



Breastfeeding: Context, Obstacles & Solutions

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CONTENTS

- Where were we?
- Where are we now?
- Where do we want to be?
- What are the obstacles?
- What can we do?



WHERE WERE WE?



BREASTFEEDING IN HISTORY



Japanese art 1700s



Old Romanian bank note



Wyspianski - Breastfeeding Painting (1905)



Renoir painting of
mother & baby

Source: facebook

BREASTFEEDING IN PRE-HISTORY

Evolved Developmental Niche

- 'natural' vaginal birth
- Infant in contact with caregivers 24/7
- extended breastfeeding (2.5 to 7 years)
- lots of physical touch
- highly responsive care
- multiple adult caregivers
- high social support



References: *Narvaez, Gleason, Wang, Brooks, et al (2013), Dettwyler (1995),*

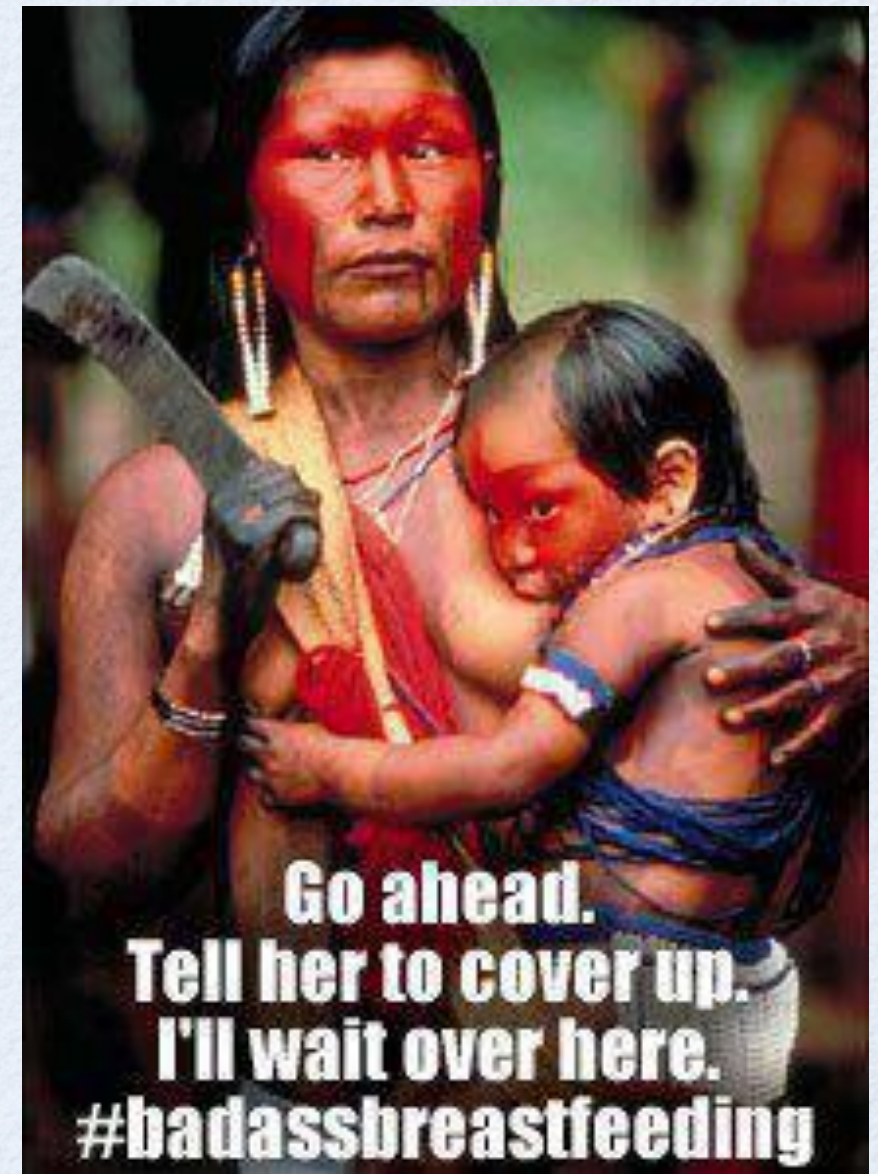
BREASTFEEDING IN PRE-HISTORY

Humans have only engaged in agriculture and kept animals for 10,000 to 15,000 years (approx. 1% of our existence)

For 99% of human history we had no milk other than breastmilk.

Only a minority of human beings can digest cows' milk past infancy.

Non-human milk is not essential for a nutritious diet.



Source: facebook

References: *Palmer (1993, p. 37), Narvaez, Gleason, Wang, Brooks, et al (2013)*

BREASTFEEDING IN HISTORY

Unrestricted lactation (e.g. feeding 'on demand' day and night):

- reduces infant mortality, &
- acts as a contraceptive

The combination of higher infant survival and increased child spacing protected communities from overpopulation.

c. 1900

Source: *facebook*



References: *Palmer (1993), Stuart-Macadam (1995), Fildes (1995)*

ARTIFICIAL FEEDING TRADITIONS

e.g. Southern Germany, 15th century onwards

- In some areas breastfeeding was considered “swinish” and “filthy”
- Babies fed ‘meal pap’ (flour plus water/milk)
- About 50% of the babies died
- 1989 certain areas of Southern Germany still had infant mortality rates of 400 per 1,000

e.g. Punjab, 20th century

- Indian infants fed with animal milks
- Infant mortality rates of 950 per 1,000

e.g. Dublin Foundling Hospital, 1775-1796

- 10,272 Infants were dry-nursed
- Only 45 survived (a mortality rate of 99.6%)



