

The association between diabetes in pregnancy and infant feeding practices

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INTRODUCTION

- The benefits of breastfeeding are well known.
 - Reduced risk of overweight, obesity and type 2 diabetes (T2D) in childhood ¹.
 - Reduces the risk of the development of T2D in women who had gestational diabetes (GDM) ².
- Women with T2D and GDM in pregnancy may face unique barriers to breastfeeding ^{3,4}.

PURPOSE

To look at the association between diabetes in pregnancy with infant breastfeeding practices in the Next Generation Cohort.

METHODS

The Next Generation birth cohort consists of First Nation and Metis mothers with T2D, GDM or no diabetes and their offspring in Manitoba.



Primary exposure: diabetes in pregnancy.



Primary outcome: breastfeeding initiation was obtained from medical charts and duration was obtained from phone questionnaires.



Maternal covariates: maternal age and parity.
Offspring covariates: delivery type, hypoglycemia, NICU stay, gestational age and birth weight obtained from medical charts.



Descriptive statistics, chi square tests and one-way ANOVA were used.

RESULTS

- 421 infants were included, 50.4% female.
- 50.4% exposed to T2D in utero, 24.9% to GDM, and 24.7% to no diabetes.

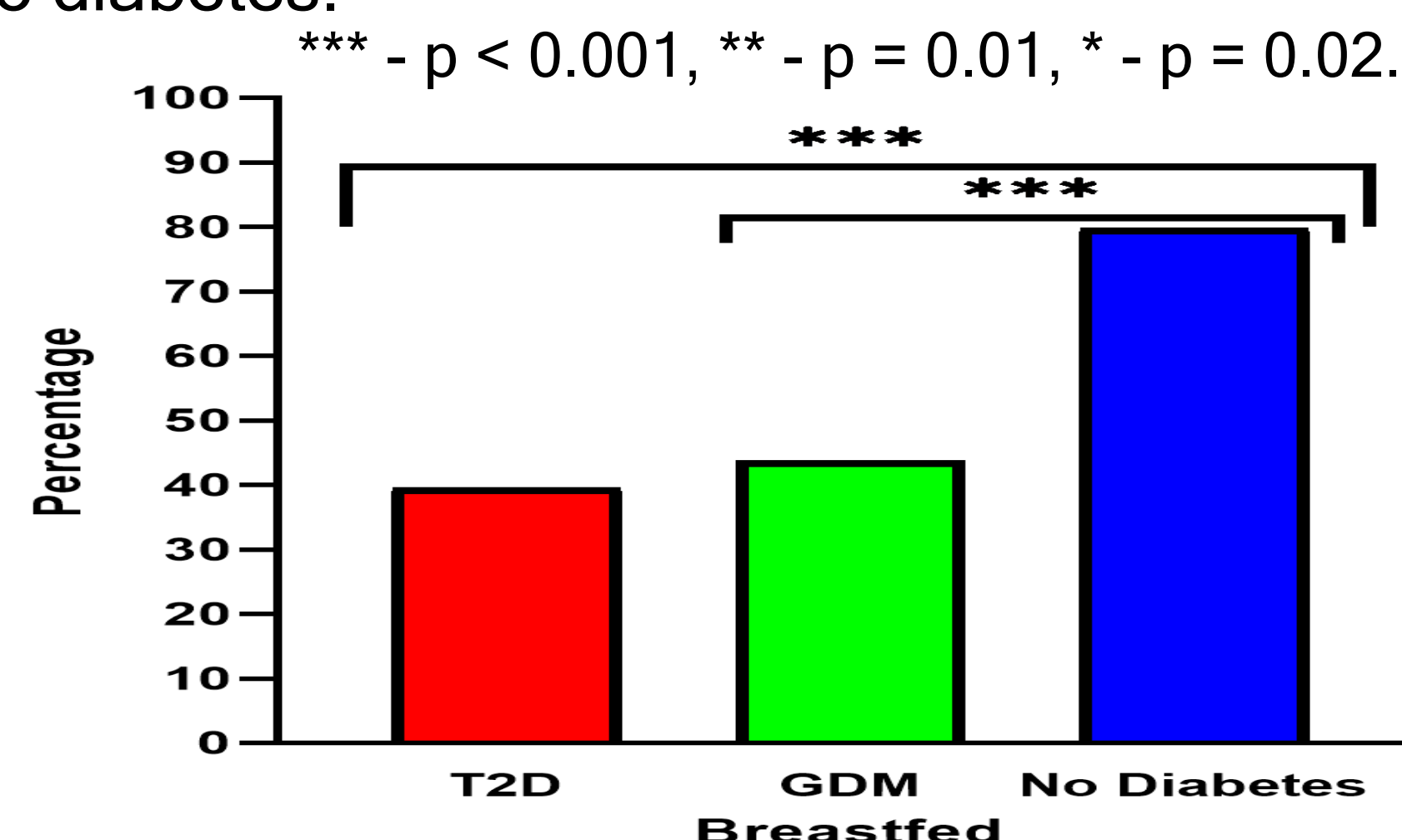


Figure 1: Breastfeeding rates by diabetes exposure.

