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Policy Matters

Racial and Ethnic Abortion Disparities Following Georgia's 22-Week Gestational Age Limit

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A B S T R A C T

Introduction: Georgia's 2012 House Bill 954 (HB954) prohibiting abortions after 22 weeks from last menstrual period (LMP) has been associated with a significant decrease in abortions after 22 weeks. However, the policy's effects by race or ethnicity remain unexplored. We investigated whether changes in abortion numbers and ratios (per 1,000 live births) in Georgia after HB954 varied by race or ethnicity.

Methods: Using Georgia Department of Public Health induced terminations of pregnancy data from 2007 to 2017, we examined changes in number of abortions and abortion ratios (per 1,000 live births) by race and ethnicity following HB954 implementation.

Results: After full implementation of HB954 in 2015, the number of abortions and abortion ratios at or after 22 weeks (from last menstrual period) decreased among White ($b_{Number} = -261.83$, $p < .001$; $b_{Ratio} = -3.31$, $p < .001$), Black ($b_{Number} = -416.17$, $p < .001$; $b_{Ratio} = -8.84$, $p < .001$), non-Hispanic ($b_{Number} = -667.00$, $p = .001$; $b_{Ratio} = -5.82$, $p < .001$), and Hispanic ($b_{Number} = -56.25$, $p = .002$; $b_{Ratio} = -2.44$, $p = .002$) people. However, the ratio of abortions before 22 weeks increased for Black people ($b_{LessThan22Weeks} = 44.06$, $p = .028$) and remained stable for White ($b_{LessThan22Weeks} = -6.78$, $p = .433$), Hispanic ($b_{LessThan22Weeks} = 21.27$, $p = .212$), and non-Hispanic people ($b_{LessThan22Weeks} = 26.93$, $p = .172$).

Conclusion: The full implementation of HB954 had differential effects by race/ethnicity and gestational age. Although abortion at 22 weeks or more decreased for all groups, abortion at less than 22 weeks increased among Black people. Additional research should elucidate the possible causes, consequences, and reactions to differential effects of abortion restrictions by race and ethnicity.

Access to safe and legal abortion services is affected by restrictive state and federal policies (Jones & Jerman, 2017; Upadhyay, Weitz, Jones, Barar, & Foster, 2013), which can carry disproportionate and inequitable consequences for communities

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of color (Boonstra, 2016; Coles, Makino, Stanwood, Dozier, & Klein, 2010; Cook, Parnell, Moore, & Pagnini, 1996; Upadhyay, Johns, Cartwright, & Franklin, 2018). To date, a growing body of evidence has demonstrated associations between the rapid rise in abortion restrictions across the United States—especially in the South (Nash, 2019)—and fewer abortion providers (Jones & Jerman, 2017; Jones, Witwer, & Jerman, 2019), longer distances to abortion clinics (Gerdts et al., 2016), and increased demand for and use of self-managed abortion techniques (Aiken et al., 2018, 2020; Grossman et al., 2015). Several studies have highlighted that women of color seem disproportionately impacted by abortion restrictions (Coles et al., 2010; Cook et al., 1996; Upadhyay et al., 2018) owing to multiple, intersecting layers of inequity (Crenshaw, 1989) that put women of color at increased risk of 1) needing an abortion and 2) disproportionately experiencing adverse effects of restrictions on how and when they can access abortion care. Yet more evidence is needed to ascertain how abortion policies might affect racial/ethnic disparities in access to and utilization of abortion services, particularly in the South.

Previous research suggests that Black and Latinx people[1] in the United States are more likely to live in states where abortion is restricted and inaccessible (Guttmacher Institute, 2019; Jones and Jerman, 2017; Nash, 2019), experience significant and unique barriers to abortion access (Mosley et al., 2020), and have abortions at later gestational ages (Jones & Finer, 2012) compared with White people. In 2020, 43% of women aged 13–44 years lived in states considered hostile to abortion compared with 7% in 2000 (Nash, 2019), and three-quarters of states in the South are considered hostile or very hostile to abortion (Nash, 2019). Black and Hispanic people are more likely to live in states described as hostile or very hostile to abortion (Frey, 2019). Further, historical and ongoing reproductive injustices create a legacy of racialized barriers to abortion care. Historically, Black and Latinx women have been targeted and sterilized by unsafe and/or coercive family planning, and, because structural racism makes them more likely to live in poverty, Black and Latinx women seeking abortion services are more likely than White women to do so out of economic necessity (Roberts, 1997; Schoen, 2005; Stern, 2005). Qualitative research in Georgia has shown how Black and Latinx people face intersectional barriers to abortion care, including past experiences of disrespectful care leading to mistrust, lack of appropriate interpretation services, and risk of deportation, in addition to poverty-related factors such as inability to afford abortion services, lack of transportation, and lack of insurance (Mosley et al., 2020). Given this burden, it is plausible that policies limiting access to abortion by gestational age—a common abortion restriction—carry disproportionate consequences for Black and Latinx people.

The state of Georgia presents a unique case study to better understand racial/ethnic differences in effects of abortion policies, particularly gestational age limits. Historically, abortion access has been greater in Georgia than in surrounding states (Roberts, Gould, & Upadhyay, 2015). Research indicates that a substantial proportion of individuals seeking abortion services in Georgia travel to Georgia from out of state (Hall et al., 2020; Roberts et al., 2015), suggesting that restrictive abortion policies enacted in Georgia have implications for access to care expanding to residents of other states. Indeed, both Hall et al. and Roberts et al. note that Georgia's recently implemented 22-week gestational age limit policy (at or after 22 weeks from last menstrual period [LMP]) decreased access to abortion care for out-of-state residents and they emphasize the detrimental implications of this policy for abortion care in the Southeast (Hall et al., 2020; Roberts et al., 2015). Additionally, Georgia's population is racially and ethnically diverse (U.S. Census Bureau, 2020). In 2010, 32% of the state's 9.7 million residents were Black and 9% were Hispanic/Latino (U.S. Census Bureau, 2020). The state also has widespread racial/ethnic disparities in unintended pregnancy (Healthy Mothers, Healthy Babies Coalition of Georgia, 2019), and maternal (Centers for Disease Control and Prevention, 2019) and infant mortality (Georgia Department of Public Health, 2013). In 2012, the Georgia Assembly passed House Bill 954 (HB954) prohibiting abortion at 20 weeks after fertilization (equivalent to 22 weeks since LMP). The bill included exceptions to save the pregnant person's life or to avoid their permanent physical impairment (General Session, 2011–2012). HB954 was signed into law in April 2012, but quickly enjoined following a legal challenge by the American Civil Liberties Union (Figure 1). The law was then partially implemented in January 2013, allowing abortions up to 24 weeks' gestation from LMP, and it was fully implemented in October 2015, allowing abortions up to 22 weeks' gestation from LMP.

