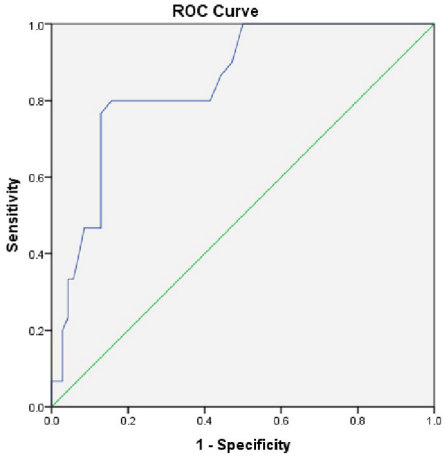
STUDY DESIGN: A comparative cross-sectional study of 100 pregnant women who were selected to have screening for GDM done betwwen gestational ages of 24 to 28 weeks using random plasma glucose and fasting plasma glucose. All the subjects had 75g oral glucose tolerance test as the gold standard. Venous plasma glucose assay was performed using glucose oxidase method.

RESULTS: During this study, a total of 100 eligible pregnant women were screened for GDM using FPG, RPG and the 75g -OGTT. The mean age±standard deviation (sd) of the participants was 34.81±4.04 yrs; mean BMI was 31.46±7.29 kg/m^2 and mean parity was 1.38±1.15 (Table I). The mean RPG of the participants was 5.53±1.57 mmol/L while the mean FPG was 4.70±1.02 mmol/L. The prevalence of GDM was 29% using FPG cut off≥ 5.1 mmol/L; 16% using FPG cut off≥5.3 mmol/L and 6% using RPG cut off≥7.8 mmol/L. The RPG cut off ≥ 11.1 mmol/L gave the lowest prevalence rate of 2% while 75g-OGTT (Gold standard test) gave the highest prevalence rate of 30%. The primary outcome was measured as the accuracy of GDM screening using RPG which revealed sensitivity of 13.8%, specificity of 97.1%, positive predictive value of 66.7% and negative predictive value of 72.3% as compared with FPG threshold of 5.1 mmol/L which gave sensitivity of 90%, specificity of 97.1%, PPV of 93.1% and NPV of 95.8%. The receiver operating characteristics curve (ROC) plotted for both screening tets gave AUC of 0.845 for RPG and 0.920 for FPG.

CONCLUSION: The findings from this study reveal that FPG threshold of 5.1 mmol/L has a high sensitivity of 90% and specificity of 97.1% as well as AUC of 0.920, which is excellent for a screening test. The use of RPG threshold of 7.8 mmol/L gave sensitivity of 13.8% and specificity of 97.1% with an AUC of 0.845 which was inferior to FPG.

Figure 1: Receiver Operating Characteristics (ROC) Curve for the Accuracy of RPG (≥7.8 mmol/l) in Prediction of GDM.

The receiver-operating characteristics (ROC) curve was constructed in order to compare the ability of RPG with OGTT in differentiating between subjects with diagnosis of GDM.



Diagonal segments are produced by ties.

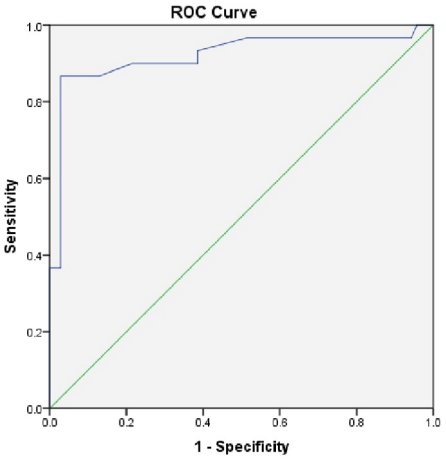
Area Under the Curve

Test Result Variable(s): RPGValues

Area	Std. Error[a]	Asymptotic Sig.[b]	Asymptotic 95% Confidence Interval	
			Lower Bound	Upper Bound
.845	.040	.000	.767	.924

Figure 2: ROC Curve for the Accuracy of FPG (cut off ≥ 5.1 mmol/l) in Prediction of GDM.

The receiver-operating characteristics (ROC) curve was constructed in order to compare the ability of FPG with OGTT in differentiating between subjects with diagnosis of GDM.



Diagonal segments are produced by ties.

Area Under the Curve

Test Result Variable(s): FPGValues

Area	Std. Error[a]	Asymptotic Sig.[b]	Asymptotic 95% Confidence Interval	
			Lower Bound	Upper Bound
.920	.037	.000	.847	.994

662 Racial disparities in preeclampsia and growth restriction persist among women of high socioeconomic status (SES)

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OBJECTIVE: Despite persistent racial disparities in placentally mediated adverse outcomes [gestational hypertension (GHTN ± preeclampsia (PREE), small for gestational age (SGA)] in the US among non-Hispanic (NH) black women compared to NH white women, it is controversial whether sociodemographic factors can explain these differences. We sought to evaluate whether disparities in GHTN ± PREE and SGA persist among women of high SES.

STUDY DESIGN: We conducted a population-based cohort study using US live birth records from the National Vital Statistics System, 2015-2017.We included singleton, non-anomalous pregnancies among women of high SES (those with ≥ 16 years of education and private insurance and not receiving Women, Infants and Children [WIC] benefits) and who identified as NH white, NH black, or both NH black & white races.The primary outcome was the diagnosis of GHTH ± PREE. The secondary outcome was SGA (birthweight < 10% and < 3% for fetal gender & gestational age). Data were analyzed using chi-square, t-test, and logistic regression.

