



# Beyond abortion: impacts of the expanded global gag rule in Kenya, Madagascar and Nepal

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## ABSTRACT

Since 1984, Republican administrations in the US have enacted the global gag rule (GGR), which prohibits non-US-based non-governmental organisations (NGOs) from providing, referring for, or counselling on abortion as a method of family planning, or advocating for the liberalisation of abortion laws, as a condition for receiving certain categories of US Global Health Assistance. Versions of the GGR implemented before 2017 applied to US Family Planning Assistance only, but the Trump administration expanded the policy's reach by applying it to nearly all types of Global Health Assistance. Documentation of the policy's harms in the peer-reviewed and grey literature has grown considerably in recent years, however few cross-country analyses exist. This paper presents a qualitative analysis of the GGR's impacts across three countries with distinct abortion laws: Kenya, Madagascar and Nepal. We conducted 479 in-depth qualitative interviews between August 2018 and March 2020. Participants included representatives of Ministries of Health and NGOs that did and did not certify the GGR, providers of sexual and reproductive health (SRH) services at public and private facilities, community health workers, and contraceptive clients. We observed greater breakdown of NGO coordination and chilling effects in countries where abortion is legal and there is a sizeable community of non-US-based NGOs working on SRH. However, we found that the GGR fractured SRH service delivery in all countries, irrespective of the legal status of abortion. Contraceptive service availability, accessibility and training for providers were particularly damaged. Further, this analysis makes clear that the GGR has substantial and deleterious effects on public sector infrastructure for SRH in addition to NGOs.

## INTRODUCTION

In 2017, the Trump administration reinstated and expanded the Mexico City Policy or global gag rule (GGR), which required non-US-based non-governmental organisations (NGOs) receiving US government

## WHAT IS ALREADY KNOWN ON THIS TOPIC

- ⇒ In 2017, President Donald J. Trump reinstated and expanded the Global Gag Rule (GGR), which requires non-US organisations that receive select US government funding to agree not to provide, refer for or promote abortion as a method of family planning. The new policy applied to most categories of US government global health assistance (US\$7.3 billion in 2020), instead of only to family planning assistance (US\$600 million in 2020), as it had in prior iterations.
- ⇒ Econometric analyses of the impact of the 2001–2009 iteration of the GGR found that the policy was associated with reduced modern contraceptive use and increased abortions among women living in highly impacted countries in Africa and Latin America and the Caribbean.
- ⇒ Grey and peer-reviewed literature documents how all iterations of the policy have limited access to sexual and reproductive health (SRH) care for vulnerable and remote populations, disrupted referral systems and access to information, and caused a 'chilling' of abortion-related advocacy, including in countries where abortion is legal under multiple circumstances.

## WHAT THIS STUDY ADDS

- ⇒ This is the first cross-country analysis of the GGR's impacts in the peer-reviewed literature.
- ⇒ The GGR hinders SRH programmes and services in countries where abortion is highly and less restricted.
- ⇒ In addition to limiting non-governmental organisation coordination and programmes, the GGR damages public sector contraceptive and abortion service delivery and supply chains.

(USG) global health funding to certify that neither they nor their subgrantees would provide, refer for, counsel on or advocate for abortion as a method of family planning using any funding source.<sup>1</sup> While past iterations of the GGR only applied to USG family planning assistance, under President Trump the GGR applied to nearly all USG global health assistance, potentially impacting

**HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY**

- ⇒ Our findings illustrate how the GGR dismantles the same services that US Agency for International Development prioritises in Kenya, Madagascar and Nepal.
- ⇒ Permanent legislative repeal of the GGR by the US government, and increased funding commitments for SRH by the Kenyan, Malagasy and Nepali governments are needed to undo and prevent further damage.