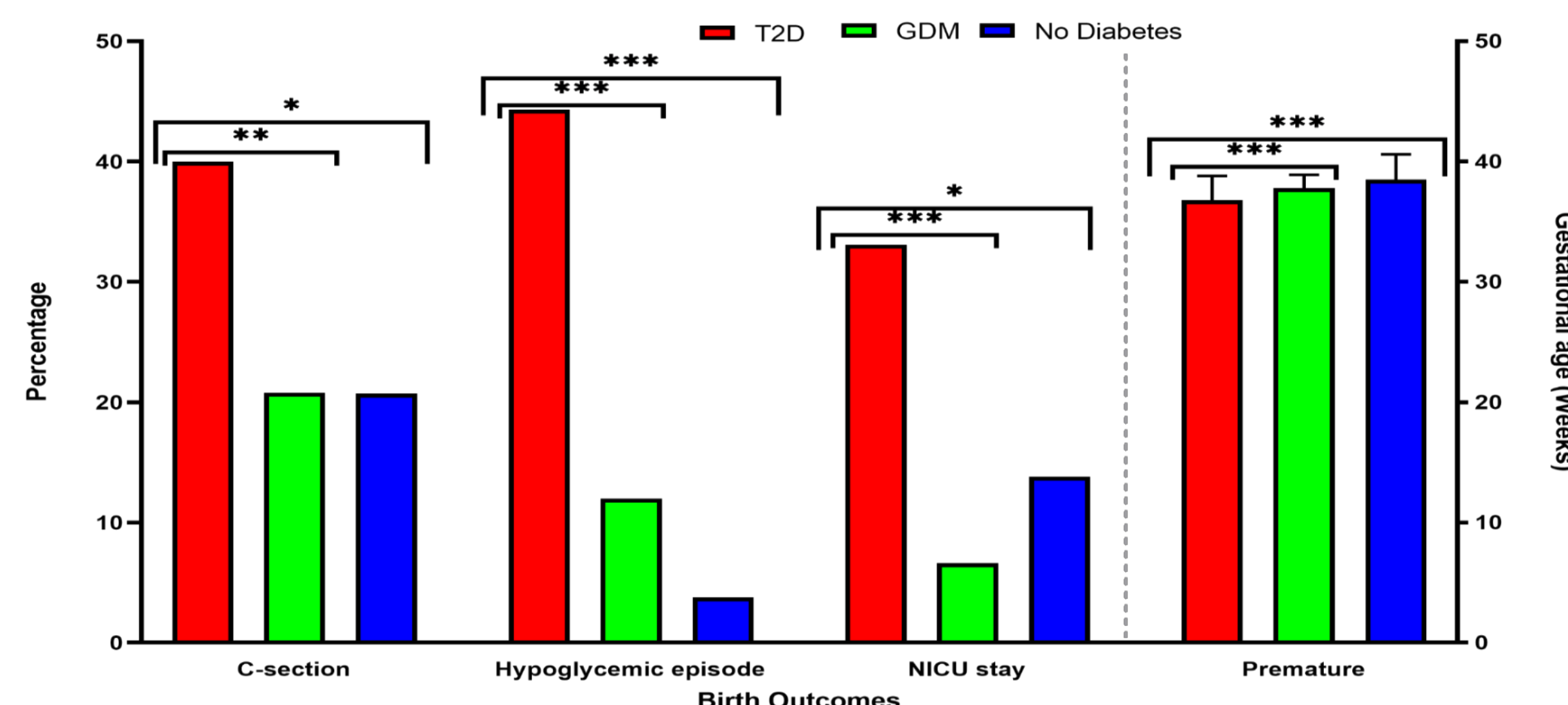


Figure 2: Birth outcomes by diabetes exposure.

Note:

- Offspring covariates: There were no significant differences in birth weight between the groups.

mean (SD)	T2D	GDM	No diabetes	P value
Age	25.8 (6.25) #	28.3 (6.93) #**	25.9 (5.15) **	# - $p=0.003$ * - $p=0.01$
Parity	2.19 (1.92)	2.83 (2.50) *	1.67 (1.70) *	* - $p<0.001$

Table 1: Maternal covariates.

CONCLUSIONS

- Infants exposed to any diabetes in utero are less likely to breastfeed.
- This may be related to the increased rates of c-section delivery, prematurity, and NICU stay.
- Understanding the barriers to breastfeeding is necessary to inform timely, targeted and appropriate interventions.

ACKNOWLEDGMENT

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REFERENCES

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