Two previous studies examined the implications of Georgia's 22-week gestational age limit for abortion access in the state (Hall et al., 2020; Roberts et al., 2015). Roberts et al. analyzed data from 2012 to 2013 on abortions after 20 weeks' gestation to estimate the potential implications of the new policy. They found that 55% of patients were Black, 7% were Hispanic, and 55% had a high school education or less (Roberts et al., 2015), suggesting that Black people and those of a lower socioeconomic status would be affected disproportionately by HB954, because social determinants of health—including poorer access to clinics and needing more time to gather funds for abortion procedures—push their abortion care later into pregnancy. More recently, Hall et al. (2020) analyzed Georgia Department of Public Health state-wide abortion data from 2007 to 2017 and found that abortions at more than 21 weeks significantly decreased over time, whereas total abortions and abortions at 21 weeks or less remained stable (Hall et al., 2020). However, neither of these studies investigated differences in the effects of HB954 by race or ethnicity.

The current study expands on prior studies by measuring racial and ethnic differences in number of abortions and abortion ratios before (2007–2012), during (2013–2015), and after (2016–2017) implementation of Georgia's 22-week gestational age limit. Specifically, we investigated how White, Black, Hispanic, and non-Hispanic abortion numbers and abortion ratios changed during partial and full implementation of Georgia HB954.

Methods

Induced Termination of Pregnancy Data

The Georgia Department of Public Health requires all entities that provide abortions to report each Induced Termination of Pregnancy (ITOP) event. Entities submit data using the Georgia Vital Events Registration System, a vital records software developed by Genesis, Inc. for the DPH State Office of Vital

[1] In this manuscript, we use the term "Latinx" when possible to describe the ethnicity of individuals from Latin America, and "people" when describing abortion patients of all genders. "Latinx" is a term that encompasses Latino, Latina, and Hispanic, but is more inclusive of gender diversity. We use the terms "Hispanic" and "women" when citing studies or data that specifically used that language.

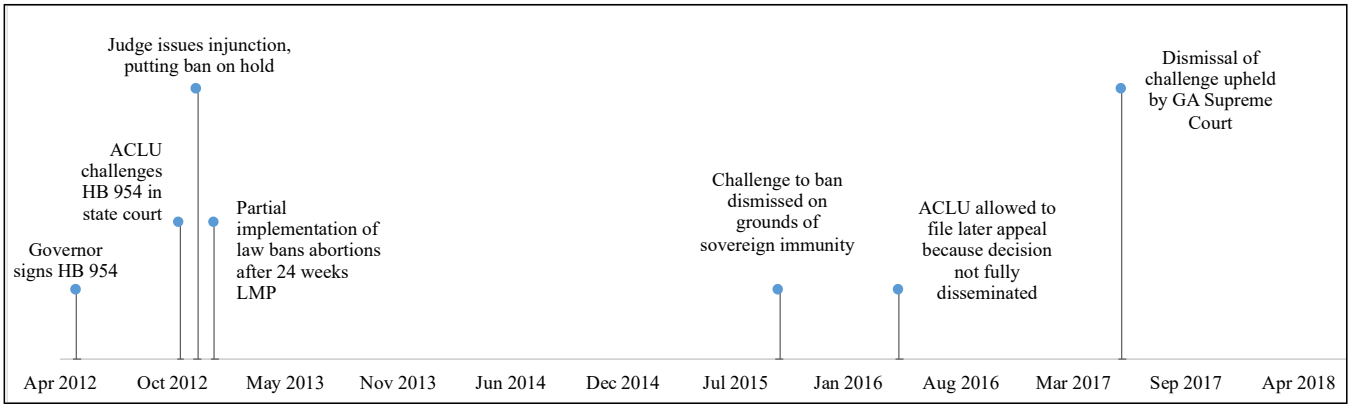

Figure 1. Timeline of Georgia's 22-Week Gestational Age Limit on Abortion (HB954).

Records (Georgia Department of Public Health, 2021a). Vital Records collects, maintains, amends, and certifies all vital events that occur in Georgia, including ITOPs (Georgia Department of Public Health, 2021b). Although state vital records are private and confidential, in aggregate they are publicly available through Online Analytical Statistical Information System with limited query functionality (Georgia Department of Public Health, 2020a), and available in greater detail when requested through the Public Health Information Portal (Georgia Department of Public Health, 2021c), the method we chose for this study. The institutional review board at GDPH granted exempt status for the ITOP analyses, and the institutional review board at Emory University approved all study procedures including those described in this article.

We analyzed annual, cross-sectional abortion data from 2007 through 2017 from GDPH's state-mandated ITOP reporting in the Public Health Information Portal (Georgia Department of Public Health, 2020a). Data were stratified by gestational age, race, and ethnicity. All gestational ages are in LMP dating; gestational age categories included all gestational ages total, less than 13 weeks 0 days, 13w0d to 19w6d, 20w0d to 21w6d, and 22 or more weeks; and a composite category of less than 22 weeks (consisting of all abortions up to 21w6d).

Abortion Ratios

To account for underlying pregnancy and birth rates of the population, we calculated abortion ratios as the number of induced terminations per 1,000 live births for a given racial or ethnic group, by gestational age from LMP, in a given year or period (Anderson, 2014). Live birth data were obtained from the Georgia Department of Public Health Online Analytical Statistical Information System (Georgia Department of Public Health, 2020b).

Race and Ethnicity

Racial categories were all racial groups total, White, Black, Other (i.e., Asian, American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, or multiracial), and unknown. Ethnic categories were all ethnic groups total, non-Hispanic, Hispanic (i.e., persons of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin, regardless of race), and other or unknown. We conducted analyses by race and ethnicity separately.

We analyzed all groups total (including all races and ethnicities), White versus Black, and Hispanic versus non-Hispanic. We included other and unknown racial and ethnic groups in all groups total analyses and excluded them from subgroup analyses. ITOPs abortion numbers for Hispanic people were abnormally high in 2010 and 2011 (more than twice the number of abortions as other years), which called into question the reliability of ethnicity-specific data for that period. For that reason, we excluded 2010 and 2011 data from our primary analyses of Hispanic and non-Hispanic groups, but conducted sensitivity analyses with 2010 and 2011 included (Appendix A).

Policy Exposure

Policy exposure was operationalized as a three-category variable: before policy implementation (2007–2012), partial policy implementation (2013–2015), and full policy implementation (2016–2017). This division coincides with the legislative process for HB954, which was enacted in 2012, partially implemented from 2013 to 2015, and fully implemented during 2016 and 2017.

Changes during and after Policy Implementation

To examine trends in abortion over time, we first measured changes in the number of abortions and abortion ratios from 2007 to 2017 using linear regression models predicted by year, stratifying by gestational age, race, and ethnicity. To examine how HB954 influenced these trends, we measured changes in number of abortions and abortion ratios using bivariate linear regression models predicted by policy time period: partial policy exposure (2013–2015) and full policy exposure (2016–2017), with pre-policy (2007–2013) as the reference. We then stratified those models by gestational age, race, and ethnicity.

