American Journal of
Preventive Medicine

RESEARCH ARTICLE

Women's Reproductive Rights Policies and Adverse Birth Outcomes: A State-Level Analysis to Assess the Role of Race and Nativity Status

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Introduction: Reproductive rights policies can potentially support or inhibit individuals' abilities to attain the highest standard of reproductive and sexual health; however, research is limited on how broader social policies may differentially impact women of color and immigrants in the U.S. This study examines the associations among state-level reproductive rights policies, race, and nativity status with preterm birth and low birth weight in the U.S.

Methods: This was a retrospective, cross-sectional analysis of all births occurring within all the 50 states and the District of Columbia using vital statistics birth record data in 2016 (N=3,945,875). Modified log-Poisson regression models with generalized estimating equations were fitted to estimate the RR of preterm birth and low birth weight associated with tertiles of the reproductive rights policies index. Analyses were conducted between 2019 and 2020.

Results: Compared with women in states with the most restrictive reproductive rights policies, women living in the least restrictive states had a 7% lower low birth weight risk (adjusted RR=0.93, 95% CI=0.88, 0.99). In particular, low birth weight risk was 8% lower among Black women living in the least restrictive states than among their counterparts living in the most restrictive states (adjusted RR=0.92, 95% CI=0.86, 0.99). In addition, low birth weight risk was 6% lower among U.S.-born Black women living in the least restrictive states than among those living in the most restrictive states, but this was marginally significant (adjusted RR=0.94, 95% CI=0.89, 1.00). No other significant associations were found for race−nativity-stratified models.

Conclusions: Women living in states with fewer restrictions related to reproductive rights have lower rates of low birth weight, especially for Black women.

Am J Prev Med 2020;000(000):1−9.

INTRODUCTION

In 1994, the International Conference on Population and Development recognized the fundamental role of reproductive rights as a core component to health and human development.[1] Reproductive rights policies, in particular, can support or inhibit individuals' ability to decide freely whether and when to have children. In the U.S., restrictive reproductive rights are associated with higher infant mortality rates[2] and increased odds of preterm birth (PTB) and low birth weight (LBW).[3]

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0749-3797/$36.00
https://doi.org/10.1016/j.amepre.2020.07.025

Despite the link with adverse health outcomes, reproductive rights policies remain highly debated. In recent years, the number and type of state-level policies that restrict reproductive rights have fluctuated substantially.[4] Although national-level policies (i.e., Roe v. Wade, Affordable Care Act) provide a broad legal framework for reproductive policies, states have substantial discretion in creating policies that may create a more or less restrictive environment generally or for specific populations or services (e.g., provision of Medicaid funding of contraception and abortion services and requiring parental consent for minor to obtain an abortion).

There are multiple complex pathways potentially linking reproductive policies to birth outcomes, including through proximal factors (i.e., reductions in unintended pregnancies resulting in birth) and more distal factors (i.e., as a marker of women's status). First, policies impact the ability—especially for disadvantaged groups (e.g., immigrant and low-income women)—to access needed reproductive health services, causing delays in obtaining care or not being able to obtain needed services at all.[5] Policies such as comprehensive sex education, contraceptive coverage mandates, and Medicaid family planning expansion programs increase effective contraceptive use.[6,7] Challenges in accessing contraception result in higher levels of unintended pregnancies,[8–10] which are associated with LBW[11,12] and PTB.[13,14] Earlier studies using data from before the year 2000 assessing Medicaid funding restrictions and parental involvement laws find reductions in the number of abortions, with no or negative effects on birth.[15–17] More recent studies, however, suggest that restrictive policies result in an increase in birth rates and a decrease in abortion rates.[9,18] For example, a study using 2000–2005 data found that Medicaid funding restrictions were associated with higher rates of unwanted birth among Black teens especially.[9] Alternatively, policies that improved access to family planning services were associated with a lower risk of PTB.[19] Potential mechanisms linking unintended pregnancies and adverse birth outcomes include risk behaviors before pregnancy (i.e., smoking), more stress, less social support, and lower SES.[20]

