

Breastfeeding in Scotland:

the impact of advice for mothers

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Authors

This briefing was written by Valeria Skafida based on an unpublished MSc dissertation which explored differences in breastfeeding practice among Scotland's mothers in relation to their personal characteristics and their family circumstances. Please contact the author for further details on the methodology and results on v.skafida@sms.ed.ac.uk. It was edited by Jennifer Flueckiger, Sarah Morton and Fran Wasoff.

About this study

This study was completed using data collected for the Growing Up in Scotland (GUS) longitudinal study funded by the Scottish Government and carried out by the Scottish Centre for Social Research in partnership with CRFR. GUS follows the lives of a national sample of Scotland's children from infancy through to their teens. This is one of the largest longitudinal studies ever done in Scotland and will provide information that will help develop policies affecting young children and their families in Scotland.

The study is following just over 8,000 children annually, until these children are aged 5. Of these, 5217 belong to the 'baby cohort' who were approximately 10 months old at the first interview, and 2859 were in the 'toddler cohort' who were approximately 34 months at the time of interview.

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Breastfeeding in Scotland: the impact of advice for mothers

In the last two decades western societies have witnessed a new-found social and political interest in the promotion of breastfeeding. Scotland has recently passed legislation to make breastfeeding in public a right. However, breastfeeding remains controversial, and many mothers find it difficult or are reluctant to breastfeed. Research shows that breastfeeding is beneficial for babies and so is an important component in tackling health inequalities. This briefing outlines some of the key findings of a research project that investigated the impact of advice on increased take-up of breastfeeding among mothers in Scotland. It was based on the analysis of data derived from the Growing Up in Scotland (GUS) early years longitudinal study funded by the Scottish Government.

Key Points

- Mothers who received breastfeeding advice before birth were more likely to breastfeed (67%) than those who did not receive any advice (41%) regardless of age, education or anticipated feeding plans
- Mothers who attended all or most antenatal classes were much more likely to breastfeed than those who did not attend any classes and those who attended only some
- There was no significant difference in the likelihood of breastfeeding between mothers who attended only some classes and those who attended none
- 86% of mothers with degrees or equivalent, and 31% of mothers with no qualifications breastfed their infants
- Older mothers were more likely to have breastfed their babies than younger mothers

Policy context

There has been an increasing international interest in promoting breastfeeding for example from the World Health Organisation and the European Commission. Scottish policy concern with breastfeeding promotion began with the launch of the Scottish Joint Breastfeeding Initiative in 1990. In 1994, the Scottish Dietary Targets were announced, hoping to raise breastfeeding rates for the first six weeks from 30% to 50% by 2005. In 1995 a National Breastfeeding Adviser was appointed to work with Local Breastfeeding Initiatives in raising awareness regarding the benefits of breastfeeding. Simultaneously, the Scottish Breastfeeding Group was launched which established a website providing information for mothers (<http://www.breastfeed.scot.nhs.uk/>). In 2003, the Scottish Executive's An Integrated Strategy for Early Years focused on improving service provision particularly for vulnerable children from pre-birth to 5 years of age and their families, and increasing the proportion of women who breastfeed. In March 2005 the Breastfeeding etc. (Scotland) Act 2005 made it an offence to prevent a child under two years of age from being breastfed in a public place.

Objectives

The Scottish Government is promoting higher rates and longer duration of breastfeeding. This is primarily through education-based initiatives aiming to raise the awareness of the benefits of breastfeeding for both mother and child, and to facilitate the availability of breastfeeding information.

Previous research, predominately North American, consistently concluded that attendance at antenatal classes and receipt of breastfeeding advice raised the chances and duration of breastfeeding (Arlotti *et al* 1998, Kistin *et al* 1990, Ladas 1972, Libbus 1994, Matich & Sims 1992). This project explored whether awareness-raising breastfeeding initiatives influenced breastfeeding rates among mothers in Scotland. The aim of this briefing is to present its findings on the influence of receiving breastfeeding advice and attending antenatal classes on breastfeeding initiation.

Methods

GUS is a major longitudinal survey commissioned to aid policy makers in evaluating policy across a range

The term 'breastfeeding' is used to define a broad spectrum of practices, ranging from exclusive breastfeeding to mixed breast-and bottle-feeding (Carter 1995). The definition employed in this research is the 'initiation', or 'occurrence' of breastfeeding. This includes the very first milk (colostrum), and applies to all mothers who breastfed at least once.

of initiatives. GUS surveys parents and children annually and is funded between 2004 and 2010 by the Scottish Government's Education Department. The survey is conducted by the Scottish Centre for Social Research in collaboration with the Centre for Research on Families and Relationships (CRFR). This research project is based on an analysis of the first sweep of GUS data.

The current analysis is based on a total of 7796 mothers. Interviews are carried out with the main carers of children, predominantly (99%) mothers. Cases where the father was interviewed were excluded for the present research purposes. Mothers of multiple births and non-biological mothers were also excluded for this study.

The aim was to establish whether attendance at antenatal classes and receiving breastfeeding advice raised the

likelihood, or, raised the odds of a mother having breastfed her child. Other characteristics of mothers were analysed at the same time in order to check that the observed effects of antenatal class attendance and receipt of advice were not being caused by other factors, such as the mothers' education, her age at the time of birth, or her anticipated feeding plans.