US\$7.3 billion in Fiscal Year 2020.<sup>2</sup> Non-US NGOs had to choose to either certify the policy or forfeit USG funding. US-based NGOs were not subject to the policy, but those that subgranted USG global health funds to non-US NGOs were responsible for ensuring that their sub-grantees complied with the GGR.<sup>3</sup> As a result of a second policy expansion in 2019, many non-US NGOs that did not receive USG funds were also forced to comply with the policy.<sup>4</sup> The GGR applied to over 1300 global health awards in September 2018.<sup>5</sup> While the policy allowed exceptions for abortion provision, counselling, and referral in cases of pregnancies resulting from rape or incest or that endangered the pregnant woman’s life, the GGR was found to have a substantial impact on sexual and reproductive health (SRH) and rights (SRHR) globally.<sup>6–9</sup> In January 2021, President Joe Biden rescinded the Trump administration’s GGR policy.<sup>10</sup> Since it was first introduced in 1984 by President Regan, the GGR has been re-enacted by all Republican presidents and rescinded by all Democrat presidents. This pattern of enacting and rescinding the GGR can heighten its impact. The organisational costs of changing activities in accordance with policy are too

high to bear for some NGOs, which can lead to permanent closure of NGOs and facilities, or a decision to stop working on abortion altogether.<sup>11</sup>

A growing evidence base demonstrates that the GGR negatively impacts SRH delivery and outcomes. Several studies have found that a prior iteration of the policy, in place between 2001 and 2009, increased induced abortions—contrary to its intended purpose—and decreased contraceptive use in Africa and Latin America and the Caribbean.<sup>12–15</sup> In addition, grey and peer-reviewed literature from a variety of countries and across policy iterations have documented how the GGR led to the disintegration of health services, clinic closures, disrupted referral networks, reduced outreach services and weakened advocacy efforts.<sup>6 7 16 17</sup>

Following the introduction of the Trump administration’s GGR, we conducted qualitative studies to understand how the newly expanded policy affected access to and provision of SRH services in Kenya, Madagascar and Nepal. Country-specific findings are published elsewhere.<sup>18–20</sup> All three countries have maternal mortality ratios that are higher than average for their region, and have set national goals to increase modern contraceptive prevalence.<sup>21–24</sup> They are also included as priority countries under the US Agency for International Development (USAID) Family Planning and Reproductive Health Programme.<sup>25</sup> Additionally, they represent diverse contexts related to foreign assistance for health, population distribution, circumstances under which abortion is legally permitted, and civil society engagement in SRHR (table 1). Driven by an interest in comparing the impacts of the GGR across three distinct legal and public health contexts for abortion, we conducted this cross-country analysis.

**Table 1** Country context

	Kenya	Nepal	Madagascar
Legal status of abortion	Abortion is permitted when there is a threat to the health or life of the pregnant woman <sup>27</sup>	Abortion permitted on request up to 12 weeks; and up to 28 weeks in cases of: <ul style="list-style-type: none"> <li>▶ rape</li> <li>▶ incest</li> <li>▶ fetal abnormality</li> <li>▶ incurable illness in the pregnant woman</li> <li>▶ threat to the life or health (mental or physical) of the pregnant woman<sup>35</sup></li> </ul>	Abortion is prohibited with no explicit exceptions <sup>39</sup>
Maternal mortality ratio	342/100 000 live births <sup>51</sup>	239/100 000 live births <sup>52</sup>	426/100 000 live births <sup>53</sup>
Modern contraceptive prevalence	53% <sup>54</sup>	43% <sup>52</sup>	40% <sup>53</sup>
% of Official Development Assistance (ODA) for population policies/programmes and reproductive health coming from USG (2017)	79% <sup>26</sup>	65% <sup>26</sup>	59.4% <sup>26</sup>
ODA, Official Development Assistance; USG, US government.			

## Country contexts

### Kenya

Kenya relies heavily on foreign aid to finance its SRH services and receives significant USG global health assistance. In 2017, 79% of the country's official development assistance (ODA) for SRH came from the USG.<sup>26</sup>

The Kenyan Constitution prohibits abortion except when necessary to protect the health or life of the pregnant woman.<sup>27</sup> At the same time, the Kenyan Penal Code stipulates punishments for women and providers who procure or provide abortions, without clearly specifying the circumstances under which abortion is criminalised.<sup>28</sup> Confusion created by this inconsistency, coupled with stigma and numerous actions by the Ministry of Health (MOH) to limit safe abortion provision and training in recent years, deters women and healthcare workers from seeking and providing safe abortion care.<sup>29</sup> Unsafe abortion, however, is common, and a leading cause of maternal mortality and gynecologic emergency hospital admissions in Kenya.<sup>30 31</sup>

### Nepal

A substantial amount of Nepal's global health funding comes from the USG. In 2017, USAID obligated US\$44 million in health and population funding, and 65% of the country's ODA for SRH came from the USG.<sup>26 32</sup>