Results

ITOPs and Abortion Ratio Trends for 2007 to 2017

From 2007 to 2017, there were 360,972 abortions in Georgia, with 98% occurring at less than 22 weeks (Table 1). Over time, the total number of abortions for all groups total remained fairly stable, from 33,535 in 2007 to 32,234 in 2017 ($b = -298.88$, $p = .08$). They decreased significantly for White people (12,489 to 7,752; $b = -322.96$, $p = .009$), and were stable for Black (19,575 to

Table 1
Number of Abortions in Georgia from 2007 to 2017 with Linear Regression Trends Stratified by Race, Ethnicity, and Gestational Age

Group	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total	b	*p*	SE
All groups all gestations	33,535	36,094	33,429	34,855	32,937	31,635	30,864	30,191	31,100	34,098	32,234	66332	*–298.88*	*.082*	*152.44*
All groups <13w0d	28,728	30,150	28,211	29,497	27,895	26,844	26,561	25,781	26,767	29,991	28,484	58475	–135.95	.357	139.92
All groups 13w0d–19w6d	3,525	4,403	3,878	4,051	3,684	3,408	3,311	3,385	3,349	3,442	3,201	6643	***–79.60***	***.013***	***25.72***
All groups 20w0d–21w6d	473	645	583	496	510	493	535	542	446	560	542	1102	–2.63	.643	5.48
All groups <22w	32,726	35,198	32,672	34,044	32,089	30,745	30,407	29,708	30,562	33,993	32,227	66220	–218.17	.204	159.23
All groups ≥22w	809	896	757	811	848	890	457	483	538	105	7	112	***–80.71***	***.001***	***16.34***
White all gestations	12,489	10,055	8,652	8,440	7,849	7,958	7,993	7,844	7,780	8,011	7,752	15763	***–322.96***	***.009***	***97.68***
White <13w0d	10,726	8,495	7,409	7,170	6,697	6,789	6,944	6,793	6,776	7,104	6,913	14017	***–245.77***	***.022***	***88.83***
White 13w0d–19w6d	1,218	1,093	868	856	757	760	776	771	744	736	695	1431	***–41.51***	***.001***	***9.07***
White 20w0d–21w6d	180	178	148	154	151	136	145	154	109	144	142	286	***–4.08***	***.016***	***1.38***
White <22w	12,124	9,766	8,425	8,180	7,605	7,685	7,865	7,718	7,629	7,984	7,750	15734	***–291.36***	***.016***	***98.06***
White ≥22w	365	289	227	260	244	273	128	126	151	27	2	29	***–31.59***	***<.001***	***4.28***
Black all gestations	19,575	20,996	19,303	20,384	17,803	17,818	18,157	17,903	18,479	20,864	19,422	40286	–76.12	.539	119.29
Black <13w0d	16,714	17,403	16,147	17,037	14,834	14,988	15,497	15,175	15,732	18,192	17,043	35235	4.50	.969	110.83
Black 13w0d–19w6d	2,183	2,712	2,407	2,624	2,244	2,079	2,080	2,154	2,151	2,257	2,061	4318	*–39.11*	*.059*	*18.08*
Black 20w0d–21w6d	274	383	333	277	269	270	309	303	279	349	316	665	0.04	.992	3.74
Black <22w	19,171	20,498	18,887	19,938	17,347	17,337	17,886	17,632	18,162	20,798	19,420	40218	–34.57	.788	124.80
Black ≥22w	404	498	416	446	456	481	271	271	317	66	2	68	***–41.55***	***.002***	***9.42***
Hispanic all gestations	2,990	3,372	2,495			2,357	2,006	1,330	2,179	2,555	2,521	5076	–88.11	.126	50.81
Hispanic <13w0d	2,548	2,802	2,096			2,016	1,791	1,176	1,907	2,342	2,327	4669	–54.85	.264	45.14
Hispanic 13w0d–19w6d	330	430	321			247	182	119	217	185	168	353	***–23.22***	***.004***	***5.41***
Hispanic 20w0d–21w6d	50	62	33			40	18	16	20	21	26	47	*–3.54*	*.010*	*1.01*
Hispanic <22w	2,928	3,294	2,450			2,303	1,991	1,311	2,144	2,548	2,521	5069	–81.61	.150	50.43
Hispanic ≥22w	62	78	45			54	15	19	35	7	0	7	***–6.50***	***.002***	***1.34***
Non-Hispanic all gestations	26,682	31,352	29,897			26,678	24,952	26,536	28,186	30,757	29,017	59774	–24.04	.919	228.15
Non-Hispanic <13w0d	22,916	26,191	25,309			22,657	21,589	22,640	24,209	26,943	25,527	52470	67.04	.739	193.61
Non-Hispanic 13w0d–19w6d	2,792	3,806	3,390			2,841	2,597	3,006	3,066	3,190	2,974	6164	–30.17	.427	35.75
Non-Hispanic 20w0d–21w6d	350	561	517			405	395	473	417	527	510	1037	3.08	.693	7.49
Non-Hispanic <22w	26,058	30,558	29,216			25,903	24,581	26,119	27,692	30,660	29,011	59671	39.94	.868	231.18
Non-Hispanic ≥22w	624	794	681			775	371	417	494	97	6	103	***–63.98***	***.007***	***16.91***

Abbreviations: d, days; w, weeks.
Statistically significant results ($p < .05$) are bolded and italicized.
Hispanic and non-Hispanic models omit 2010 and 2011.

19,422; b = −76.12, p = .539), Hispanic (2,990 to 2,521; b = −88.11, p = .126), and non-Hispanic groups (26,682 to 29,017; b = −24.04, p = .919). Abortions at 22 weeks or later significantly decreased over time, from 809 to 7 (b = −80.71, p = .001). This finding was consistent across race and ethnicity: White (365–2, b = −31.59; p < .001), Black (404–2; b = −41.55, p = .002), Hispanic (62–0; b = −6.50, b = 0.002), and non-Hispanic (624–6; b = −63.98, p = .007) groups. Notably, abortions among White people decreased significantly for all gestational ages.

Over the same period, the total abortion ratio (Figure 2) also remained stable, from 222.37 abortions per 1,000 live births in 2007 to 249.57 in 2017 (b = 1.20, p = .32) (Table 2). When stratifying by race and ethnicity, the abortion ratio for White people in Georgia decreased from 139.20 to 104.79 (b = −2.4, p = .008), whereas it remained stable for Black (382.71–426.61; b = 2.83, p = .228), Hispanic (122.17–140.70; b = 1.05, p = .64), and non-Hispanic people (215.36–263.80; b = 1.60, p = .50). Over the entire 2007 to 2017 period, we estimated the abortion ratio for Black people (415.52 abortions/1,000 births) was 3.69 times that of White people (112.74 abortions/1,000 births), whereas the abortion ratio for Hispanic people (121.33 abortions/1,000 births) was 0.48 times that of non-Hispanic people (250.27 abortions/1,000 births).