References: *Palmer (1993, p. 170), Stuart-Macadam (1995, p. 83)*

BREASTFEEDING IN HISTORY

“today is not the first time in history that women have found substitutes for maternal breastfeeding. This is, however, the first time in history when infants lived through these experiments long enough for others to measure the impacts on their health. This is also the first time that huge industries have promoted certain options for women, and profited from mothers’ decisions not to breastfeed”



Reference: *Van Esterik (1995, p. 148)*

BREASTFEEDING IN HISTORY

Church,
1871

Source:
facebook



England

- 1911: 28% infant deaths due to diarrhoea
- 1911: 58% of babies breastfed to 12 months



1891 (*Source: facebook*)

Reference: *Palmer (1993, pp. 177 & 200)*

BREASTFEEDING IN HISTORY

U.S.A.

1880s: 95% of
babies were
breastfed for 2-4
years of age



Front porch, 1898



Beach (source:
facebook)

Reference: *Newton in Stuart-Macadam & Dettwyler (Eds, 1995)*

BREASTFEEDING IN HISTORY

Aotearoa / New Zealand

“Before the arrival of Europeans breast milk was the only suitable food available for young babies”



Māori mother breastfeeding, 1849

Reference: *Te Ara: The Encyclopedia of New Zealand* (<http://www.teara.govt.nz/en/artwork/27629/maori-mother-breastfeeding>)



WHERE ARE WE NOW?

SOME DEFINITIONS

Partially breastfed: Both breastmilk and some artificial milk or solid food in the past 48 hours.

Fully breastfed: No solid food or liquids other than water, breastmilk, and prescribed medicines in the past 48 hours.

Exclusively breastfed: no water, formula, solid food, or liquid, except breastmilk (direct or expressed) and prescribed medications during the baby's life.



Reference: *Ministry of Health (2002) cited in Te Whaangai Uu*
- *Te Reo o Te Aratika, Māori Women and Breastfeeding (2008, p. 2)*

INTERNATIONAL STANDARD

Exclusive breastfeeding for six months best for babies everywhere

World Health Organisation Statement

15 January 2011

“WHO recommends mothers worldwide to *exclusively breastfeed infants for the child's first six months* to achieve optimal growth, development and health. Thereafter, they should be given nutritious complementary foods and *continue breastfeeding up to the age of two years or beyond.*”

Reference: http://www.who.int/mediacentre/news/statements/2011/breastfeeding_20110115/en/
(italics added)

THE CURRENT SITUATION

An estimated 1.4 million babies die every year because of sub-optimal breastfeeding. Why?

Internationally:

1 in 5 people lack access to clean water

1 in 3 people lack access to sanitation

formula powder is expensive

fuel (to boil water) is expensive

medical care is expensive & often unavailable

In 26 countries over 75% of women are illiterate



References: WHO (2009, p. 1), Palmer (1993, pp. 86-89),

image source: <http://www.kidspot.com.au/infant-formula-and-what-all-those-words-on-the-tin-mean/>

THE CURRENT SITUATION

Feeding 'choice' has societal costs

1979 middle-class U.S. suburb:

US\$68,684 = medical costs for bottle-fed babies

US\$4,460 = medical costs for breastfed babies

(15x as much)

Reference: *Palmer (1993, p. 212)*



Source: http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/#

THE CURRENT SITUATION

U.S.A. (2007)

approx 70% of women initiate bf
15.7% partially bf at 12 mths

11.3% exclusively breastfed to 6 mths



References: *Scanlon et al (2007) cited in Narvaez et al (2013), Forster & McLachlan (2007).*

THE CURRENT SITUATION

China

98.3% initiate breastfeeding
(only 59.4% within 1 hour of birth)

55.5% breastfeed for 1 year

9.4% breastfeed for 2 years

28.7% of babies under 6 months are exclusively breastfed



Source: WHO (<http://www.who.int/features/factfiles/breastfeeding/en/>)

References: *Guo et al (2010), Xu, Qiu, Binns, & Liu (2009) cited in Narvaez, Wang, Gleason, Cheng, Lefever, & Deng (2013)*

THE CURRENT SITUATION

Spain (2001):

72% initiated breastfeeding

46.9% exclusively breastfed to 3 months

26.5% exclusively breastfed to 6 months

Ref: Generalitat Valenciana (2002), cited in Barona-Vilar et al (2009)

Australia (2010):

96% initiated breastfeeding

47% fully breastfed to 3 months

21% fully breastfed to 5 months

Reference: Australian National Infant Feeding Survey cited in Barclay et al (2012)



THE CURRENT SITUATION

U.K. (2006-2007):

69% of women initiate breastfeeding

34% of 6 mth old babies partially breastfed

1% of 6 mth old babies exclusively breastfed



Victorian Era

References: *Fraser & Cullen (2006); Sherriff et al (2014)*

THE CURRENT SITUATION

Exclusively Breastfeeding at 6 months:

