Targeted Postpartum Breastfeeding Intervention to Improve Lactation Outcomes in Women Affected by Gestational Diabetes Mellitus

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Introduction

- The long-term epigenetic sequelae associated with gestational diabetes mellitus (GDM) are serious and costly.
- Transgenerational issue - both mom and baby at risk for long-term health risks.
- Breastfeeding, greater in duration and intensity, can mitigate the adverse metabolic risks and decrease future maternal transition to Type 2 diabetes mellitus by 35-50%.
- Women affected by GDM have poorer breastfeeding outcomes compared to their normoglycemic counterparts.

Objective

- To determine if educating lactation-certified providers to deliver a postpartum targeted breastfeeding intervention to mothers diagnosed with GDM can improve breastfeeding outcomes at 2, 8 and 16-weeks.

Methods

- **Design:** Pretest/Posttest design
- **Setting:** 670,000 member integrated healthcare system in the Rocky Mountain Region
- **Sampling:**
  - Provider Group N=19:
    - Fixed sample of NP’s/CNM’s employed in a perinatal transitional program (all lactation certified)
  - Participant Group N=41:
    - Inclusion: Postpartum women with GDM in current or past pregnancy providing any breastmilk to their infant at time of hospital discharge
    - Exclusion: Previous Type 1 or Type 2 DM diagnosis, formula feeding only and non-English speaking

Results

- **Exclusive Breastfeeding**
  - 2 Weeks: 58%
  - 8 Weeks: 46%
  - 16 Weeks: 40%

- **Predominant Breastfeeding**
  - 2 Weeks: 24%
  - 8 Weeks: 17%
  - 16 Weeks: 14%

- **Partial Breastfeeding**
  - 2 Weeks: 13%
  - 8 Weeks: 7%
  - 16 Weeks: 10%

- **Formula Feeding**
  - 2 Weeks: 5%
  - 8 Weeks: 9%
  - 16 Weeks: 27%

Conclusions

- **Targeted postpartum breastfeeding intervention delivered by lactation-trained providers can improve breastfeeding outcomes in women with GDM**
- **Results significant given the transgenerational impact of GDM and need for effective interventions throughout the lifespan to address diabetes crisis**
- **Education of healthcare professionals caring for GDM patients in both prenatal and postpartum periods key**
- **Impact Factor: Raising awareness!**

References


Note:

- **GDM = Gestational Diabetes Mellitus**
- **Baseline indicates 2016 historical data**
- **100% breastmilk**
- **Greater than 50% breastmilk**
- **Less than 50% breastmilk**
- **100% formula**
- **Indicates less formula given compared to baseline (in %)**
- **Statistical significance when p≤.05**