Changes during and after Policy Implementation

Compared with the pre-implementation period, the total number of abortions temporarily decreased during partial implementation between 2013 and 2015 (b = −3029.17, p = .012), but returned to baseline levels during full implementation of the policy in 2016 and 2017 (b = −581.50, p = .607) (Table 3). When stratified by race and ethnicity, the total number of abortions for each group did not significantly differ between baseline and full implementation (b_{White} = −1359.00, p = .271; b_{Black} = 829.83, p = .385; $b_{Hispanic}$ = −265.50, p = .492; $b_{non\text{-}Hispanic}$ = 1234.75, p = .497). When analyzing abortion numbers at different gestational ages, we found significant decreases in abortions at 22 weeks or later, for all groups combined (b = −779.17, p < .001) as well as for White (b = −261.83, p < .001), Black (b = −416.17, p < .001), Hispanic (b = −56.25, p = .002), and non-Hispanic (b = −667.00, p < .001) groups specifically.

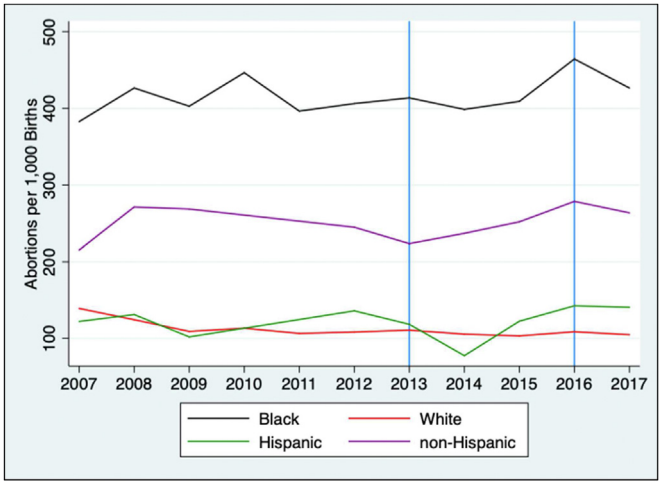

Figure 2. Total abortion ratios (abortions per 1,000 live births) from 2007 to 2017 in Georgia stratified by race and ethnicity.

Overall, the total abortion ratio did not change during partial (b = −7.11, p = .385) or full (b = 12.94, p = .186) policy implementation, but we noted an increasing abortion ratio before 13w0d (b = 20.02, p = .024) and a decreasing abortion ratio at 22 weeks or later (b = −5.60, p < .001) during full policy implementation (Table 4, and Figures 3 and 4). For each group, the abortion ratio at 22 weeks or later decreased during both partial and full policy implementation. Notably, the decrease in abortion ratios at 22 weeks or later was significantly greater for Black people (b = −8.84, 95% confidence interval [95% CI], −10.70 to −6.98) than White people (b = −3.31, 95% CI, −3.95 to −2.67) and marginally greater for non-Hispanic (b = −5.66, 95% CI, −7.17 to −4.60) compared with Hispanic people (b = −3.03, 95% CI, −4.87 to −1.19). Moreover, during full policy implementation, Black people saw an increase in the abortion ratio at less than 22 weeks (b = 44.06, p = .028) that was not observed in the White (b = −6.78, p = .433), Hispanic (b = 21.27, p = .212), or non-Hispanic groups (b = 26.93, p = .172).

Discussion

Differential Policy Effects on Abortion at 22 Weeks or Later by Race and Ethnicity

Our results suggest that HB954 carried differential effects on abortion numbers and ratios depending on race and ethnicity. First, we observed significant decreases in abortion at 22 weeks or later for all groups—with steeper decreases for Black people compared with White people and for non-Hispanic people compared with Hispanic people. This is due, at least in part, to higher baseline abortion ratios for Black compared with White people (7.09 abortions at or after 22 weeks/1,000 live births for Black people vs. 4.07 for White in 2007) and non-Hispanic compared with Hispanic people (5.04 abortions at or after 22 weeks/1,000 live births for non-Hispanic people vs. 2.53 for Hispanic in 2007). By 2017, all abortion ratios at 22 weeks or later had decreased to nearly zero. These findings build on previous research (Hall et al., 2020) that showed overall number of abortions at or after 22 weeks decreased significantly after both partial and full implementation of HB954. Our results also support the hypothesis of Roberts et al. (2015), who anticipated that HB954 would disproportionately affect Black people because they made up the majority of people receiving abortions at or after 20 weeks in Georgia. Notably, it is challenging to interpret our results on ethnic differences in abortion, because the non-Hispanic group contains all races (e.g., White and Black).

The constructs of "race" and "ethnicity" are demographic variables collected by the ITOP system as reported by clinic staff. They therefore might serve as markers for discrimination and inequities inherent in our society and health care system. Owing to racism and ethnocentrism, Black and Latinx individuals are more likely to be unemployed (Department of Labor Women's Bureau, 2020), live in households headed by a single woman (U.S. Census Bureau, 2019), or experience poverty-related barriers to accessing abortion services (Blount, 2015; Mosley et al., 2020; Semega, Fontenot, & Kollar, 2019; Upadhyay et al., 2018). The Turnaway Study, a longitudinal prospective study, assessed 956 women across 21 states from 30 abortion facilities that are located more than 150 miles from another facility that could provide abortions at a later gestational age limit. Women were recruited if they presented for abortion during the first trimester, presented up to 2 weeks before the gestational age limit (based on limits of the clinician, facility, or legal restrictions), or up to 3 weeks after the gestational age limit

Table 2
Abortion Ratios (Abortions per 1,000 Live Births) in Georgia from 2007 to 2017 with Linear Regression Trends Stratified by Race, Ethnicity, and Gestational Age

