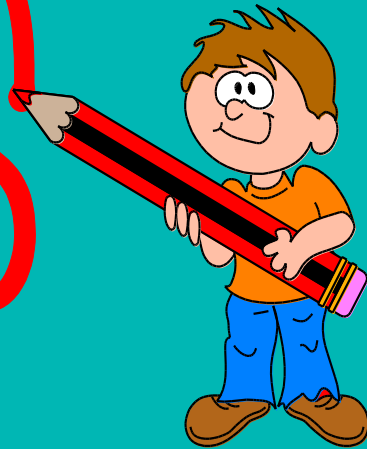


GUS



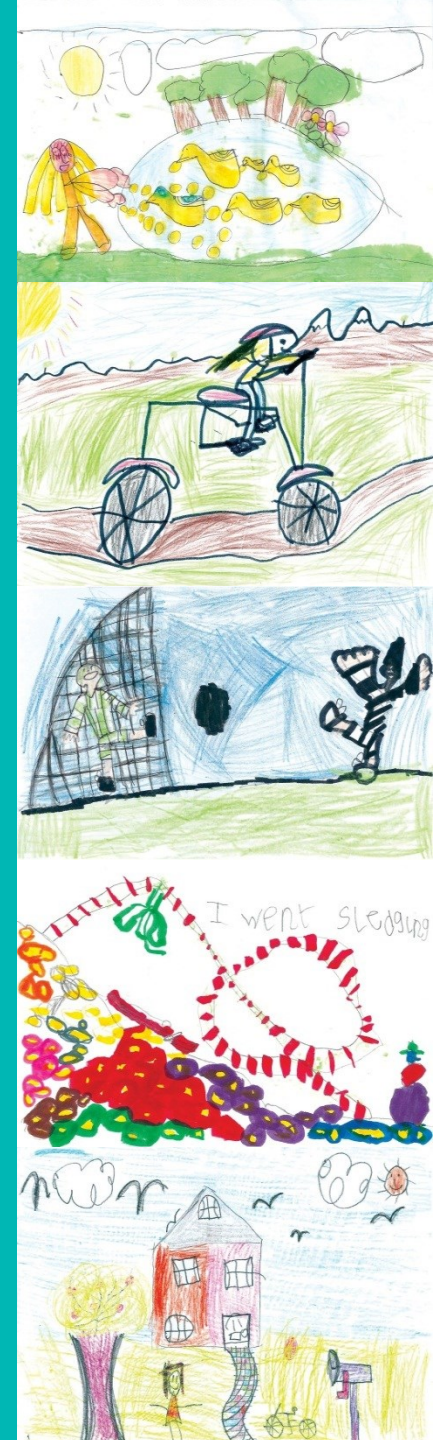
GROWING UP IN SCOTLAND

Initial findings from Birth Cohort 2 - Infant feeding

Dr Pamela Warner

Centre for Research on Families & Relationships

University of Edinburgh



Outline

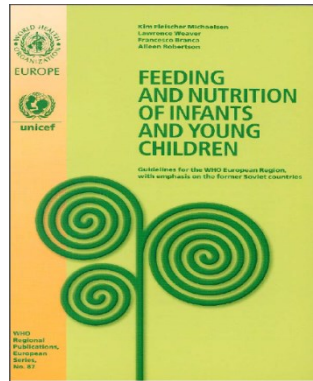
- Evidence background
- Recent infant feeding policy in Scotland
- Methods
- Findings
 - Description of infant feeding for BC2
 - Comparison with BC1
- Reflections

EVIDENCE & DEFINITIONS

'Evidence' milestones

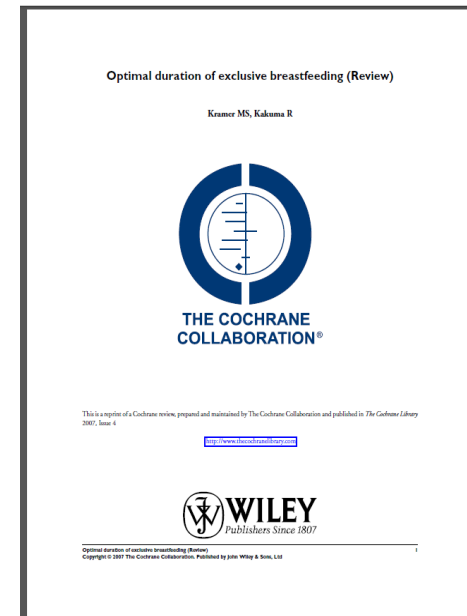
2000 WHO Nutrition for Health and Development

