CISA Student Showcase

Restrictive Maternal Health Policies Negatively Affect Women's Health

MS in Integrative Social Science | College of Int...
cisa.asu.edu

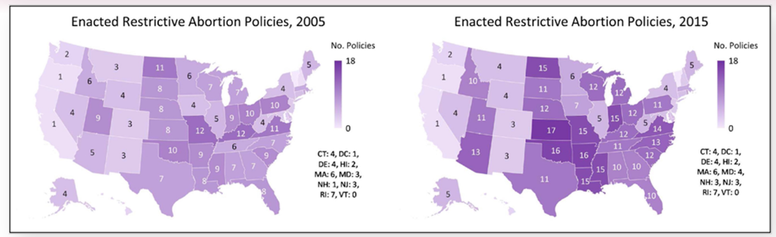
Introduction and Objectives

- American history showcases that maternal health choices are often not woman friendly. Public policy and opinions tend to get in the way of medical science, leading to maternal health crises that many women face even today. With the rise of the pro-life movements, I thought it would be interesting to delve into if these abortionn policies may help women
- Does restrictive aboriton access to maternal health policies help women's health? My expectation among these policies will showcase a divide between states that show restrictive policies make it difficult for women to receive appropriate maternal health.

Methods

Literature Review

In order to understand how restrictive abortion access in maternal health policies affect women, we will go over various pieces of literature of studies.



Conclusion(s)

- States with restrictive abortion access show they do not help with maternal health.
- These policies affect women of color and women with low educational levels negatively.
- These policies seem to affect women's health that extend beyond personal choices.
- Restrictive maternal health policies, especially aboriton, are more likely to affect women's maternal health more so if they are women of color and have achieved lower educational levels.

Results

State Policy

Incomplete reporting or pregnancies shows that The United States maternal health resources are in need of being bolstered. (Desai, Sheila, et al.2021)

States with restivive abortion access experienced more maternal morality deaths by 7%. (Vilda, Dovile, et al., 2021)

Race and Education

States with restrictive abortions policies showcased women of color experiences higher chances of adverse maternal health affects, with a focus on black women. See Table 3. (Red, Sara K, et al. 2021)

Non-hispanic white women had less adverse maternal mortality rates compared to non-hispanic black and hispanic women. See Table 4. (Vilda, Dovile, et al. 2021).

Women who had less than a college degree were more likely to experience adverse maternal health effects.See Table 1. (Red, Sara K, et al. 2022)

TABLE 1— Total Maternal Mortality (TMM), Maternal Mortality (MM), and Late Maternal Mortality (LMM; 2015–2018) and State-Level Covariates (2015) by Tertile of State Abortion Policy Composite Index: United States

	All States (n = 51), Mean ±SD or No. (%)	Low (n = 15), Mean ±SD or No. (%)	Moderate (n = 17), Mean ±SD or No. (%)	High (n = 19), Mean ±SD or No. (%)
TMM per 100 000 live births	24.62 ±8.89	20.79 ±5.25	22.04 ±7.60	29.98 ±9.90
MM per 100 000 live births	17.78 ±7.13	14.83 ±3.89	15.81 ±6.10	21.73 ±8.21
LMM per 100 000 live births	7.02 ±2.86	6.32 ±2.34	6.23 ±2.73	8.25 ±3.03
Abortion policy composite index, 2015	3.75 ±2.46	0.73 ±0.65	3.41 ±0.91	6.42 ±0.71
Poverty (% of state population with income below federal poverty level[a])	14.85 ±3.17	13.81 ±3.38	14.29 ±2.78	16.16 ±3.02
Unemployment (% of state civilian population aged ≥ 16 y)	7.63 ±1.72	7.91 ±1.49	7.67 ±1.54	7.36 ±2.042
College graduates (% of state population aged ≥ 25 y)	28.66 ±5.87	33.36 ±6.19	27.47 ±5.33	26.01 ±3.7
Non-Hispanic White (% of state population)	75.99 ±13.63	71.13 ±19.99	80.45 ±8.30	75.84 ±10.26
Residence in urban county (% of state population)	74.11 ±14.89	77.97 ±19.92	76.22 ±13.58	69.17 ±10.02
Foreign-born population (% of state population)	9.25 ±6.12	13.10 ±7.35	8.95 ±5.71	6.47 ±3.52
Medicaid expenditure per capita (2011 US $)	3226 ±1170	3961 ±1412	3371 ±933	2518 ±691
Births to women aged ≥ 35 y, %	15.96 ±4.17	19.69 ±3.91	15.65 ±3.53	13.18 ±2.26
Births covered by Medicaid, %	40.64 ±9.06	38.75 ±8.44	41.09 ±7.50	41.51 ±11.07
Medicaid expansion status				
Yes	30 (58.81)	14 (93.33)	11 (64.71)	5 (26.29)
No	21 (41.19)	1 (6.67)	6 (35.29)	14 (73.71)

Note. All estimates for MM and LMM exclude data from California.

[a]Federal poverty level is according to the US Census Bureau's American Community Survey.