Restrictive reproductive policies also potentially have more distal impacts on adverse birth outcomes when viewed as a marker of women's status. Increased women's status (e.g., civic participation, economic opportunity, and reproductive autonomy) has been shown to lower the incidence of adult mortality and morbidity rates,[21] infant mortality,[2] and teenage birth rate.[2] A substantial literature links gender equity to improved population health outcomes.[22,23] Women's empowerment, in particular, may improve birth outcomes by preventing early marriage and promoting family planning, improving women's nutritional status, reducing domestic violence and stressors related to psychological health, and increasing utilization of healthcare during pregnancy and delivery.[24] Women's status may indirectly influence adverse birth outcomes through stress-related pathways. Some research finds that lower women's status is associated with mood and anxiety disorders[25] and depressive symptoms,[26] which are known risk factors for PTB.[27]

The impact of reproductive policies on women of color, who may experience lower status across the life course relative to men and to their White peers, has not been adequately studied.[28] In the U.S., unacceptably high levels of racial and ethnic disparities in infant mortality and adverse birth outcomes exist. Black women have the highest rates of PTB, LBW, and infant mortality at 11.4 deaths per 1,000 live births, more than twice the rate of White, non-Hispanics (4.9 deaths per 1,000 live births). Although Hispanic/Latina and Asians and Pacific Islanders have rates of PTB and LBW that are similar to those of White non-Hispanics,[29,30] examination of birth outcomes solely by broad racial/ethnic groupings in the U.S. masks important differences in adverse birth outcomes within racial/ethnic groups. Despite lower SES, foreign-born women have better perinatal outcomes than U.S.-born women of the same race/ethnicity.[31] This is widely known as the epidemiologic paradox.[32] Debate continues, however, surrounding the generalizability of this phenomenon including mixed results across heterogeneous groups of Asian ethnicities[33] and a lack of assessment of nativity status within racial/ethnic groups.[34] From 2007 to 2016, the prevalence of PTB increased by 2% among foreign-born women and declined by 11.5% among U.S.-born women,[35] with similar trends for LBW.[36]

Studies have attempted to disentangle the causes of disparities in adverse birth outcomes, with most focusing on individual-level factors.[37,38] However, advancements in the field highlight the importance of the historical and social context in explaining these disparities.[38] Specifically, structural racism or the ways in which historically and culturally linked social forces reinforce racial inequities through discriminatory practices and unequal distribution of resources, such as wealth and housing, may be an important factor in producing reproductive disadvantage.[39] Reproductive disadvantage, in turn, is the result of structural racism through the stress-induced physiologic pathways linking racism and discrimination to poor health outcomes.[38] Examples of structural racism include social segregation, exclusionary immigration policies, and intergenerational trauma, all of which negatively impact health outcomes.[40] Reproductive rights policies specifically have differentially discriminated

against Black women and communities of color, including practices of involuntary and nonconsensual sterilization of non-White women, degrading notions of Black motherhood, and present-day targeting of contraceptive technologies to Black women.[41–43] This has resulted in infringements to reproductive autonomy and high levels of mistrust of the healthcare system.[44] Studies find that increased exposure to structural racism results in higher levels of infant mortality rates[45] and fetal growth restriction.[46] Given the recent federal and state changes in reproductive rights policies and increasing anti-immigrant sentiments in the U.S., women of color and immigrant women may be differentially impacted by restrictive policies.

