

Targeted Breastfeeding Intervention to Improve  
Breastfeeding Outcomes in Women with Gestational Diabetes Mellitus

Abstract

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*“On my honor, I pledge that I have neither given nor received any unauthorized assistance on this written assignment.” J Donahue 4/7/19*

**Introduction:** The long-term epigenetic sequelae associated with gestational diabetes mellitus (GDM) are serious and costly, both for healthcare organizations and patients. Breastfeeding, specifically in greater duration and intensity, can mitigate the adverse metabolic effects of GDM for both mother and baby. Though representing a feasible lifestyle intervention, breastfeeding difficulties are common in this population. We developed a targeted postpartum breastfeeding intervention to increase breastfeeding duration and intensity among women with GDM.

**Methods:** This quality improvement project used a pretest/posttest design to determine the efficacy of a targeted breastfeeding intervention for women with GDM. Lactation-certified providers delivered in-person breastfeeding support during postpartum home visits.

Breastfeeding duration and intensity data were assessed at 2, 8 and 16-weeks. A benchmark goal was set to increase post-intervention breastfeeding duration and exclusivity by 10% compared to retrospective baseline. A chi square test to compare proportions of breastfeeding at each time point at baseline and post-intervention was used to assess for significance.

**Results:** We enrolled 41 women in the intervention. Exclusive breastfeeding increased by greater than 10% compared to baseline at each timepoint (14.6% at 2 weeks, 35.3% at 8 weeks and 25% at 16 weeks). There was a significant effect comparing the frequency breastmilk was given in the participant group at each timepoint compared to baseline: 2 weeks  $\chi^2 (3) = 39.7$ ,  $p < .001$ , 8 weeks  $\chi^2 (3) = 27.1$ ,  $p < .001$  and 16 weeks  $\chi^2 (3) = 14.5$ ,  $p < .002$ .

**Discussion:** These results suggest that targeted breastfeeding support delivered by lactation-certified providers is efficacious and feasible.