29% of Pākēhā babies

17% of Māori babies

19% of Pasific babies

25% of Asian babies

25% overall



Reference: *Plunket Breastfeeding Data for 2006, cited in Te Whaangai Uu*
- *Te Reo o te Aratika: Māori Women & Breastfeeding* (2008, p. 3)

THE CURRENT SITUATION

The physiological norm is now 'abnormal':

71% of Pākēhā babies

83% of Māori babies

81% of Pasific babies

75% of Asian babies

75% of NZ babies

don't get 6 months of exclusively breastfeeding



Reference: *Plunket Breastfeeding Data for 2006, cited in Te Whaangai Uu*
- *Te Reo o te Aratika: Māori Women & Breastfeeding* (2008, p. 3)

AOTEAROA / NEW ZEALAND

Exclusive breastfeeding by year:

Baby's age	2008	2009	2010	2011	2012	2013
	6 wks	53%	54%	55%	57%	56%
	3 mths	40%	42%	42%	42%	42%
	6 mths	16%	16%	16%	16%	17%

Reference: Plunket Annual Breastfeeding Statistics (2008-2013)

<https://www.plunket.org.nz/news-and-research/research-from-plunket/plunket-breastfeeding-data-analysis/annual-breastfeeding-statistics/>



WHAT HAPPENED?

WHAT HAPPENED?

“If a multinational company developed a product that was a nutritionally balanced and delicious food, a wonder drug that both prevented and treated disease, cost almost nothing to produce and could be delivered in quantities controlled by the consumers’ needs, the very announcement of their find would send their shares rocketing to the top of the share market. The scientists who developed the product would win prizes and the wealth and influence of everyone involved would increase dramatically. Women have been producing such a miraculous substance, breastmilk, since the beginning of human existence, yet they form the half of the world’s people who are the least wealthy and the least powerful”

Reference: *Palmer (1993, p. 19)*



WHAT HAPPENED?

“Why is it that whether you were breastfed yourself or whether you breastfeed your own child depends so much on your social and economic class position in your own society?

How is it that in some societies, 100 per cent of poor, marginally nourished women can all breastfeed successfully, while in others, groups of privileged, well-nourished women cannot?

Why is the right to breastfeed fought for so vehemently by some women and rejected so forcefully by others?”

Reference: *Palmer (1993, p. 20)*. Image source: <http://www.who.int/features/factfiles/breastfeeding/en/>



WHAT HAPPENED?

1853: Condensed milk developed

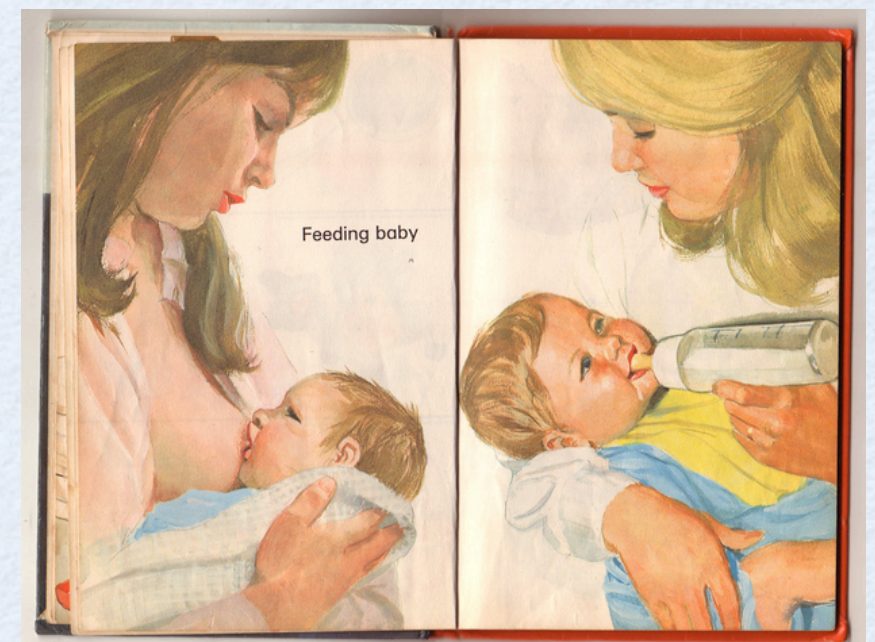
1860s: German chemist Justus von Liebig invented the “perfect infant food” made from wheat flour, cows’ milk, malt flour & bicarbonate of potash

1873: Nestle selling 500,000 boxes of “Milk Food” a year in Europe, U.S., Argentina, Mexico, & East Indies