Group	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total	b	*p*	SE
All groups all gestations	222.37	246.44	236.53	260.76	249.07	243.14	240.17	230.86	236.80	262.41	249.57	243.19	1.20	.320	1.14
All groups <13w0d	190.50	205.85	199.61	220.67	210.94	206.31	206.68	197.14	203.81	230.81	220.54	208.11	1.92	.083	0.98
All groups 13w0d–19w6d	23.37	30.06	27.44	30.31	27.86	26.19	25.76	25.88	25.50	26.49	24.78	26.70	−0.22	.300	0.20
All groups 20w0d–21w6d	3.14	4.40	4.13	3.71	3.86	3.79	4.16	4.14	3.40	4.31	4.20	3.92	0.04	.374	0.04
All groups <22w	217.01	240.32	231.17	254.69	242.66	236.30	236.61	227.17	232.71	261.61	249.52	236.57	1.74	.162	1.14
All groups ≥22w	5.36	6.12	5.36	6.07	6.41	6.84	3.56	3.69	4.10	0.81	0.05	4.45	***−0.54***	***.004***	***0.14***
White all gestations	139.20	124.46	109.09	113.29	106.47	108.31	110.76	105.51	103.27	108.64	104.79	112.74	***−2.40***	***.008***	***0.71***
White <13w0d	119.55	105.15	93.42	96.25	90.84	92.40	96.22	91.37	89.94	96.34	93.45	97.28	***−1.64***	***.037***	***0.67***
White 13w0d–19w6d	13.58	13.53	10.94	11.49	10.27	10.34	10.75	10.37	9.88	9.98	9.39	97.28	***−0.36***	***.001***	***0.07***
White 20w0d–21w6d	2.01	2.20	1.87	2.07	2.05	1.85	2.01	2.07	1.45	1.95	1.92	1.95	−0.02	.197	0.02
White <22w	135.13	120.88	106.23	109.80	103.16	104.60	108.98	103.82	101.26	108.27	104.76	111.06	***−2.03***	***.022***	***0.73***
White ≥22w	4.07	3.58	2.86	3.49	3.31	3.72	1.77	1.69	2.00	0.37	0.03	2.49	***−0.37***	***<.001***	***0.06***
Black all gestations	382.71	426.64	402.84	446.58	396.49	406.29	413.73	398.71	409.20	464.34	426.61	415.52	2.83	.228	2.18
Black <13w0d	326.78	353.63	336.98	373.25	330.36	341.76	353.12	337.96	348.37	404.87	374.36	352.53	*3.90*	*.075*	*1.94*
Black 13w0d–19w6d	42.68	55.11	50.23	57.49	49.98	47.41	47.40	47.97	47.63	50.23	45.27	49.21	−0.33	.441	0.41
Black 20w0d–21w6d	5.36	7.78	6.95	6.07	5.99	6.16	7.04	6.75	6.18	7.77	6.94	6.63	0.72	.344	0.07
Black <22w	374.81	416.52	394.16	436.81	386.33	395.33	407.56	392.68	402.18	462.87	426.57	407.62	3.65	.138	2.24
Black ≥22w	7.90	10.12	8.68	9.77	10.16	10.97	6.18	6.04	7.02	1.47	0.04	7.15	***−0.82***	***.006***	***0.23***
Hispanic all gestations	122.17	131.16	101.96			136.09	118.43	77.40	122.49	142.67	140.70	121.33	1.05	.64	2.14
Hispanic <13w0d	104.11	108.99	85.65			116.40	105.74	68.44	107.20	130.77	129.87	105.75	1.96	.344	1.94
Hispanic 13w0d–19w6d	13.48	16.73	13.12			14.26	10.75	6.93	12.20	10.33	9.38	12.24	***−0.58***	***.031***	***0.21***
Hispanic 20w0d–21w6d	2.04	2.41	1.35			2.31	1.06	0.93	1.12	1.17	1.45	1.59	*−0.10*	*.069*	*0.05*
Hispanic <22w	119.63	128.13	100.12			132.97	117.55	76.30	120.52	142.27	140.70	119.58	1.29	.564	2.13
Hispanic ≥22w	2.53	3.03	1.84			3.12	0.89	1.11	1.97	0.39	0.00	1.75	***−0.24***	***.018***	***0.08***
Non-Hispanic all gestations	215.36	271.47	268.80			245.00	223.70	237.04	252.08	278.73	263.80	250.27	1.60	.497	2.24
Non-Hispanic <13w0d	184.96	226.78	227.55			208.07	193.55	202.24	216.52	244.16	232.07	214.73	2.16	.284	1.86
Non-Hispanic 13w0d–19w6d	22.54	32.96	30.48			26.09	23.28	26.85	27.42	28.91	27.04	27.25	−0.07	.834	0.34
Non-Hispanic 20w0d–21w6d	2.82	4.86	4.65			3.72	3.54	4.23	3.73	4.78	4.64	4.09	0.05	.462	0.07
Non-Hispanic <22w	210.32	264.59	262.67			237.88	220.38	233.32	247.67	277.85	263.75	246.07	2.14	.370	2.23
Non-Hispanic ≥22w	5.04	6.88	6.12			7.12	3.33	3.72	4.42	0.88	0.05	4.20	***−0.54***	***.013***	***0.16***

Abbreviations: d, days; w, weeks.
Statistically significant results ($p < .05$) are bolded and italicized.
Hispanic and non-Hispanic models omit 2010 and 2011.

Table 3
Linear Regression Models of the Number of Abortions by Policy Exposure (Before-Reference, Partial Implementation, and Full Implementation) to Georgia's 22-Week Gestational Age Limit, Stratified by Race, Ethnicity, and Gestational Age

Group	Partial Policy 2013–2015			Full Policy 2016–2017		
	b	*p*	SE	b	*p*	SE
All groups ($n = 11$, F = 5.26, $p = .035$)	***–3029.17***	***.012***	***941.44***	–581.50	.607	1087.08
All groups <13w0d ($n = 11$, F = 5.94, $p = .026$)	***–2184.50***	***.018***	***733.97***	683.33	.443	847.51
All groups 13w0d–19w6d ($n = 11$, F = 3.69, $p = .073$)	–476.50	.053	209.69	–503.33	.071	242.13
All groups 20w0d–21w6d ($n = 11$, F = 0.81 $p = .479$)	–25.67	.557	41.86	17.67	.724	48.33
All groups <22w ($n = 11$, F = 4.70, $p = .045$)	***–2686.67***	***.021***	***933.61***	197.67	.859	1078.04
All groups ≥22w ($n = 11$, F = 170.56 $p < .001$)	***–342.50***	***.001***	***37.48***	***–779.17***	***<.001***	***43.28***
White ($n = 11$, F = 1.28, $p = .329$)	–1368.17	.206	995.04	–1359.00	.271	1148.98
White <13w0d ($n = 11$, F = 0.89, $p = .448$)	–1043.33	.260	859.83	–872.50	.405	992.85
White 13w0d–19w6d ($n = 11$, F = 2.06, $p = .190$)	–161.67	.165	105.76	–209.83	.124	122.12
White 20w0d–21w6d ($n = 11$, F = 1.57, $p = .266$)	–21.83	.129	12.92	–14.83	.349	14.91
White <22w ($n = 11$, F = 1.00, $p = .408$)	–1226.83	.242	970.58	–1097.17	.356	1120.73
White ≥22w ($n = 11$, F = 36.99, $p < .001$)	***–141.33***	***.001***	***27.93***	***–261.83***	***<.001***	***32.35***
Black ($n = 11$, F = 2.03, $p = .194$)	–1133.50	.185	781.41	829.83	.385	902.30
Black <13w0d ($n = 11$, F = 3.41, $p = .085$)	–719.17	.294	640.57	1430.33	.089	739.66
Black 13w0d–19w6d ($n = 11$, F = 1.77, $p = .231$)	–246.50	.130	145.98	–215.83	.236	168.56
Black 20w0d–21w6d ($n = 11$, F = 0.59, $p = .575$)	–4.00	.888	27.48	31.50	.350	31.74
Black <22w ($n = 11$, F = 2.45, $p = .148$)	–969.67	.247	776.26	1246.00	.202	896.34
Black ≥22w ($n = 11$, F = 106.53, $p < .001$)	***–163.83***	***<.001***	***25.06***	***–416.17***	***<.001***	***28.94***
Hispanic ($n = 9$, F = 4.64, $p = .061$)	***–965.17***	***.024***	***320.36***	–265.50	.492	363.26
Hispanic <13w0d ($n = 9$, F = 4.41, $p = .066$)	***–740.83***	***.032***	***265.93***	–31.00	.921	301.54
Hispanic 13w0d–19w6d ($n = 9$, F = 7.45, $p = .023$)	***–159.33***	***.014***	***46.28***	***–155.50***	***.025***	***52.48***
Hispanic 20w0d–21w6d ($n = 9$, F = 9.32, $p = .014$)	***–28.25***	***.007***	***6.95***	***–22.75***	***.028***	***7.88***
Hispanic <22w ($n = 9$, F = 4.55, $p = .063$)	***–928.42***	***.025***	***313.49***	–209.25	.578	355.47
Hispanic ≥22w ($n = 9$, F = 17.44, $p = .003$)	***–36.75***	***.007***	***9.02***	***–56.25***	***.002***	***10.23***
Non-Hispanic ($n = 9$, F = 1.87, $p = .233$)	–2094.00	.214	1507.07	1234.75	.497	1708.86
Non-Hispanic <13w0d ($n = 9$, F = 3.08, $p = .120$)	–1455.58	.254	1153.44	1966.75	.183	1307.87
Non-Hispanic 13w0d–19w6d ($n = 9$, F = 0.57, $p = .169$)	–317.58	.312	287.82	–125.25	.714	326.36
Non-Hispanic 20w0d–21w6d ($n = 9$, F = 0.92, $p = .447$)	–29.92	.611	55.73	60.25	.377	63.19
Non-Hispanic <22w ($n = 9$, F = 2.24 $p = .188$)	–1803.08	.267	1474.81	1901.75	.299	1672.28
Non-Hispanic ≥22w ($n = 9$, F = 58.15 $p < .001$)	***–291.17***	***.002***	***54.98***	***–667.00***	***<.001***	***62.34***

