

# Birth and in-hospital perinatal practices that ensure successful breastfeeding

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# CONFLICT OF INTERESTS

I DECLARE TO **NOT HAVE** ANY CONFLICT OF INTERESTS  
REGARDING THIS PRESENTATION

# 1000 Days Nutrition



- Improved early nutrition provides enormous potential advantages across the life span.
- Human milk + breastfeeding – crucial role in:
  - Neurodevelopment
  - Intestinal microbiome
  - Behavior

Schwarzenberg SJ, Georgieff MK and Committee on Nutrition. Advocacy for Improving Nutrition in the First 1000 Days to Support Childhood Development and Adult Health. Pediatrics 2018;141. DOI: 10.1542/peds.2017-3716.

<https://thousanddays.org/>

# BREASTFEEDING BENEFITS – BABIES

- Natural means of infant nutrition → bonding!
- Adequate temperature + easily available.
- Optimal nutritional composition to baby's needs:
  - Growth + development
- Biological components:
  - Immunity (microbiome) + anti-inflammatory
- Less infections:
  - Otitis (2x less at 6 months old) + diarrhea (less hospital admission)

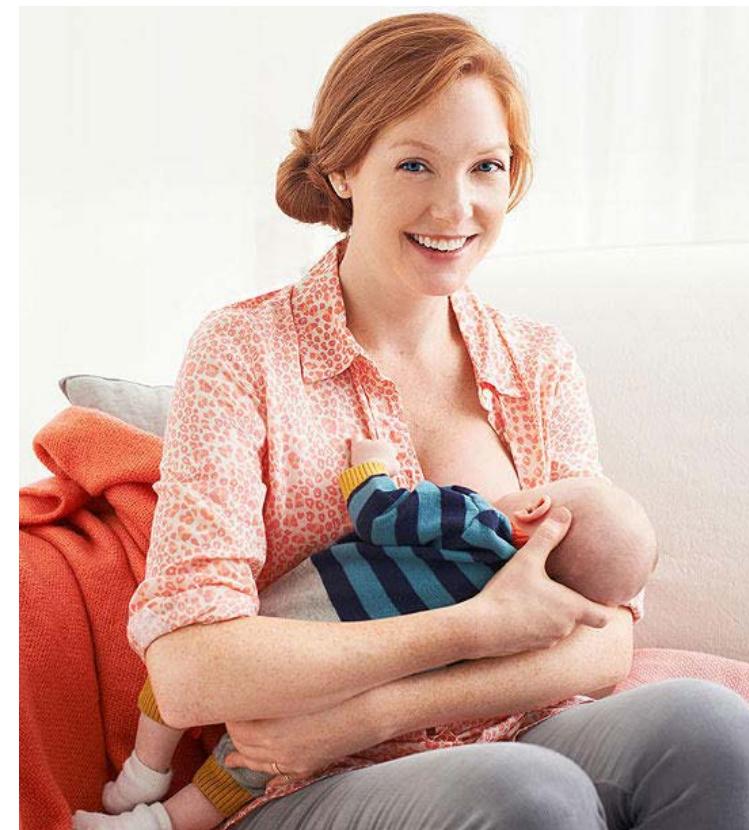


# BREASTFEEDING BENEFITS – BABIES

- Prevents Sudden Infant Death Syndrome - 15-36% lower risk.
- Reduces risk of asthma + atopic dermatitis + obesity.
- Improves cognitive development – breast-fed adults: >2-3 IQ score.
  - DHA + ARA – long-chained fatty acids help myelinization.
  - Prospective cohort study – at 30-year-old:
    - 3.8 higher IQ score
    - 0.9 average additional year of education and occupational training
    - 23% higher incomes

# BREASTFEEDING BENEFITS – MOMS

- Faster uterine involution.
- Greater fat deposits catabolism – weight loss.
- Reduces risk of breast cancer (12m).



# WHO + UNICEF Recommendation

- Breastfeeding should begin within **1st hour** of life
- Exclusively until **6 months** of age
- Continued until 2 years or beyond



# Despite of all this knowledge, breastfeeding **rates are low** worldwide !!!

- WHO's *Global Breastfeeding Scorecard - 2017*
  - 23 of 194 evaluated nations **rate above 60%** of exclusive breastfeeding at 6 months → 11,9%
    - Goal: **75%** !!!



**Guaranteeing the success of breastfeeding begins during **pre-natal care** and may also depend on several **perinatal & in-hospital factors**.**

Few high-quality evidence available on this issue



**What are the top 3 strategies used at your hospital that you think greatly influence mothers to breastfeed?**

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**#1516**



# 1. PARENTS **INFORMATION** & EDUCATION

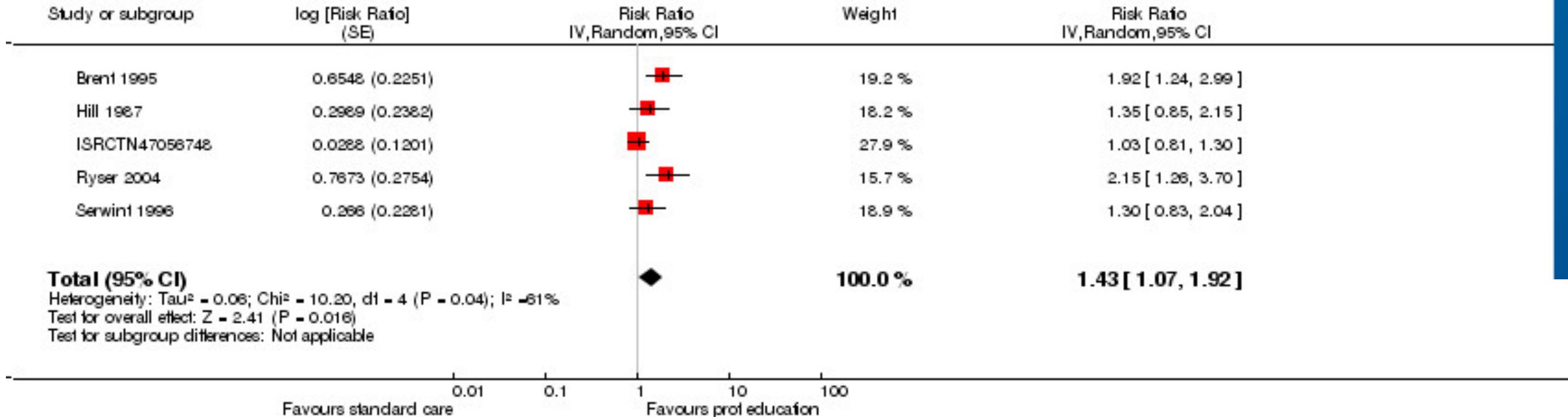
# Parents should be adequately informed about breastfeeding **before** the **child is born**.

- Cochrane review (2016) - 23 RCTs ; n = 107,362 ; 7 countries.
- Healthcare professional-led education in formal settings improves rates of breastfeeding initiation
  - Midwives + nurses + doctors
  - Promotion campaigns + counselling
- Low quality evidence.

# Healthcare professional-led education vs. Standard care

Initiation of breastfeeding - RR 1.43, 95% CI (1.07 - 1.92)

Review: Interventions for promoting the initiation of breastfeeding  
 Comparison: 1 Healthcare professional-led breastfeeding education and support versus standard care  
 Outcome: 1 Initiation of breastfeeding