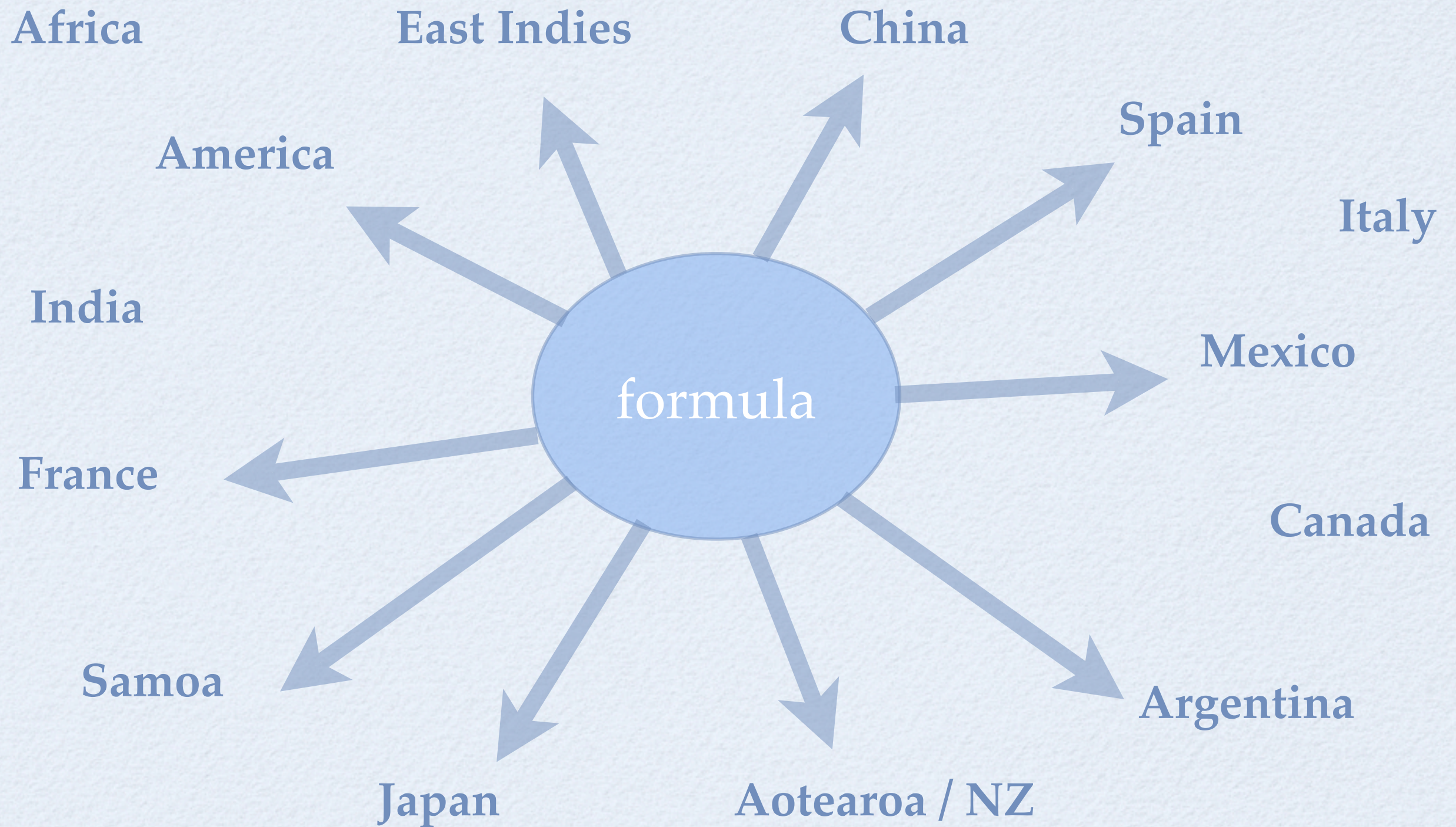
1885: Evaporated milk developed

1891: First milk laboratory opened

Reference: *Palmer (1993, p. 192)*



WHAT HAPPENED?



WHAT HAPPENED?

• ‘Scheduled’ feeding

- Time spent at each breast
- Intervals between feedings increased from 2 hrs to 4-5 hrs

