Maternal race/ethnicity, age, body mass index, education level, insurance status, number of prenatal visits, smoking history, and parity were assessed as potential confounders. Chi-square and multivariable logistic regression analyses were performed for statistical comparisons.

RESULTS: Among the 20,546 women with chronic hypertension included in this study, neonatal outcomes (Table 1) showed significant associations between NICU admission and hospital characteristics of urban (aOR 3.05, 95% CI 2.36-3.94), academic (aOR 1.21, 95% CI 1.09-1.34), medium volume (aOR 1.41, 95% CI 1.17-1.70), and high volume (aOR 1.79, 95% CI 1.51-2.12). Preterm delivery and respiratory distress syndrome were also highly associated with urban, academic, higher volume hospitals. Maternal outcomes (Table 2) concluded cesarean delivery rate was lower for academic hospitals and higher for high volume hospitals. Severe maternal morbidity was more common in academic hospitals and less common in medium volume hospitals. In addition, endometritis was more common and placental abruption was less common in academic hospitals.

CONCLUSION: While maternal outcomes varied among hospital characteristics, severe neonatal outcomes were significantly associated with urban, academic, and higher volume hospitals in women with chronic hypertension. Next step would be to identify and analyze subjects with adequately versus poorly controlled chronic hypertension in order to minimize worse neonatal morbidity and mortality in this population.

Table 1. Neonatal outcomes among women with chronic hypertension

Neonatal Outcomes		Urban N=19,706	Rural N=839	Academic N=2,705	Community N=17,841	High Volume N=15,388	Medium Volume N=3,789	Low Volume N=1,369
Preterm Delivery	%	25.83	15.14	30.06	24.68	27.04	22.01	16.22
	aOR (95% CI)	1.95 (1.58-2.40)	Ref	1.26 (1.15-1.39)	Ref	1.84 (1.57-2.16)	1.38 (1.15-1.64)	Ref
NICU Admission	%	22.92	9.51	25.67	21.87	23.62	20.18	14.31
	aOR (95% CI)	3.05 (2.36-3.94)	Ref	1.21 (1.09-1.34)	Ref	1.79 (1.51-2.12)	1.41 (1.17-1.70)	Ref
Respiratory Distress Syndrome	%	15.77	9.30	18.96	14.98	16.33	13.91	10.66
	aOR (95% CI)	1.99 (1.54-2.58)	Ref	1.34 (1.20-1.50)	Ref	1.65 (1.36-1.99)	1.31 (1.06-1.61)	Ref
Apgar < 7	%	1.94	1.33	3.20	1.71	1.85	2.15	1.94
	aOR (95% CI)	1.35 (0.71-2.57)	Ref	1.85 (1.42-2.41)	Ref	0.85 (0.55-1.32)	1.03 (0.64-1.66)	Ref
Hypoxic Ischemic Encephalopathy	%	0.14	0.24	0.15	0.15	0.16	0.11	0.07
	aOR (95% CI)	1.04 (0.14-7.88)	Ref	0.91 (0.27-3.06)	Ref	-	0.82 (0.28-2.41)	Ref
Neonatal Death	%	0.30	0.48	0.34	0.30	0.31	0.29	0.30
	aOR (95% CI)	0.65 (0.20-2.16)	Ref	1.11 (0.49-2.51)	Ref	1.09 (0.33-3.63)	1.04 (0.27-3.96)	Ref
Infant Death	%	0.22	0.12	0.23	0.21	0.19	0.27	0.30
	aOR (95% CI)	1.76 (0.24-13.10)	Ref	0.92 (0.36-2.36)	Ref	0.52 (0.18-1.54)	0.78 (0.24-2.60)	Ref