2000/ 3



WHO Guidance
'Feeding and Nutrition for
Infants and Young Children'

2002/ 9/ 12 Cochrane Systematic Review
Kramer & Kakuma
'The optimal duration of
breastfeeding'



Definitions[#]

- **Exclusive** breastfeeding - *occurs when breastfeeding provides **all fluid, energy and nutrient requirements***
- **Complementary** feeding - *provision to infants of **foods or fluids, in addition to breast milk, usually as a gradual process***

Implications of these definitions

- ‘Complementary’ - i) Does not distinguish complementary **fluids** from ‘**solids**’, so mixed formula/breast feeding would be ‘complimentary’
ii) Plain water is a complementary fluid
- Exclusive BF - Ends as soon as the first non-breast-milk food or fluid (even water) is given
- Neither! - WHO guidance re timing of transition from formula to solids is unclear for infants who are not breastfed

Gist of WHO guidance - assuming exclusive BF

Month of life	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th
Age		4 – 7 wks	2 mths	3 mths	4 mths		6 mths					11 mths	1 year
Exclusive BF													
Complimentary F													
Continuing BF													
Family food only													

What is the guidance
 - if never, or very brief, exclusive BF?

Month of life	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th
Age		4 – 7 wks	2 mths	3 mths	4 mths		6 mths					11 mths	1 year
Formula feeding		[Purple bar from 2nd to 10th month]											
BF (continuing)		[Green bar from 2nd to 12th month]											
Solids					[Light orange bar from 5th to 7th month]			[Dark orange bar from 8th to 9th month]					
Family food only								[Light blue bar from 8th to 10th month]		[Medium blue bar from 11th to 12th month]		[Dark blue bar for 13th month]	

RECENT INFANT FEEDING POLICY

Policy milestones in Scotland

- 1995 National Breastfeeding Adviser appointed
-
- 2004 Integrated Strategy for Early Years
- 2007/8 Heat Targets set - e.g. *for 2010/11, re % exclusively breastfed for 6 weeks or more*
- 2008 Infant Nutrition Co-ordinator appointed
- 2008 CEL 36 – provision of additional funding to Health Boards *[to support improvement of maternal and infant nutrition, & meeting Heat targets]*
-
- 2011* Maternal & Infant Nutrition Framework for Action published

* *But only towards the end of the BC2 birth 'year'*

Infant feeding 'targets' in Scotland

'Target'	BC2	BC1
Breastfed (BF) for 6 weeks or more	~	$\geq 50\%$
Exclusively BF for 6 week or more	$\geq 32.7\%$	~
Age at introducing solids	6 mths +	4 to 6 mths

METHODS

What aspects are measured in GUS?

Month of life		1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	
Age	Birth		4 – 7 wks	2 mths	3 mths	4 mths		6 mths					
BF (exclusive)	1											2	
Formula feeding													
Solids							4						
BF (continuing)												3	
Family food only													

Measured in GUS

BC 2

BC1

- | | | | |
|---|-----------------------------------|---------|------------------------|
| 1 | BF initiation at birth | ✓ | ✓ |
| 2 | Duration <u>exclusive</u> BF | ✓ | |
| 3 | Duration BF at all (<u>any</u>) | ✓ | ✓ |
| 4 | Timing of introduction of solids | ✓ (wks) | ✓ (but as age in mths) |

What cautions do we need to bear in mind?

Possibility of recall error as to timings

Likelihood of failure to recall events of no salience

Confusion that exists regarding:

- 'month of life', which is different from
- 'age in months', and
- if age (mths) needs to be expressed in weeks, how to convert.. *(eg 4 months of age is reached when 17 weeks of infant life have elapsed, not $4 \times 4 = 16!$)*

FINDINGS

BC2: Recall receiving advice about breastfeeding 'at the time of the birth'

	All BC2	---Those who BF	----- did not BF
Any source	75%	85%	60%
From:			
Midwife	65%	71%	53%
Health visitor	25%	32%	14%
Other health prof.	14%	18%	8%

Recall of receiving advice was greater for first time mothers

BC2: Reasons for not breastfeeding

Did not want to	29%
Previous bad experience	12%
Embarrassed/ not comfortable	7%
Thought bottle feed better	6%
Baby did not want to/ couldn't	6%
...	
Other (<i>not otherwise categorised</i>)	33%

