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# Breaking the Barriers: Breastfeeding at the beginning

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หน่วยเวชศาสตร์มารดาและทารกในครรภ์
ภาควิชาสูติศาสตร์ นรีเวชวิทยา
คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล

# Outline

- Factors associated/ barriers to breastfeeding in the first hour of life
- Interventions for promoting the initiation of breastfeeding

Rev Saúde Pública 2014;48(4):697-708

Review

DOI:10.1590/S0034-8910.2014048005278

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# Factors associated to breastfeeding in the first hour of life: systematic review

# Fatores associados à amamentação na primeira hora de vida: revisão sistemática

## ABSTRACT

**OBJECTIVE:** To identify independent risk factors for non-breastfeeding within the first hour of life.

**METHODS:** A systematic review of Medline, LILACS, Scopus, and Web of Science electronic databases, till August 30, 2013, was performed without restrictions on language or date of publishing. Studies that used regression models and provided adjusted measures of association were included. Studies in which the regression model was not specified or those based on specific populations regarding age or the presence of morbidities were excluded.

**RESULTS:** The search resulted in 155 articles, from which 18 met the inclusion criteria. These were conducted in Asia (9), Africa (5), and South America (4), between 1999 and 2013. The prevalence of breastfeeding within the first hour of life ranged from 11.4%, in a province of Saudi Arabia, to 83.3% in Sri Lanka. Cesarean delivery was the most consistent risk factor for non-breastfeeding within the first hour of life. "Low family income", "maternal age less than 25 years", "low maternal education", "no prenatal visit", "home delivery", "no prenatal guidance on breastfeeding" and "preterm birth" were reported as risk factors in at least two studies.

**CONCLUSIONS:** Besides the hospital routines, indicators for low socioeconomic status and poor access to health services were also identified as independent risk factors for non-breastfeeding within the first hour of life. Policies to promote breastfeeding, appropriate to each context, should aim to reduce inequalities in health.

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# Factors associated to breastfeeding in the first hour of life: systematic review 2014

- **OBJECTIVE:**
  - To identify independent **risk factors** for non-breastfeeding within the first hour of life
- **RESULTS:**
  - The search resulted in 155 articles, from which 18 met the inclusion criteria.
  - These were conducted in Asia (9), Africa (5), and South America (4), between 1999 and 2013

# Factors associated to breastfeeding in the first hour of life: systematic review 2014

## Results

- The prevalence: varied
- **Cesarean delivery was the most consistent risk factor**
- "Low family income", "maternal age < 25 yrs", "low maternal education", "no prenatal visit", "home delivery", "no prenatal guidance on breastfeeding" and "preterm birth" were reported as risk factors in at least two studies.

**Factors associated to breastfeeding in the first hour of life: systematic review 2014**

## Conclusions

- Besides the hospital routines, indicators for low socioeconomic status and poor access to health services were also identified as independent risk factors
- Policies to promote breastfeeding, appropriate to each context, should aim to reduce inequalities in health.

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Original Article

DOI: 10.7860/JCDR/2016/19072.8559

Community Medicine Section

# Barriers to Early Initiation and Continuation of Breastfeeding in a Tertiary care Institute of Haryana: A Qualitative Study in Nursing Care Providers

JAI PAL MAJRA[1], VIJAY KUMAR SILAN[2]

## ABSTRACT

**Introduction:** Ever increasing institutional deliveries in India has shifted the responsibility of timely initiation and continuation of breastfeeding from peripheral health workers and families to the nursing care providers of health facilities where the births take place. While institutional deliveries have increased to 72.6%, only 44.6% of the newborns enjoy early breastfeeding in India.

**Aim:** To study the barriers to early initiation of breastfeeding in institutional delivery.

**Materials and Methods:** A total 34 nursing care providers were selected randomly and five Focus Group Discussions (FGDs) were carried out. This Qualitative Study was conducted through FGDs among the nursing care providers of a tertiary care institute in the Indian State of Haryana, India.

**Statistical Analysis:** The analyses continued throughout the group discussions as the newly emerged themes were tested in the subsequent discussion. FGDs transcripts were analysed to enhance the robustness of the emerged domain.