• ‘Scientific’ child-rearing

- Medical ‘experts’
- Behaviourism

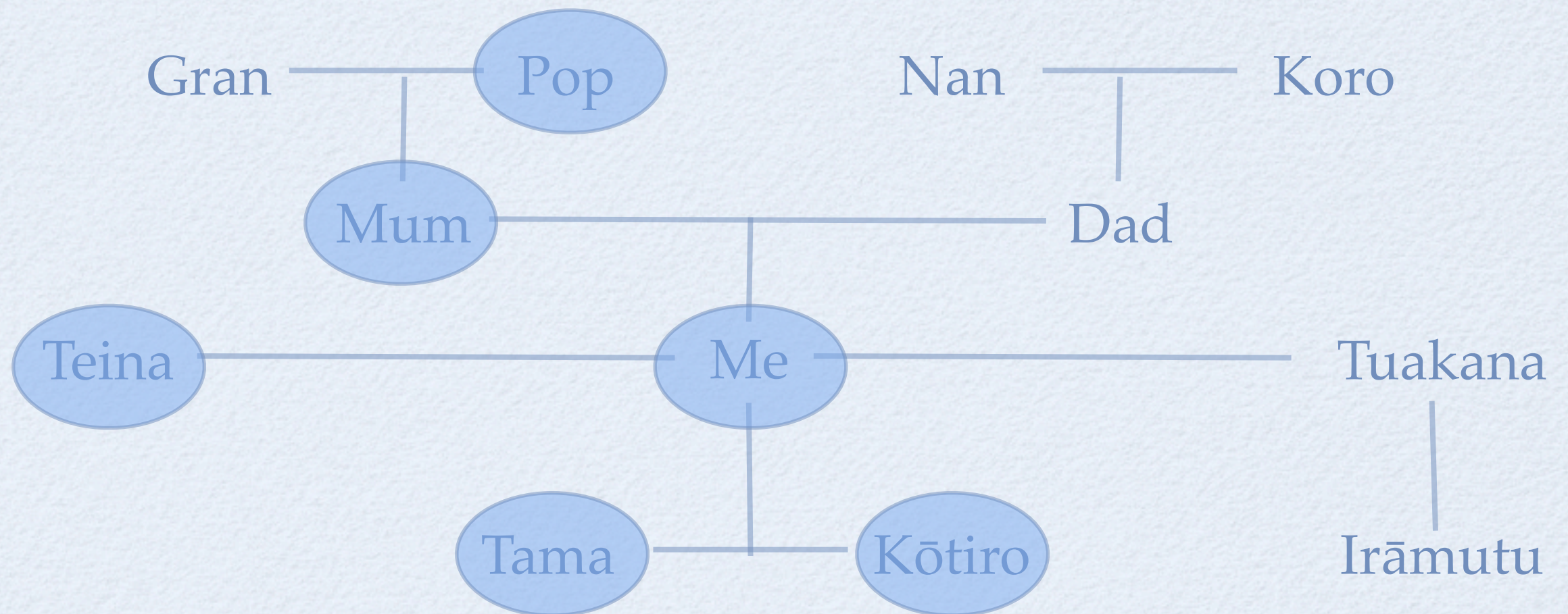


Paris Doctor's
Waiting Room, 1946

Reference: *Millard (1990) cited in Quandt (1995, p. 134)*

EXERCISE

Draw a Genogram (family tree):



Circle anyone who was breastfed



“Are women being
freed from a
timewasting biological
tyranny to lead nobler,
more fulfilling and
more equal lives?”

Reference: *Palmer (1993, p. 19)*

Breastfeeding is a performative cultural practice and its meaning varies depending on context



Da Vinci Painting of Mary & Jesus



Gabriel Joseph de Froment, Baron de Castille, Princess Hermine Aline Dorothée de Rohan and Family (19th Century)

Reference: *Bartlett (2005, p. 13), images from facebook*

WHAT HAPPENED?



Maisey Rika breastfeeding

- We started talking about breastfeeding as a 'choice'
- Women figured out there was a 'right' choice and a 'wrong' choice
- Breastfeeding a 'moral minefield'

Reference: *Bartlett (2005, pp. 170-175), image from facebook*

GOOD	BAD
BREAST	FORMULA
NATURAL	ARTIFICIAL
SELF-SACRIFICING	SELFISH
RESPONSIBLE	IRRESPONSIBLE
ASSURED BONDING	RISKED BONDING
PROVEN HEALTH BENEFITS	HEALTH COMPROMISED
CARING	NEGLIGENT

Reference: *Susan Maushart, cited in Bartlett (2005, p. 170)*



WHERE DO WE
WANT TO BE?

TEA (NURSING?) BREAK



WHAT ARE THE
OBSTACLES?



mammary glands or sex symbols?

DOUBLE STANDARDS



Professionals say:	Mothers hear:
“How are you planning on feeding your baby?”	It doesn't matter whether I breastfeed or bottle-feed
“Breast is best”	‘Good’ mothers breastfeed. I hate ‘good mothers’
“Breastmilk is optimal nutrition / the perfect food for babies”	Formula is good enough for most of us. I don't need to be ‘perfect’
“Just give it a go”	Nobody really expects me to succeed & it's not a big deal
“We're not allowed to talk about bottle-feeding”	All the hype about breastfeeding is PC bullsh*t



WHAT ARE THE
SOLUTIONS?

WHAT HAVE OTHERS DONE?

Increased Paid Parental Leave

Canada increased the duration of paid maternity / parental leave from 6 months (25 weeks) to 12 months (50 weeks) in Dec 2000.

Working mothers are eligible for 55% replacement of their wages (with a cap of \$39,000). Last 35 weeks can be split with the father. Everyone gets 12 months unpaid leave.

Reference: *Baker & Milligan, 2008*



Canadian Mothers Stay Home Longer (since Dec 2000 reform)

55% increase from 5.9 mths away from work to 9.1 mths (+3.2)

