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Health consequences of the Mexico City policy

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Abstract

We study the impacts that the reversal of the Bush Administration's Mexico City Policy has on health outcomes. While work has been done analyzing the impact of the policy on abortions, few studies have looked at other health outcomes. We use country-level data over the period 2001 – 2016 and a difference in difference framework to study changes in mortality and other health indicators. We find that countries with high exposure to the policy had significant improvements in infant, neo-natal, and under five mortality, lower fertility rates, and improvements in birthweights once the policy was rescinded starting in 2009. As this policy gets re-implemented (and expanded) under Republic Administrations, it is important to understand both the direct and indirect impacts of the policy on countries which rely on U.S. global health aid.

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1. Introduction

In 1984 President Reagan mandated that the U.S. government cease family planning assistance and funding to any NGOs that promoted or performed abortion services. Under the policy, NGOs were further prohibited from counseling women on abortion services or advocating for the legalization of abortion. This policy, known as the Mexico City Policy or the global gag rule, has since been rescinded by Democratic Administrations and reinstated by Republican Administrations (Rodgers, 2018). During the most recent Republican Administration the policy was significantly expanded and renamed to Protecting Life in Global Health Assistance (PLGHA). Under the reformed PLGHA policy, foreign NGOs that promote or perform abortion services can lose almost all global health assistance, meaning not just family planning and reproductive health funding, but also funding for maternal and child healthcare, sanitation, HIV and AIDS, tuberculosis, and malaria, among other health areas (Mavodza et al., 2019).

Proponents of the policy claim it is important to reduce global abortion rates, and therefore necessary to prevent foreign organizations from receiving United States funding if they perform or discuss abortion services. Those opposed to the global gag rule, on the other hand, argue that this policy approach causes more abortions than it prevents due to healthcare staff reductions and decreases in contraceptive availability that funding cuts have created (Rodgers, 2018). Evidence from previous studies on the global gag rule show that the policy results in higher abortion rates, more unwanted births, higher maternal mortality, worse health status for unwanted children, and substantial reductions in the provision of family planning services in countries that rely on U.S. funding for family planning (Barot & Cohen, 2015; Bendavid et al., 2011; Ji, 2019; Jones, 2011 & 2015; Kassebaum et al., 2014; Rodgers, 2018).¹

Looking at macro-level panel data, we build on these studies by looking at the effect of the Mexico City Policy under the Bush Administration (2001-2008) vs. the removal of the policy under the Obama Administration (2009-2016). We investigate whether the reversal of the policy is related to improvements in health indicators for women and children. To do so, we analyzed the association between a country's exposure to the policy and changes in health indicators when the policy is rescinded. We find evidence that the Mexico City Policy in high exposure countries has harmful effects on health measures such as infant, neo-natal, and under five mortality, fertility, and birth weights. At the country level, we do not find evidence that the policy significantly affects maternal mortality rates or adolescent fertility rates. Since this is a macro-level analysis, these results are likely underestimates as nuances of the data get lost in the aggregation of the data.

The rest of the paper is organized as follows. Section 2 provides a literature review, which discusses the global gag rule's impacts on abortion rates, women's reproductive health, and other unintended health consequences, such as those for children. Section 3 discusses the empirical methodology and data while Section 4 presents the empirical results. Section 5 concludes.

2. Literature Review

2.1. The Global Gag Rule and Abortion Rates

There have been three notable studies conducted on the association between the global gag rule and induced abortion rates (Bendavid et al., 2011, Jones, 2011, & Rodgers, 2018). Bendavid

¹ See Mavodza et al. (2019) for a review of the literature.

et al. (2011) evaluated exposure to the global gag rule and induced abortion rates in twenty sub-Saharan African countries between 1994 and 2008 (Bendavid et al., 2011). Countries were considered to have high exposure to the policy if they received United States funding above a calculated median level, and it was found that women in high-exposure countries were two and half times more likely to have an induced abortion than women in low-exposure countries. Jones (2011) conducted a study in Ghana that compared the periods when the global gag rule was in effect and when the rule was not in effect between 1972 to 2007, examining the policy's impact on abortion rates and child health outcomes. Jones found that abortion rates did not decrease for any demographic during periods when the policy was in effect and that women in rural areas had one and a half times the odds of having an abortion compared to those in urban areas (Jones, 2011).