**Results:** Major barriers to initiation of breast feeding identified included: lack of awareness regarding proper technique of breastfeeding and benefits of colostrum; breast abnormality like inverted/retracted nipples; obstetric/neonatal complications requiring specialised care; and cultural practices like giving pre-lacteals and gender discrimination. It was further reported that the manpower has not been rationalised with ever increasing number of institutional deliveries. The respondents though willing to promote early initiation and continuation of breastfeeding felt excessive workload as one of the major barriers due to multi-tasking nature of their job.

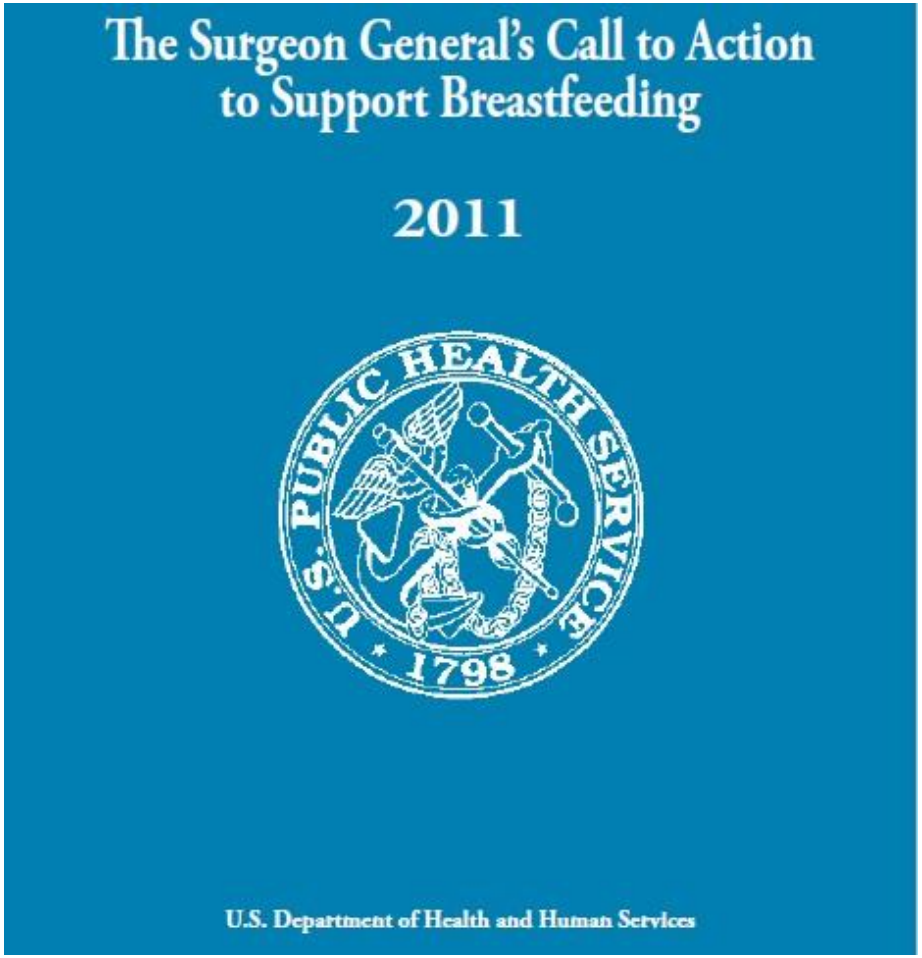
**Conclusion:** The new challenges to the early initiation and continuation of breastfeeding are emerging due to change in the place of delivery which needs to be addressed at the policy level.

**Keywords:** India, Institutional delivery, Rural

# Barriers to Early Initiation and Continuation of Breastfeeding

- Lack of awareness: proper technique, benefit of colostrum, breast abnormalities
- Obstetric/ neonatal complications
- Cultural practice: prelacteals
- Gender discrimination
- Excessive workload of health provider

**The Surgeon General's Call to Action to Support Breastfeeding.**
Office of the Surgeon General (US); Centers for Disease Control and Prevention (US); Office on Women's Health (US).