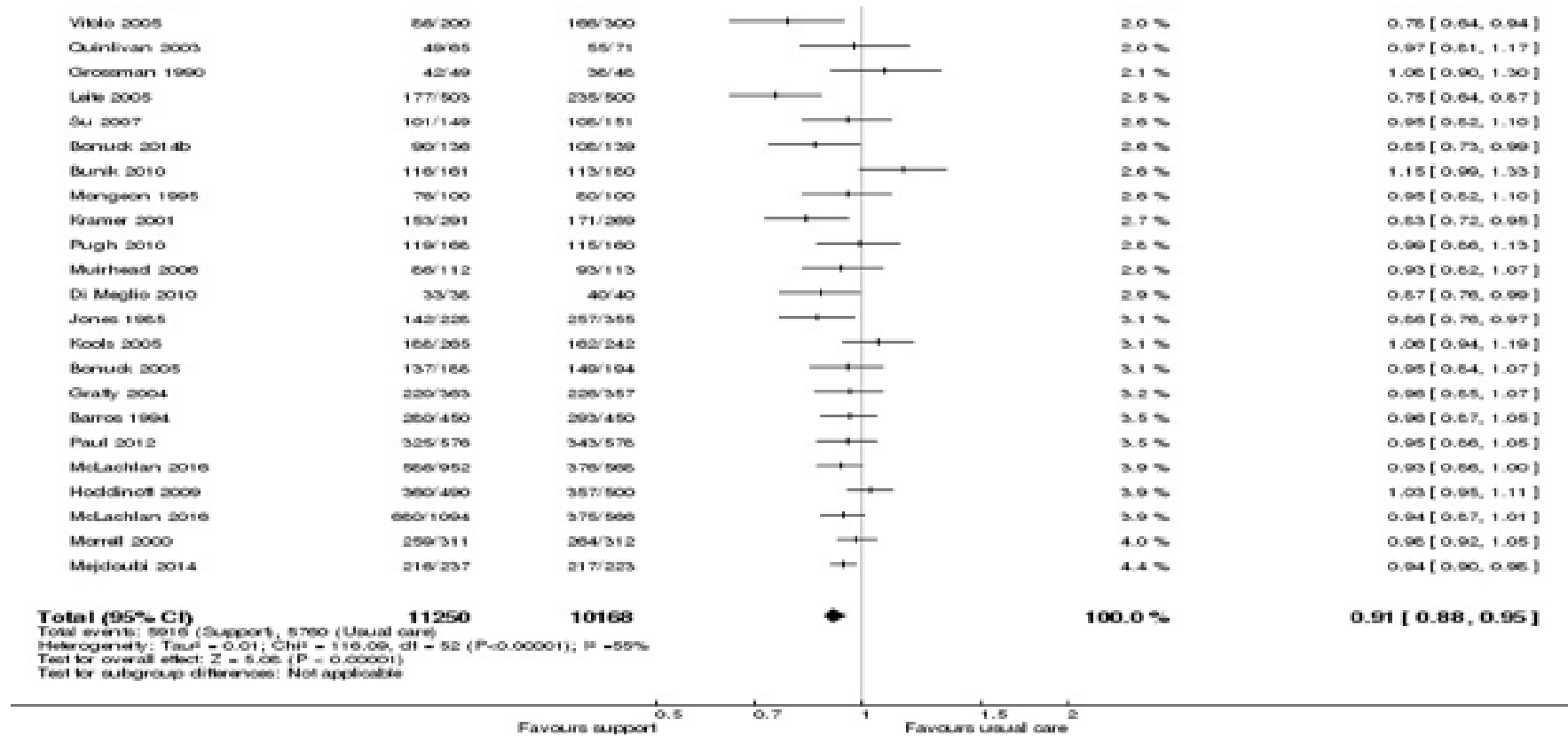


# Parents should receive **good quality** information

- Cochrane review (2017) - 73 RCTs; n = 74,656 mother-infant pairs; 29 countries (62% high-income).
- All forms of **organized support** **increased length of time** women **continued to breastfeed** exclusively – more helpful if:
  - Scheduled – predictable.
  - Ongoing visits with trained volunteers, doctors and nurses.
- Moderate quality evidence.

# All forms of support vs. Usual care

Less likely to stop breastfeeding before 6 months - RR 0.91, 95% CI (0.88 - 0.95)



*Not all studies included*

## 2. CONTINUOUS SUPPORT



# Continuous Support (Nurses & Midwives)

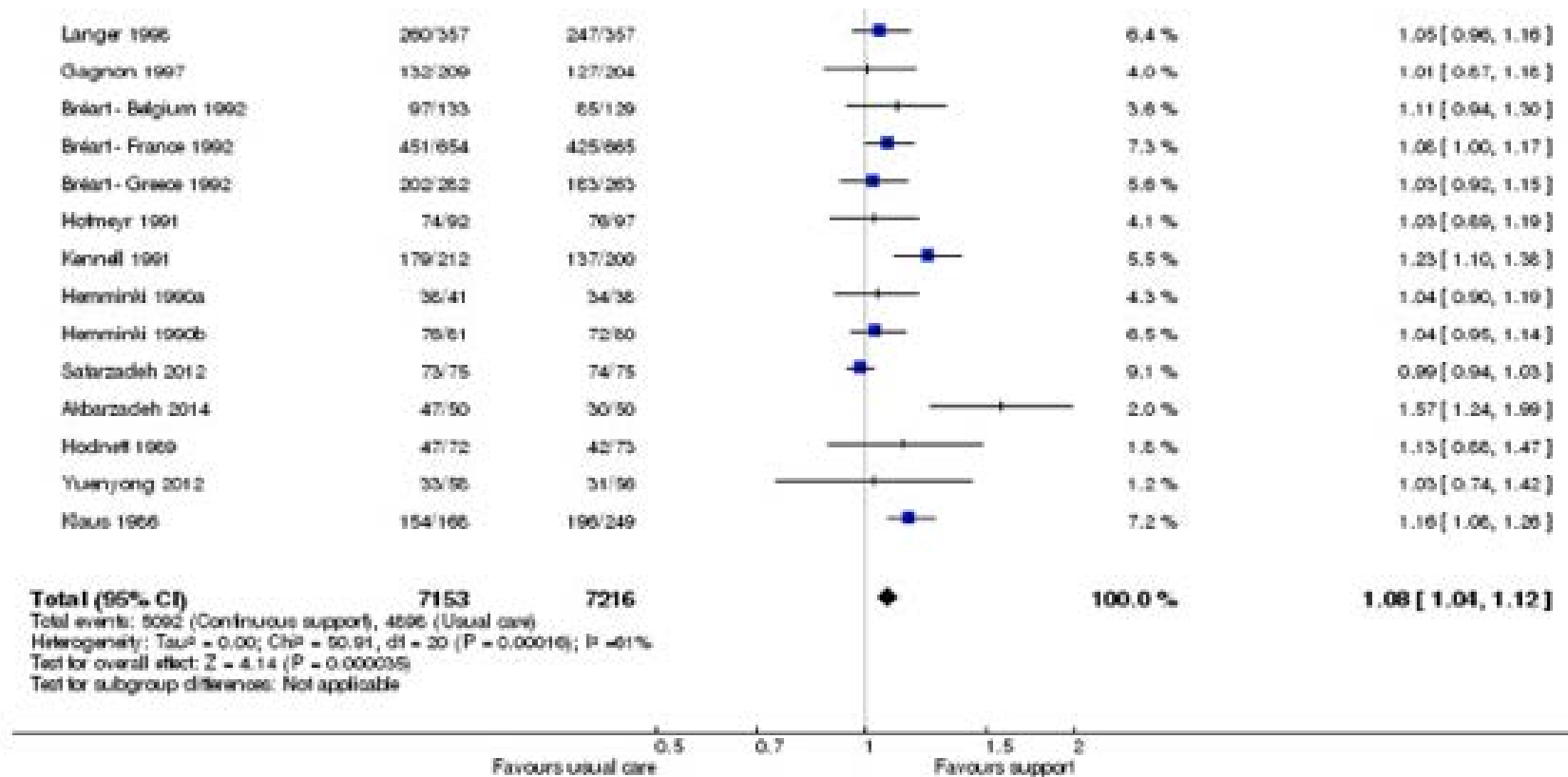
- Cochrane review (2017) - 26 RCTs; n = 15,858 women; 17 countries (76% high-income).
- Usually from another **woman/person of their choice** during labor and birth.
  - **Emotional** – continuous presence + reassurance + praise.
  - **Information** regarding labor progress.
  - **Comfort measures** – touching + massaging + warm bath/shower + encouraging mobility + promoting adequate fluid intake and output.
  - **Speaking up on behalf** of woman (when needed).

# Continuous Support (Nurses & Midwives)

- Lack of continuous support – labor and birth may be perceived as **dehumanized**.
- Supportive care enhances:
  - Physiological labor processes
  - Women's feeling of control
  - Confidence in their own strength and ability to give birth:
    - ❑ May reduce obstetric intervention → HIGHER VAGINAL BIRTH RATES
    - ❑ Improve women's experience

# Continuous support vs. Usual care

Increases spontaneous vaginal birth - RR 1.08, 95% CI (1.04 - 1.12)



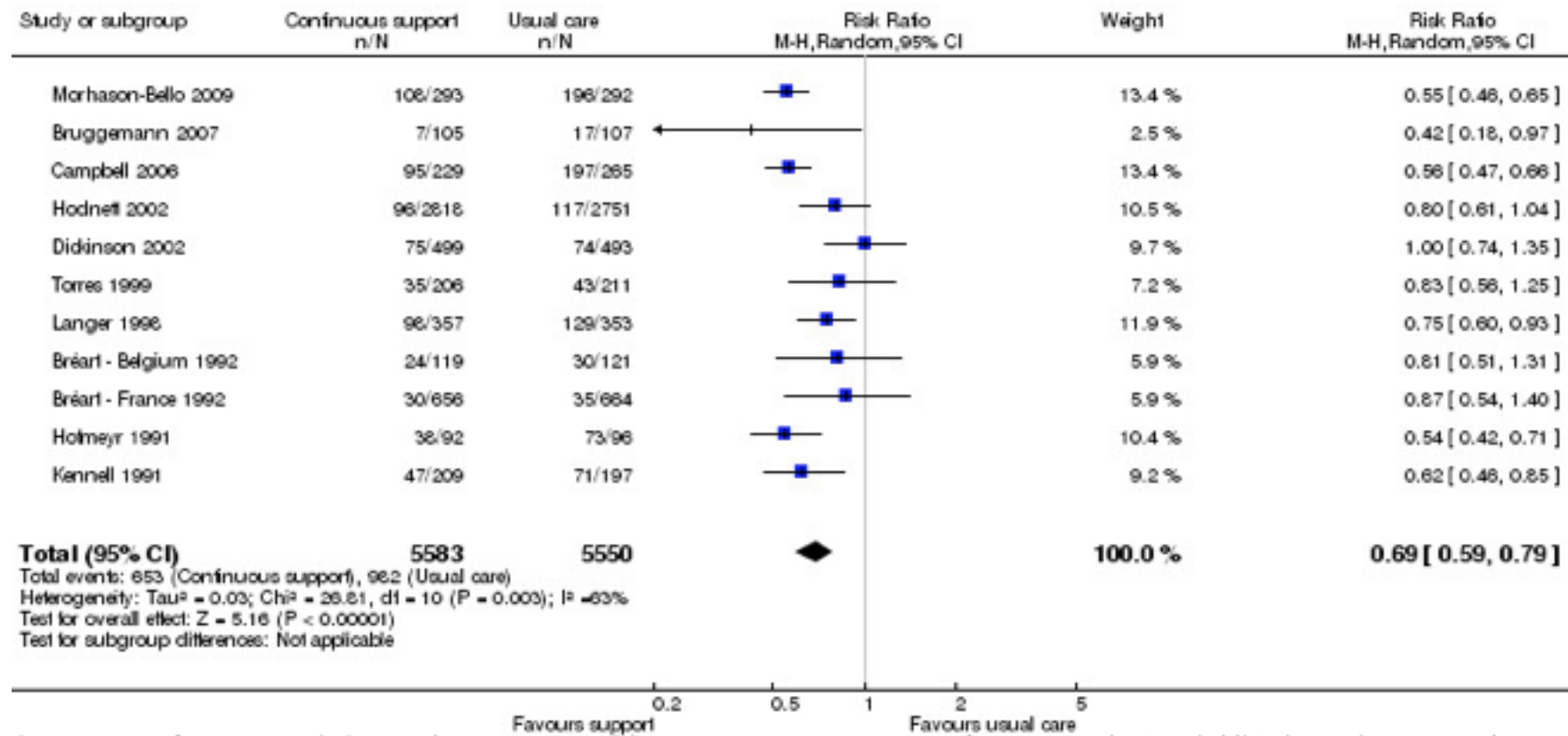
*Not all studies included*

# Continuous Support (Nurses & Midwives)

- Institutional / hospital routines may have adverse effects on the quality, outcomes and experience of care during labor and childbirth.
- All low quality evidences.