Rogers (2018), replicating the Bendavid et al. (2011) methodology on a global scale, found similar results in sub-Saharan Africa, with women in high-exposure countries having two times the odds of having an abortion when the policy was in place than those in low-exposure countries. Rogers also found that in Latin America and the Caribbean, women in countries with high exposure to the global gag rule had three times the odds of having an abortion when the policy was in place, compared to those in countries with low exposure to the policy (Rogers, 2018). These studies show an association between the enactment of the global gag rule and increases in abortion rates. This is likely caused by the fact that the global gag rule forces providers of other family planning services, such as contraception and reproductive health education, to reduce their services.

2.2. Women's Reproductive Health

The loss of U.S. family planning funding assistance due to non-compliance with the global gag rule has led to a significant decrease in family planning programs. USAID stopped sending contraceptive supplies to sixteen countries in sub-Saharan Africa, Asia, and the Middle East when the policy was in effect under the Bush administration, and Lesotho's only condom-distributing organization did not receive condoms from the US for eight years. According to Barot and Cohen (2015), the family planning funding lost by the International Planned Parenthood Federation (IPPF) between 2001 and 2008 could have prevented approximately 36 million unintended pregnancies and 15 million abortions. Additionally, Jones (2015) found an association between family planning funding loss and an increase in rural pregnancies by approximately 12 percent, as well as 500,000 to 750,000 additional unintended births. Increases in unintended pregnancies may be attributed to decreased access to family planning resources and reduced contraceptive supplies (Jones, 2015).

Another issue to consider is that approximately 300,000 women die annually due to pregnancy and childbirth-related causes (Bingenheimer & Skuster, 2017). Complications during pregnancy and childbirth are the leading causes of death and disability among reproductive-age women in the developing world (World Bank, 2020). Bingenheimer and Skuster (2017) predict that re-implementation of the global gag rule (after the Obama Presidency) will cause negative outcomes such as reductions in access to healthcare and increases in unsafe abortions, which will likely lead to higher rates of maternal morbidity and mortality. Kassebaum et al. (2014) estimate that approximately 15 percent of global maternal deaths are caused by unsafe abortions, meaning that lack of access to safe abortions and subsequent increases in unsafe abortions are likely to lead to higher maternal death rates.

Young women are particularly at risk for unwanted pregnancies, as almost 50 percent of unmarried, sexually active adolescents who want to avoid pregnancy in sub-Saharan Africa are

not using contraceptives (Elias, 2016). Twenty five percent of married adolescents who do not want to become pregnant are not using contraceptives (Elias, 2016). Information about and access to contraceptives is especially important for adolescents, as teenagers who become pregnant are at greater risk for fistulas, eclampsia, and infection (Elias, 2016). Many young mothers who survive childbirth complications suffer from related health issues for the rest of their lives, complicating future pregnancies and overall quality of life. In addition, pregnancy can interrupt an adolescent girl's education, social life, and career prospects (Elias, 2016).

2.3. Health Consequences for Children and Other Health Outcomes

According to Jones (2011), children born from unintended pregnancies, specifically those in countries with high exposure to the global gag rule, showed poorer health status on height and weight indicators than their siblings born from planned pregnancies. Furthermore, it has been found that global gag rule exposure in Ghana reduced access to prenatal care in both rural and urban areas, likely due to the closure of facilities run by foreign NGOs after funding cuts (Mavodza et al., 2019).

