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Spring 3-24-2023

## Evaluating Education in Pregnant Women with Gestational Diabetes in Relation to Patient and Infant Outcomes

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### Repository Citation

Young, Lauren; Abbott, Emily; and Arsenault, Emilee, "Evaluating Education in Pregnant Women with Gestational Diabetes in Relation to Patient and Infant Outcomes" (2023). *Non-Thesis Student Work*. 28. [https://digitalcommons.library.umaine.edu/student\\_work/28](https://digitalcommons.library.umaine.edu/student_work/28)

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## Introduction

- Gestational diabetes mellitus (GDM) is a health condition diagnosed in pregnancy that increases the mother and fetal risk of complications. Women with gestational diabetes often struggle with dietary management and the financial strain of purchasing healthy food. The definition of GDM varies from a 50g 1 hr oral glucose tolerance test (oGTT), and a 75 g 2 hr oGTT (Thomas, 2020).
- Patients who have higher educational understanding of their condition, are typically associated with better health outcomes throughout pregnancy and postpartum (Ural, 2021).

## PICO Question

(P) For women experiencing gestational diabetes,, (I) does adequate prenatal education influence metabolic control, (C) compare to health outcomes of women who do not receive education (O) affect metabolic control?

## Methods

- Conducted a search in CINAHL using keywords, 'education', 'outcomes', 'diabetes', 'gestational diabetes', 'metabolic control'
- All articles within this review were published between 2017-2023
- Articles that discussed women with existing diabetes mellitus were excluded

TABLE 5: Comparison of pregnancy outcomes between the two groups of patients (n, %).

Group	Number of cases	Premature birth	Polyhydramnios	Infection during pregnancy	Ways to produce	
					Cesarean section	Vaginal birth
The control group	65	4 (6.15)	5 (7.69)	4 (6.15)	39 (60.00)	26 (40.00)
The observation group	65	2 (3.08)	1 (1.54)	0 (0.00) <sup>#</sup>	22 (33.85) <sup>#</sup>	43 (66.15) <sup>#</sup>

Compared with the control group, <sup>#</sup>P < 0.05.

TABLE 6: Comparison of perinatal outcomes between the two groups of patients (n, %).