This study examines how state-level differences in measures of reproductive rights policies collectively predict the risk of PTB and LBW and how these associations may vary by race/ethnicity and nativity status. The study examines policy data from 2015. Between 2014 and 2015, the greatest increase in the number of state-level reproductive restrictions was enacted since 2011.[47] This study tests a set of overall policies rather than assessing singular policies, given that children's health outcomes are more likely to reflect the cumulative experience of policies in a place at a given time,[48] especially among disadvantaged groups.[49,50] This study hypothesizes that women living in states with less restrictive reproductive rights have lower rates of adverse birth outcomes than women living in states with higher levels of restrictive reproductive rights. It is expected that race and nativity modify this relationship, such that Black women as well as foreign-born women living in less restrictive states have protective effects compared with Black and foreign-born women living in more restrictive states.

METHODS

Study Sample

This study was a retrospective, cross-sectional analysis of all births occurring within all the 50 states and the District of Columbia in 2016 (N=3,945,875). Vital statistics birth record data were obtained from the National Center for Health Statistics. The primary outcomes of interest were PTB (i.e., birth before 37 completed weeks of gestation) and LBW (i.e., a birth weight of <2,500 g regardless of gestational age).

Measures

The reproductive rights composite index is based on 6 indicators, with a score assigned to each indicator (i.e., 0–1) on the basis of the Institute for Women's Policy Research methodology.[51] This study constructed the score using data routinely collected by the Guttmacher Institute. All data were recorded in 2015[52]; the exception is the percentage of women living in counties with abortion providers, which was recorded in 2014. This index describes the reproductive rights policy climate for each state in the year before when women gave birth (i.e., preconception year).[51] The indicators include (1) mandatory parental consent for minors seeking an abortion, (2) mandatory waiting periods for abortion services, (3) restrictions on public funding for abortion, (4) the percentage of women living in counties with abortion providers, (5) expanded eligibility for Medicaid family planning services, and (6) mandatory sex education in schools. States received a 0 if a restrictive policy existed (i.e., mandatory parental consent) and 1 if a restrictive policy did not exist (i.e., consent was not required). Alternatively, states received a 1 if promoting policies existed (i.e., mandatory sex education required) and 0 if promoting policies did not exist (i.e., did not require mandatory sex education). Per the Institute for Women's Policy Research guidelines, weights were based on the degree of restrictive reproductive rights: parental consent and mandatory waiting period indicators were weighted 0.5, and other indicators were weighted 1.0. Weighted indicators were then summed to provide a total composite index. The index was then divided into tertiles, categorizing the states as having the least restrictive, moderately restrictive, or most restrictive reproductive rights.

Adjusted models controlled for individual- and state-level covariates. Birth records included data on maternal race (White, non-Hispanic; Black, non-Hispanic; Native American Indian, non-Hispanic; Asian, non-Hispanic; Native Hawaiian and Pacific Islanders, non-Hispanic more than 1 race; and Hispanic), nativity status (foreign born versus U.S. born), age, education, smoked at any stage during pregnancy (yes/no), and insurance type (public [Medicaid], private, and self-pay/other). In the remaining part of this paper, *Black, non-Hispanic* is referred to as Black and *White, non-Hispanic* as White. State-level variables were obtained from the American Community Survey of the U.S. Census Bureau and Centers for Medicare and Medicaid Services and included state-level unemployment rate in 2015, percentage foreign-born population, percentage Republican voters in 2012, public expenditure on health in 2015 (in 1,000s), and state Medicaid expansion status. In addition, the study controlled for state-level immigration policies in 2015, including the provision of children's health insurance regardless of legal status and whether a state fully collaborates with federal immigration authorities.[53,54] The study also controlled for a measure of women's status by including the 2015 Poverty and Opportunity Index provided by the Institute for Women's Policy Research, which combines 4 components of women's economic security, such as business ownership and poverty rate.[51] This study used deidentified data and was exempt from the ethics review process.

