



Perceived Health Risks and Healthy Behavior Intentions among Low-Income Postpartum Women with Recent Gestational Diabetes Mellitus

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Purpose

The purpose of this study is to analyze healthy lifestyle behavior intentions and perceptions about health risks among of low-income postpartum women with recent gestational diabetes mellitus (GDM)

Background

Women with GDM history may have misperceptions about risks for development of T2D following the affected pregnancy (Bernstein et al., 2016; Poth & Carolan, 2013)

Future health risks for women with GDM history

- ↑ lifetime risk for T2D
 - Greatest risk 3 to < 6 years after affected pregnancy (Song et al., 2018)
- Undiagnosed T2D creates future pregnancy risks (Jovanovic et al., 2019; Nakanish et al., 2021)
 - Spontaneous abortion
 - Major congenital malformations
 - Macrosomia
 - Fetal demise
 - Maternal glycemic instability
 - Maternal progression chronic diabetes complications

Diabetes screening is recommended within 3 months postpartum and annually thereafter (ADA, 2021)

Breastfeeding for at least 6 months and healthy dietary/physical activities can mitigate risks for developing T2D and promote achieving/maintaining a healthy weight (Hedeager Momsen et al., 2021; Ley et al., 2020)

Women with GDM history may also have misperceptions about ↑ health risks for children born from a diabetes-complicated pregnancy, such as developing obesity and insulin resistance in childhood, and T2D in adulthood (Lowe et al., 2018; Scholtens et al., 2019)

Specific Aims

1. Ascertain intentions of low-income postpartum women with recent GDM to engage in recommended healthy dietary/physical activity behaviors, breastfeeding, and follow-up healthcare including blood glucose screening
2. Determine perceptions about breastfeeding recommendations and maternal/child health risks related to a diabetes-complicated pregnancy among low-income postpartum women with recent GDM

Methods

- Low-income postpartum women with recent GDM (n=16) were recruited with posters and flyers at two Florida public health maternity clinics
- Participants volunteered to complete a 47-item (written/oral) survey with questions about their pregnancy, birth, breastfeeding, healthy lifestyle behavior intentions, and perceptions about maternal/child health risks associated with a diabetes-complicated pregnancy
- Participants received a \$10 gift card as an incentive/thank you for completing the survey
- A 5-point Likert-type scale was implemented with response options: Strongly Disagree; Disagree; Neither Agree or Disagree; Agree; Strongly Agree
- Descriptive statistics were used to analyze maternal perceptions, breastfeeding behaviors, and intentions to participate in healthy lifestyle behaviors