# Continuous support vs. Usual care

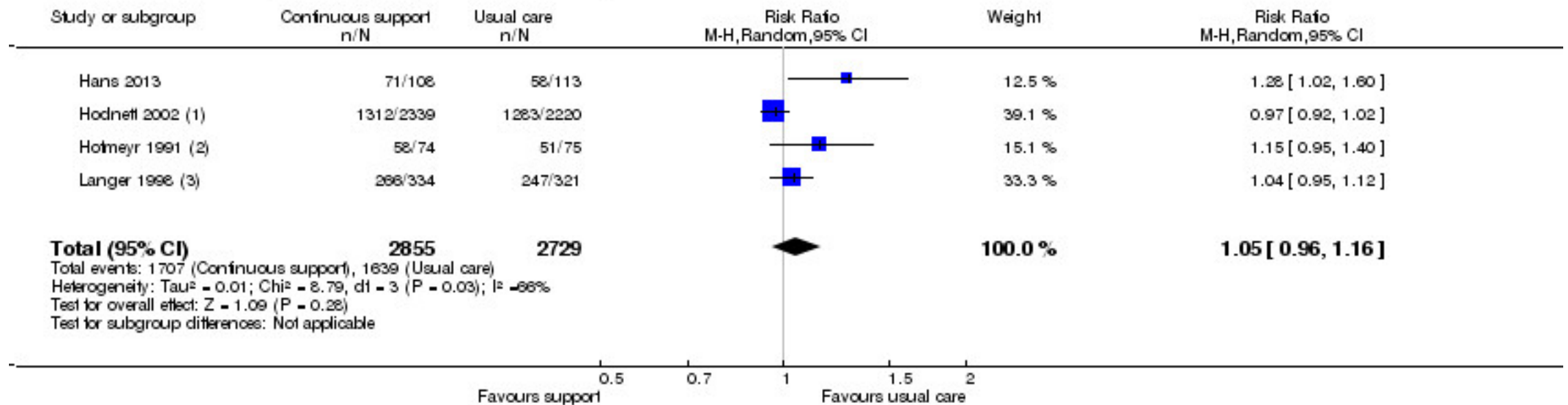
Decreases negative feelings about birth experience - RR 0.69, 95% CI (0.59 - 0.79)



# Continuous support vs. Usual care

No difference whether babies were breastfed at 8 weeks - RR 1.05, 95% CI (0.96-1.16)

Review: Continuous support for women during childbirth  
 Comparison: 1 Continuous support versus usual care - all trials  
 Outcome: 5 Exclusive or any breastfeeding at any time point, as defined by trial authors



(1) Reported as 'Not breastfeeding at 6 weeks postpartum'. Reciprocal results reported here.

(2) Reported 'breastfeeding only' and 'not breastfeeding at all' at 6 weeks postpartum - reported 'breastfeeding only' group minus those 'not breastfeeding at all' from denominator

(3) Reported as 'Full breastfeeding' and 'Breastfeeding plus formula' one month postpartum.

### 3. **ALTERNATIVE** INSTITUTIONAL SETTINGS

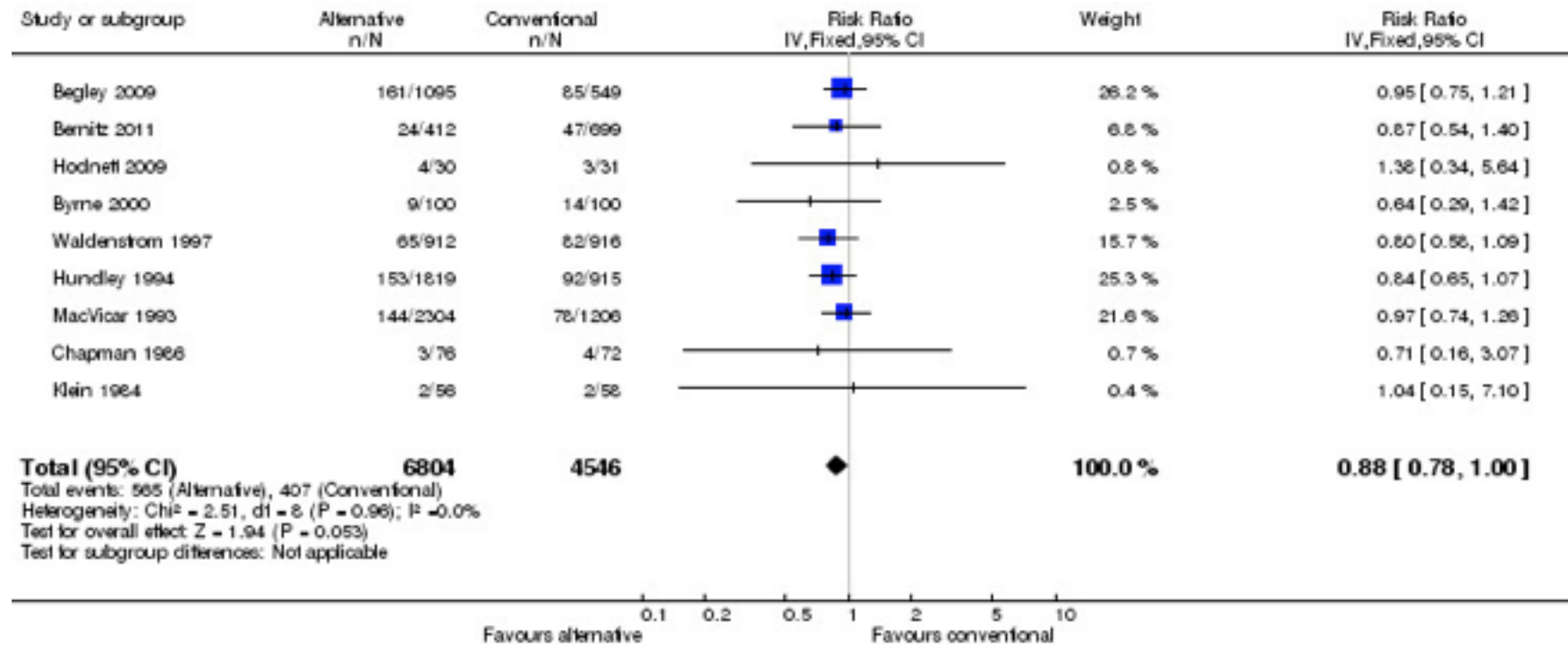
# ALTERNATIVE INSTITUTIONAL SETTINGS

- Cochrane review (2012) - 10 RCTs; n = 11,795 women.
- Hospital **birth centers** increase likelihood of:
  - No intrapartum analgesia/anesthesia.
  - Spontaneous vaginal birth.
  - **Breastfeeding** at 6 – 8 weeks of age.
  - Very positive views of care.
- Usually restricted to high/moderate-income countries.



# Alternative vs. Conventional settings for birth

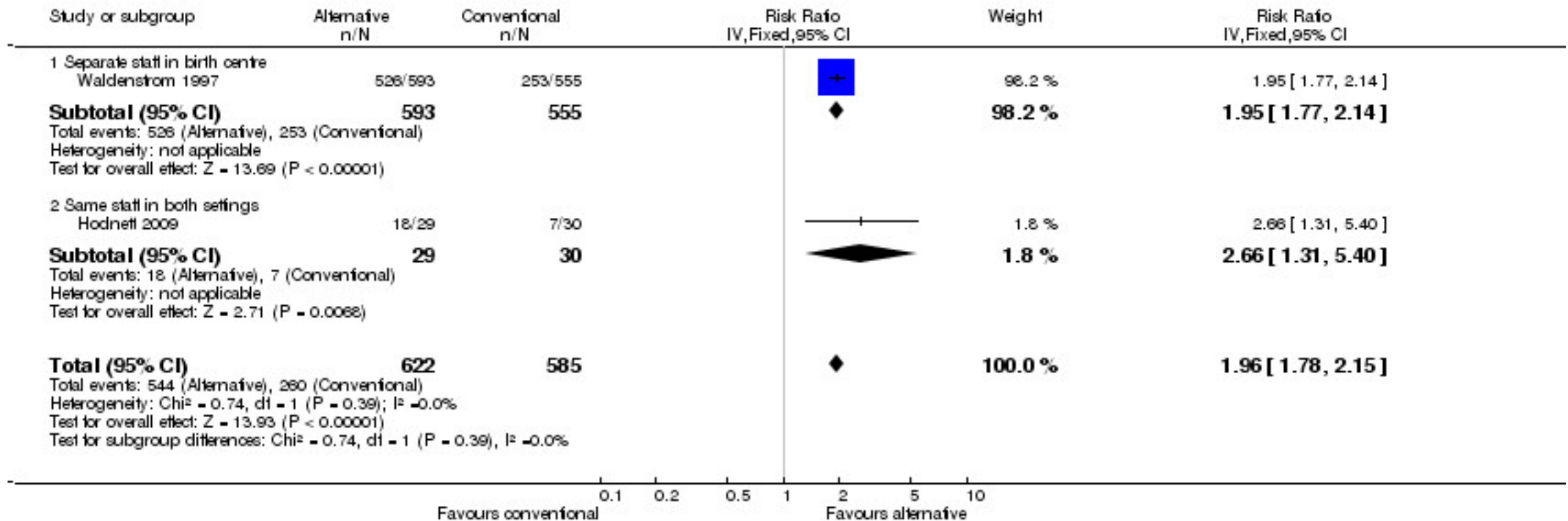
Less likely to perform Caesarean birth - RR 0.88, 95% CI (0.78-1.00)