Statistical Analysis

Descriptive analyses were performed to compare the characteristics of women, birth outcomes, and states across tertiles of the reproductive rights composite index. Modified log-Poisson regression models with generalized estimating equations estimated the RR of PTB and LBW among women in states where rights were less restrictive (middle and high tertiles of the composite index) compared with women in states where rights were most restrictive with clustering by state. Each of the fitted models included the individual- and state-level covariates. Effect modification was identified by first fitting fully adjusted models with interaction

terms between race/ethnicity and nativity status. Nativity-stratified models assessed the potential effect of modification of race/nativity on the association between reproductive rights policies and adverse birth outcomes. The results from stratified models are only presented if interaction terms were significant or marginally significant ($p \leq 0.1$). Crude percentages of LBW and PTB by race and nativity status are included in Appendix Table 1 (available online). All statistical analyses were performed using SAS, version 9.4. Analyses were conducted between 2019 and 2020.

RESULTS

The characteristics of birth outcomes and individual- and state-level covariates across tertiles of the reproductive rights composite index are summarized in Table 1. Across states, the reproductive rights index ranged from 0.23 to 4.70; cut points for tertiles were 1.37 and 3.08. The cluster of states with the least restrictive reproductive rights policies had the lowest rates of PTB (8.9%) and LBW (7.4%) compared with the most and moderately restrictive states (Table 1).

Women living in states with the least restrictive reproductive rights policies had a 7% lower risk of LBW (adjusted RR [ARR]=0.93, 95% CI=0.88, 0.99) than women in the most restrictive states, after adjusting for individual- and state-level characteristics (Table 2). PTB risk did not significantly differ between the least and the most restrictive states (ARR=0.97, 95% CI=0.90, 1.05).

Fully adjusted interaction models by race/ethnicity showed statistically significant differences between Black women and all other women ($p<0.01$). Results from race-stratified models showed that Black women living in the states with the least restrictive reproductive rights policies had an 8% lower risk of LBW than Black women in the most restrictive states (ARR=0.92, 95% CI=0.86, 0.99) (Table 3). Fully adjusted interaction models by nativity showed that there were marginal differences between Black U.S.-born and foreign-born women ($p=0.10$). In Black nativity–stratified models, U.S.-born Black women living in the least restrictive states had a 6% lower LBW risk than U.S.-born Black women in the most restrictive states (ARR=0.94, 95% CI=0.89, 1.00) (Table 3). No other significant associations were found for race—nativity-stratified models.

DISCUSSION

Despite the increasing restrictions on reproductive rights in recent years, there are remarkably few empirical studies assessing the association between state-level restrictive reproductive policies and adverse birth outcomes by nativity status and race/ethnicity. This study aligns with other research that has found that women living in less restrictive versus those living in more restrictive states have better birth outcomes.[2,3] Moreover, this study found that less restrictive policy environments were particularly protective for Black women, with evidence that this may be especially true for U.S.-born Black women.

These findings provide evidence for important policy levers that could be implemented to improve women's reproductive health generally, with particular benefits for U.S.-born Black women, such as increasing abortion access and mandatory sex education in schools. The U.S. has a long history of oppressive reproductive policies and ideologies that results in the devaluation of certain lives, mainly racial/ethnic minorities. Past examples include the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 and the racist stereotypes of Black mothers as *welfare queens* to control reproduction[55]; the eugenics movement; and the country's history of involuntary and nonconsensual sterilization, especially among immigrant, Black, and incarcerated women.[56] Moreover, new contraceptive technologies have been targeted to Black women,[41] and several states have introduced legislation to restrict sex- and race-selective abortion policies, which are devoid of scientific justification and only serve to propagate stereotypes targeting Asian, Latina, and Black women and to restrict reproductive rights.[57]

There were no significant associations for foreign-born women. This suggests that other factors beyond nativity status may explain the association between reproductive rights and birth outcomes, such as documentation status, length of time in the U.S., social support networks, and broader policy climates. Undocumented women may be systematically excluded from public benefits altogether, whereas those living in mixed-status families may experience spillover/chilling effects owing to social proximity with targeted individuals.[5] Moreover, recent immigrants are more likely to experience a health advantage in regard to birth outcomes,[31] whereas others have found that broader restrictive immigration policies increase adverse birth outcomes among Latinas.[58] Corroborating previous literature, this study also found that the extent to which states collaborate with federal immigration authorities was associated with higher rates of LBW.

