

Measurement of early initiation of breastfeeding: accuracy challenges and implications to newborn health in Ethiopia

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Introduction

- Early initiation of breastfeeding saves newborn lives
- Only 52% mothers in Ethiopia initiate within an hour (1)



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- But, there are accuracy issues in measuring the indicator

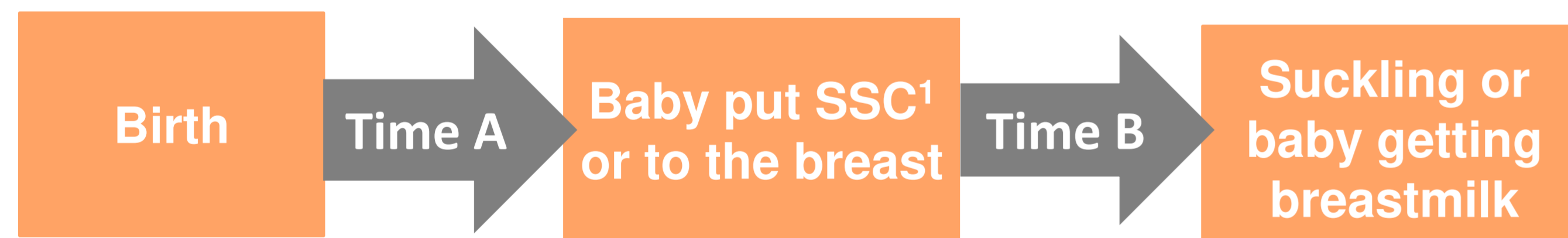


Fig 1. Timeline from birth to breastfeeding initiation

Defⁿ: initiation of breastfeeding **within 1 hour** after birth

Poor evidence setting this time limit (2)

Variations exist between survey definitions (3)

Q: How long after birth did you first put baby to the breast?

- ❑ The question is about **TIME A** (4) but not clear how mothers **perceive the question** and data collectors **code maternal responses** of time

¹SSC= naked baby placed on mother's chest with skin-to-skin contact

²RCT= Randomized controlled trials

³Lanka mansat: traditional practice done in baby's mouth to help speak better later

Objectives (Methods)

1. Investigate the evidence base for the 'one hour' time limit
 - **Systematic literature review** of Medline, Embase, CINAHL, and Web Science to identify RCTs² assessing the effect of SSC on BF initiation. Retrieved 553 and 129 RCTs were eligible. 11 reported timing for initiation.
2. Assess mothers' perception of household survey question
 - 49 **cognitive interviews** in Basona and Debrebirhan dist.
3. Assess experiences of household survey data collectors
 - 130 **self-administered questionnaires** completed
4. Explain breastfeeding initiation in the context of other immediate newborn behaviors
 - 26 **semi-structured interviews**, 2 **focus group discussions** and 1 **key informant interview** in Basona district

Results

One hour time limit

Finding: the average time for initiation was < 1 hour

Studies	Time B	Studies	Time B
Windstorm (1987)	55 m	Widström (2011)	62 m
Righard (1990)	50 m	Mahmood (2011)	41 m
Ransjo-Arvidson (2001)	79 m	Gizzo (2012)	30 m
Carfoot (2005)	46 m	Cantrill (2014)	38 m
Jonas W (2007)	2 m	Aghdas, (2014)	22 m
Gabriel (2010)	48 m		

Table 1: selected studies which reported time for initiation

Mothers' perception

Finding: Mothers thought the question was about when baby received breastmilk and reported **TIME A + TIME B**

Data collectors' experience

Finding: two-thirds (66%) had to probe mothers to help in recalling the event and describe timing in minutes, hours or days.

Other newborn care practices

Finding: There are other competing newborn care practices which have more cultural values to mothers



Fig 2: Sequence of newborn care practices following birth

Conclusions

- Accurate measurement informs policy/practice and helps to track progress in newborn health targets
- Therefore, consistent use of the definition is recommended
- Revise question as "how long after birth did you first put [name] to the breast even if your breastmilk did not arrive yet?"
- Standard probes or follow on questions are needed
- Design probes using other local newborn behaviours as reference points for mothers to recall time accurately



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4. WHO. Indicators for assessing infant and young child feeding practices; part II measurement. Geneva 2010. p. p. 18