The Nepal Constitution guarantees safe motherhood and reproductive health rights as fundamental women's rights.<sup>33</sup> Further, Nepal has one of the most permissive abortion laws in South Asia. The Safe Motherhood and Reproductive Health Rights Act enacted in 2018 allows abortion on request through 12 weeks gestational age, and up to 28 weeks in cases of rape, incest, fetal anomaly, if the pregnant woman has an incurable illness and desires not to continue the pregnancy, and/or if the pregnancy poses a threat to the life or health (mental or physical) of the pregnant woman.<sup>34 35</sup> However, the Penal Code criminalises abortion when performed beyond the circumstances for which it is legally permitted, or by unapproved health institutions or service providers.<sup>36</sup> In 2014, an estimated 323 000 of induced abortions took place in Nepal, 58% of which were unsafe.<sup>37</sup> Beginning in 2017, the Government of Nepal began providing abortion services for free in all public facilities. Despite this, low awareness of the legality of abortion persists across the country; and cost continues to present barriers to women seeking safe abortion.<sup>38</sup>

### Madagascar

Madagascar also relies heavily on foreign aid for its health services, but receives this funding from demonstrably fewer donors than Kenya and Nepal—the main donors are United Nations agencies (including the WHO, the UNICEF and the United Nations Population Fund (UNFPA)) and USAID. In 2017, the USG (via USAID) provided 59.4% of Madagascar's ODA for SRH, and

88.4% of the country's development assistance for family planning, specifically.<sup>26</sup>

Madagascar has one of the world's strictest abortion laws. Abortion is completely prohibited with no explicit exception to save the woman's life.<sup>39</sup> The country's Penal Code punishes women and providers who voluntarily terminate a pregnancy. Despite these prohibitions, the MOH estimated in 2015 that 11.8% of maternal deaths were due to complications of abortion.<sup>40 41</sup>

## METHODS

### Study design and sample

Researchers in the Global Health Justice and Governance Programme at the Columbia University Mailman School of Public Health collaborated with the African Population Health Research Centre in Kenya, L'Institut National de Santé Publique et Communautaire (National Institute for Public and Community Health) in Madagascar and the Centre for Research on Environment, Health and Population Activities in Nepal to conduct qualitative studies to explore the impact of the GGR on SRH service provision and access (for more information about this collaboration, see Author Reflexivity Statement in online supplemental appendix 1). While a similar methodological framework was used across countries, the in-country research teams determined the specific methods and participants in each country. Detailed information about country-specific samples, site selection and participant recruitment can be found in country-specific articles.<sup>18–20</sup>

All qualitative data were collected between August 2018 and March 2020. In total, the country-based research teams conducted 479 in-depth interviews with representatives from local and international NGOs engaged in service delivery, advocacy, and/or research on SRHR and other global health issues, as well as with SRH providers from public and private health facilities. In Madagascar and Nepal, research teams also conducted in-depth interviews with representatives from MOHs, while attempts to recruit similar officials in Kenya proved unsuccessful. In Madagascar, community health workers and contraceptive clients were also interviewed (table 2).

Data were collected in the capital cities and more rural areas of the three countries. This included areas where NGOs that certified and declined to certify the GGR were implementing or supporting SRH service provision in public and/or private sectors. In Madagascar and Nepal, research teams conducted two rounds of data collection. In Kenya, data were collected in one round.

The research teams conducted interviews with participants in different key-informant categories to capture the effects of the GGR at different levels of the health system. At the NGO/MOH-level, participants were asked questions about GGR-related communications, changes in funding, and changes in organisational policy, programme management and administration. Interviews with providers at the facility- and community-level focused on changes in staffing, commodity supply, and

**Table 2** Number of interviews with each type of key informant by country

	Kenya	Madagascar	Nepal
NGO representatives	18	41	84
MOH representatives	–	40	31
Providers at public facilities	31	41	27
Providers at private/NGO facilities	6	20	63
Community health workers	–	33	–
Contraceptive clients	–	44	–
Total	55	219	205

MOH, Ministry of Health; NGO, non-governmental organisation.

service delivery, including referral pathways. Interviews with clients in Madagascar included questions about changes in the availability, accessibility and cost of contraceptive services after the largest NGO provider of SRH services declined to certify the GGR.

