# POSTNATAL BREASTFEEDING TELEPHONE SUPPORT SIGNIFICANTLY IMPROVES RATES OF BREASTFEEDING



WQ Fan, C Chan, S Paterson, K Foster, J Manji, M Morrow, D Bourne and J Ashworth

#### Background

- Breastfeeding has multiple benefits both to mother and infant.
- However, there are many factors which lead to breastfeeding cessation well before the WHO minimum recommended 6 months duration of exclusive breast feeding.
- Lactation support programs have been shown to help. These have been face to face, or telephone based.

### Aim & Objectives

- We hypothesized that a program consisting of weekly lactation consultant led telephone contact in the 1<sup>st</sup> month postpartum would increase breastfeeding rates compared with the current standard post-discharge care.
- To determine if exclusive and partial breastfeeding rates at 1, 3 and 6 months postpartum are improved with the telephone support program
- To determine the most common areas of maternal breastfeeding concern and to evaluate the effectiveness of the strategy for those groups of mothers at higher risk of breastfeeding cessation.

#### Methods

**Randomisation:** In a single centre, randomised controlled trial (Feb 2018 to March 2020), mothers with uncomplicated pregnancies of more than 36 weeks gestation, were randomised to a Control Group (CG n=377) receiving standard postnatal support and an Intervention Group (IG n=382) receiving standard postnatal care plus weekly lactation consultant telephone contact for 1<sup>st</sup> month postpartum, then follow-up support at 3 and 6 months.

**Ethical approval and Trial Registration:** This study was granted ethics approval by the Austin Health Human Research Ethics Committee HREC Reference number: LNR/17/Austin/371. The study was registered as a Clinical Trial.

**Statistical analyses:** Microsoft Excel was used for data entry. Where appropriate, either Student's t-test or Chi-square analyses were used to compare differences between the control and intervention groups. Calculations were done using NCSS statistical software. P values < 0.5 were considered to be statistically significant.

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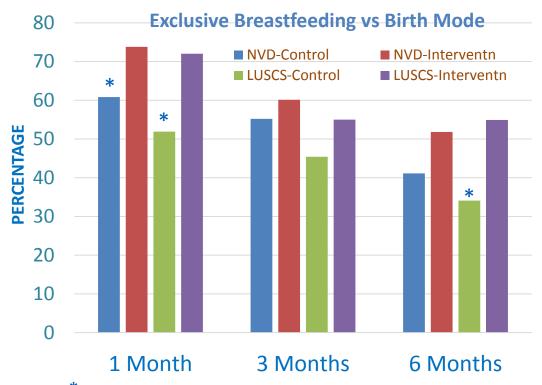
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### Results

**Table 1: Characteristics of the control and intervention groups:** 

Characteristics	Control Group (n=377)	Intervention group (n=382)	OR [95% CI]	p Value
Maternal age (mean ± SD), years	30.5 ± 4.8	29.8 ± 4.7		0.0994
NVD %	41.2	41.2	0.98 [ 0.74- 1.21]	1.0000
Elective LUSCS %	16.6	12.4	1.41 [ 0.94- 2.12]	0.1033
Emergency LUSCS %	26.9	31.3	0.82 [ 0.60- 1.10]	0.1773
Infant BW (mean ± SD, g)	3362 ± 479	3303 ± 479		0.0900
Male gender %	52.2	46.3	1.27 [ 0.95- 1.67]	0.1023
Gestational age (mean ± SD, weeks)	39.1 ± 1.2	39.0 ± 1.3		0.5989

**Table 1:** Statistical comparison showed that the randomization process had provided well matched Control and Intervention cohorts.



\* Indicates statistical significance (P < 0.001), for control vs intervention

**Figure 1** Intervention group exclusive breastfeeding rates were significantly enhanced compared to control. The breastfeeding rate for the caesarean group at 6 months is even higher than for the NVD group.



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### Results, Discussion & Conclusion

**Table 2:** Breastfeeding rate at 1, 3, 6 months control vs intervention groups

	Control	Intervention	OR [95% CI]	P Value
ONE MONTH	(n=363)	(n=345)		
Exclusive Breastfeeding %	55.4	72.8	3.33 [2.42- 5.54]	<0.0001
Partial Breastfeeding %	29.5	16.2	2.15 [1.50- 3.11]	<0.0001
THREE MONTHS	(n=352)	(n=341)		
Exclusive Breastfeeding %	49.4	57.2	1.37 [1.01- 1.84]	0.0409
Partial Breastfeeding %	21.9	16.4	1.43 [0.98- 2.09]	0.0684
SIX MONTHS	(n=344)	(n=338)		
Exclusive Breastfeeding %	36.0	51.8	0.53 [0.39- 0.71]	<0.0001
Partial Breastfeeding %	20.6	12.4	1.83 [ 1.21- 2.78]	0.0039

**Table 2:** At each of the time intervals, one month, 3 months and 6 months exclusive breast feeding was significantly higher than the control group, even at 6 months, the rate of 52% for the intervention group is much higher than the official reported local rate of 44% at 3 months.

What do our study's results tell us? Given the results of this study, we can look forward to implementing a future strategy with confidence. The strategy was so successful that we can look at initiatives to extend the level of breastfeeding support beyond the initial first month.

**Limitations:** Only English speaking mothers were enrolled in the study, so we are unable to assess multicultural aspects of breastfeeding.

**Strengths:** Our sample size was sufficiently large to draw valid statistical conclusions and compared very favourably with the sample sizes of comparable studies.

**Conclusion:** A lactation consultant led telephone program to provide early and regular support for new mothers not only significantly improves exclusive breastfeeding rates but promotes breastfeeding among especially vulnerable groups

**Northern Health**