Vulnerable communities such as LGBTQ+ people, poor people, religious, racial, and ethnic minorities, and people living in rural areas are especially at risk for negative health outcomes from the effects of the global gag rule, as these communities often already face challenges to accessing health care (Ji, 2019). The global gag rule disrupts the provision of HIV and AIDS services, particularly in cases of organizations that have integrated family planning and HIV and AIDS programs. When family planning funding is cut due to non-compliance with the global gag rule, services crucial to HIV prevention, such as condom distribution and education, are negatively affected (Mavodza et al., 2019). The expanded policy - Protecting Life in Global Health Assistance – is likely to have exacerbated these issues as it directly affected funding for HIV/AIDS (Jogee, 2019).²

3. Data and Methodology

We explore the impact of a country's exposure to the Mexico City Policy on women's and children's health indicators between 2001 to 2016 using the reversal of the Mexico City Policy in 2009 as a natural experiment.

3.1. Exposure to the Global Gag Rule

We replicate the methodology used by Bendavid et al. (2011) and Rodgers (2018) to categorize whether a country has high exposure to the Mexico City Policy. High exposure means that a country received from than the average per capital amount of U.S. financial assistance for family planning and reproductive health between 1994 and 2000.³ To calculate this, we used the Creditor Reporting System of the Organization for Economic Cooperation and Development (OECD, 2020) to find the total value of United States official development assistance commitments for family planning and reproductive health between 1994 and 2000 when the policy was inactive. We chose these years to estimate the extent to which countries depended on financial support from the US when the rule was not in place. Using this data, we create a dichotomous variable for high exposure that classifies countries as high exposure if they received U.S. financial

² An analysis of the effect of PLGHA is difficult to conduct at the macro-level due to its short duration (the policy was, once again rescinded by a Democratic Administration) but, more importantly, to the emergence of COVID-19.

³ While data for the entire Clinton Administration would be preferable, this data begins in 1994.

aid for family planning and reproductive health that was above the global mean value and zero otherwise. The assumption is that countries that receive higher levels of U.S. financial assistance for family planning and reproductive health services will be more affected by the Mexico City Policy as they stand to lose more funding if NGOs do not comply with the policy requirements.

3.2. Statistical Model

We used a difference-in-difference (DID) estimation to test the association of the Mexico City Policy with health outcomes for women and children in countries with high exposure to the policy. DID is used in observational settings to estimate the causal effect of an intervention or treatment, such as a policy change, by comparing the changes in outcomes over time between a group impacted by the intervention and a group that is not impacted by the intervention. The basic assumption of DID analysis is that in the absence of an intervention or treatment, the differences between the intervention group and the control group will be the same over time. This approach is particularly useful for measuring the impact of the Mexico City Policy because DID study designs can use group-level observational data and because the model accounts for changes that occur due to reasons other than the intervention. Using a panel of 154 aid recipient countries between 2001 and 2016 we use the following regression specification:

$$Y_{it} = \alpha + \beta_1 Post_t + \beta_2 [Post_t * Exposure_i] + X_{it}\delta + \eta_t + \phi_i + \varepsilon_{it}$$

where i and t index for countries and years. $Post_t$ is a dummy variable for the years when the Mexico City Policy is not in effect between 2009-2016 (i.e., our treatment is the removal of the policy). $Exposure_c$ is a dummy variable for countries with high exposure to the policy.⁴ $Exposure$ equals unity for the entire period of analysis if a country received more than the mean level of U.S. family financial aid during the Clinton Administration and zero otherwise.⁵ The term of interest is the interaction between the $Post_t$ and $Exposure_c$ variables. X is a vector of controls that may influence health outcomes – the log of real GDP, the percentage of a country’s population living in urban areas, and a linear time trend. η_t and ϕ_i are vectors of year and country fixed effects, respectively and ε_{it} is the standard error clustered at the country level.

Y represents different variables related to women and children’s health. Women’s health outcomes are measured by maternal mortality and fertility rates. Maternal mortality ratio is the number of women who die from pregnancy-related causes while pregnant or within 42 days of termination per 100,000 live births. The lifetime risk of maternal death measures the probability that a 15-year-old girl will die at some point in her life from a maternal cause. Fertility rates are calculated as the total births per woman, and adolescent fertility rates are measured in total births per 1,000 women ages 15 to 19.