Abbreviations: d, days; w, weeks.
Statistically significant results are bolded and italicized ($p < .05$);
Hispanic and non-Hispanic models omit 2010 and 2011.

and were denied an abortion (Upadhyay et al., 2013). Although the researchers did not note significant racial/ethnic differences, they found that people were more likely to seek an abortion at or after 20 weeks if they were younger, unemployed, single mothers, or having trouble accessing the clinic owing to financial, transportation, or other barriers (Foster & Kimport, 2013). Furthermore, other studies have found that people of color are more likely to access abortion care in the second trimester (Jones and Finer, 2012). Therefore, it is likely that gestational age limits inherently carry greater consequences for people of color.

Our finding that HB954 had stronger effects on abortion at or after 22 weeks among Black people echoes previous research that shows Black individuals can be affected disproportionately by abortion restrictions. Because Black individuals are more likely to rely on Medicaid for health insurance (Boonstra, 2016), they are more affected by the Hyde Amendment, which restricts federal funding for abortion. In North Carolina, researchers found that the absence of Medicaid funding for abortion was associated with 11% fewer abortions for Black individuals compared with 1% fewer abortions for White individuals (Cook et al., 1996). A national study by Coles et al. (2010) similarly found that Black adolescents are four times more likely to have an unintended birth when living in states without Medicaid funding for abortion. More recently, Upadhyay et al. (2018) evaluated an Ohio law that required patients to make four visits to receive a medication abortion; the authors found that Black individuals were less likely to access medication abortion under the law, representing 24% of medication abortion patients before the law, but only 16% after the law.

Shifts in the Timing of Abortion after HB954 by Race and Ethnicity

After full implementation of HB954, the less than 13w0d abortion ratio for Black people increased significantly, whereas those for other groups were stable or marginally declining. The increase for Black people is likely driving the increase we observed for abortion before 13w0d among all groups combined and among non-Hispanic people in our ethnic sensitivity analyses. This finding suggests that even with the new restrictive abortion policy, Black people exhibit continued resilience in overcoming barriers to obtain the health care they need. In contrast, the overall White abortion ratio was stable, and we actually saw marginal (but not statistically significant) decreases in the White abortion ratio at 13w0d to 19w6d (b = –2.00, $p = .08$). In other words, abortions among White people may be decreasing over time, but this is not likely because of Georgia's restrictions on abortion at 22 weeks or more.

This finding points toward national trends, where overall abortion rates are decreasing (Blount, 2015; Boonstra, 2016; Guttmacher Institute et al., 2019; Jones and Jerman, 2017). From 1995 to 2014, the U.S. abortion ratio decreased from 25.9 to 18.8

abortions per 1,000 live births in response to a variety of factors, including improved access to all methods of contraception, better education and use of contraceptives, lower rates of unintended pregnancy, changes in sexual behavior, and possibly greater use of self-managed abortion outside of the traditional health system (Foster, 2017; Guttmacher Institute et al., 2019; Jones & Jerman, 2017; Ralph et al., 2020).

Other studies might explain why earlier gestation White abortion ratios are stable (if not declining) as Black ratios increase. Researchers in North Carolina similarly found that the state's total Black abortion ratio increased slightly from 1980 to 2004 after the implementation of Medicaid funding restrictions for abortion, whereas the White abortion ratio decreased significantly (Alvey et al., 2017). They concluded that "access to contraception may be driving the reduction in abortion rates in some demographic groups, but not others" (Alvey et al., 2017 p. 721). For example, Black women have decreased access to contraceptive services, higher levels of unintended pregnancy, and higher poverty burdens that may result in terminating pregnancies they cannot afford to keep (Davis, 2003; Dehlendorf, Harris, & Weitz, 2013; Finer & Zolna, 2016; Masinter, Feinglass, & Simon, 2013; Ross, 1998, 2006). Reproductive justice leaders have cited the relatively higher abortion rates and ratios among Black women as a reproductive injustice (Luna & Luker, 2013; Ross, 2006; Ross & Solinger, 2017; Silliman, Fried, Ross, & Gutiérrez, 2016). They expand on the framework of reproductive rights, which emphasizes access to contraception and abortion, to also include the human rights to have children if desired, and to raise those children in safe and healthy environments. Although access to abortion and contraception in Georgia are fundamental reproductive and human rights, so is access to social and economic conditions that enable parenting with dignity regardless of race or ethnicity.