# Alternative vs. Conventional settings for birth

Perceived experience with greater satisfaction - RR 1.96, 95% CI (1.78 - 2.15)

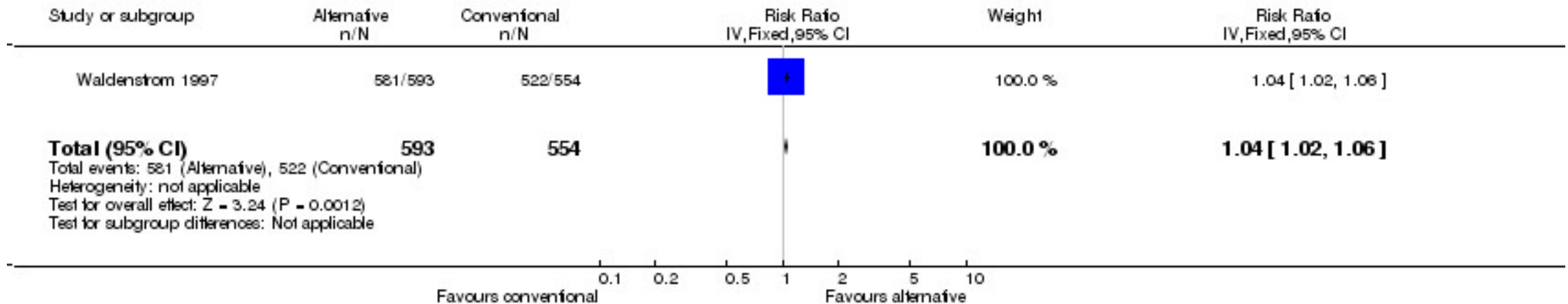
Review: Alternative versus conventional institutional settings for birth  
 Comparison: 2 Alternative versus conventional birth settings - same or separate staff  
 Outcome: 4 Very positive views of intrapartum care



# Alternative vs. Conventional settings for birth

No difference whether babies were breastfed at 6-8 weeks - RR 1.04, 95% CI (1.02-1.06)

Review: Alternative versus conventional institutional settings for birth  
 Comparison: 1 Alternative versus conventional birth settings - all trials  
 Outcome: 14 Breastfeeding at 6-8 weeks



## 4. SKIN-TO-SKIN CONTACT

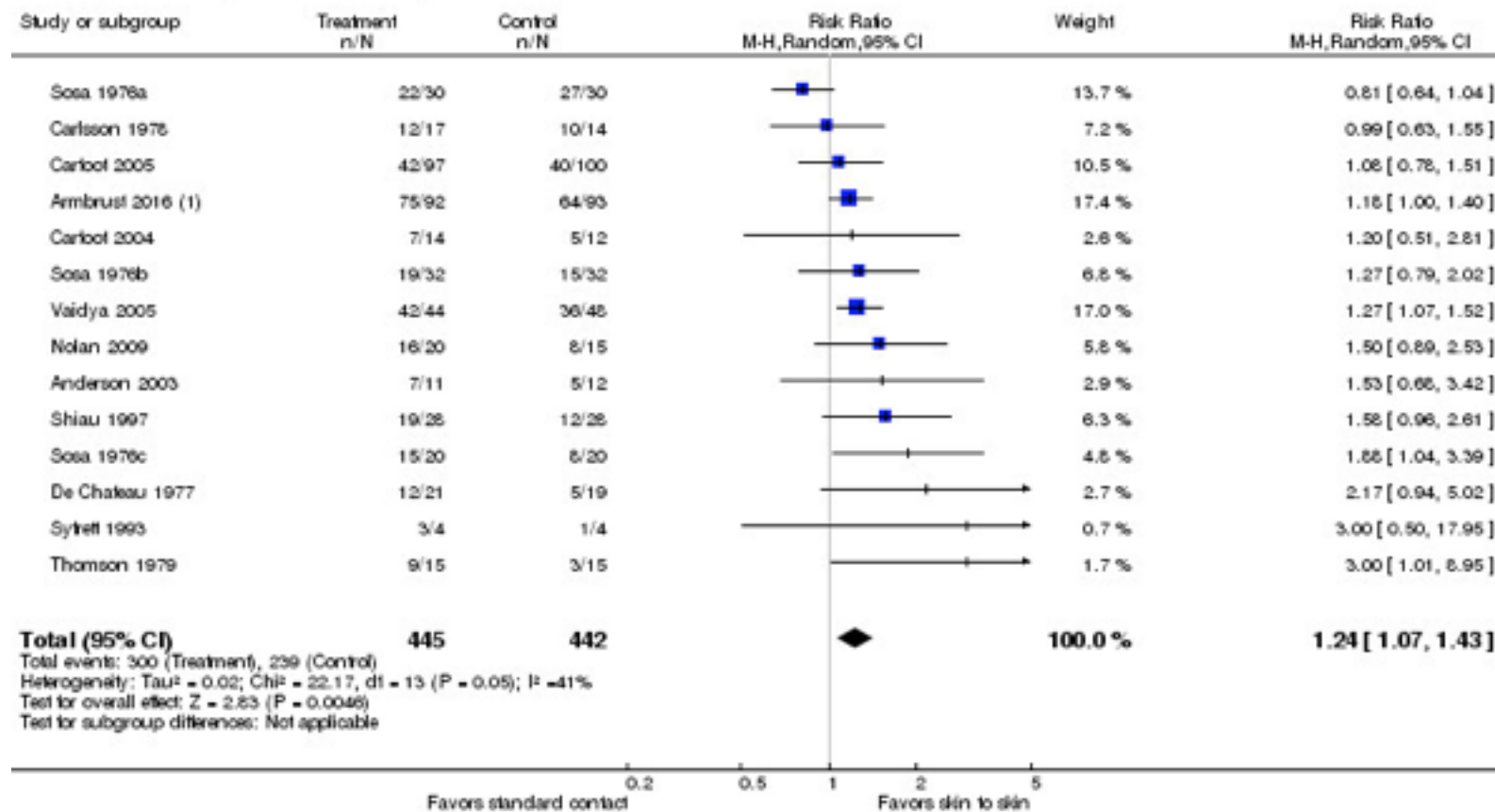
# SKIN-TO-SKIN CONTACT

- Placing **naked newborn** on mother's bare chest after birth.
  - **Immediate** – within *first 10 minutes* of age.
  - **Early** – 10 minutes to *24 hours* of age.
- Cochrane review (2016) - 38 RCTs; n = 3,472 mother-infant pairs; 8 countries.
- All healthy infants (>35wk) – majority full term



# Skin-to-skin vs. Standard contact

Increased chances of breastfeeding up to 4 months - RR 1.24, 95% CI (1.07-1.43)



# SKIN-TO-SKIN CONTACT

- More like to exclusively breastfeed from hospital discharge to 1-month post-birth, and from 6 weeks to 6 months post-birth.
- Infants had higher blood glucose level (*low-quality evidence*).
- No difference between:
  - Times of initiation – <10 min (**immediate**) vs. >10 min (**early**)
  - Length of contact time – <1 hour vs. > 1 hour

## 5. ROOMING-IN



# ROOMING-IN

- Hospital arrangement whereby a newborn infant is kept in the **mother's hospital room** instead of in a nursery.
- Cochrane review (2016) - 1 study; n = 176 women; all *low-quality* evidence.