TABLE 2— States and Maternal Death by Tertile of State Abortion Policy Composite Index: United States, 2015–2018

Abortion Policy Index	No. of States	States	TMM (n = 3785), No. (%)	MM (n = 2524), No. (%)	LMM (n = 962), No. (%)
Low	15	CA, CT, DC, HI, IL, MD, ME, MT, NH, NJ, NM, NY, OR, VT, WA	1004 (26.53)	499 (19.77)	206 (21.41)
Moderate	17	AK, AZ, CO, DE, FL, IA, KY, MA, MN, NV, OH, PA, RI, TN, WI, WV, WY	999 (26.39)	714 (28.29)	285 (29.63)
High	19	AL, AR, GA, ID, IN, KS, LA, MI, MO, MS, NC, ND, NE, OK, SC, SD, TX, UT, VA	1782 (47.08)	1311 (51.94)	471 (48.96)

Note. LMM = late maternal mortality; MM = maternal mortality; TMM = total maternal mortality. All counts of MM and LMM exclude data from California.

TABLE 4— Associations Between Race-Specific Total Maternal Mortality (TMM), Maternal Mortality (MM), and Late Maternal Mortality (LMM), and Abortion Policy Composite Index, 2015–2018

	Non-Hispanic White			Non-Hispanic Black			Hispanic		
	TMM	MM	LMM	TMM	MM	LMM	TMM	MM	LMM
Abortion policy composite index, ARR (95% CI)	1.06 (1.02, 1.11)	1.05 (0.95, 1.15)	0.99 (0.92, 1.07)	0.98 (0.89, 1.08)	0.95 (0.80, 1.13)	0.99 (0.85, 1.15)	1.01 (0.94, 1.06)	0.98 (0.86, 1.13)	0.91 (0.79, 1.15)
No. of maternal deaths	1 728	1 165	489	1 210	848	312	615	366	115
No. of live births	8 082 036	7 564 573		2 233 216	2 139 606		3 626 302	2 733 569	

Note. ARR = adjusted rate ratio; CI = confidence interval. All estimates for MM and LMM and counts of deaths and live births in these columns exclude data from California. All models adjusted for state-level poverty, unemployment, % population with bachelor's degree or higher, % non-Hispanic White population, % urban population, % foreign-born population, Medicaid expansion status, Medicaid expenditure per capita, average % of births covered by Medicaid, and average % of births to women aged 35 years or older.

Table 3 Predictive Margins of Preterm Birth and Low Birthweight from Linear Probability Models Examining Moderating Effects of Race/Ethnicity or Education Level on Relationship between Restrictiveness Index and Adverse Birth Outcomes

	Preterm Birth				Low Birthweight			
	−1 SD	0 SD	+ 1 SD	+ 2 SD	−1 SD	0 SD	+ 1 SD	+ 2 SD
Race/ethnicity (categorical) x Restrictiveness Index (RI)								
AIAN	11.6	11.2	10.9	10.6	6.3	6.0	5.8	5.6
AAPI	11.9	11.7	11.4	11.2	9.5	9.2	9.0	8.8
Black	14.5	14.7	14.8	15.0	11.4	11.4	11.4	11.5
Hispanic or Latinx	11.7	11.4	11.2	11.0	7.2	6.8	6.4	6.0
White	11.2	11.1	11.1	11.0	7.5	7.3	7.1	6.9
Race/ethnicity (dichotomous) x Restrictiveness Index (RI)								
Black	14.5	14.7	14.9	15.1	11.5	11.5	11.5	11.5
Non-Black	11.4	11.3	11.1	11.0	7.6	7.3	7.0	6.8
Education Level x Restrictiveness Index (RI)								
LT HS grad	12.6	12.5	12.5	12.4	8.7	8.7	8.7	8.7
HS grad	12.3	12.3	12.3	12.3	8.5	8.5	8.4	8.3
Some college	12.0	11.9	11.9	11.8	8.2	7.9	7.6	7.3
College grad	10.9	10.7	10.4	10.2	7.4	6.9	6.5	6.1

Note: Results are predictive margins of preterm birth and low birthweight for all racial/ethnic and education level subgroups at −1 standard deviation (SD), 0 SD, + 1 SD, and + 2 SD of the lagged restrictiveness index. Predictive margin estimates were produced from multivariate linear probability models estimating moderating effects of race/ethnicity or education level on the relationship between the standardized lagged restrictiveness index and the probability of preterm birth and low birthweight among all 50 states and Washington, D.C. Final sample size included people not missing any data on race/ethnicity, education level, restrictiveness index, outcomes, and covariates. All models adjust for individual-level sociodemographic characteristics, state-level sociodemographic, economic, and political characteristics, and state and year fixed effects. Standard errors clustered at the state level

Literature Cited & Acknowledgements

- Desai, Sheila, et al. "The Impact of Abortion Underreporting on Pregnancy Data and Related Research." Maternal & Child Health Journal, vol. 25, no. 8, 2021, pp. 1187–93, https://doi.org/10.1007/s10995-021-03157-9.
- Redd, Sara K., et al. "Racial/ethnic and Educational Inequities in Restrictive Abortion Policy Variation and Adverse Birth Outcomes in the United States." BMC Health Services Research, vol. 21, no. 1, 2021, pp. 1–16, https://doi.org/10.1186/s12913-021-07165-x.
- Redd, Sara K., et al. "Variation in Restrictive Abortion Policies and Adverse Birth Outcomes in the United States from 2005 to 2015." Women's Health Issues, vol. 32, no. 2, 2022, pp. 103–14, https://doi.org/10.1016/j.whi.2021.10.006.
- Vilda, Dovile, et al. "State Abortion Policies and Maternal Death in the United States, 2015–2018." American Journal of Public Health, vol. 111, no. 9, 2021, pp. 1696–705, https://doi.org/10.2105/ajph.2021.306396.