# Barriers to Breastfeeding in the United States

- Lack of Knowledge
- Social norms
- Poor Family and Social Support
- Embarrassment
- Lactation Problems
- Employment and Child Care
- Barriers Related to Health Services

Sharma and Byrne International Breastfeeding Journal (**2016**) 11:17

REVIEW Open Access

# Early initiation of breastfeeding: a systematic literature review of factors and barriers in South Asia

Indu K. Sharma* and Abbey Byrne

**Abstract**

**Background:** Early or timely initiation of breastfeeding is crucial in preventing newborn deaths and influences childhood nutrition however remains low in South Asia and the factors and barriers warrant greater consideration for improved action. This review synthesises the evidence on factors and barriers to initiation of breastfeeding within 1 h of birth in South Asia encompassing Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

**Methods:** Studies published between 1990 and 2013 were systematically reviewed through identification in Academic Search Complete, CINAHL, Global Health, MEDLINE and Scopus databases. Twenty-five studies meeting inclusion criteria were included for review. Structured thematic analysis based on leading frameworks was undertaken to understand factors and barriers.

**Results:** Factors at geographical, socioeconomic, individual, and health-specific levels, such as residence, education, occupation, income, mother's age and newborn's gender, and ill health of mother and newborn at delivery, affect early or timely breastfeeding initiation in South Asia. Reported barriers impact through influence on acceptability by traditional feeding practices, priests' advice, prelacteal feeding and discarding colostrum, mother-in-law's opinion; availability and accessibility through lack of information, low access to media and health services, and misperception, support and milk insufficiency, involvement of mothers in decision making.

**Conclusions:** Whilst some barriers manifest similarly across the region some factors are context-specific thus tailored interventions are imperative. Initiatives halting factors and directed towards contextual barriers are required for greater impact on newborn survival and improved nutrition in the South Asia region.

**Keywords:** Breastfeeding, Barriers, Factors, Early initiation of breastfeeding, Timely initiation of breastfeeding, South Asia, Breastfeeding within 1 h of birth, Colostrum, Review

# Early initiation of breastfeeding: a systematic literature review of factors and barriers in South Asia

**Geographic factors**

- Geographical area
- Place of residence

**Socioeconomic factors**

- Education of mother
- Occupation of mother
- Household wealth
- Family type and size

# Early initiation of breastfeeding: a systematic literature review of factors and barriers in South Asia

## Individual factors

- Birth order and previous birth interval
- Gender of the child
- Mother's age

## Health related factors

- Health and physiological condition of mother and newborn
- Delivery related factors

# Interventions for promoting the initiation of breastfeeding

Balogun OO, O'Sullivan EJ, McFadden A, Ota E, Gavine A, Garner CD, Renfrew MJ, MacGillivray S. Interventions for promoting the initiation of breastfeeding. Cochrane Database of Systematic Reviews **2016**, Issue 11.

Cochrane Library

Cochrane Database of Systematic Reviews

# Interventions for promoting the initiation of breastfeeding (Review)

Balogun OO, O'Sullivan EJ, McFadden A, Ota E, Gavine A, Garner CD, Renfrew MJ, MacGillivray S

# Results

- Low quality evidence
  - Healthcare professional: breastfeeding education
  - non- healthcare professional: breastfeeding counseling
  - peer support interventions