### Public involvement

Prior to data collection, each team held round table meetings with SRHR stakeholders to solicit feedback on research objectives and design. Stakeholders also submitted suggestions of NGOs to reach out to for interviews.

### Data analysis

All interviews were audiorecorded, transcribed, and analysed using NVivo V.12 (QSR International). Members of the Columbia-based team collaborated with each country team to create codebooks using hybrid inductive-deductive approaches. After completing analyses of each country's data, the research teams identified common themes across the three countries for this cross-country analysis.

## RESULTS

### Dismantled partnerships and coordination

Across the three countries, we found that the GGR fractured collaboration between organisations and facilities. This commonly occurred when the GGR prohibited a partnership, or when an NGO declined to certify the policy and subsequently lost USG funding, which limited their ability to partner. NGO representatives described disruptions to partnerships with community-based organisations and public and private health facilities that relied on them for financial and material support. Respondents linked these disruptions to service delivery impacts related to HIV, contraception, comprehensive abortion care and child health.

In Kenya and Nepal, NGOs that did and did not certify the GGR indicated that the policy threatened their sustainability by reducing the number of donor-funded projects for which they were eligible. NGOs reported severing partnerships with organisations with which they had established, trusting relationships because of the

policy. In addition, whether or not an organisation certified the GGR became more important than their capacity as a project partner:

Usually the [partner organizations] are selected based on the following things- organizational policy and guidelines, organizational aim, experience, program coverage, their reviews from other partners, their history etc... This time we selected a few CBOs [community-based organizations] and among them, three of the organizations could not work with us as they were supported by USAID...since the USAID support was larger than ours and the local CBOs had to decide between the two of us, they continued work with USAID support. (Nepal, US-based NGO representative)

This participant went on to explain that their NGO had to reduce the geographic coverage of their work on abortion because they could not replace all of the initially selected CBO partners. In all three settings, non-certifying NGOs reported being forced to change their operations in order to accommodate smaller budgets and fewer partnerships. In Kenya, NGO representatives reflected on how the GGR's impact on partnerships ultimately stymied the objectives and achievements of global health projects:

Because they [sub-grantee] have been denied funding, what we have been doing with them, now the indicators have dropped, the achievements have dropped. (Kenya, non-certifying NGO representative)

Work we could have done around integration in HIV programs is what is affected because they [certifying NGOs] might not want to...those are the ones who receive a lot of US government funding and...they might not be comfortable partnering with us. (Kenya, non-certifying NGO representative)

In Madagascar, although our results suggest that fewer NGO partnerships were dismantled by the GGR than in the two other countries studied, impacts of those that did end caused significant damage to the health system. The MOH's primary NGO partner for contraceptive services declined to certify the GGR, subsequently lost USG funding, and was in turn forced to stop supporting nearly 200 public and private health facilities.

Previously, [non-certifying NGO] had a clinic in our town. In addition to the services, they provided training for midwives and [public health center] managers. We had a lot of these [NGO-supported public health centers] but their number has dwindled... [The non-certifying NGO] can no longer provide training for these facilities. [Their loss of USAID funding] has led to a decline in their activities and even the closure of several of their health facilities as well as layoffs. (Madagascar, MOH district representative)

NGO representatives in all three countries described the negative consequences of searching for and transitioning projects to replacement partners. Respondents in Kenya and Nepal described this work as tedious and time consuming, indicating that spending time recruiting new partners caused major disturbances in their normal workflow. In Madagascar, a protracted transition of USAID funding and supplies from the aforementioned non-certifying NGO to a US-based NGO left a number of hard-to-reach communities without mobile outreach SRH services for well over a year.

While the GGR mostly disrupted partnerships which hindered service delivery, some Kenyan organisations described how it contributed to a strengthening of some SRHR advocacy partnerships. For example, a number of SRHR organisations in Kenya—particularly those that were not subject to the GGR because they received no USG funding—expressed the perspective that the GGR engendered a newfound sense of comradery, and reinvigorated advocacy collaborations within local civil society:

I feel like we've strengthened partnerships as a result of the GGR. So we really have partnerships with a number of organizations within the local SRHR movement and [because of] the GGR we've been forced to kind of galvanize ourselves and really sit back and really re-strategize on how to address these issues. (Kenya, NGO representative)

### Chilling effects on SRHR advocacy, policy debate, and referrals

In Kenya and Nepal, we found evidence of a 'chilling effect', whereby certifying NGOs applied unnecessary restrictions to their work to ensure compliance with the GGR and prevent scrutiny from USG donors. The chilling effect manifested in several ways: self-censorship and reduced participation in coalitions and meetings, and limitations beyond GGR requirements on referrals and service provision by certifying NGOs and affiliated facilities. Experiences indicative of the chilling effect were not reported in Madagascar.