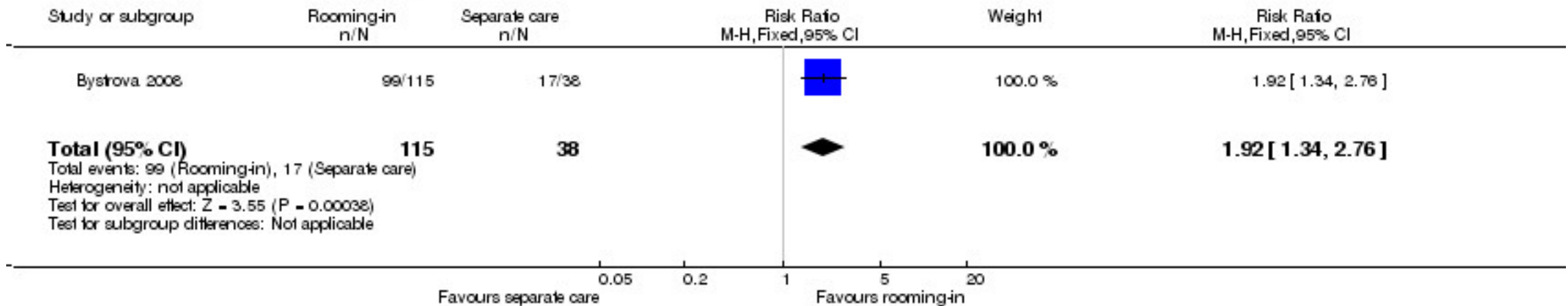
<https://www.merriam-webster.com/dictionary/rooming-in>

Jaafar SH, Ho JJ, Lee KS. Rooming-in for new mother and infant versus separate care for increasing the duration of breastfeeding. Cochrane Database of Systematic Reviews 2016, Issue 8. Art. No.: CD006641. DOI: 10.1002/14651858.CD006641.pub3

# Rooming-in vs. Separate care

Increased exclusive breastfeeding at day-4 postpartum [before hospital discharge] - 86% vs. 45% - RR 1.92, 95% CI (1.34-2.76)

Review: Rooming-in for new mother and infant versus separate care for increasing the duration of breastfeeding  
 Comparison: 1 Comparison between rooming-in versus separate care  
 Outcome: 3 Exclusive breastfeeding at day 4 postpartum



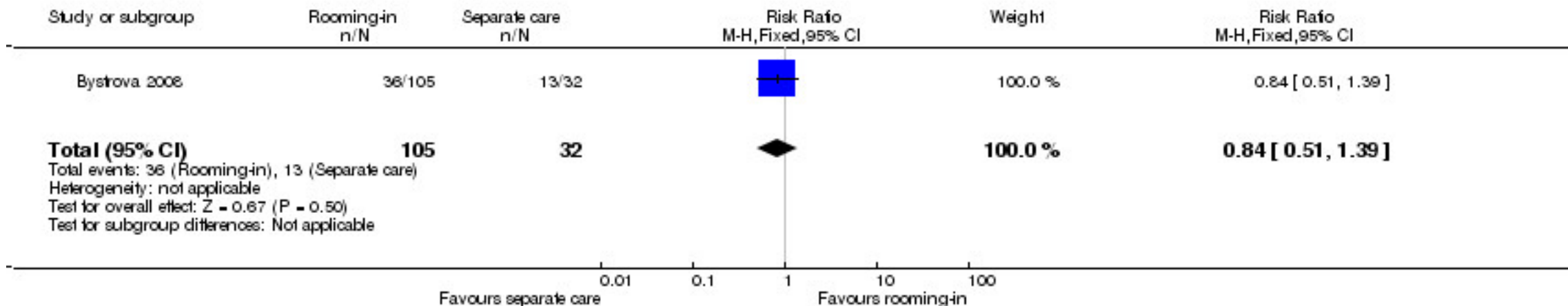
# Rooming-in vs. Separate care

Found no difference between proportion of women breastfeeding at 6 months - RR 0.84, 95% CI (0.51 - 1.39)

Review: Rooming-in for new mother and infant versus separate care for increasing the duration of breastfeeding

Comparison: 1 Comparison between rooming-in versus separate care

Outcome: 1 Proportion of women with any breastfeeding at 6 months



## 6. ORAL DEXTROSE GEL

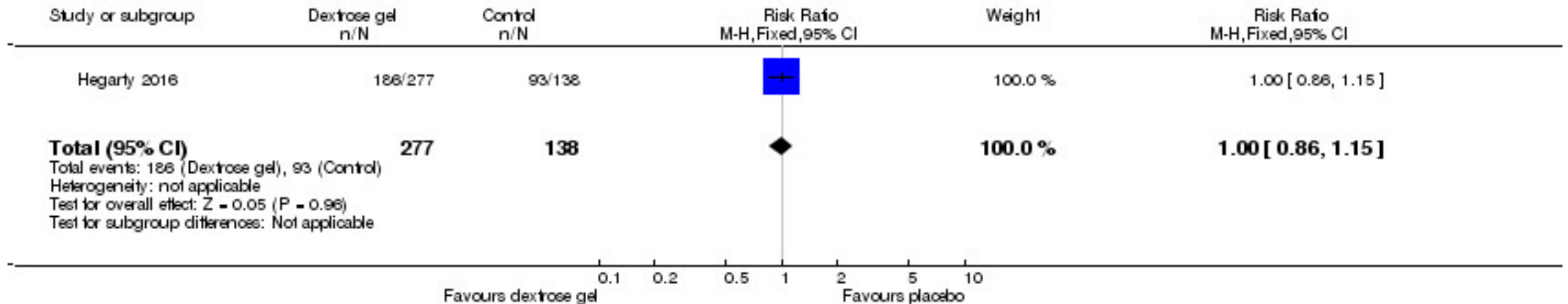
# ORAL DEXTROSE GEL - HYPOGLYCEMIA

- Cochrane review (2017) - 1 study; n = 416 infants at risk of hypoglycemia.
- All moderate-quality evidence.

# Dextrose Gel vs. Control

Found no difference between exclusive breastfeeding at discharge - RR 1.00, 95% CI (0.86 - 1.15)

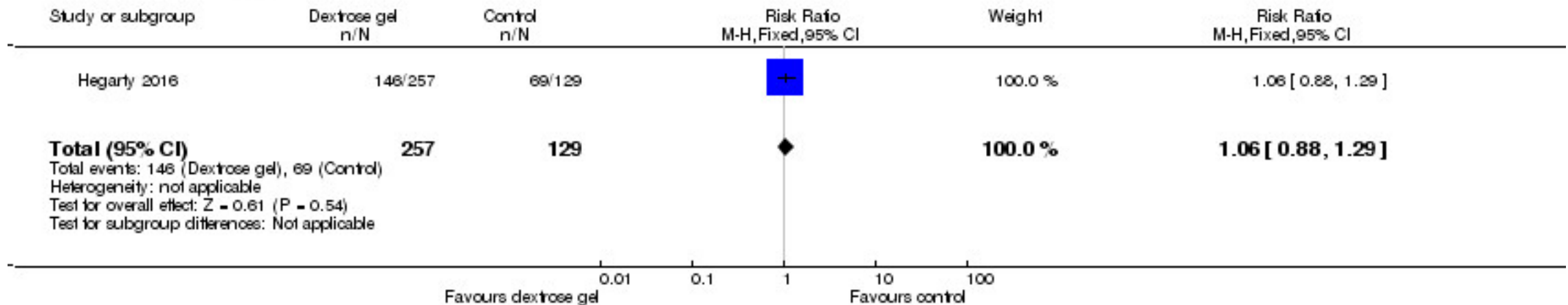
Review: Oral dextrose gel to prevent hypoglycaemia in at-risk neonates  
 Comparison: 1 Dextrose gel versus control  
 Outcome: 9 Exclusive breastfeeding at discharge



# Dextrose Gel vs. Control

Found no difference between exclusive breastfeeding after 6 weeks - RR 1.06, 95% CI (0.88 - 1.29)

Review: Oral dextrose gel to prevent hypoglycaemia in at-risk neonates  
 Comparison: 1 Dextrose gel versus control  
 Outcome: 10 Breastfeeding (6 weeks)



## 7. FRENOTOMY



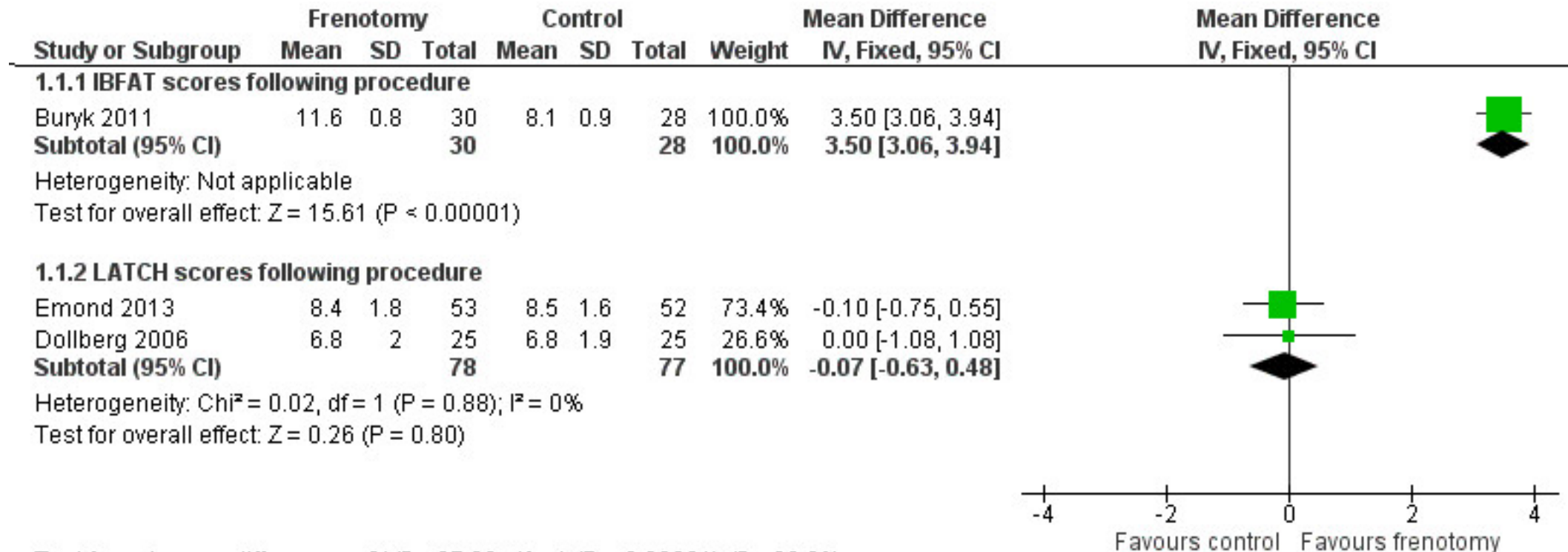
# TONGUE-TIED NEWBORNS

- Cochrane review (2017) - 3 studies; n = 155 infants; all *low-quality* evidence.
- Frenotomy reduced breastfeeding mothers' nipple pain in the short term.
- Investigators did not find a consistent positive effect on infant breastfeeding.
- No study was able to report whether frenotomy led to long-term successful breastfeeding.