  can result in some improvements in the number of women beginning to breastfeed

# Antenatal care

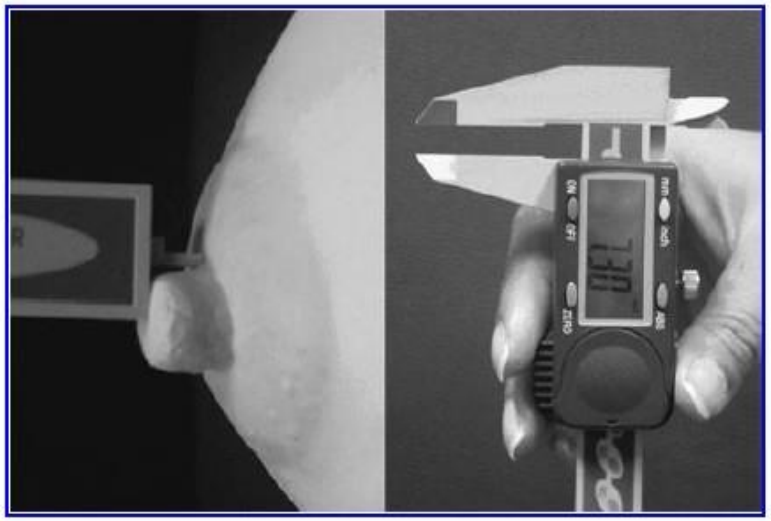
- Breastfeeding education
  - the importance
  - child survival, growth and development
  - reduction in risk of childhood obesity and CVD in later life
  - Nutrition : folic acid, iron supplement
- Breast examination and correction

BREASTFEEDING MEDICINE
Volume 8, Number 4, 2013

DOI: 10.1089/bfm.2012.0118

# Outcome of Non-protractile Nipple Correction with Breast Cups in Pregnant Women: A Randomized Controlled Trial

Pharuhas Chanprapaph,[1] Jinda Luttarapakul,[2] Somprasong Siribariruck,[2] and Srisawat Boonyawanichkul[2]



Vernier caliper

TABLE 3. NUMBER OF WOMEN WHO HAD CONVERTED FROM VERY SHORT OR SHORT NIPPLES TO NORMAL NIPPLES AFTER TREATMENT IN THE TWO GROUPS ($N$=90)

| | *Post-treatment* | | |
|---|---|---|---|
| *Group, pretreatment* | *Very short nipple* | *Short nipple* | *Normal nipple* |
| Breast cup (n=43) | | | |
| Very short nipple ($n$=21) | 3 | 13 | 5 |
| Short nipple ($n$=22) | 0 | 6 | 16 |
| Expectant ($n$=47) | | | |
| Very short nipple ($n$=24) | 4 | 19 | 1 |
| Short nipple ($n$=23) | 0 | 9 | 14 |

Nipple length was classified into three groups by length: very short (<4.0 mm), short (4.0–6.9 mm), and normal (≥7 mm).

**21/43 (48.84%)**

**15/47 (31.9%)**

**The 3-month exclusive breastfeeding rate** in the BC group was greater than that of the EX group (**65.39% versus 50.0%; p = 0.35**).

# Intra- partum care

**First stage of labor**

- Minimize stress
- Pain control: inhalation analgesics, avoid IM opiate analgesic
- Home- like setting
- Continuous support during labor and bladder care by trained lay women

# Intra- partum care

## Second stage of labor

- **Cesarean section**: risk for breastfeeding initiation
  - Skin to skin contact
  - BF in recovery room
- Prevention of complications
- Identify women for extra BF support
  - PPH, Prolong 2nd stage of labor, induction of labor due to medical problems

Hobbs et al. BMC Pregnancy and Childbirth (2016) 16:90

RESEARCH ARTICLE Open Access

# The impact of caesarean section on breastfeeding initiation, duration and difficulties in the first four months postpartum

Amy J. Hobbs[1*], Cynthia A. Mannion[2], Sheila W. McDonald[3], Meredith Brockway[2] and Suzanne C. Tough[1,3]

**Abstract**

**Background:** The caesarean section (c-section) rate in Canada is 27.1 %, well above the 5–15 % of deliveries suggested by the World Health Organization in 2009. Emergency and planned c-sections may adversely affect breastfeeding initiation, milk supply and infant breastfeeding receptivity compared to vaginal deliveries. Our study examined mode of delivery and breastfeeding initiation, duration, and difficulties reported by mothers at 4 months postpartum.

**Methods:** The All Our Babies study is a prospective pregnancy cohort in Calgary, Alberta, that began in 2008. Participants completed questionnaires at <25 and 34–36 weeks gestation and approximately 4 months postpartum. Demographic, mental health, lifestyle, and health services data were obtained. Women giving birth to singleton infants were included ($n = 3021$). Breastfeeding rates and difficulties according to mode of birth (vaginal, planned c-section and emergency c-section) were compared using cross-tabulations and chi-square tests. A multivariable logistic regression model was created to examine the association between mode of birth on breastfeeding duration to 12 weeks postpartum.