Child mortality and health outcomes are measured through infant, neo-natal, and under-five mortality, and low-birthweight babies. The infant mortality rate is the number of infants who die before reaching the age of one per 1,000 live births in a year. Neo-natal mortality is the number of neonate (infants less than 28 days old) deaths per 1,000 live births in a year. Mortality rates for children under-five is the number of deaths of children between one and five years old per 1,000

⁴ Note that this is a dummy variable that is time invariant. When we estimate the model using country fixed effects, this variable will drop due to the country specific effect.

⁵ Refer to Bendavid et al. (2011) for specifics on how this variable is constructed.

live births in a year. Low-birthweight babies are newborns who weigh less than 2,500 grams (5.5 pounds) within the first hour of life as a percentage of total births in a year.

4. Results and Analysis

Table 1 shows the results of the regressions for all health outcomes. The coefficient of interest is the interaction term between the post and exposure variables, which demonstrates the effects in high-exposure countries when the policy is not in place (post).

Table 1: Results

Panel A:	Maternal Mortality Ratio	Lifetime Risk of Maternal Death	Adolescent Fertility	Fertility
	(1)	(2)	(3)	(4)
Post x Exposure	-22.043 (16.356)	-0.102 (0.111)	-1.213 (1.782)	-0.119* (0.072)
Post	7.497 (7.239)	0.044 (0.048)	1.980** (0.913)	0.139*** (0.034)
Mean of dep. variable	248.6	1.2	66.7	3.3
N	2,289	2,289	2,305	2,328
R ²	0.308	0.270	0.543	0.548
Panel B:	Infant Mortality	Neo-Natal Mortality	Under 5 Mortality	Low Birthweight
	(1)	(2)	(3)	(4)
Post x Exposure	-7.826*** (1.572)	-2.667*** (0.589)	-12.384*** (3.173)	-0.337** (0.140)
Post	4.060*** (0.817)	1.411*** (0.297)	6.198*** (1.557)	0.182*** (0.068)
Mean of dep. variable	34.6	19.2	48.6	11.4
N	2,382	2,382	2,382	1,634
R ²	0.636	0.667	0.536	0.294

note: All specifications include controls, year and country fixed effects, and a linear time trend. All data comes from the World Bank's World Development Indicators (World Bank, 2020). To construct the exposure variable, we used the Creditor Reporting System of the Organization for Economic Cooperation and Development (OECD, 2020). Cluster robust standard errors are listed in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Looking at Panel A, the interaction terms in columns (1)-(3) are negative but insignificant, suggesting that maternal mortality, lifetime risk of maternal death, and adolescent fertility did not significantly change when the policy was removed in countries with high exposure to the policy. Fertility is used as a measure of women's health because fertility rates are linked to family planning, access to contraceptives, and the ability to make decisions about one's reproductive health, all of which are components of the physical and mental well-being of women (World Bank,

2020). The interaction term for fertility is negative marginally significant and suggesting that overall fertility rates declined after the policy was rescinded.

Looking at the results in Panel B, the interaction term is negative and significant for infant, neo-natal, and under five mortality, and low birthweight. The results for mortality imply that when the policy is not in place, children of all ages in high exposure countries are more likely to live - on average, 7.8 more infants, 2.7 more neonates, and 12.4 children under five survive. That is a 22.6%, 13.9%, and 3% decrease from their mean values, respectively. Low-birthweight increases the risk of infant mortality and stunted growth, and emerging evidence indicates that low-birthweight babies are more at-risk for non-communicable diseases such as cardiovascular disease and diabetes (World Bank, 2020). The results in column (4) suggest that 0.3 fewer babies (a 3.6% reduction from the mean) are born with low-birthweights when the policy is inactive in countries with high exposure.

