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17TH ANNUAL CHILD HEALTH RESEARCH DAYS

# Nutrition for a Changing World

The Science of Nourishing the Next Generation

## CHRD 2021: Abstract & Poster Submission Form

### Submitter Name

Meg

First

Raymond

Last

### Email

megeraymond@gmail.com

### Research Category:

- ☐ Basic Science
- ☒ Clinical
- ☐ Community Health / Policy

### What was your role in the project?

- ☐ Design
- ☐ Perform Experiments
- ☐ Analyze Data
- ☒ Write Abstract

☐

### Presenter Status:

- ☐ Undergraduate Students
- ☐ Masters Student
- ☐ PhD Student
- ☐ Post-Doctoral Fellows
- ☒ Residents
- ☐ Non-Trainee

## Title

Perinatal factors associated with initiation of breastfeeding following very preterm birth <29 weeks in Manitoba.

## Background

With multiple benefits for mothers and babies, exclusive breastfeeding for the first 6 months of life (and up to 2 years) is currently recommended. In preterm neonates, breast milk is protective against many complications of prematurity, yet difficult to initiate due to complexities of care in this population.

## Objective

To determine feeding trends and perinatal characteristics associated with breastfeeding amongst very preterm neonates.

## Methods

This was a retrospective cohort study using a national neonatal database. Preterm neonates delivered <29 weeks and admitted to NICU in Manitoba were eligible for inclusion (2015-2019). Maternal demographics, pregnancy complications, birth events, and postnatal course were available in the database as entered by trained abstractors using standardized definitions. Primary outcome was initiation and continuation of feeding with mother's-own-(breast)-milk ("MOM"). Secondary outcomes were perinatal factors associated with MOM feeds. Descriptive and inferential statistics (student t-, chi-square, and Wilcoxon rank-sum tests) were used to compare outcomes between groups.

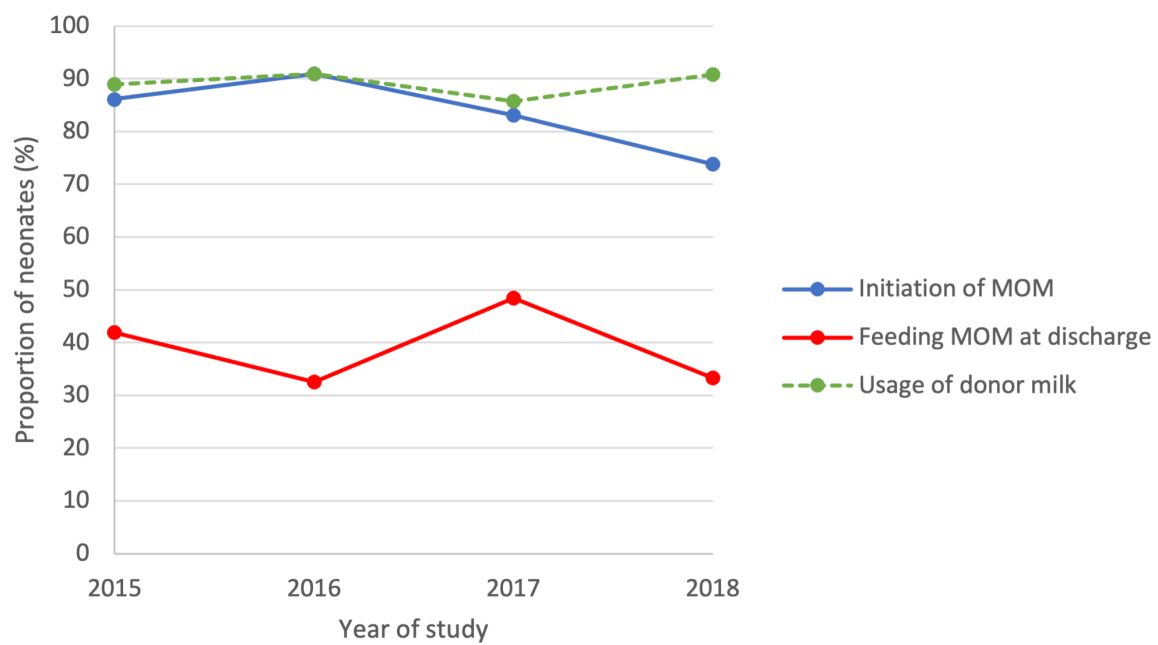
## Results

Of 302 eligible neonates, 84.1% initiated feeding of MOM but only 40.4% continued to discharge. There was no change in the rates of discontinuation of MOM in the study period, but a significant reduction in initiation rates ( $p < 0.0001$ ; Figure 1). The perinatal factors negatively associated with initiation of MOM were multiparity ( $p = 0.0001$ ) and cigarette smoking ( $p = 0.0011$ ). Discontinuation of MOM prior to hospital discharge was significantly associated with earlier gestational age at birth ( $p = 0.0002$ ) as well as maternal characteristics including multiparity ( $p = 0.0003$ ), older age ( $p = 0.0195$ ), and cigarette smoking ( $p = 0.0002$ ).

## Conclusion

While initiation of MOM was high amongst very preterm neonates, over half stopped breastfeeding during the NICU admission. Enhanced understanding of the key perinatal factors associated with non-initiation and discontinuation will improve targeted supports and quality improvement strategies promoting breastfeeding in this high-risk group.

**Figure 1.** Trends in initiation and continuation of feeding MOM and usage of donor breast milk by year of study.



## Authors

- For each author, please click "[+] Add Item" and provide the author's information

Name	Email	Role	Profession
Dr. Meg Raymond	megeraymond@gmail.com	Presenting Author	Resident
Dr. Christy Pylypjuk	cpylypjuk@hsc.mb.ca	Co Author	Assistant Professor
Dr. Molly Seshia	MSeshia@hsc.mb.ca	Co Author	Full Professor
Dr. Ruben Alvaro	ralvaro@hsc.mb.ca	Co Author	Associate Professor
Dr. Michael Helewa	MHELEWA@sbgh.mb.ca	Co Author	Full Professor
Dr. Deepak Louis	dlouis@hsc.mb.ca	Co Author	Assistant Professor