Many NGO respondents lamented the disruptions to coalition, advocacy, and meeting environments caused by the GGR. Because of the chilling effect, USG-funded organisations were often reluctant, or even unwilling to attend meetings with organisations that did abortion-related work, even when the meetings were unrelated to abortion. Some certifying NGO representatives described feeling gagged in SRHR advocacy spaces where they used to be vocal, and in turn, respondents from non-certifying

NGOs reflected on the loss of these partners in their coalition work.

Representatives from non-certifying NGOs reported that meetings hosted by certifying NGOs no longer included them. In Nepal, some groups working on abortion were even excluded from national policy discussions convened by the Ministry of Public Health:

...we were not invited for the policy discussion session; we had to make a separate effort for our entry. Along with us, none of the other NGOs working on abortion were invited to the discussion [...] As per the information we have received, certain people [in the government] are influenced by USAID and are avoiding the abortion component. (Nepal, US-based NGO representative)

NGO and facility-level respondents described how the chilling effect ultimately had negative consequences for SRH clients. For example, several organisations that certified the GGR in Kenya and Nepal reportedly stopped providing referrals to non-certifying NGOs for services that are not restricted by the policy, such as contraception, post-abortion care, and abortion in cases of rape or incest or when the pregnancy endangers the woman's life. Several organisations halted referrals for these allowable services altogether after certifying the GGR. One respondent in Kenya discussed the consequences of this overinterpretation:

At that point the understanding of the Global Gag Rule was that they [non-certifying NGO] could not do any [post-abortion care] referrals and therefore they were not able to help the others because they felt gagged and they did not know to what extent they were supposed to provide information to these women and say go to this place or go to that place. So from their end, the impact that they have seen is deaths. (Kenya, Certifying NGO representative)

### Weakened service delivery infrastructures and consequences for clients

The data reveal that the GGR impacted SRH service delivery in all three countries, with public and private facilities experiencing similar changes, even though the policy did not apply to direct USG-public sector funding agreements. Across the three countries, MOH, facility and NGO respondents described health system weaknesses—such as contraceptive stock outs and staff transfers—which predated the Trump Administration's GGR, but reported that the GGR exacerbated them by limiting the external supports provided by NGOs which they deemed imperative for health systems' functionality.

Measures adopted by NGOs in the wake of GGR-induced funding losses included closing clinics, reducing staff stipends and supervision, and decreasing the number of staff providing outreach services, abortion and contraception, as well as the frequency at which these services were offered. In addition, NGO-facilitated training opportunities for providers diminished, which in turn harmed morale and limited quality of care:

After the limiting of funding you find that motivation of staff [diminishes]... training for example ...you need a backup training that will assist you to gain knowledge and upgrade knowledge. So the reduction of the funding has really affected [us] because such training has stopped; so you find that there is no chance of you accessing the knowledge. (Kenya, public provider)

Public sector providers in Madagascar and Nepal described being unable to offer the full range of contraceptive methods without trainings previously offered by non-certifying NGOs. In both countries, a USAID-funded project intended to strengthen public sector provision of contraception ended early because the implementing NGOs did not certify the GGR. In turn, provider trainings on long-acting, reversible contraception (LARC) and permanent methods could not be completed as planned, leaving some public facilities without the capacity to meet client demands:

...none of the service providers of this health post have obtained IUCD [intra-uterine copper device] insertion training. One received SBA [skilled birth attendant] training and is expected to deliver the IUCD service but she is not confident about her skill in delivering IUCD. Due to that, we have been focusing only on implant while offering counselling to the client regarding the available range of family planning services. (Nepal, public provider)

Since 2018, we have sensitized many more women to use long-term methods, including tubal ligation. Since [the re-introduction of the GGR], the number of [trained] providers has decreased and when the women came for the tubal ligation... they left without even benefiting from this ligation. Some became pregnant because of it. (Madagascar, public provider)

Another consequence of the USAID-funded project's early closure in both settings was a decline in public sector mobile outreach services in remote and underserved areas. Not having adequate budgets to organise contraceptive outreach themselves, both governments had come to rely on the non-certifying NGOs to fill the gaps. Without their support, some district governments in Nepal were unable to provide any contraceptive outreach services in 2018.