# TONGUE-TIED NEWBORNS

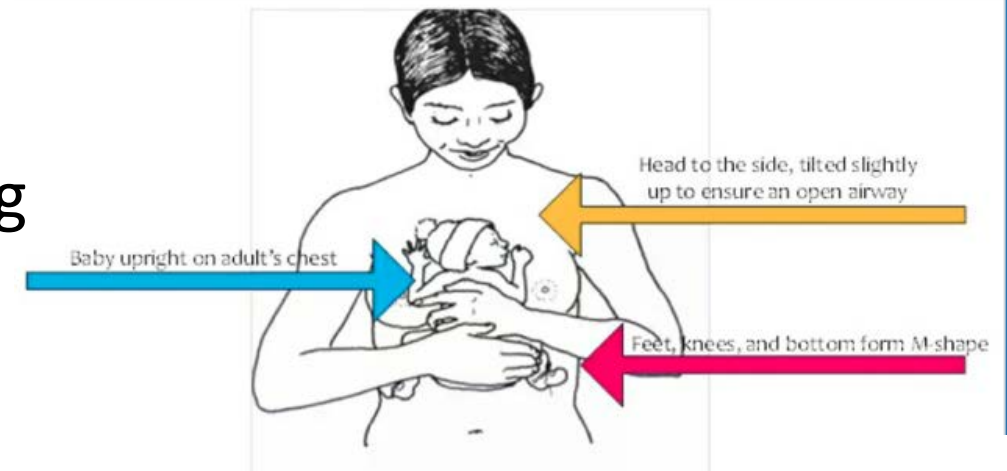
Found no difference between breastfeeding performance assessed by validated scale



## 8. KANGAROO CARE

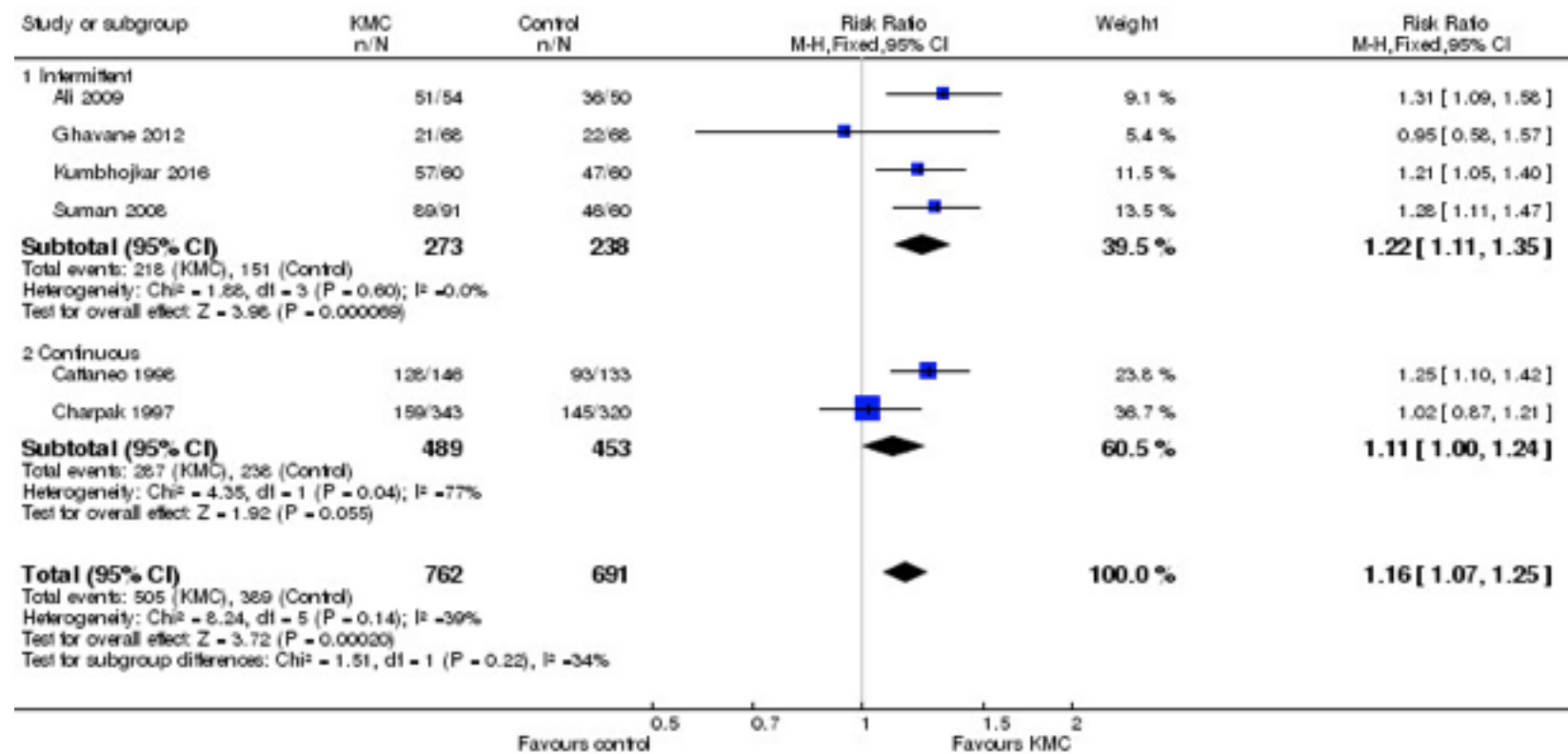
# KANGAROO CARE

- Cochrane review (2017) - 31 studies; n = 3,042 infants; *moderate-quality* evidence.
- Found to increase exclusive breastfeeding at:
  - Discharge (RR 1.16, 95% CI [1.07-1.25])
  - 1 to 3 months (RR 1.20, 95% CI [1.01-1.43])
- But not at 6-12 months (RR 1.29, 95% CI [0.95-1.76])



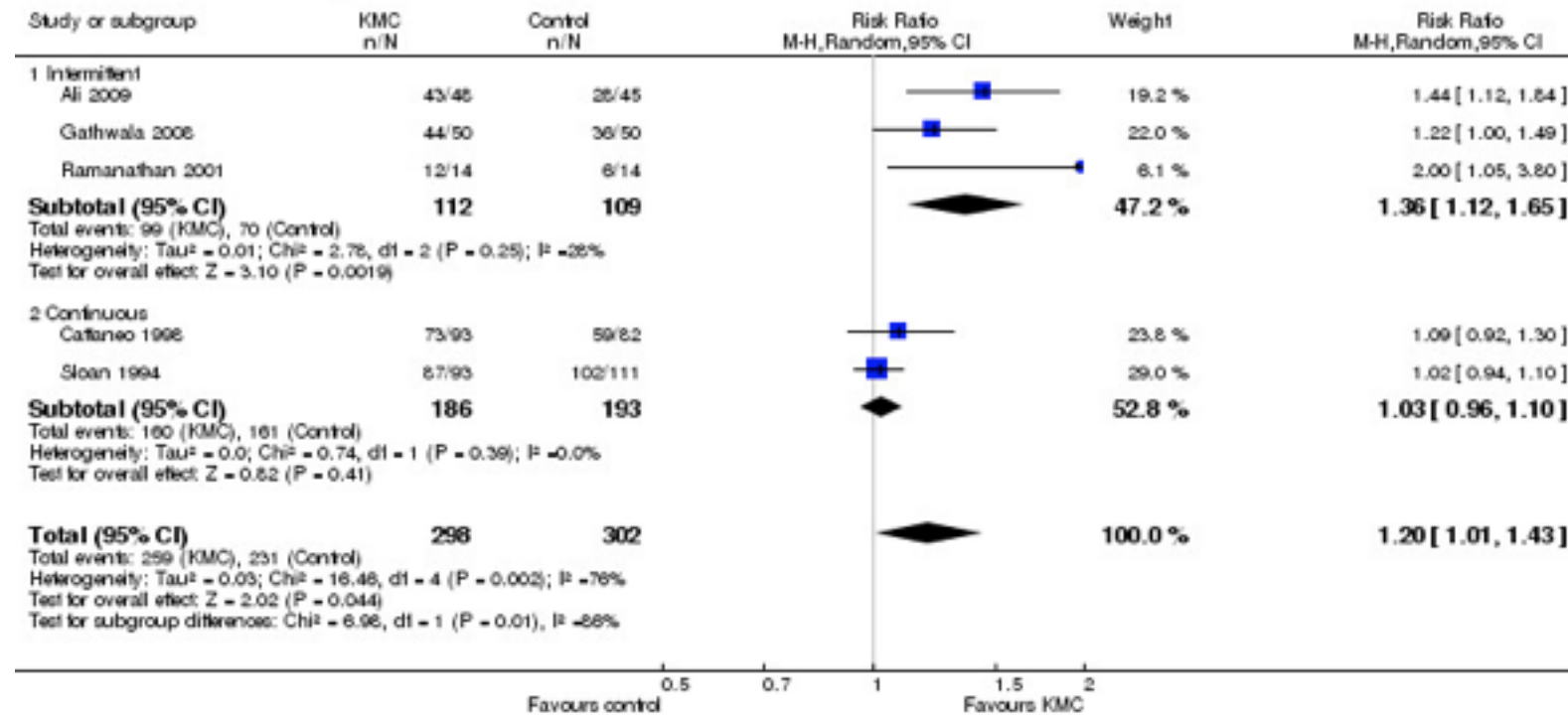
# Kangaroo vs. Conventional care

Increased exclusive breastfeeding at discharge - RR 1.16, 95% CI (1.07 - 1.25)