**Results:** More women who delivered by planned c-section had no intention to breastfeed or did not initiate breastfeeding (7.4 % and 4.3 % respectively), when compared to women with vaginal births (3.4 % and 1.8 %, respectively) and emergency c-section (2.7 % and 2.5 %, respectively). Women who delivered by emergency c-section were found to have a higher proportion of breastfeeding difficulties (41 %), and used more resources before (67 %) and after (58 %) leaving the hospital, when compared to vaginal delivery (29 %, 40 %, and 52 %, respectively) or planned c-sections (33 %, 49 %, and 41 %, respectively). Women who delivered with a planned c-section were more likely (OR = 1.61; 95 % CI: 1.14, 2.26; $p = 0.014$) to discontinue breastfeeding before 12 weeks postpartum compared to those who delivered vaginally, controlling for income, education, parity, preterm birth, maternal physical and mental health, ethnicity and breastfeeding difficulties.

**Conclusions:** We found that when controlling for socio-demographic and labor and delivery characteristics, planned c-section is associated with early breastfeeding cessation. Anticipatory guidance around breastfeeding could be provided to women considering a planned c-section. As well, additional supportive care could be made available to lactating women with emergency c-sections, within the first 24 hours post birth and throughout the early postpartum period.

**Keywords:** Caesarean section, Mode of birth, Vaginal delivery, Breastfeeding, Postpartum

# Intrapartum care

- C-sections
  - associated with more breastfeeding difficulties
  - greater use of resources
  - shorter breastfeeding duration compared to vaginal deliveries esp. plan C-sections

# Cesarean section

**การผ่าตัดคลอด**

ปวดแผล

ถูกผูกยึดด้วยอุปกรณ์ทางการแพทย์

เสียเลือด อ่อนเพลีย ไม่สามารถเริ่มต้นการให้นมได้เอง

**การเริ่มการให้นมแม่**

ดูดไม่บ่อย ไม่สม่ำเสมอ

ขาดการเรียนรู้และปรับตัว

ขัดขวางกระบวนการสร้างและหลั่งน้ำนม

**ปัญหาของน้ำนม**

มารดาเกิดความกังวล

ให้นมผสม

ทารกติดรสชาตินมผสมและการได้น้ำนมที่ไหลเร็ว (faster flow)

ปฏิเสธการดูดนมจากเต้า

# Interventions

- ลดการผ่าคลอดโดยไม่จำเป็น
- พัฒนาเทคนิกการผ่าตัด การระงับความรู้สึก
- เริ่มให้รับประทานอาหาร ลุกเดินหลังผ่าตัดแต่เนิ่นๆ
- ช่วยดูแล สนับสนุนการให้นมแม่อย่างรวดเร็วหลังคลอด
- ให้ความรู้เพื่อให้มารดาคลายความกังวลใจ

(From left) Mothers from Namibia's Himba tribe; from Amber, India; and from Washington state.

*Jose Luis Trisan/Getty; Hadynyah/Getty; Sarah Wolfe Photography/Getty*

# Post- partum care

BREASTFEEDING MEDICINE
Volume 9, Number 1, 2014

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**ABM Protocol**

## ABM Clinical Protocol #2: Guidelines for Hospital Discharge of the Breastfeeding Term Newborn and Mother: "The Going Home Protocol," Revised 2014

Amy Evans,[1,2] Kathleen A. Marinelli,[3,4] Julie Scott Taylor,[5] and The Academy of Breastfeeding Medicine

*A central goal of The Academy of Breastfeeding Medicine is the development of clinical protocols for managing common medical problems that may impact breastfeeding success. These protocols serve only as guidelines for the care of breastfeeding mothers and infants and do not delineate an exclusive course of treatment or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient.*

# Post- partum care

- Guidelines for Hospital Discharge of Breastfeeding Term Newborn and Mother: "**The Going Home Protocol**"
  - A health professional trained in formal assessment of breastfeeding
  - A least once during the last 8 hrs preceding discharge of the mother and infant
  - During hospitalization at least once every 8- 12 hrs