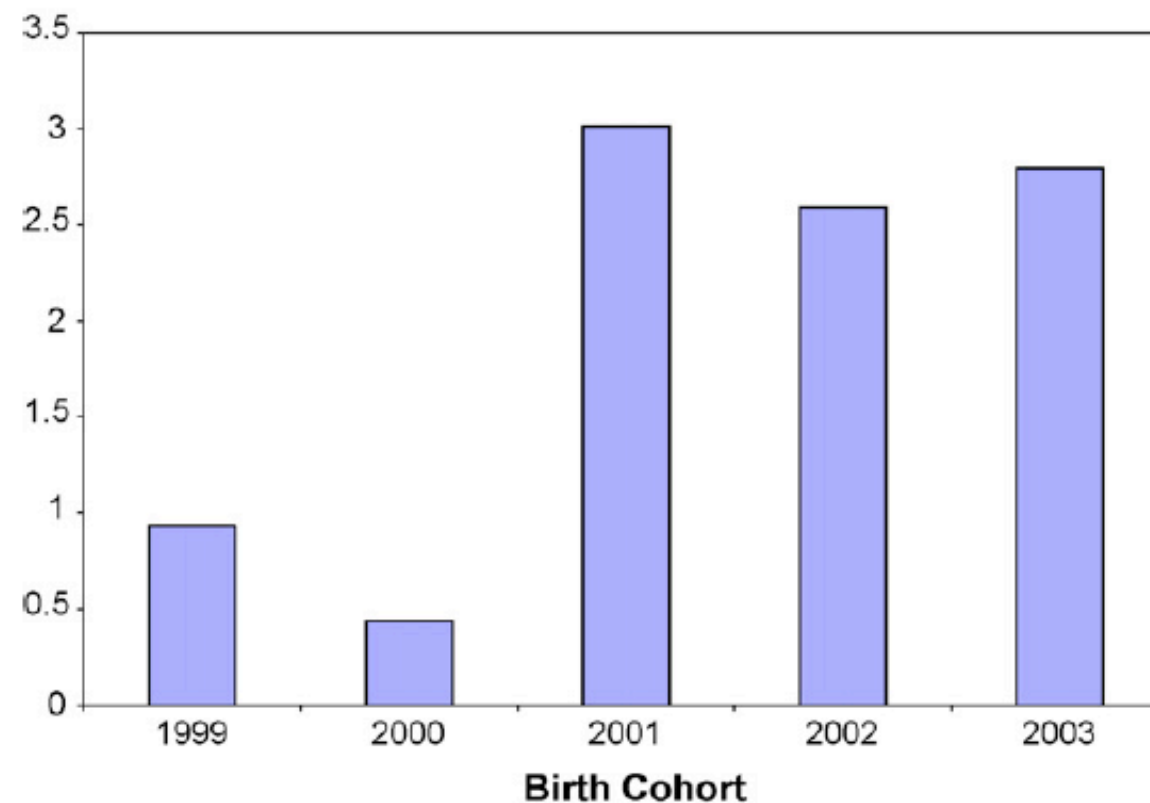


Fig. 1. Estimates of months before the mother returned to work by birth cohort, relative to 1998 births. *Notes:* Displayed are the coefficients on year of birth dummy variables using NLSCY data.

Reference: *Baker & Milligan, 2008, p. 877*

Canadian Mothers Stay Home Longer (since Dec 2000 reform)

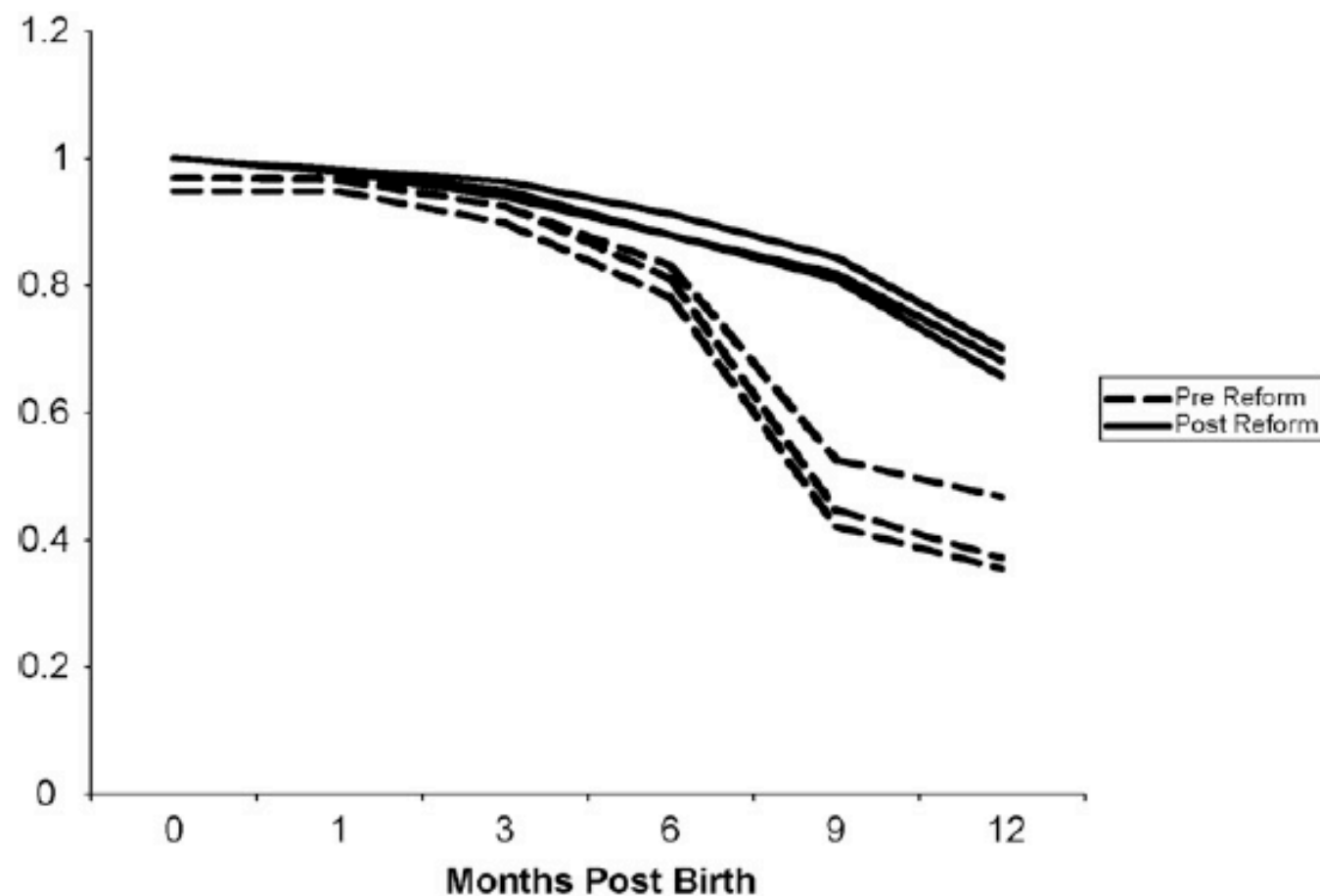


Fig. 2. Proportion of mothers not at work by month post-birth, by birth cohort.