Those who face policy restrictions and poverty-related barriers to abortion care sometimes attempt to self-manage their abortions (Aiken et al., 2018, 2020; Gerdts et al., 2016; Grossman et al., 2015; Moseson et al., 2020). An estimated 7% of U.S. women have attempted self-managed abortion in their lifetime (Ralph et al., 2020), with Black and Hispanic women being three times more likely to self-terminate than White women (Grossman et al., 2010, 2018). Qualitative research with U.S. women who have self-managed their abortions emphasizes how hostile policy environments have created logistical and financial barriers to care that push women toward methods that can be less safe—particularly lower income women/people and women of color, who had fewer resources to overcome those barriers (Aiken et al., 2018). Most commonly, people self-manage their abortion using misoprostol (Ralph et al., 2020), one of two medicines used for medication abortion (Guttmacher Institute, 2021). It causes uterine contractions, bleeding, and expulsion of the pregnancy (U.S. Food and Drug Administration, 2015). International studies suggest misoprostol is 96% effective up to 9 weeks' gestation or 71% after 12 weeks' gestation and is safe (Foster et al., 2017; Moseson et al., 2020). Self-managed abortion with misoprostol can be made safer and more effective through online resources and support hotlines that provide information

Table 4
Linear Regression Models of Abortion Ratios (Abortions per 1,000 Live Births) by Policy Exposure (Before-Reference, Partial Implementation, and Full Implementation) to Georgia's 22-Week Gestational Age Limit Stratified by Race, Ethnicity, and Gestational Age

Group	Partial Policy 2013–2015			Full Policy 2016–2017		
	b	*p*	SE	b	*p*	SE
All groups ($n = 11$, F = 2.02, $p = .195$)	−7.11	.385	7.74	12.94	.186	8.94
All groups <13w0d ($n = 11$, F = 4.80, $p = .43$)	−3.10	.632	6.23	***20.02***	***.024***	***7.19***
All groups 13w0d–19w6d ($n = 11$, F = 1.08, $p = .385$)	−1.82	.252	1.48	−1.90	.296	1.70
All groups 20w0d–21w6d ($n = 11$, F = 0.81 $p = .479$)	0.06	.828	0.29	0.42	.242	0.33
All groups <22w ($n = 11$, F = 3.14, $p = .099$)	−4.86	.537	7.53	18.54	.066	8.70
All groups ≥22w ($n = 11$, F = 90.24 $p < .001$)	***−2.24***	***<.001***	***0.37***	***−5.60***	***<.001***	***0.42***
White ($n = 11$, F = 1.34, $p = .314$)	−10.29	.195	7.28	−10.09	.264	8.40
White <13w0d ($n = 11$, F = 0.69, $p = .528$)	−7.09	.292	6.29	−4.71	.535	7.26
White 13w0d–19w6d ($n = 11$, F = 2.56, $p = .138$)	−1.36	.154	0.86	−2.00	.079	1.00
White 20w0d–21w6d ($n = 11$, F = 0.67, $p = .538$)	−0.16	.282	0.14	−0.07	.678	0.16
White <22w ($n = 11$, F = 0.85, $p = .461$)	−8.61	.261	7.12	−6.78	.433	8.23
White ≥22w ($n = 11$, F = 77.61, $p < .001$)	***−1.68***	***<.001***	***0.24***	***−3.31***	***<.001***	***0.28***
Black ($n = 11$, F = 2.52, $p = .141$)	−3.04	.841	14.66	35.22	.071	16.92
Black <13w0d ($n = 11$, F = 6.41, $p = .022$)	2.69	.819	11.38	***45.82***	***.008***	***13.14***
Black 13w0d–19w6d ($n = 11$, F = 0.55, $p = .597$)	−2.82	.390	3.10	−2.73	.467	3.58
Black 20w0d–21w6d ($n = 11$, F = 1.30, $p = .326$)	0.27	.617	0.52	0.97	.146	0.60
Black <22w ($n = 11$, F = 3.87, $p = .067$)	0.15	.992	14.31	***44.06***	***.028***	***16.52***
Black ≥22w ($n = 11$, F = 61.23, $p < .001$)	***−3.19***	***.002***	***0.70***	***−8.84***	***<.001***	***0.81***
Hispanic ($n = 9$, F = 2.39, $p = .173$)	−16.73	.267	13.59	18.84	.270	15.52
Hispanic <13w0d ($n = 9$, F = 3.34, $p = .106$)	−9.99	.437	12.00	26.53	.099	13.60
Hispanic 13w0d–19w6d ($n = 9$, F = 5.77, $p = .040$)	***−4.44***	***.025***	***1.50***	***−4.54***	***.370***	***1.70***
Hispanic 20w0d–21w6d ($n = 9$, F = 7.27, $p = .025$)	***−0.99***	***.010***	***0.27***	−0.72	.057	0.31
Hispanic <22w ($n = 9$, F = 2.62, $p = .152$)	−15.42	.294	13.42	21.27	.212	15.22
Hispanic ≥22w ($n = 9$, F = 14.28, $p = .005$)	***−1.31***	***.019***	***0.41***	***−2.44***	***.002***	***0.47***
Non-Hispanic ($n = 9$, F = 1.60, $p = .278$)	−12.55	.456	17.87	21.10	.282	17.87
Non-Hispanic <13w0d ($n = 9$, F = 2.84, $p = .136$)	−7.74	.552	12.27	26.28	.108	13.91
Non-Hispanic 13w0d–19w6d ($n = 9$, F = 0.36, $p = .709$)	−2.16	.457	2.72	−0.40	.990	3.08
Non-Hispanic 20w0d–21w6d ($n = 9$, F = 1.02, $p = .415$)	−0.18	.744	0.53	0.69	.291	0.60
Non-Hispanic <22w ($n = 9$, F = 2.10 $p = .203$)	−10.01	.535	15.33	26.93	.172	17.38
Non-Hispanic ≥22w ($n = 9$, F = 38.36 $p < .001$)	***−2.46***	***.006***	***0.59***	***−5.82***	***<.001***	***0.67***

Abbreviations: d, days; w, weeks.
Statistically significant results are bolded and italicized ($p < .05$);
Hispanic and non-Hispanic models omit 2010 and 2011.

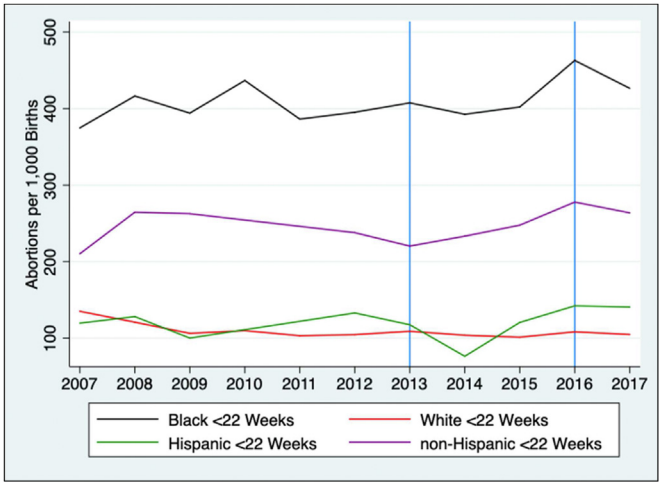

Figure 3. Abortion ratios (abortions per 1,000 live births) at less than 22 weeks of gestation (from last menstrual period) from 2007 to 2017 in Georgia, stratified by race and ethnicity.

and/or medications, although some people still experience stress, find it harder to seek advice from a clinician, and might turn to other less safe termination options (Aiken et al., 2018; Gerdts & Hudaya, 2016). Some forms of self-managed abortion—including ingesting poisons, inserting objects into the uterus, or causing trauma to the abdomen—can be dangerous and increase risk of maternal morbidity and mortality (Moseson et al., 2020).