RESULTS: Of 11,376,439 singleton, non-anomalous pregnancies during the study period, 2,170,686 (19.1%) pregnancies met inclusion criteria; 92.9% were NH white, 6.7% NH black, and 0.4% both NH white & black races. Overall, 6.1% were diagnosed with GHTN ± PREE, 3.7% with SGA < 10%, and 0.7% with SGA < 3%. Baseline characteristics and outcomes are compared by race (Table 1). In unadjusted analyses, rates of GHTN ± PREE, SGA < 10%,

and SGA < 3% were higher for women of NH black and both NH black & white races compared to women of NH white race alone. In regression models, NH black women and those with mixed NH black and NH white race had a higher odds of GHTN ± PREE and SGA (Figure 1).

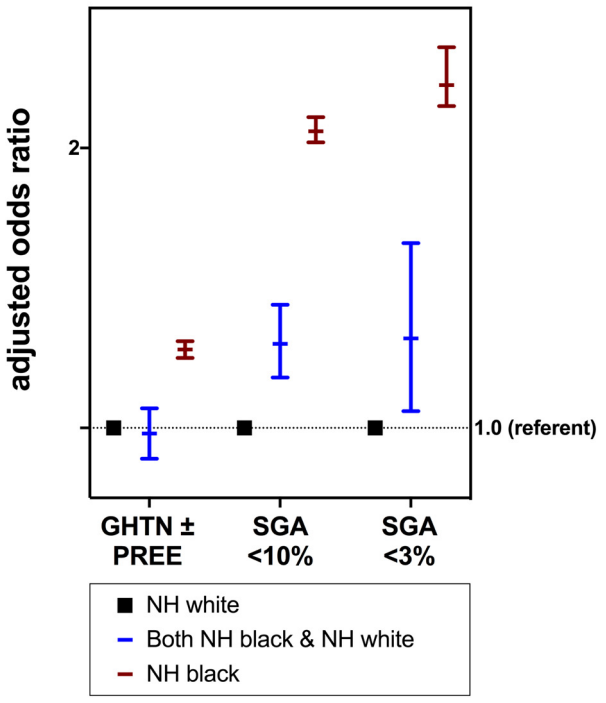
CONCLUSION: Among college-educated U.S. women with private insurance who are not receiving WIC, racial disparities in placentally mediated adverse outcomes in pregnancy persist. These findings suggest that factors other than socio-demographics are important in the underlying pathogenesis of placentally-mediated adverse pregnancy outcomes.

Table 1. Characteristics of women by maternal race. Data are n(%) unless specified. Data are n(%) unless specified.

Characteristic	NH white women N=2,017,470	NH black and NH white race women N=8,604	NH black women N=144,612	P-value
Maternal age, mean years ± SD	32.0 ± 4.1	32.6 ± 4.6	31.6 ± 4.6	<0.001
Interpregnancy interval <12 months	5,300 (0.5)	527 (0.7)	14 (0.4)	<0.001
Nulliparous	906,641 (44.9)	64,917 (44.9)	4,278 (49.7)	<0.001
Married	1,866,436 (92.5)	107,407 (74.3)	6,501 (75.6)	<0.001
Previous preterm birth*	39,675 (3.8)	3,854 (5.3)	192 (4.7)	<0.001
Male fetus	1,035,115 (51.3)	73,292 (50.7)	4,414 (51.3)	<0.001
Smoked during pregnancy	12,357 (0.6)	534 (0.4)	81 (0.9)	<0.001
Chronic hypertension	28,119 (1.4)	5,580 (3.9)	158 (1.8)	<0.001
Pregestational diabetes mellitus	33,636 (1.7)	2,987 (2.1)	145 (1.7)	<0.001
Gestational hypertension ± preeclampsia	120,289 (6.0)	10,928 (7.6)	515 (6.0)	<0.001
SGA <10%	69,425 (3.4)	10,424 (7.2)	400 (4.7)	<0.001
SGA <3%	12,718 (0.6)	2,191 (1.5)	76 (0.9)	<0.001

* Of 1,137,495 multiparous women with a previous live birth

Figure 1. Regression results. Shown are the adjusted odds (95% CI) of each placentally mediated adverse pregnancy outcome by maternal race. All models are adjusted for marital status, history of PTB, chronic HTN, smoking, and male fetus.



663 Are women in CenteringPregnancy less likely to have brief interpregnancy intervals?

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OBJECTIVE: Brief interpregnancy interval ≤6 months increases the risk of adverse pregnancy outcomes. The purpose of this study was to determine whether participation in CenteringPregnancy (CP) group prenatal care is associated with a decreased risk of brief interpregnancy interval compared to participation in traditional prenatal care.

STUDY DESIGN: We conducted a retrospective cohort study of adult women enrolled in Missouri Medicaid from 2007-2014 using maternal Medicaid records linked to infant birth certificate data. Women who were residents of St. Louis city or county, participated in at least 2 sessions of either CP or traditional care, and had a singleton live birth were included. The primary outcome was rate of brief interpregnancy interval ≤6 months. Secondary outcomes included brief interpregnancy interval ≤ 12 months, ≤ 18 months, postpartum long acting reversible contraception (LARC) uptake, preterm birth, and small for gestational age. Demographics were analyzed using descriptive statistics. Logistic regression was used to adjust for potential confounders including maternal age, race, obesity, parity, and number of prenatal visits.

RESULTS: Of the 54,968 pregnancies included in the analysis, 1,550 (3%) received CP. Women participating in CP were more likely to be nulliparous, African American or Hispanic, and have a normal BMI than those in traditional care. CP participants were also less likely to have a brief interpregnancy interval ≤6 months (aOR 0.62; 95% CI 0.47-0.82), ≤12 months (aOR 0.75; 95% CI 0.63-0.89), and ≤18