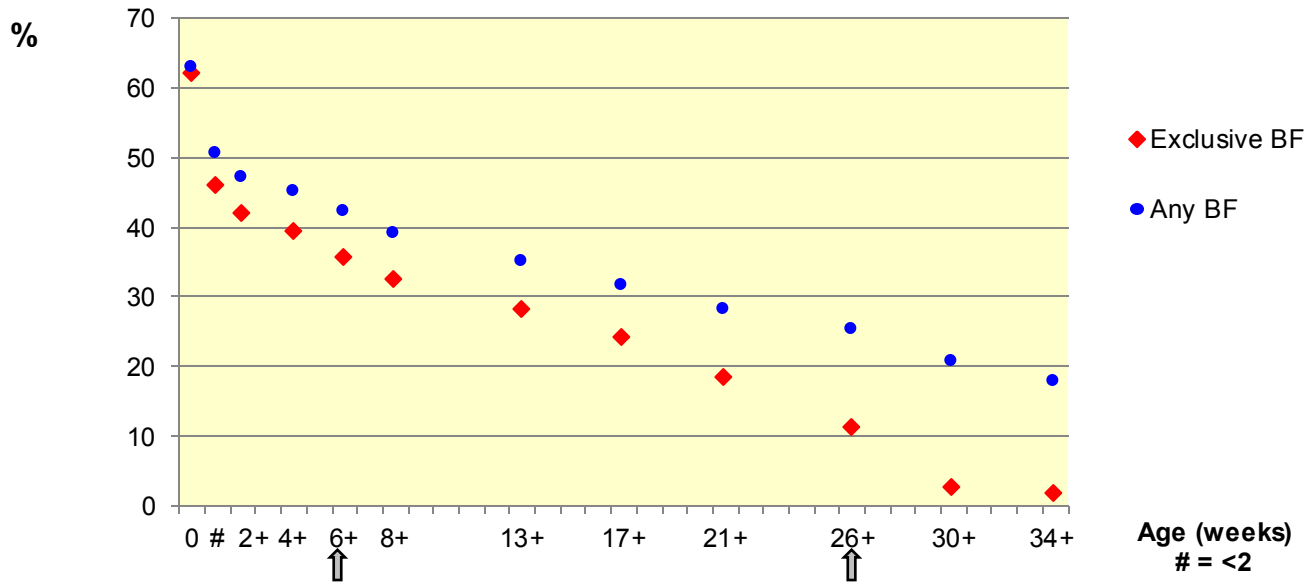
BC2: Reasons for stopping breastfeeding



Not enough milk	31%
Baby not interested	12%
Returned to work	9%
It was long enough	6%
Inconvenience / fatigue	5%
...	
Other (<i>not otherwise categorised</i>)	31%

BC2: Initiation and duration of BF

% initiating and continuing BF up to specified ages in weeks



Initiate	6 wks	6 mths
63%	42% any BF	25% any BF
	36% excl. BF	11% excl. BF

Socio-demographic factors associated with BF exclusively for 6 weeks or more



Higher odds of excl. BF if

Respondent's education

extended or 'Other'

Mother's reln. status

living as couple

Ethnicity

not 'white'

Deprivation (SIMD)

less deprived

Maternal age

20 years & over

BC2: Age at starting solid foods

Compliance with guidance was difficult to judge because:

- Targets have evolved: '4 to 6 mths'
 - 6 mths
 - 'about 6 mths'
- Age at starting solids had to be reported in weeks of age, but if recalled in 'months' perhaps conversion to weeks was with 'error'

Socio-demographic factors associated with starting solids at '5 months or more'
ie reported as 19 weeks or more