5. Discussion

Previous studies have shown a strong association between the Mexico City Policy and significantly higher odds of women having abortions (Bendavid et al., 2011; Jones, 2011; and Rodgers, 2018). This paper studies a global sample of countries that receive U.S. financial assistance for family planning and reproductive health to explore the relationship between the policy and unintended health consequences for women and children other than abortions. The Mexico City Policy was in place for eight years under the Bush Administration and was rescinded in 2009 by the Obama Administration. We find that in the period after the policy was reversed, from 2009 to 2017, high-exposure countries saw improvements in infant, neonate, and under five mortality, and fertility rates and low birthweights declined. These results are likely attributed to the fact that when foreign organizations lose funding for family planning and reproductive healthcare, people in the communities where these organizations operate often lose access to contraceptives, pre-and post-natal care, and other essential health services. Additionally, loss of funds due to NGOs' non-compliance with the policy has been shown to lead to staff reductions and clinic closures, which is especially impactful on overall health considering that many impacted organizations are also the primary providers of general healthcare services in their areas (Rodgers, 2018).

The results here are likely underestimates since a large amount of data was lost when aggregating to the country level. Even so, the results are both statistically and economically significant. The results of this study, combined with existing evidence that abortion rates increase when the Mexico City Policy is active, suggest that the policy 1) does not achieve its goals, and 2) causes unintended harm to the women and children in the countries it is aiming to help. With the expanded scope of the gag rule under Protecting Life in Global Health Assistance policy, these and other unintended negative health effects are likely increase.

References

- Barot S., and S. A. Cohen (2015) “The global gag rule and fights over funding UNFPA: the issues that won't go away” *Gutmacher Policy Review* **18(2)**, 27–33.
- Bendavid, E., P. Avila, and G. Miller (2011) “United States aid policy and induced abortion in sub-Saharan Africa” *Bulletin of the World Health Organization* **89(12)**, 873-880.
<https://doi.org/10.2471/blt.11.091660>
- Bingenheimer J. B. and P. Skuster (2017) “The foreseeable harms of Trump's global gag rule” *Studies in Family planning* **48(3)**, 279–27090.
- Elias, C. J. (2016, February 16) “Why family planning is an issue we should all care about” *World Economic Forum*. Retrieved March 15, 2021, from
<https://www.weforum.org/agenda/2016/02/why-family-planning-is-an-issue-we-should-all-care-about/>
- Ji, S. G. (2019, November 11) “Once Again, the Global Gag Rule Increases Maternal Deaths” *Gender Policy Report*, University of Minnesota.
<https://genderpolicyreport.umn.edu/global-gag-rule-increases-maternal-deaths/>
- Jogee, F. (2019) “The effect of the Protecting Life in Global Health Assistance policy in South Africa: Possible implications for local HIV/AIDS non-governmental organisations” *South African Journal of Bioethics and Law* **12(1)**, 38-43.
- Jones, K. M. (2011) “Evaluating the Mexico City policy: how US foreign policy affects fertility outcomes and child health in Ghana” *International Food Policy Research Institute*.
https://core.ac.uk/display/6261537?utm_source=pdf&utm_medium=banner&utm_campaign=pdf-decoration-v1
- Jones, K. M. (2015) “Contraceptive Supply and Fertility Outcomes: Evidence from Ghana” *Economic Development and Cultural Change* **64(1)**, 31–69.
<https://doi.org/10.1086/682981>
- Kassebaum, N., A. Bertozzi-Villa, M. Coggeshall, K. Shackelford, C. Steiner, K. Heuton, and J. Geleijnse (2014) “Global, regional, and national levels and causes of maternal mortality during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013” *The Lancet (British Edition)* **384(9947)**, 980–1004.
- Mavodza, C., R. Goldman, and B. Cooper (2019) “The impacts of the global gag rule on global health: a scoping review” *Global Health Research and Policy* **4(26)**.
<https://doi.org/10.1186/s41256-019-0113-3>
- Organization for Economic Cooperation and Development (2019) *Creditor Reporting System Database*. <https://stats.oecd.org/Index.aspx?DataSetCode=CRS1> .
- Rodgers, Y. M. (2018) *The Global Gag Rule and Women's Reproductive Health*. New York, NY: Oxford University Press.
- World Bank (2020) *World Development Indicators*. [Data file].
<https://databank.worldbank.org/source/world-development-indicators#>