# Guidelines for Hospital Discharge of Breastfeeding Term Newborn and Mother: "**The Going Home Protocol**"

- Evaluation of…
  - Positioning
  - Latch
  - Milk transfer
  - Clinical jaundice
  - Stool color and transition
  - Stool and urine output
  - Notation of uric acid crystal if present

- Infant weight and percentage weight loss
- All concerns raised by mother
  - e.g. nipple pain, inability to hand express, perception of inadequate supply
- Ankyloglossia
- Breastfeed exclusively for the first 6 months and continue through 2 yrs. of life and beyond
- A plan of action and follow up of problem after discharge

TABLE 1. MATERNAL RISK FACTORS FOR LACTATION PROBLEMS

*Factors*

History/social

- Primiparity
- Intention to both breastfeed and bottle or formula feed at less than 6 weeks
- Intention to use pacifiers/dummies and/or artificial nipples/teats at less than 6 weeks
- Early intention/necessity to return to school or work
- History of previous breastfeeding problems or breastfed infant with slow weight gain
- History of infertility
- Conception by assisted reproductive technology
- Significant medical problems (e.g., untreated hypothyroidism, diabetes, cystic fibrosis, polycystic ovaries)
- Extremes of maternal age (e.g., adolescent mother or older than 40 years)
- Psychosocial problems (e.g., depression, anxiety, lack of social support for breastfeeding)
- Prolonged labor
- Long induction or augmentation of labor
- Use of medications during labor (benzodiazepines, morphine, or others that can cause drowsiness in the newborn)
- Peripartum complications (e.g., postpartum hemorrhage, hypertension, infection)
- Intended use of hormonal contraceptives before breastfeeding is well established (6 weeks)
- Perceived inadequate milk supply
- Maternal medication use (inappropriate advice about compatibility with breastfeeding is common)

Anatomic/physiologic

- Lack of noticeable breast enlargement during puberty or pregnancy
- Flat, inverted, or very large nipples
- Variation in breast appearance (marked asymmetry, hypoplastic, tubular)
- Any previous breast surgery, including cosmetic procedures (important to ask—not always obvious on exam)
- Previous breast abscess
- Maternal obesity (body mass index $\geq 30\,kg/m^2$)
- Extremely or persistently sore nipples
- Failure of ''secretory activation'' lactogenesis II. (Milk did not noticeably ''come in'' by 72 hours postpartum. This may be difficult to evaluate if mother and infant are discharged from the hospital in the first 24–48 hours postpartum.)
- Mother unable to hand-express colostrum
- Need for breastfeeding aids or appliances (such as nipple shields, breast pumps, or supplemental nursing systems) at the time of hospital discharge

Adapted with permission from Neifert[51,p.285] and the *Breastfeeding Handbook for Physicians.*[2,p.90] (III)

TABLE 2. INFANT RISK FACTORS FOR LACTATION PROBLEMS

| *Factors* |
|---|
| Medical/anatomic/physiologic |
| • Low birth weight or premature (<37 weeks) |
| • Multiples |
| • Difficulty in latching on to one or both breasts |
| • Ineffective or unsustained suckling |
| • Oral anatomic abnormalities (e.g., cleft lip/palate, macroglossia, micrognathia, tight frenulum/ankyloglossia with trained medical assessment) |
| • Medical problems (e.g., hypoglycemia, infection, jaundice, respiratory distress) |
| • Neurologic problems (e.g., genetic syndromes, hypertonia, hypotonia) |
| • Persistently sleepy infant |
| • Excessive infant weight loss (>7–10% of birth weight in the first 48 hours) |
| Environmental |
| • Mother–infant separation |
| • Breast pump dependency |
| • Formula supplementation |
| • Effective breastfeeding not established by hospital discharge |
| • Discharge from the hospital at <48 hours of age[50] |
| • Early pacifier use |

Adapted with permission from Neifert[51,p.285] and the *Breastfeeding Handbook for Physicians.*[2,p.91] (III)