Table 2. Maternal outcomes among women with chronic hypertension

Maternal Outcomes		Urban N=19,706	Rural N=839	Academic N=2,705	Community N=17,841	High Volume N=15,388	Medium Volume N=3,789	Low Volume N=1,369
Cesarean Delivery	%	53.11	53.16	48.58	53.80	54.04	50.99	48.58
	aOR (95% CI)	0.97 (0.83-1.12)	Ref	0.78 (0.72-0.85)	Ref	1.19 (1.06-1.34)	1.08 (0.95-1.24)	Ref
Severe Maternal Morbidity	%	3.11	2.62	4.25	2.91	3.09	2.93	3.51
	aOR (95% CI)	1.14 (0.71-1.83)	Ref	1.46 (1.17-1.83)	Ref	0.79 (0.57-1.09)	0.66 (0.45-0.96)	Ref
Endometritis	%	1.03	0.72	1.59	0.92	1.05	0.92	0.88
	aOR (95% CI)	1.18 (0.51-2.71)	Ref	1.53 (1.05-2.22)	Ref	0.90 (0.49-1.65)	0.93 (0.47-1.83)	Ref
Placental Abruption	%	2.09	1.91	1.29	2.20	2.16	1.82	1.97
	aOR (95% CI)	0.97 (0.57-1.66)	Ref	0.52 (0.35-0.77)	Ref	1.08 (0.70-1.68)	0.80 (0.48-1.32)	Ref
Maternal Blood Transfusion	%	2.33	2.38	2.77	2.26	2.29	2.45	2.48
	aOR (95% CI)	0.95 (0.58-1.57)	Ref	1.22 (0.93-1.60)	Ref	0.81 (0.56-1.19)	0.76 (0.49-1.18)	Ref

217 Black-White Disparities and Preterm Births Comparisons Following the COVID-19 Pandemic in Michigan

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OBJECTIVE: Racial and ethnic disparities in health care have been documented throughout decades in the United States. The COVID-19 pandemic has further shown a disproportionate burden on racial and minority groups. Black women have been disproportionately impacted among other races in terms of pregnancy outcomes. The aim of this study was to compare preterm birth outcomes between black vs white women after the COVID-19 pandemic.

STUDY DESIGN: A population-based retrospective cohort study was performed using the state of Michigan's birth registry data. The timeline of interest was after the emergence of the pandemic in Michigan from March 2020 until December 2020. The pre-pandemic cohort was from March 2019 until December 2019. The main outcome of interest was preterm birth rates comparison between White and Blacks in the post-pandemic vs pre-pandemic period.

RESULTS: Of 91,068 women in the pre-pandemic cohort, 65,420 (71.8%) identified as White, compared to 16,997 (18.7%) who identified as Black. The post-pandemic cohort included 83,240 women with 57,836 (69.5%) identifying as White, compared to 16,160 (19.4%) identifying as Black. The overall preterm birth rate decreased from 10.4% to 9.9% post-pandemic. In the pre-pandemic cohort, the preterm birth rate was 9.0% for White women compared to 16.3% for Black women, the extreme preterm birth rate (< 28 weeks gestation) was 0.42% for White women compared to 1.4% for Black women. In the post-pandemic cohort, the preterm birth rate was 8.6% for White women compared to 15.1% for Black women and the extreme preterm birth rate was 0.39% for White women compared to 1.2% for Black women.

CONCLUSION: Although disparities continue to persist in preterm birth rates between White vs Black women, we found no increased racial disparities in changes in preterm birth or extreme preterm birth rates between both races in the pre vs post-pandemic periods. More data in the upcoming years post-pandemic can help further confirm these findings.

218 A Spatial Approach to Examining Individual and Disparity-Level Factors and Hypertensive Disorders of Pregnancy

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OBJECTIVE: Investigate independent maternal and disparity-level factors contributing to hypertensive disorders of pregnancy, accounting for home address during pregnancy. The Area Deprivation Index (ADI), which is a ranked measure of neighborhood socioeconomic disadvantage that encompasses income, education, employment, and housing quality domains was used to assess disparity.

STUDY DESIGN: A retrospective cohort study of Dane County, WI births (n=13,272) from 1/2016-6/2018 was used to explore effects of ADI (scale 1-10) and census block group on hypertensive disorders