When considered jointly, both race/ethnicity and nativity played a role in shaping the risk for adverse birth outcomes associated with the state's reproductive rights climate. That is, the findings showed significant associations between LBW and states' reproductive rights climate among U.S.-born but not among foreign-born Black women. This finding is in line with the growing literature on the context-dependent nature of race as a determinant of population health.[40,45,46,59] It may be that U.S.-born Black women's reproductive health is

Table 1. Characteristics of Births by Tertile of State-Level Reproductive Rights Index

Characteristics	Most restrictive policies (20 states) (*n*=1,449,023)	Moderately restrictive policies (15 states) (*n*=1,199,047)	Least restrictive policies (16 states) (*n*=1,297,805)
States	AI, AR, CO, ID, IN, KS, KY, LA, MO, NE, ND, OK, PA, SD, TN, TX, UT, VA, WI, WY	AK, AZ, DE, FL, GA, IL, ME, MA, MI, MS, NH, NC, OH, SC, WV	CA, CT, DC, HI, IA, MD, MN, MT, NV, NJ, NM, NY, OR, RI, VT, WA
PTB, %	10.2	10.3	8.9
LBW, %	8.4	8.7	7.4
Maternal race/ethnicity, %			
Non-Hispanic Asian	3.9	4.2	11.6
Black, non-Hispanic	13.6	19.9	9.8
Hispanic	21.5	17.5	31.4
White, non-Hispanic	58.0	55.7	43.5
More than 1 race/Other	3.0	2.7	3.7
Maternal nativity, %			
U.S. born	82.9	80.9	68.2
Foreign born	17.1	19.1	31.8
Maternal age, years, %			
<19	6.3	5.6	4.1
20–24	22.8	21.2	16.9
25–29	30.3	29.5	27.5
30–34	26.4	27.6	30.6
35–39	11.8	13.2	16.8
40–45	2.3	2.7	3.8
≥45	0.2	0.2	0.3
Maternal education, %			
Less than high school	14.4	13.0	13.9
High school graduate or GED	26.2	25.9	23.2
Some college, Associate's, or BA degree	49.2	49.6	48.7
Graduate degree or higher	10.1	11.5	14.2
Insurance, %			
Public	42.0	44.1	41.9
Private	49.1	48.3	50.73
Self-pay/other	8.9	7.6	7.4
Smoking during pregnancy, %	8.7	8.3	4.5
Percentage foreign born, M (SD)	9.1 (5.2)	10.9 (5.8)	20.3 (7.2)
Percentage Republican voters, M (SD)	55.9 (6.7)	48.3 (5.2)	38.3 (4.8)
Percentage unemployed, M (SD)	4.0 (0.5)	4.9 (0.4)	4.8 (0.7)
Medicaid expanded, *n* (%)	5.0 (20.0)	7.0 (46.7)	16.0 (100.0)
Children's health insurance regardless of immigration status, *n* (%)	0.0 (0.0)	2.0 (13.3)	4.0 (25.0)
States collaborating with federal immigration authorities, *n* (%)	1.0 (5.0)	0.0 (0.0)	3.0 (18.8)
Public expenditure on health, M (SD)	7,631.0 (799.3)	8,095.6 (1,096.4)	8,346.9 (984.3)
Gender poverty and opportunity index, M (SD)	6.84 (0.3)	6.92 (0.3)	7.18 (0.3)

LBW, low birth weight; M, mean; PTB, preterm birth.

shaped by the accumulation of insults to health accrued over their lifetime (and even over generations before them) living within a systematically racist society. Foreign-born women, on the other hand, may have had less time exposed to the historical and contemporary features of structural racism that restrict access to health-promoting resources and opportunities among people of color in the U.S. It should be noted, however, that fully adjusted interaction models and stratified models showed marginal significance, and therefore, these

