

CGM in Early Gestational Diabetes Improves Maternal Glycemic Control and Neonatal Outcomes—The Steady Sugar Trial*

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STUDY OBJECTIVE: To evaluate whether continuous glucose monitoring (Dexcom G6) use during gestational diabetes mellitus (GDM) improves maternal and neonatal health outcomes.

METHODS



DESIGN:
Randomized Controlled Trial

PARTICIPANTS:

120

Women

SITES:

Woman's Hospital
Baton Rouge, LA,
United States

INCLUSION CRITERIA

- ✓ Women between 8–26 weeks of pregnancy
- ✓ Singleton pregnancy only
- ✓ Newly diagnosed with gestational diabetes mellitus (GDM)
- ✓ No prior diagnosis of diabetes and no prior use of glucose-lowering therapy

INTERVENTION

- Real-time CGM (rtCGM) using Dexcom G6 or SMBG 4×/day plus monthly blinded CGM
- Lifestyle and medication guidance based on CGM interpretation

RESULTS

Maternal Glycemic Metrics	Control Group	CGM Group	P-Value
Unscheduled C-sections	44%	20%	0.046
Preterm Delivery (<37 weeks)	18%	7%	0.041
Gestational Age at Birth (weeks)	37	38	0.015
Large for Gestational Age (LGA >90th percentile)	18%	5%	0.019
NICU Admissions	45%	23%	0.013

All results in the table above are statistically significant with a P-Value less than 0.05

KEY TAKEAWAYS

- 01 Early CGM use in pregnancy reduced unscheduled C-sections, preterm births, and NICU admissions.
- 02 CGM improved maternal and neonatal outcomes by enabling timely treatment adjustments and better insulin acceptance.
- 03 CGM use in early GDM is associated with later gestational age at delivery, fewer preterm births, and reduced NICU admissions.

Dexcom CGM Use and Satisfaction in a Diverse Gestational Diabetes Cohort: Insights Into Glycemic Management and Patient Experiences

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STUDY OBJECTIVE: To examine CGM satisfaction among mothers with GDM by different racial groups and assess glycemic outcomes across populations.

DESIGN

- 78 Women Diagnosed with Gestational diabetes mellitus (GDM)
- Receiving care in a Southern US medical system
- Unblinded Dexcom G6 CGM from diagnosis till delivery
- CGM Satisfaction Survey one week before delivery
- Participants included Black and White mothers
- Other races excluded from analysis

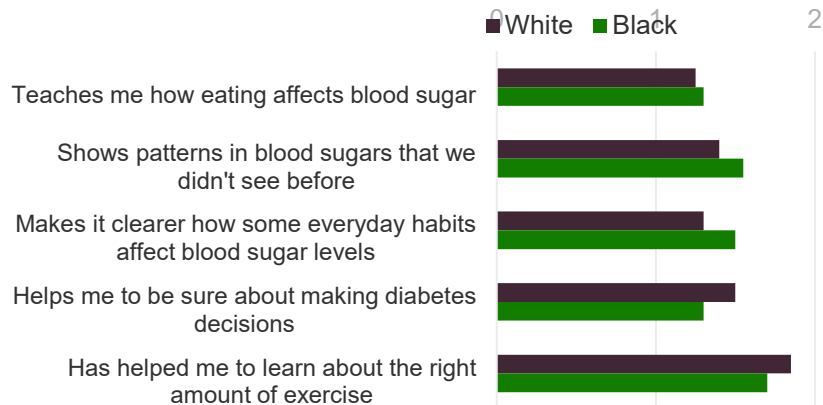
PARTICIPANTS

- N = 78 women

INTERVENTION

- Unblinded Dexcom G6 CGM from diagnosis to delivery
- Data analyzed by racial group for outcomes

RESULTS: CGM Satisfaction Survey



RESULTS: Glucose Metrics over Study Period, N = 78^{1,2}

Glycemic Metrics	Black (n=24)	White (n=51)	P-value
Mean Glucose (mg/dL)	117 (12)	106 (8)	p<0.001
Daily Max Glucose (mg/dL)	245 (31)	227 (33)	
GMI (%)	6.11 (0.28)	5.86 (0.20)	p<0.001
CV (%)	0.22 (0.04)	0.21 (0.04)	
TIR 70-180 mg/dL (%)	95 (5)	96 (3)	
TIR 70-140 mg/dL (%)	81 (13)	89 (7)	p<0.01
TIR 63-140 mg/dL (%)	81 (13)	90 (7)	p<0.001
Time Below 70 (%)	2 (1)	3 (2)	
Time Below 55 (%)	0.2 (0.2)	0.3 (0.3)	
CGM Wear-time (%)	82 (20)	92 (11)	p<0.05

¹ Reported as Mean (SD) over study period;
² Three subjects from study were excluded from analysis due to reported race of "Other"

KEY TAKEAWAYS

- 1 Women with GDM demonstrated strong engagement and satisfaction with Dexcom CGM during their pregnancy journey.
- 2 Despite variability in life circumstances, including racial and social factors, high satisfaction with Dexcom CGM was reported across groups.
- 3 Significant differences in glycemic metrics (Mean Glucose, GMI, Time in Tight Range, and Time in Range 63-140 mg/dL) were observed between Black and White mothers.