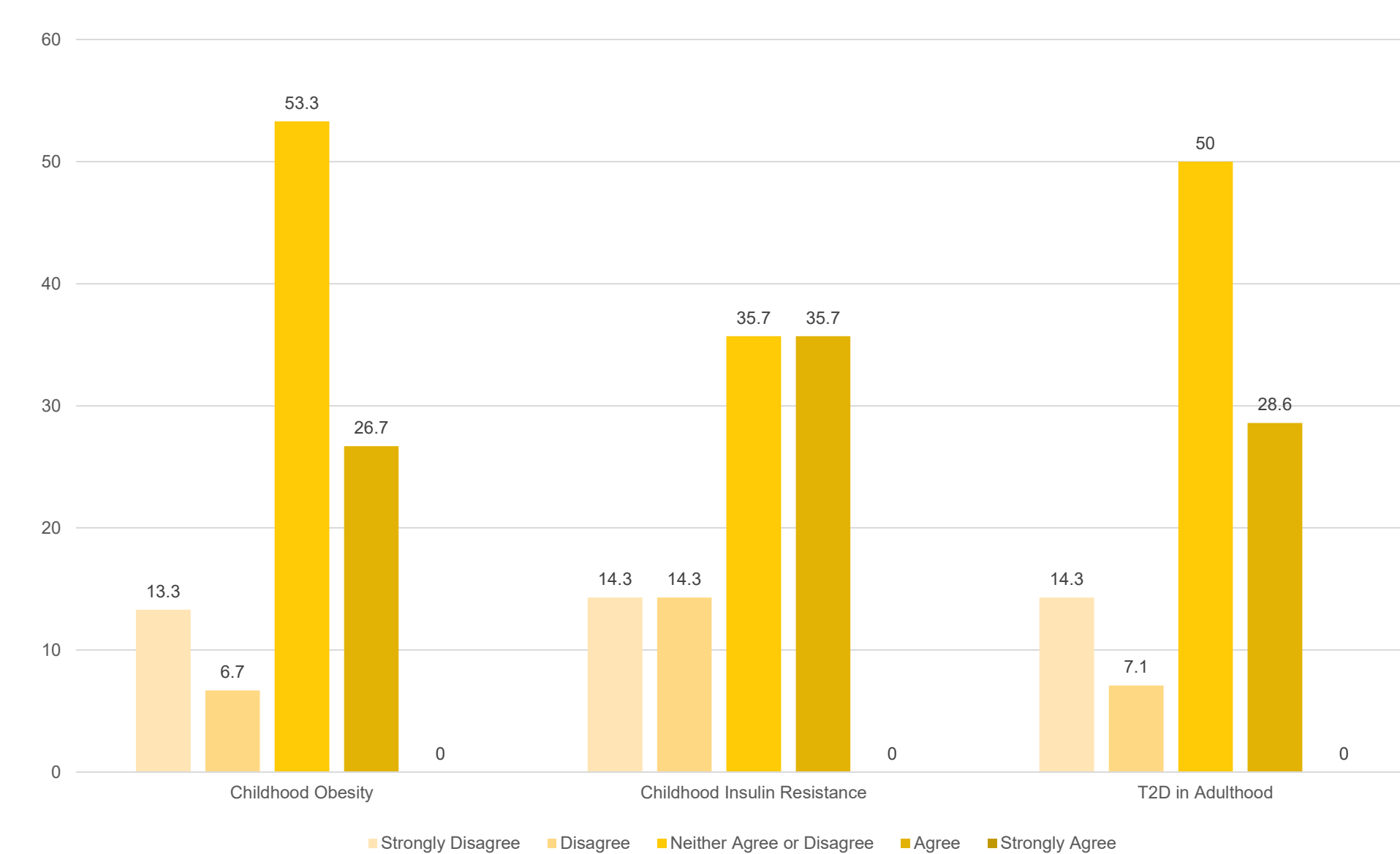


(Personal photo, Jacqueline B. LaManna)

Results

- One-fourth (25%) of participants had < high school education or equivalent; 18.8% preferred language was Spanish and 25% preferred reading in Spanish; over half (56.3%) did not have primary care provider (PCP) for routine care
- Preliminary findings indicate most (>87%) of participants intend to engage in healthy dietary/physical activity behaviors and achieve/maintain a healthy weight
- At least 75% plan to ask their healthcare provider for glucose screening at 3-months postpartum and every year
- Approximately 1/3 (27%-36%) perceived that children born from mothers with diabetes during pregnancy have ↑ risk to develop obesity and insulin resistance in childhood, and adult T2D
- Most (73%) agreed women with GDM history have ↑ risk to develop T2D with a few years after pregnancy and later life
- Half (50%) perceived breastfeeding for ≥ 6 months will reduce risks for developing T2D; 73% are planning to breastfeed for 3-6 months or longer

Maternal Perceptions of Health Risks for Child Born from GDM Pregnancy (n=16)



Maternal Perceptions of Health Risks for Women with GDM History (n=16)