- No longer a steep drop in proportion of mothers at home after 6 mths (when previous leave ended)
- 79% more mums home at 9 mths
- 71% more mums home at 12 mths

Reference: *Baker & Milligan, 2008, p. 879*

Canadian Mothers Breastfeed Longer (since Dec 2000 reform)

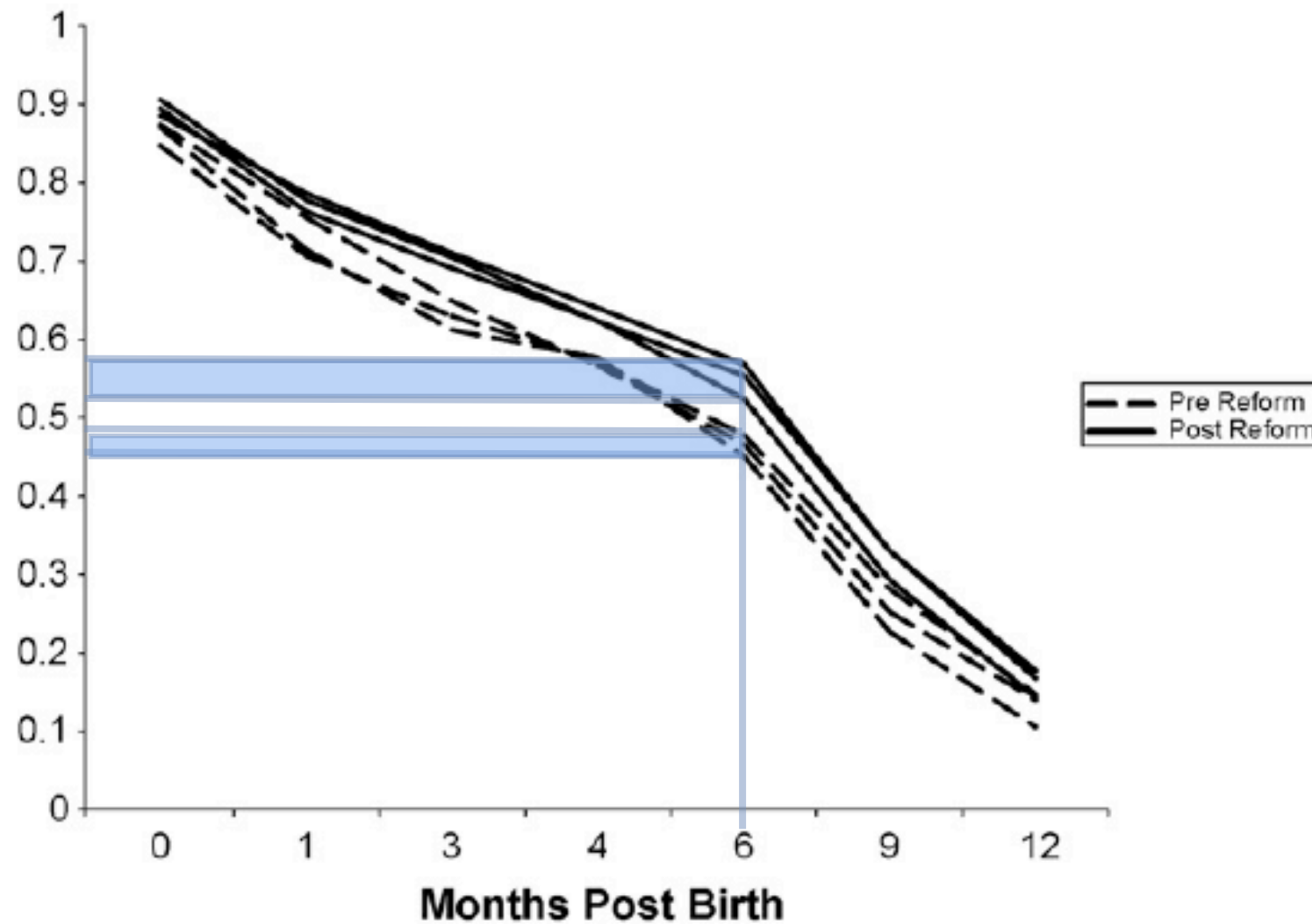


Fig. 3. Proportion of mothers still breastfeeding by month post-birth, by birth cohort.

- 40% increase in the number of mothers exclusively breastfeeding to 6 mths

Reference: *Baker & Milligan, 2008, p. 879*

Skin-to-Skin

E.g. nurse-driven, hospital based prospective cohort study of 21,842 mother baby-dyads in U.S.A. (2005-2006).