The results of the analysis are reported as odds ratios, which compare the proportional odds of a group of mothers having breastfed (e.g. mothers receiving advice) to the breastfeeding odds of a reference category (e.g. mothers not receiving advice). The table below displays the five factors taken into account in the analysis and shows how breastfeeding occurrence is distributed for each of these factors.

Table 1 The rate of breastfeeding incidence by selected maternal characteristics

<i>(single births, biological mothers, weighted sample)</i>	Child was breastfed	
	N	%
Mother's Education		
Degree or Equivalent	1752	86
Vocational qualification below degree	1683	59
Higher grade or equivalent	394	64
Standard grade or equivalent	572	40
No qualifications	233	31
<i>Total</i>	<i>4637</i>	<i>60</i>
Age of mother at birth of sample child (banded)		
Under 20	204	33
20 to 29	1747	53
30 to 40	2536	70
40 or older	160	73
<i>Total</i>	<i>4647</i>	<i>60</i>
Feeding method planned prior to birth		
Breastfeeding	4302	88
Bottle-feeding	110	5
No strong preference	233	47
<i>Total</i>	<i>4645</i>	<i>60</i>
If mother received breastfeeding help or advice		
Yes	3835	67
No	812	41
<i>Total</i>	<i>4647</i>	<i>60</i>
Mother's attendance at antenatal classes or groups		
Attended all or most classes	2012	73
Attended only some classes	548	65
Did not attend any	2087	51
<i>Total</i>	<i>4647</i>	<i>60</i>

Findings

As seen in the table below, older mothers, those with higher educational qualifications, and those attending antenatal classes and receiving breastfeeding advice were all more likely to breastfeed.

- On average, 60% of the sample mothers initiated breastfeeding
- 86% of mothers with degrees or equivalent, and 31% of mothers with no qualifications breastfed their infants
- Older mothers were more likely to have breastfed than younger mothers
- 47% of mothers with no anticipated feeding plans initiated breastfeeding
- 67% of mothers who received breastfeeding advice compared to 41% of mothers who did not receive any advice breastfed their infant
- 73% of mothers who attended all or most antenatal classes initiated breastfeeding, compared to 65% of those who attended some and 51% of those who attended none

The analysis revealed that mothers who attended most or all antenatal classes had three times higher odds of having breastfed than mothers who did not attend any classes. However, there was no significant difference in breastfeeding chances between mothers who attended some classes and mothers who attended no classes at all. The results also indicate that the odds of breastfeeding for mothers who received breastfeeding advice prior to birth are twice as large as for those who did not receive any advice.

Results showed that the influence of antenatal class attendance and breastfeeding advice on breastfeeding practice is not being caused by other factors like maternal education, age when giving birth, or anticipated feeding plans. To clarify with an example, among two groups of mothers with the same age and level of education, the one group which received breastfeeding advice would be more likely to breastfeed than the group which did not receive advice, and we could say the difference in likelihood of breastfeeding is not being caused by differences in the mother's education or age.

It is important to note however that other research has shown that older mothers and those with higher educational qualifications are nevertheless more likely to attend antenatal classes in the first place (Anderson *et al* 2007).

Discussion

Previous research primarily conducted in North America consistently indicated that attendance at antenatal classes and receipt of breastfeeding advice raised the initiation and duration of breastfeeding. Similarly for Scotland, these results revealed that, even when controlling for education, age, feeding plans, and antenatal-class

attendance, mothers who received breastfeeding advice prior to birth were more likely to breastfeed than those who did not receive any. Mothers who attended antenatal classes were much more likely to breastfeed their infants than those who did not attend, regardless of the impact of education, age, feeding plans and breastfeeding advice. However, no significant difference was found for those who attended only some classes and those who attended none.

These findings support the information-based approach to increase general health awareness and breastfeeding rates. The present findings suggest that these measures are related to a higher likelihood of breastfeeding initiation for mothers at all educational levels and ages.

However, while attending all or most antenatal classes was found to improve breastfeeding odds, this was not true for mothers who only attended some classes. From a policy perspective, it is particularly important to encourage mothers to attend classes regularly, as it is regular attendance which is associated with higher breastfeeding rates. It would therefore be important to understand the reason why some mothers only attend some of the classes or none at all.

Irregular or partial attendance at antenatal classes may be related to the classes not being available within reasonable proximity or not being available at times which suit unusual or busier schedules. It may also be a result of the class content not being helpful or responsive enough to the needs of some mothers. Furthermore, while complete non-attendance might be due to attendance at classes for previous births, it may also be related to the problems in meeting travelling or childcare costs, or simply related to the lack of availability of classes, or the lack of awareness that classes exist. Questions regarding the usefulness of classes for the attendees and class non-attendance have been asked in the GUS survey leaving scope for further research in this area.

While this research emphasises the importance of antenatal help and advice, evidence from qualitative research suggests that advice before pregnancy is often not followed up with advice after pregnancy when problems often occur (Carter 1995). Improving the provision and quality of post-natal breastfeeding help and advice is important for mothers who may find they have no one to turn to for advice or support.

Recommendations

More research is needed to find out why some women do not attend ante-natal classes, or only attend a few, and to address this as part of a strategy to increase breastfeeding rates

This briefing reports on initiation of breastfeeding. More research is needed on continuing breastfeeding and the support required for this.