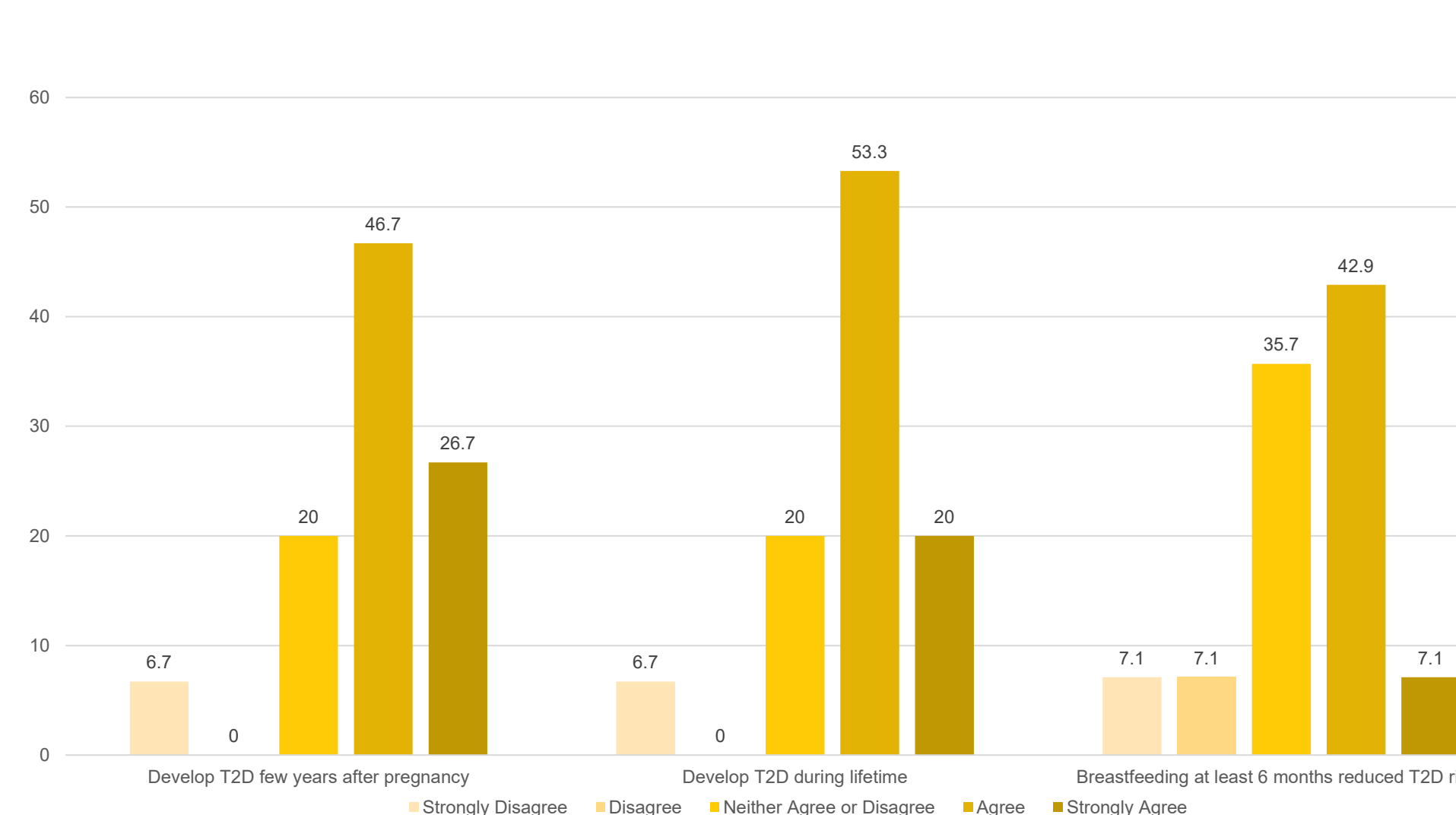


Table 1
Participant Characteristics (n=16)

Variables	n (%)
Age (years)	
18 - 24	25.0
25-29	12.5
30-34	37.5
35-39	6.3
40-45	18.8
Race/Ethnicity	
White/Caucasian	50.0
Black/African American	12.5
Hispanic/Latino or Spanish Origin of any race	37.5
Education (highest level)	
< 9 th grade	18.8
Some high school; no diploma	6.3
High school graduate, diploma, or equivalent (e.g., GED)	25.0
Some college credit; no degree	18.8
Associate degree	12.5
Bachelor's degree	12.5
Graduate degree (Master's or Doctorate)	6.3
Preferred language to speak	
English	81.3
Spanish	18.8
Preferred language to read	
English	75.0
Spanish	25.0
Has primary care provider for routine healthcare	
Yes	43.8
No	56.3
Received Medicaid during most recent pregnancy	
Yes	93.8
No	6.3

Discussion & Conclusions

- Patient education should be delivered at an appropriate education level in both English and Spanish because approximately 25% of this sample of low-income women had < high school education or equivalent and/or preferred to speak/read Spanish
- Although most of these low-income women with GDM history plan to ask a healthcare provider for glucose screening at 3-months postpartum and every year, less than half (43.8%) have a PCP for routine healthcare which may be a barrier to access for this screening
- With only about 1/3 of women with GDM history agreeing that children born from diabetes-complicated pregnancies are at ↑ risk for childhood obesity and insulin resistance, there is an opportunity to educate, motivate, and promote healthy family lifestyle changes (diet/physical activity) to ↓ these near-term childhood health risks and long-term risk for adult T2D
- Support, guidance, and referrals from primary care providers are needed to facilitate healthy behavioral intentions (Draznin et al., 2022; McLellan et al., 2014)
 - Longer breastfeeding (Bajaj et al., 2017; Feng et al., 2018)
 - ↑ physical activity
 - Postpartum weight loss to achieve/maintain healthy weight
 - Referral to community resources (Jones et al., 2017)
- Continued patient education about ↑ risk for T2D and need to self-advocate for lifetime T2D screenings (Roberts et al., 2021; Schmidt et al., 2020)
 - Regular blood glucose screening for T2D per American Diabetes Association (ADA) guidelines (Drazin et al., 2022; ACOG, 2018)
 - Reproductive life planning (LaManna et al., 2020)
 - Preconception assessment for T2D conversion (LaManna et al., 2020)

Additional research with a larger sample of low-income minority postpartum women with recent GDM is needed for more in-depth analysis to identify associations with other related variables and to determine if these preliminary findings are generalizable

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References available upon request