Table 2. Associations Between PTB and LBW and State-Level Reproductive Rights Index Tertiles, Total Sample

Variable	PTB (*n*=3,699,229) ARR (95% CI)	LBW (*n*=3,697,728) ARR (95% CI)
Reproductive rights index tertile		
Most restrictive	ref	ref
Moderately restrictive	0.99 (0.94, 1.04)	0.99 (0.95, 1.02)
Least restrictive	0.97 (0.90, 1.05)	**0.93*** (0.88, 0.99)
Maternal race/ethnicity		
Asian, non-Hispanic	ref	ref
Black, non-Hispanic	**1.19**** (1.15, 1.23)	**1.56**** (1.49, 1.64)
Hispanic	**1.52**** (1.49, 1.55)	**1.95**** (1.92, 1.99)
White, non-Hispanic	**1.15**** (1.12, 1.20)	**1.16**** (1.12, 1.19)
More than 1 race/Other	**1.17**** (1.11, 1.23)	**1.25**** (1.20, 1.30)
Maternal nativity		
U.S. born	ref	Ref
Foreign born	**0.80**** (0.77, 0.84)	**0.81**** (0.78, 0.85)
Maternal age, years		
<19	ref	ref
20–24	**0.98*** (0.96, 1.00)	**0.91**** (0.89, 0.93)
25–29	**1.04**** (1.01, 1.07)	**0.91**** (0.88, 0.93)
30–34	**1.17**** (1.14, 1.21)	0.99 (0.96, 1.01)
35–39	**1.42**** (1.37, 1.47)	**1.17**** (1.14, 1.20)
40–45	**1.76**** (1.68, 1.84)	**1.45**** (1.39, 1.51)
≥45	**2.99**** (2.75, 3.25)	**2.56**** (2.36, 2.77)
Maternal education		
Graduate degree or higher	ref	Ref
Less than high school	**1.25**** (1.22, 1.28)	**1.20**** (1.17, 1.23)
High school graduate or GED	**1.18**** (1.16, 1.20)	**1.14**** (1.11, 1.17)
Some college, Associate's, or BA degree	**1.08**** (1.07, 1.10)	**1.04**** (1.02, 1.05)
Insurance		
Private	ref	ref
Public	**1.08**** (1.05, 1.10)	**1.10**** (1.08, 1.13)
Self-pay/other	0.97 (0.93, 1.00)	0.98 (0.94, 1.03)
Smoking during pregnancy		
No	ref	ref
Yes	**1.33**** (1.30, 1.37)	**1.73**** (1.69, 1.77)
Medicaid expansion status		
Yes	ref	ref
No	1.03 (0.99, 1.08)	1.01 (0.98, 1.05)
Children's health insurance regardless of immigration status		
Yes	ref	ref
No	1.03 (0.96, 1.11)	1.05 (0.99, 1.11)
State collaboration with federal immigration authorities		
No	ref	ref
Yes	1.00 (0.93, 1.07)	**1.20**** (1.09, 1.31)
% foreign-born	0.82 (0.59, 1.13)	1.11 (0.85, 1.44)
% Republican voters	1.42 (0.90, 2.25)	1.34 (0.81, 2.23)
% unemployed	**1.49*** (1.10, 2.05)	**1.54*** (1.12, 2.12)
Public expenditure on health	0.89 (0.69, 1.10)	0.99 (0.59, 1.66)
Gender poverty and opportunity index	0.96 (0.90, 1.03)	0.97 (0.91, 1.04)

Note: Boldface indicates statistical significance (*p<0.05; **p<0.01).
ARR, adjusted RR; LBW, low birth weight; PTB, preterm birth.