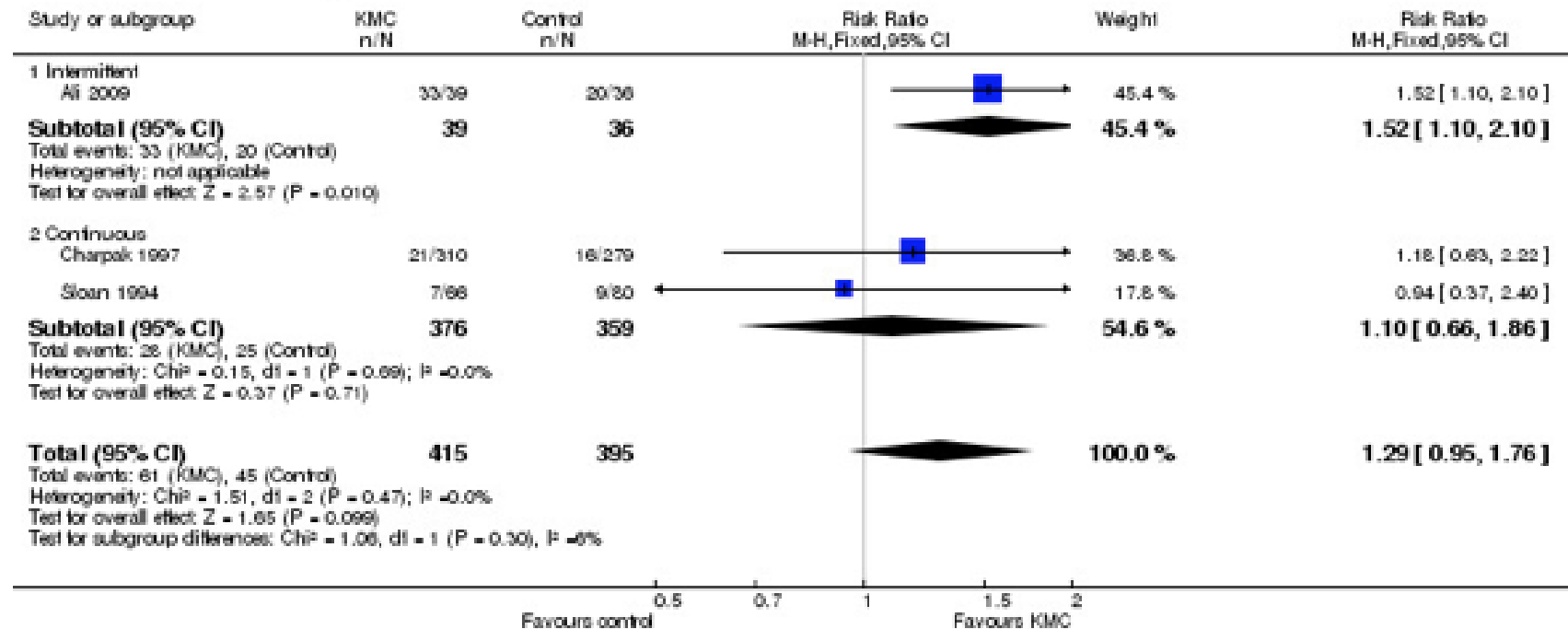
# Kangaroo vs. Conventional care

Increased exclusive breastfeeding at 1 to 3 months - RR 1.20, 95% CI (1.01 - 1.43)



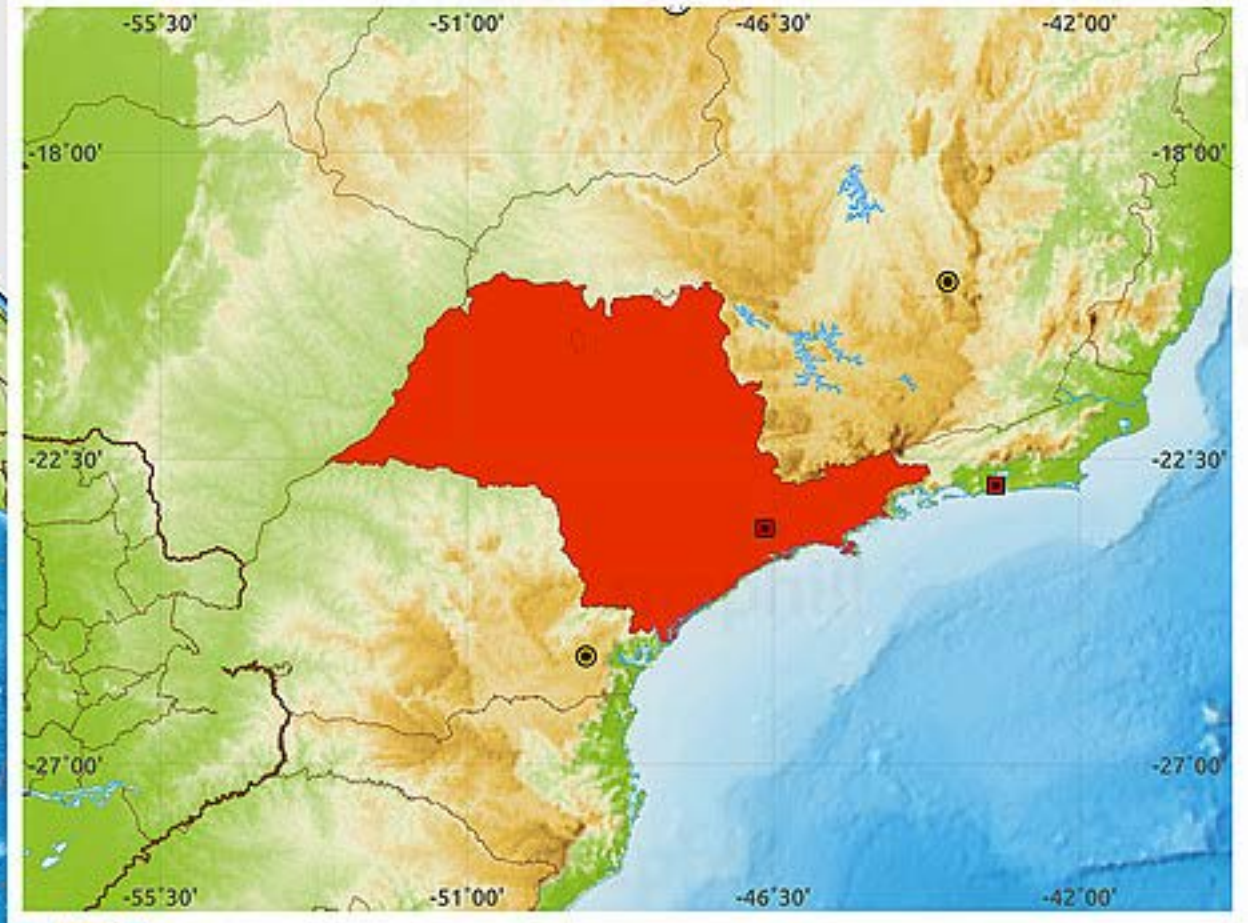
# Kangaroo vs. Conventional care

Found no difference between exclusive breastfeeding at 6 to 12 months - RR 1.29, 95% CI (0.95 - 1.76)



**OUR EXPERIENCE AT**  
**ALBERT EINSTEIN HOSPITAL**  
**São Paulo - Brazil**





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HOSPITAL ISRAELITA  
ALBERT EINSTEIN

# WHAT WE DO AT ALBERT EINSTEIN HOSPITAL

- Pregnant women usually accompanied by continuous support throughout labor + childbirth.
  - Obstetric nurses and/or doulas
- Some also hire private pediatrician to take care of newborn and assist with breastfeeding
  - Information and latching techniques.

