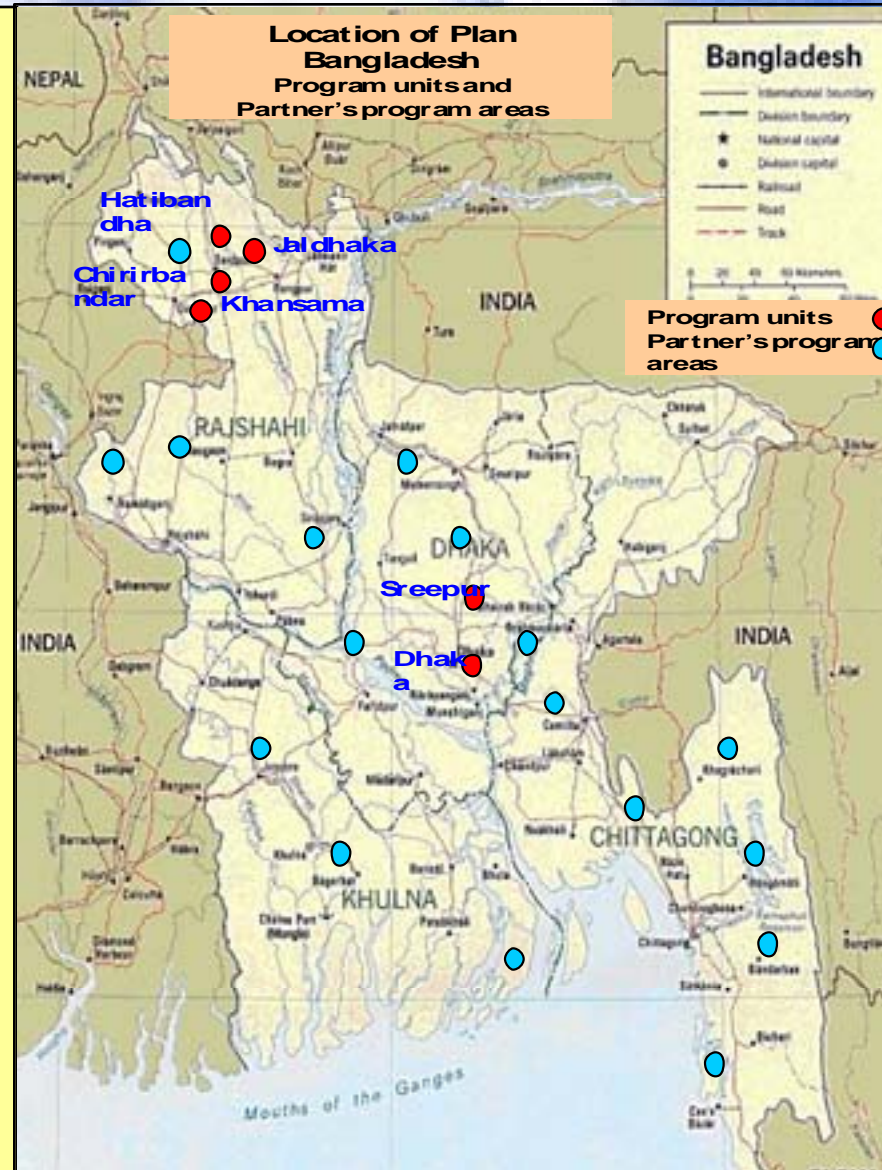
Plan Bangladesh's Integrated Nutrition Program, cont'd

Target population: 405,000 people
living in

- Rural: Three sub-districts in northern region of Bangladesh
- Urban: One sub-district in Dhaka division and one urban slum of Dhaka city

Major strategies of the program
included:

- Community development
- Multi sectoral involvement
- Food security



RESULTS OF THE STUDY

Data was collected from randomly selected 256 (baseline) and 113 children (midterm) aged less than 6 months

Baseline study

Age (in months)	24 hour recall	Since birth recall
0	77.6%	85.7%
1	58.8%	76.5%
2	50.9%	56.1%
3	40%	60%
4	24%	46%
5	20%	35%
Total	44.4%	59.6%



RESULTS OF THE STUDY

Data was collected from randomly selected 256 (baseline) and 113 (midterm) children aged less than 6 months

Baseline study

Age (in months)	24 hour recall	Since birth recall
0	77.6%	85.7%
1	58.8%	76.5%
2	50.9%	56.1%
3	40%	60%
4	24%	46%
5	20%	35%
Total	44.4%	59.6%

Midterm evaluation

Age (in months)	24 hour recall	Since birth recall
0	95.5%	86.4%
1	83.3%	66.7%
2	100%	57.1%
3	85.7%	61.9%
4	69.2%	46.2%
5	55.6%	27.8%
Total	83.2%	57.7%

RESULTS OF THE STUDY

Data was collected from randomly selected 256 (baseline) and 113 (midterm) children aged less than 6 months

Baseline study

Age (in months)	24 hour recall	Since birth recall
0	77.6%	85.7%
1	58.8%	76.5%
2	50.9%	56.1%
3	40%	60%
4	24%	46%
5	20%	35%
Total	44.4%	59.6%

Midterm evaluation

Age (in months)	24 hour recall	Since birth recall
0	95.5%	86.4%
1	83.3%	66.7%
2	100%	57.1%
3	85.7%	61.9%
4	69.2%	46.2%
5	55.6%	27.8%
Total	83.2%	57.7%

1. While the EBF rate obtained through 24 hr recall has changed significantly between the baseline and midterm studies, the EBF rate obtained through since birth recall has barely changed.
2. Differences on EBF rates between both recall methods are statistically significant both in the baseline and midterm studies.

Conclusion 1..

Significant differences were observed by measuring EBF through two recall methods.

This finding underscores the importance of applying standardized methods in order to make meaningful comparisons.



Conclusion 2..

Observations of Plan Bangladesh's INP staff suggest a significant increase in EBF practice.

These observations support the 24 hr recall as a more sensitive method to monitor EBF.

Therefore, we recommend that the 24 hr recall be considered for nationwide application after its adaptation (through a prospective study of local EBF practices).