Table 3. Associations Between PTB and LBW and State-Level Reproductive Rights Index Tertiles Among Black Women, Total and by Nativity Status

Variable	PTB ARR (95% CI)	LBW ARR (95% CI)
Non-Hispanic Black total population (*n*=517,167)		
Most restrictive	ref	ref
Moderately restrictive	0.99 (0.93, 1.05)	0.99 (0.95, 1.04)
Least restrictive	0.95 (0.85, 1.05)	0.92* (0.86, 0.99)
U.S.-born Black (*n*=430,508)		
Most restrictive	ref	ref
Moderately restrictive	1.00 (0.94, 1.06)	1.00 (0.96, 1.04)
Least restrictive	0.97 (0.87, 1.07)	0.94* (0.89, 1.00)
Foreign-born Black (*n*=86,659)		
Most restrictive	ref	ref
Moderately restrictive	1.00 (0.94, 1.06)	1.06 (0.96, 1.17)
Least restrictive	0.97 (0.87, 1.07)	0.96 (0.83, 1.12)

Note: Boldface indicates statistical significance (*$p<0.05$)
Models stratified by race/ethnicity were adjusted for maternal age, nativity status, education level, insurance status, smoking during pregnancy, state-level percentage foreign born, state-level percentage Republicans, state-level percentage unemployment, Medicaid expansion status, children's health insurance regardless of legal status, whether the state fully collaborates with federal immigration authorities, public expenditure on health, and state gender poverty and opportunity score.
ARR, adjusted RR; LBW, low birth weight; PTB, preterm birth.

results may be due to chance. However, these significant findings persisted in the models run with different combinations of covariates (i.e., state-level poverty instead of poverty and opportunity index) for U.S.-born Black women. Future studies should explore this finding further, including qualitative studies to further examine the lived experiences of Black women.

Limitations

There are a number of limitations to highlight as well as directions for future research. First, this study uses cross-sectional data and does not allow assessment of the implementation of policies and the subsequent impact on health outcomes. Future studies should consider how policies change across time, using specific dates that lawmakers introduce and pass bills, given that the introduction of new or changing policies may lead to confusion and fear.[60] Second, although this study uses an existing measure of reproductive rights, it is limited to the focus on family planning and abortion. Future work is warranted on developing measures that are reflective of the broader political climate in regard to the reproductive rights and experiences of different populations (i.e., sexual/gender minorities and immigrants) as well as measures that use a life-course perspective,[61] especially given the interest in improving birth outcomes. Measures such as paid family leave, employment accommodations for pregnancy, and other indicators that encapsulate women's reproductive trajectory across her life course may be more robust for different populations. Third, the study includes a number of state- and individual-level characteristics to control for differences that might explain the observed associations, but the authors cannot rule out the possibility of unmeasured confounding or the possibility of findings being as a result of chance given the large number of comparisons. In addition, the authors recognize that broad race categories are limited. For example, Southeast Asians and Pacific Islanders typically report higher levels of adverse birth outcomes and maternal morbidity than those from East Asia.[62] This study is also unable to capture documentation status or length of time in the U.S. Finally, it should be noted that there were significant findings for LBW but not PTB. Future studies may assess whether there are different mechanisms at play across these 2 outcomes given how closely related they are.

CONCLUSIONS

Reproductive rights policies play a critical role in advancing maternal and child health outcomes. Future studies should assess specific evidence-based policies, particularly highlighting women's lived experiences of policy exclusion or inclusion, and the effects on women and newborn health.

ACKNOWLEDGMENTS

The authors thank Amanda Landrian for her assistance in compiling background policy data.

Contents of this work are solely the responsibility of the authors and do not necessarily represent the official position of NIH. The funder had no involvement in the study design, analysis or interpretation of data, writing of the report, or the decision to submit the article for publication.

This work was supported in part by the Eunice Kennedy Shriver National Institute of Child Health and Human Development Grants Numbers R01HD092653 and R01HD096070.

No financial disclosures were reported by the authors of this paper.

SUPPLEMENTAL MATERIAL

Supplemental materials associated with this article can be found in the online version at https://doi.org/10.1016/j.amepre.2020.07.025.

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