“extended early skin-to-skin contact has a profound positive dose-response effect on exclusive breastfeeding during the maternity hospital stay”

Reference: *Bramson et al, 2010, p. 7*

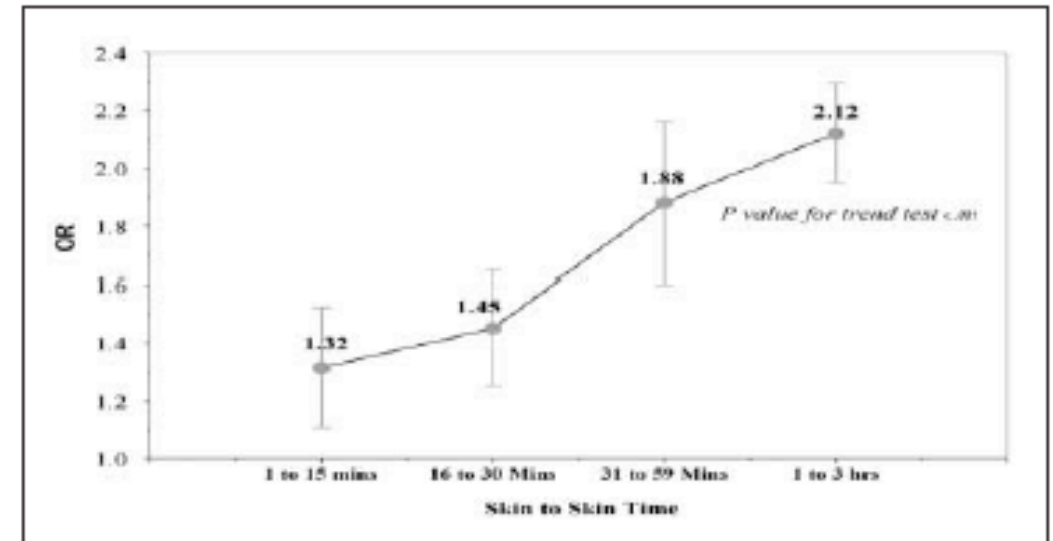


Figure 1. Multivariable analysis showing the odds ratio for exclusive breastfeeding adjusted for maternal infant-feeding method intention at entry to maternity hospital stay and type of delivery (vaginal or cesarean). Mothers experiencing no skin-to-skin mother–infant contact were the reference group.

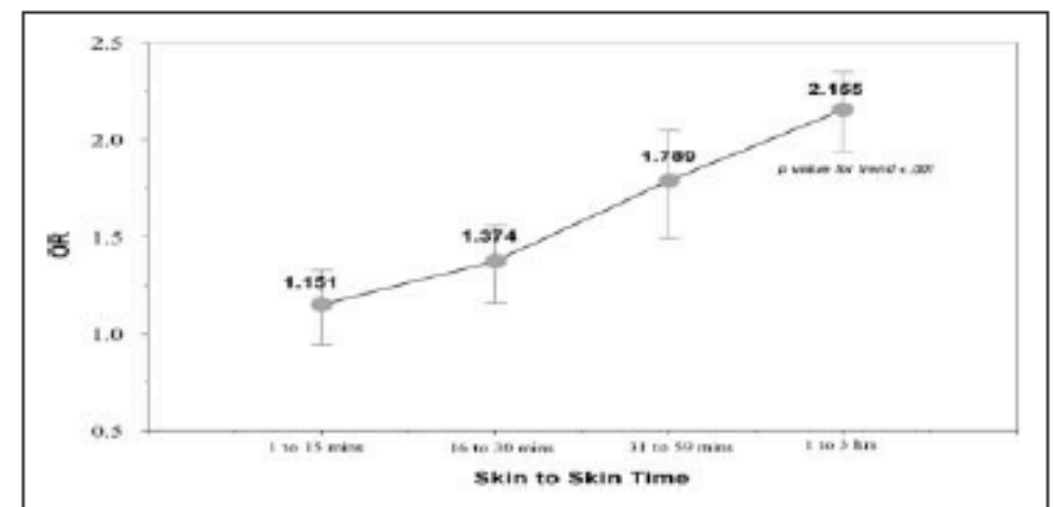


Figure 2. Multivariable analysis showing the odds ratio for exclusive breastfeeding adjusted for maternal infant-feeding intention at entry to maternity stay, mode of delivery (vaginal or cesarean), age, race/ethnicity, primary language, education, smoking status, maternal intrapartum analgesia/anesthesia, and hospital of birth. Mothers experiencing no skin-to-skin mother–infant contact were the reference group.

What kinds of 'conditions' facilitate breastfeeding?

“What does she need & is she getting it?”

- Different for different people
- May have to do with external environment, cultural factors, social support, tools, info, etc

It's a girl.

Anyway, this is the day I was born.





Something a bit different:

An “epic space opera / fantasy comic book series”. “Trojan horse’ parenting themes in *Star Wars*-like universe. Chapter one includes portrayals of homebirth, breastfeeding, & baby-wearing.

Reference: http://en.wikipedia.org/wiki/Saga_%28comic_book%29

SOLUTIONS

**Brainstorm
'solutions':**
(ways to increase
exclusive
breastfeeding to 6
months)



Source: http://iconosquare.com/p/719721725720271970_12563078



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1920s

Source: facebook