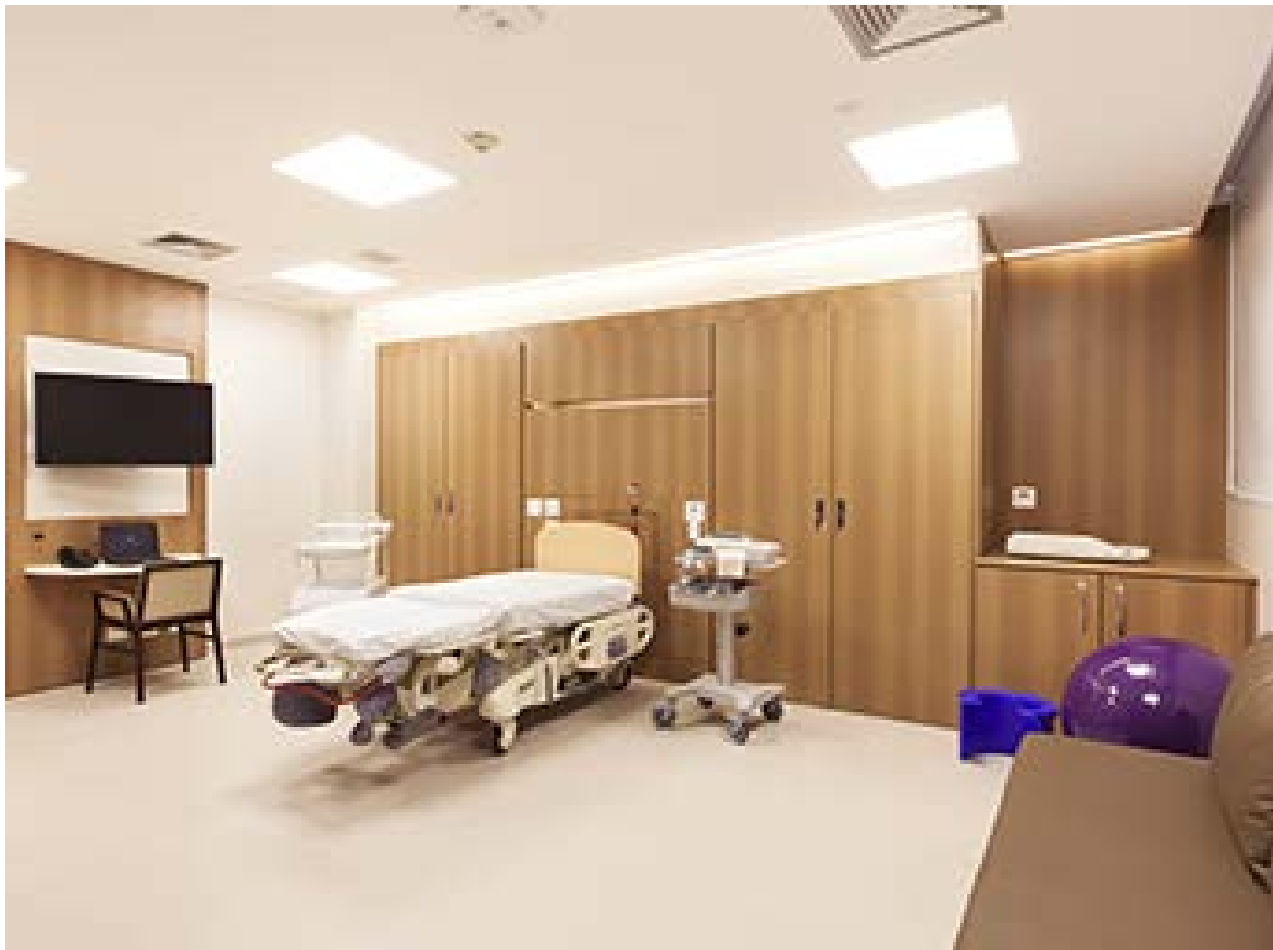
# OUR STRATEGIES INCLUDE:

- Courses for pregnant women – labor, delivery and newborn care.
- Alternative labor setting - birth center.
- Skin-to-skin contact.
- Breastfeed initiation within first hour of life.
- Rooming-in for healthy mothers and babies.

# OUR STRATEGIES INCLUDE:

- Lingual frenulum evaluation of all newborns.
- Lactation consultant evaluation for every mother-baby dyad.
- Speech-language pathologist consultation (if needed).
- Kangaroo care at Neonatal Intensive or Semi-Intensive units.
- Human milk bank + donation.

# ALBERT EINSTEIN'S BIRTH CENTER



# Resuscitation





# OUR BIRTH CENTER

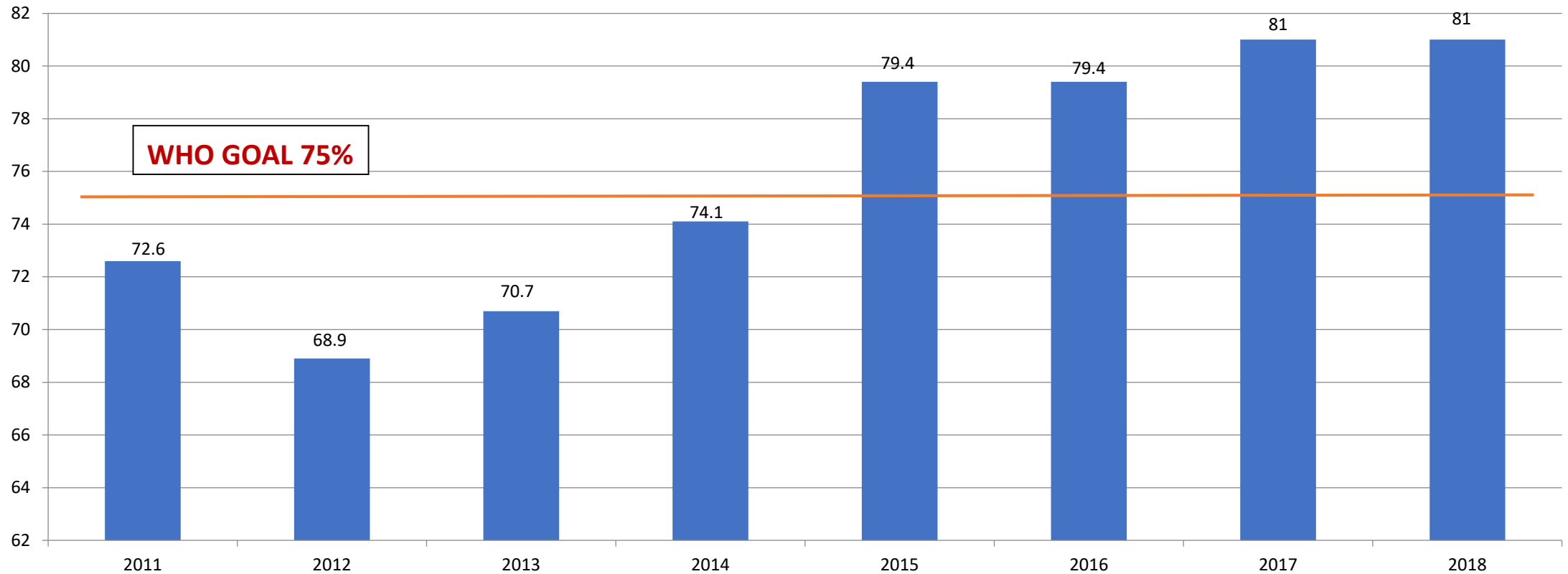
- Vaginal birth rates (all births):
  - 2017 – 27.4%                      2014 - 20,2%
  - 2018 – 29.8%
- Vaginal birth rates (Robson 1 to 4)
  - 2017 – 42%
  - 2018 – 44.4%
- Forcipes birth – 2% (2017 and 2018)

# OUR BIRTH CENTER

- Breastfeeding within the first hour of life
  - 2017 – 81.1%
  - 2018 – 89.5%
- Skin-to-skin – 87.2% (2017 and 2018).
  - 12.8% - transferred to intensive or semi-intensive units.
    - Unstable to promote skin-to-skin.

# OUR MATERNITY WARD

Exclusive breastfeeding rates amongst roomed-in term babies (2011 to 2018)



# OUR MATERNITY WARD

- 5 IBLCE consultants – 2 nurses + 3 pediatricians
- Continuous education – internal monthly meetings
  - Laser in nipple trauma
  - Breastfeeding in same-sex couples
  - Puerperal blues: use of antidepressants and breastfeeding
  - Breastfeeding and tongue-tie babies
  - When and how to use breast pump
- Annual World Breastfeeding week



# IMPORTANT ASPECTS

- Engaged & well-informed staff
- +
- Motivated mothers
  - Culturally relevant aspect of motherhood
- +
- Government campaigns

# Amamentar faz bem para o bebê e para você.

Até os 6 meses, o bebê só precisa de leite materno. Depois, ofereça alimentos saudáveis e continue amamentando até os 2 anos ou mais. Informe-se, prepare-se. Torne essa experiência completa.

Adaptado de: Brasil, distribuição e promoção do leite materno. Brasília: Unicef, 2010.

A amamentação é incentivada e apoiada pelo SUS.

# Doar Leite Materno.

AJUDE QUEM ESPERA POR VOCÊ.

O leite materno ajuda a salvar a vida de muitas crianças prematuras, de baixo peso, internadas e que não podem ser alimentadas diretamente no seio da mãe. Qualquer quantidade ajuda, e muito, na recuperação dessas crianças. Então, faça sua parte e procure um Banco de Leite Humano.

Saiba mais em [saude.gov.br/doacao-de-leite](http://saude.gov.br/doacao-de-leite)

#DoarLeiteMaterno  
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EDUBRISA



<https://pinterest.eu/julianapa-o-que-você-sente-por-mim.html>

<http://revistapress.com.br/ministerio-da-saude-incentiva-a-doacao-do-leite-materno-em-campanha-da-fields360/>

**Tão importante quanto amamentar seu bebê,  
é ter alguém que escute você.**

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Quarta-feira, 05/05/13  
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**Conte com um profissional de saúde.**  
Ele vai escutar você e ajudar a tornar sua amamentação ainda mais tranquila.  
O leite materno ajuda o seu bebê a crescer forte e saudável. Por isso, até os 6 meses, dê apenas o leite materno. Depois, ofereça alimentos saudáveis e continue amamentando até os 2 anos ou mais. A amamentação é incentivada e apoiada pelo SUS. Procure uma unidade de saúde.

f /amamentacao t @minsaudef

MELHORAR SUA VIDA, NOSSO COMPROMISSO





*RESULTS*

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**#1516**





***Successful breastfeeding is **multifactorial**.***

***Healthcare professionals must continuously support mothers throughout their in-hospital journeys (birth to breastfeeding), **adjusting practices that best meet their needs and expectations.*****