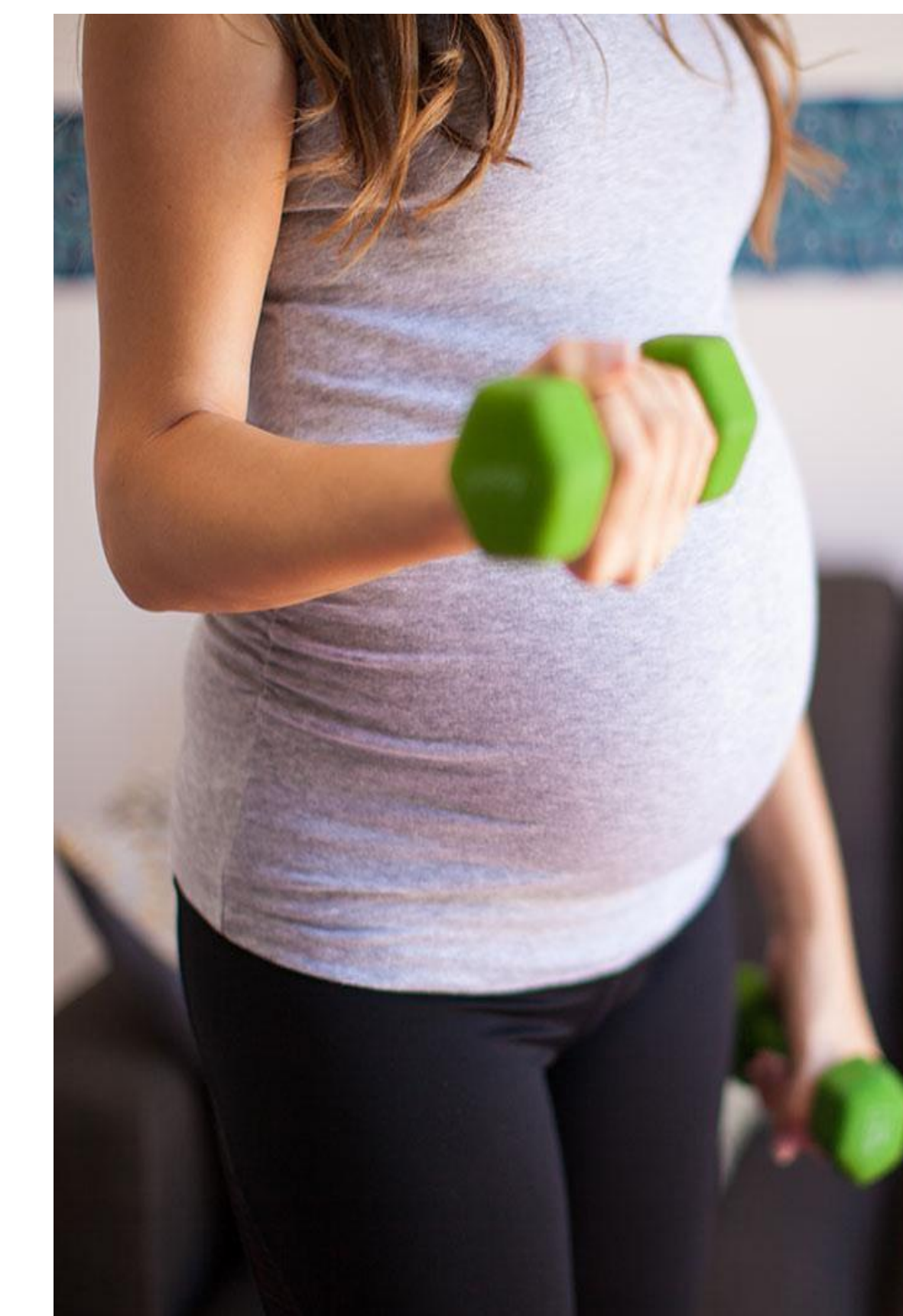
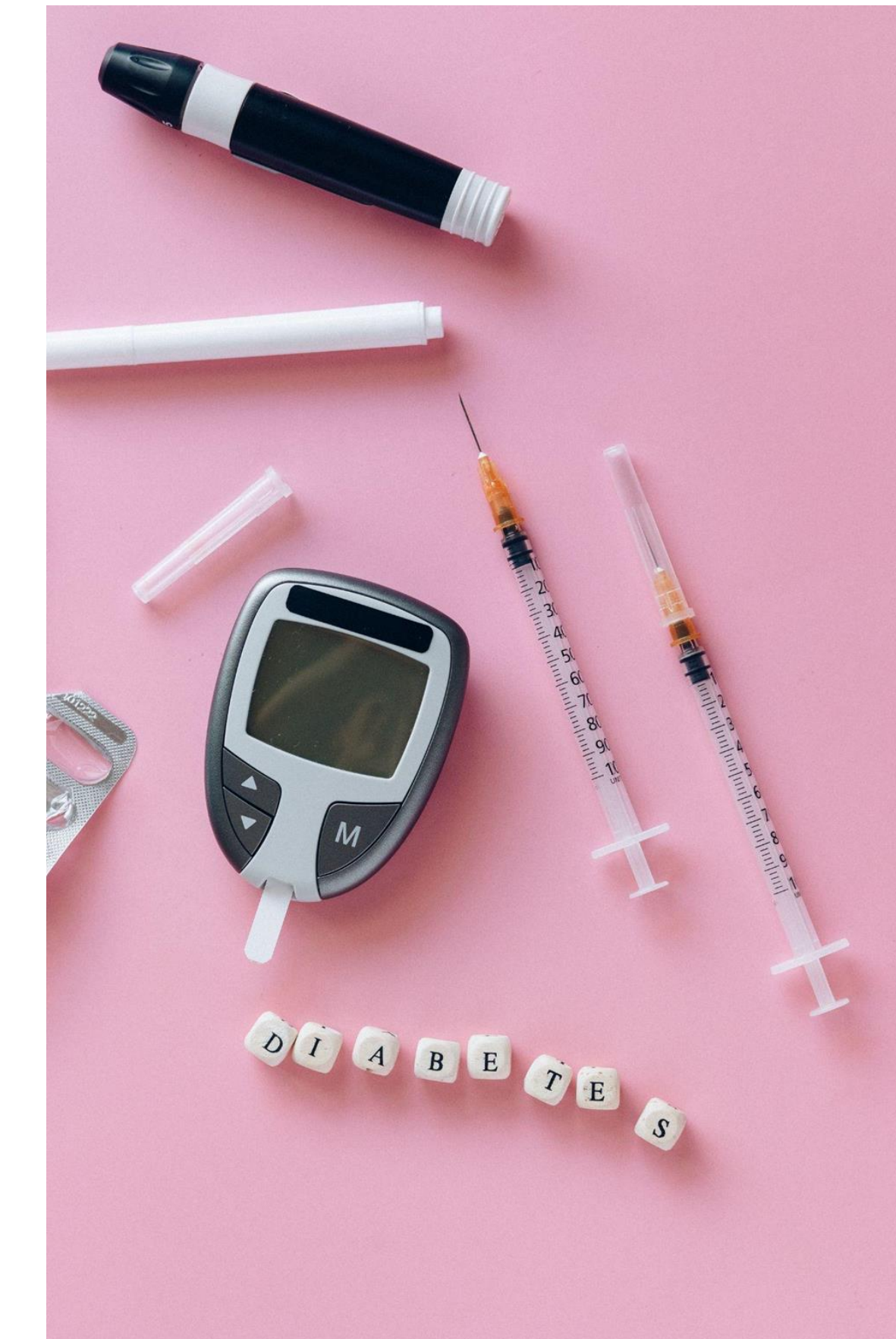
Group	Number of cases	Huge	Infant deformity	Neonatal asphyxia	Neonatal hypoglycemia	Neonatal hyperbilirubinemia
The observation group	65	1 (1.54) <sup>#</sup>	0 (0.00)	1 (1.54)	2 (3.08) <sup>#</sup>	6 (9.23) <sup>#</sup>

Compared with the control group, <sup>#</sup>P < 0.05.

Table 1: (Jiang, 2022)  
Table 2: (Jiang, 2022)

## Results

- Outcomes identify the routine prenatal checkups performed with patient teachings, a lesser likelihood of gestational diabetes occurring either during pregnancy or in the postpartum related to modifiable risk factors can reduce the chances. (Rönö, 2020)
- Mothers following healthy eating and lifestyle during their pregnancy, less complications than those not monitoring their dietary intake (Jiang, 2022).



## Conclusion

- A relationship between the overall health of the individual and gestational diabetes, but especially related to diet and education.
- Through an increased accessibility to technology provided multiple ways for women to access resources beyond accessing provider to achieve credited information to lead them to a healthy pregnancy.
- Resources come in multiple shapes, with one of the most simple being an app on a phone that can track your diet and activity levels to ensure modifiable risk factors are being managed.

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