

Hospital re-admission of late preterm or term infants is not a factor influencing duration of predominant breastfeeding

Deborah Ann McNeil,^{1,2} Jodi Siever,¹ Suzanne Tough,³ Wendy Yee,³ M Sarah Rose,⁴ Thierry Lacaze-Masmonteil^{5,6}

¹Department of Population and Public Health, Alberta Health Services, Calgary, Canada

²Faculty of Nursing, University of Calgary, Calgary, Canada

³Departments of Paediatrics and Community Health Sciences, University of Calgary, Calgary, Canada

⁴Rho-Sigma Scientific Consultants, Calgary, Alberta, Canada

⁵Department of Paediatrics, Children's Hospital of Eastern Ontario, Ottawa, Canada

⁶Women and Children's Health Research Institute, University of Alberta, Edmonton, Canada

Correspondence to

Dr Deborah McNeil,
Department of Public Health
Innovation and Decision
Support, Alberta Health
Services, Southport Atrium,
10101 Southport Rd SW,
Calgary, Alberta T2W 3N2,
Canada; Debbie.mcneil@
albertahealthservices.ca

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ABSTRACT

Objective To determine whether hospital re-admission within the first 2 months of life decreases the odds of predominant breastfeeding.

Design Mothers living in two large healthcare regions of Alberta (population 1 000 000 each) were recruited to participate in this prospective matched cohort study if they delivered a singleton infant between 34 and 41 weeks' gestation and were discharged within 7 days. Re-admitted infants were matched to non-re-admitted infants by site and date of birth. Questionnaires were mailed at 2 months postpartum. Predominant breastfeeding was defined as breastfeeding for at least three feedings per day for the past 7 days.

Results A total of 1798 mothers were eligible for analysis, (n=250 re-admitted, 1548 non-re-admitted). Seventy three per cent (n=1315) reported predominant breastfeeding at 2 months. Infant re-admission (adjusted OR: 1.12, 95% CI 0.8 to 1.55) and late preterm birth were not associated with discontinuation of predominant breastfeeding. The odds of predominantly breastfeeding were two times greater, if mothers' perceptions of talking about breastfeeding with a healthcare provider were positive versus negative. Whereas the odds were decreased for primiparous women (adjusted OR 0.61 95% CI 0.47 to 0.78) and not impacted for multiparous women (OR 0.60 95% CI 0.32 to 1.13) with a negative versus neutral perception of the breastfeeding talk experience.

Conclusions Hospital re-admission and late preterm birth had no significant impact on the odds of predominant breastfeeding beyond 8 weeks post partum whereas the odds were increased with a perception of a positive experience in speaking with a healthcare provider.

INTRODUCTION

The average length of hospital stay (LOS) following vaginal discharge has decreased while rates of late preterm births have increased in many countries and has received scientific attention because of the significant impact on the baby, the family and the healthcare system.¹⁻³ In Canada excluding Ontario, the postnatal re-admission rate (any newborn re-admitted to an acute care hospital within 28 days of life) increased from 2.7 per 100 in 1989/90 to 3.4 per 100 in 2004; while during the same period the average LOS after birth decreased from 4.2 days to 2.4 days.³⁻⁵ Rates of late preterm births (32-36 weeks gestation) increased from 6.6/100 live births in 1991 to 8.2 per 100 live births in 2004.^{5 6} In addition to early postpartum discharge,

What is known about the subject?

- ▶ Despite high rates of initiation of breast feeding, there is a dramatic decline by 6 months of age.
- ▶ Little is known about the impact of hospital re-admission and late preterm delivery on breastfeeding duration.

What does this study add?

- ▶ Hospital readmission within the first 60 days of life does not influence breast feeding cessation at 2 months of age in late preterm infants.
- ▶ Breastfeeding duration is positively influenced when mothers have a positive talk with a healthcare provider about breastfeeding.

significant predictors of neonatal re-admission include late preterm birth, low-familial income, no breastfeeding at post birth discharge and a maternal age of less than 18 years.^{1-3 7} Jaundice is the most frequent cause of re-admission and approximately 50% of re-admissions occur within the first 2 weeks after discharge from the nursery.^{3 4 7-9} Each of these factors have the potential to decrease the likelihood of sustained breastfeeding.

Despite the well-known benefits and their public promotion, the rate of exclusive breastfeeding at 2 or 3 months is reported to be far from optimal in many countries.¹⁰⁻¹² Known factors for early breastfeeding discontinuation include smoking, physical and mental maternal health problems such as depression and obesity, and short duration maternity leave.¹⁰⁻¹⁴ However, the relationship between neonatal re-admission and duration of breastfeeding in late preterm or full term babies has, to our knowledge, not been studied.¹⁵⁻¹⁷ Whether mothers whose newborns are re-admitted experience challenges maintaining breastfeeding during the course of hospitalisation or are more likely to discontinue breastfeeding is also not known. We conducted a prospective matched cohort study to answer the following research question: does hospital readmission within the first 2 months of life have an effect on the duration of predominant breastfeeding in late preterm or term infants?

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