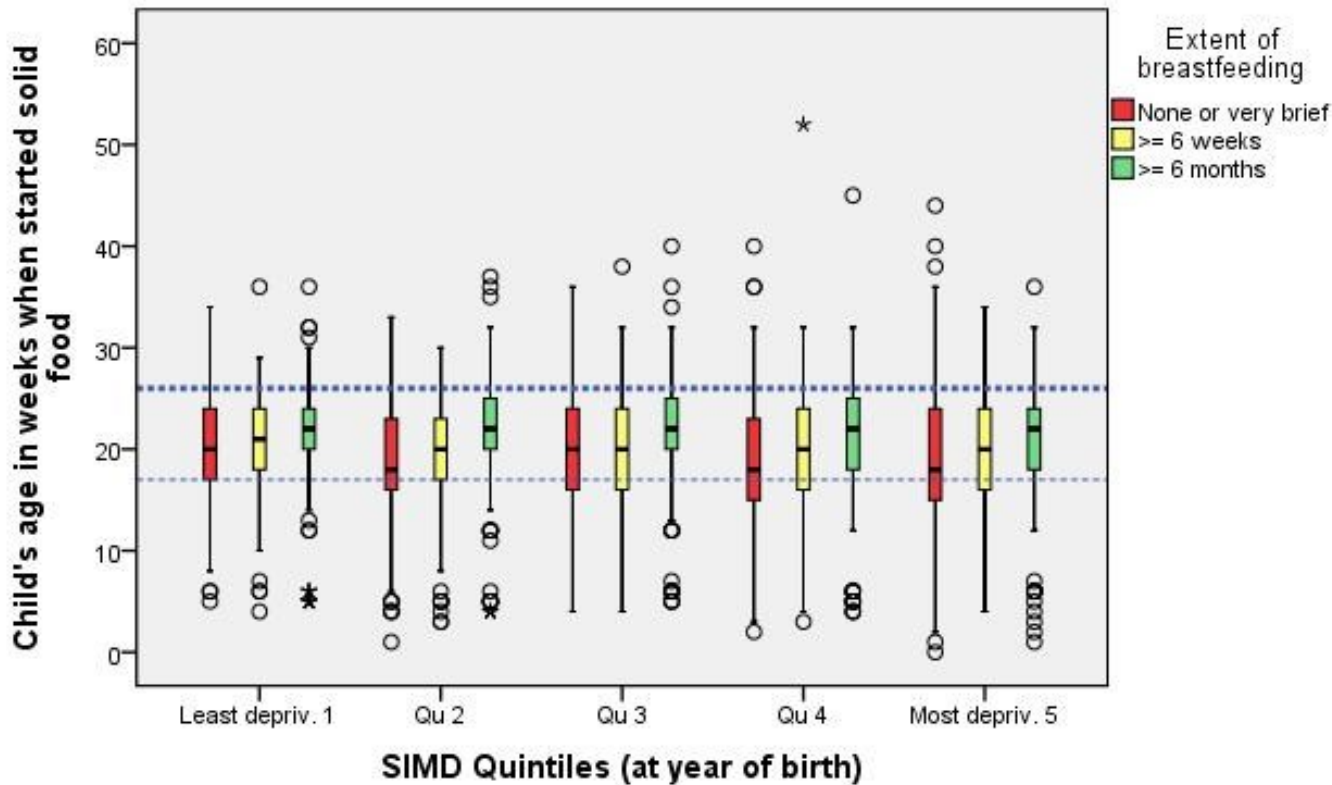


Higher odds of delaying to ≥ 5 mths if

Respondent's education	extended or 'Other'
Mother's reln. status	living as couple
Maternal age	older
Deprivation (SIMD)	less deprived
Rural/urban living	large urban or remote rural

BC2: Age at starting solids

Box plot of Age at starting solids by Extent of BF, separately within SIMD quintile



Changes in the 6 years between BC1 and BC2



Starting solids

fewer BC2 infants starting solids before 5 mths

BF outcomes

small increase in initiation in BC2

no change in BF to 6 weeks*

no change in BF to 6 months

exclusive BF can not be compared

* *After adjustment for socio-demographic factors there was a **reduction** across time*

See also Kate Smith's poster examining factors associated with timing of starting solids, BC1 v BC2

REFLECTIONS

The strong socio-demographic associations suggest that improvements in infant feeding outcomes will take time

If BF succeeds, then introduction of solids is more likely to be in line with guidance, so improving BF continuation could have knock on benefits for weaning behaviour

Initiation rates for BF are fairly high, but there is substantial loss to BF in the first 2 weeks after birth – is there some way to counter this?

Are those initiating BF doing so with real conviction, or because they feel pressured?

Many reasons for stopping are modifiable – is there adequate support in first 2 weeks?

Should there be different strategies for first time mothers?

Many reasons for *not* BF are ‘reversible’. Could initiation rates be higher?

Does the evidence justify asking so much of mothers – would mixed feeding be more achievable and yet ‘good enough’ for the infant...?

WITH THANKS TO:

Paul Bradshaw & ScotCen
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Valeria Skifadia
Lesley Kelly, CRFR

Appreciation is also due to the many BC1 and BC2 participants from around Scotland- their contributions have created a rich and valuable data resource for policy, practice and research