Abortion restrictions like HB954 can also lead to unintended births (Upadhyay et al., 2013), potentially increasing risk of poor maternal and child health outcomes like delayed prenatal care, substance use, and child maltreatment (Coles et al., 2010; Mosher, Jones, & Abma, 2012). The Turnaway Study demonstrated that abortion-seeking patients "turned away" owing to gestational age limits were more likely to be living in poverty 7 years later (Foster et al., 2018), to have negative mental health outcomes (Biggs, Upadhyay, McCulloch, & Foster, 2017), and to remain in violent relationships (Roberts et al., 2014) compared with counterparts who received an abortion. Our results suggest

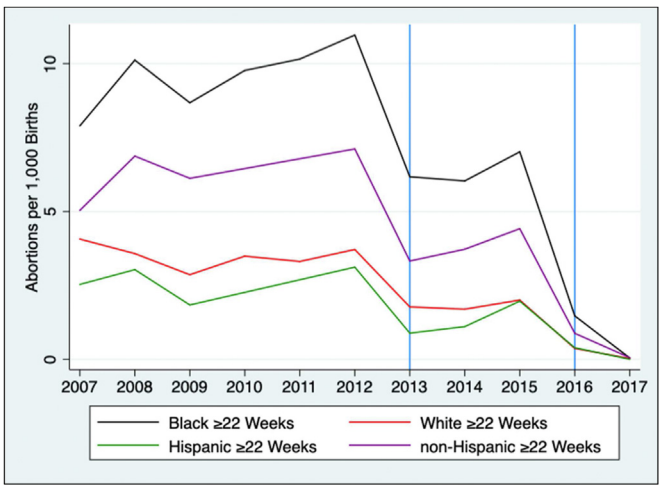

Figure 4. Abortion ratios (abortions per 1,000 live births) at 22 weeks of gestation or more (from last menstrual periods) from 2007 to 2017 (excluding 2010 and 2011) in Georgia, stratified by race and ethnicity.

that, because gestational age limits seem to have stronger effects on abortion at 22 weeks or later among Black people, HB954 has the potential to exacerbate existing racial disparities in poverty (Boonstra, 2016), mental health (Berger & Sarnyai, 2015), and pregnancy-associated intimate partner violence including homicide (Kivisto, Mills, & Elwood, 2021; West, 2004). However, the increase we observed in the Black abortion ratio before 13w0d suggests Black people might be successfully mitigating these potential consequences by accessing abortion at earlier gestational ages.

Implications for Practice and/or Policy

Abortion restrictions like HB954 decrease access to a safe and needed health service without addressing the underlying social conditions that increase the need for abortion. A public health approach to abortion would focus on equitable access to safe abortion care, high-quality contraceptive services, and anti-poverty measures that improve material and social support resources in preparing for and raising children if desired (Bongaarts & Westoff, 2000; Davis, 2003; Dehlendorf et al., 2013; Ross, 1998).

Strengths and Limitations

We analyzed state-level data on the number of abortions as well as abortion ratios, which are more appropriate for studying group differences given underlying differences in population size and fertility. However, the available ITOPs data include people coming to Georgia for abortion, although live birth rates represent only people who gave birth in Georgia. Researchers have previously calculated that 10% of abortions in Georgia are for patients from neighboring states (Alabama, Florida, North Carolina, South Carolina, and Tennessee), and out-of-state patients are more likely to have an abortion after 20 weeks' gestation compared with Georgia residents (Shapiro, Erhardt-Ohren, & Rochat, 2020). Moreover, because ITOPs data are only available by year (not by month) and because HB954 was implemented in phases over time, it is challenging to define our policy exposure categories accurately. For example, HB954 was fully implemented in October 2015. We made the decision to include all of 2015 in our "partial exposure" category, but this might not accurately reflect the reality of October to December in 2015. Second, unlike studies that rely on data from certain clinics, our study used abortion data collected from all facilities providing abortions in Georgia. However, we do not have data on people who might have self-managed their abortions. Third, this study focused on racial and ethnic differences in abortion after implementation of the gestational age limit policy and, therefore, crucially expands on previous evaluations of HB954 (Hall et al., 2020; Roberts et al., 2015) and similar policies. Unfortunately, we could not disaggregate by race and ethnicity at the same time using existing datasets, because DPH is careful to only share de-identified and un-identifiable data. Disaggregating by both race and ethnicity simultaneously when looking at abortions after 20 weeks (of which there are relatively very few) decreases the subsamples to less than 5, which is the cut-off for DPH. Similarly, it is generally unknown how racial and ethnic identity is determined on both ITOP and live birth records, which may result in the misrepresentation of birthing people's identities. One previous study in Georgia found that, rather than through self-report, clinic staff assess race and ethnicity based on physical appearances (Chelko, Rochat, Herold, Carter, & Lavoie, 2001).

However, research has shown that external perceptions of race and ethnicity shape the treatment people receive; thus, although the fact that ITOPS data likely rely on clinic staff's assessment of race and ethnicity is a limitation, it can help to capture the racism and ethnocentrism that people perceived as Black and Hispanic experience. Our decision to remove Hispanic and non-Hispanic data from 2010 and 2011 as outliers could reduce our ability to draw conclusions about ethnic differences in the data. Moving forward, researchers could request and DPH could report combined years of ITOPs data (e.g., 2007–2008, 2009–2010, 2011–2012, etc.) to disaggregate by race and ethnicity without going below the five-patient threshold for maintaining confidentiality. Finally, given the start-and-stop implementation of HB954, it is challenging to specifically define the periods of "partial" and "full" implementation. For example, Figure 4 shows significant decreases in abortion at or after 22 weeks LMP between 2012 and 2013 although the law had not been implemented. It is possible that patients perceived the law to be in effect based on media coverage during that time. Qualitative studies are needed to further explore this notion.

Conclusions

Although Georgia's 22-week restriction was associated with decreased number of abortions and abortion ratios at 22 weeks or later for all racial and ethnic groups, it was associated with increased abortion ratios before 13w0d for Black people. This suggests that Black people are seeking abortions at earlier gestational ages in response to the law. The decrease in relatively uncommon abortions at 22 weeks or later (<2%), however, still reflects decreased access to a safe and vital reproductive health service for all racial and ethnic groups. We also found notable racial differences between Black and White people. For one, the associated decrease in abortions at 22 weeks or later was steeper for Black people compared with White people, suggesting that the restrictive abortion policy had stronger effects on Black communities. And although the policy was associated with stable and marginally decreasing White abortion ratios at earlier gestational ages, it was associated with increased Black abortion ratios at less than 22 weeks. This finding could reflect ongoing racial reproductive inequities, including Black people's poorer access to contraception and the socioeconomic resources needed for childrearing.

Supplementary Data

Supplementary data related to this article can be found at https://doi.org/10.1016/j.whi.2021.09.005.

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