In addition to these impacts on providers and service delivery, interviewees in all countries described dealing with problems related to contraceptive supply chains that were compounded by the GGR. Delays in receiving commodities and stockouts of certain methods were mainly attributed to ongoing issues with national infrastructures. However, many providers and facility managers explained that supplementary stock provided by NGOs typically offset those challenges and that GGR-driven reductions in NGO support created sizeable gaps:

In addition, we cooperated with [non-certifying NGO] so they provided us with products. When our stocks were exhausted, [non-certifying NGO] gave us the products so there was no shortage. But currently, we are no longer in collaboration with [non-certifying NGO]. (Madagascar, public provider)

You see, the MOH normally supplies commodities quarterly, so when commodities are out of stock, you must wait for a time for you to receive them. So we do other things, like NGOs were coming in and try to sponsor [commodities], facilitate [the stocking of commodities] and things kept moving on; but since the [Global Gag] rule, [stock] has reduced because many NGOs have withdrawn their support, you see. (Kenya, public provider)

Due to contraceptive stockouts and/or lack of capacity to provide LARCs, public sector and NGO providers in each country reported asking contraceptive clients to return at a later date, transfer to another facility, or purchase supplies or commodities at a pharmacy and return to the facility so that the method could be safely administered. At the same time, clinic closures and service delivery changes caused by the GGR further shrank referral points for comprehensive SRH. In Kenya and Madagascar, several public and private facilities began charging clients for contraceptive services to cope with NGO funding losses. Providers expressed concern for the well-being of their clients, knowing that these costs were prohibitive for many of them:

When [women] could no longer afford the pills, many ended up giving birth. Among those who used to come to me, many became pregnant. (Madagascar, community-based midwife)

The GGR's ultimate effects were on clients; long-term impacts reported in Madagascar include unintended pregnancies and distrust in the health system:

I couldn't find any [contraceptive method]. I had just 1,000 ariary and we can't devote it to that because we can't let our children sleep without eating. ... Then after, the deadline for meeting with the midwife passed. And I got pregnant. (Madagascar, client)

The service also becomes bad, the confidence of the women decreases because when they arrive at the site they do not get the product because of the stockout. (Madagascar, MOH representative)

Some [clients] complain a lot [when their preferred method is unavailable], but we try to convince them to use other contraceptive methods that are available at the time. Some of them don't want to, and so they just don't. It is mainly young people who complain, because for them FP was free. They say that we sensitized them to practice FP, and when they are finally ready to do it, the products are not even there. They think that we are wasting their time. It's as though we're the ones lying when it's the very products that are not available. (Madagascar, public provider)

## DISCUSSION

We explored the effects of the GGR in three countries that represent a range of abortion laws and receive different amounts of USG global health assistance. Laws in Kenya and Nepal allow for abortion provision in cases not permitted by the GGR, which means that non-US NGOs that certified the policy in these countries were

prohibited from providing, referring for, and counselling clients on legal abortion services.<sup>27,34</sup> In contrast, Madagascar's law prohibits abortion even in cases allowed via the policy's exceptions.<sup>40</sup> While some might hypothesise that the policy has little effect in countries where the public health system provides abortion care for free (Nepal), or where abortion is illegal in all cases (Madagascar), our findings reveal that the GGR impacts health systems and SRH service provision and use across countries in similar ways, irrespective of the legal status of abortion.

We observed that the GGR has a number of adverse effects beyond restricting safe abortion access and care. Contraceptive service delivery in particular was highly impacted across the three countries, illustrating the conflict between the GGR and USAID's own commitments to support voluntary modern contraceptive use and end preventable maternal mortality.<sup>25</sup>

Our findings show that GGR had an enormous impact on the public health sector in all three countries. While the GGR is not attached to USG funding agreements with MOHs, it directly affects funding for NGOs working to strengthen public sector service delivery. Participants across the three countries described similar impacts when NGOs that did not certify the GGR had to stop supporting public sector facilities. First, the capacity of the public sector to deliver contraceptive services was diminished without provider trainings typically offered by these NGOs. Second, prevailing contraceptive stock shortages that NGOs had helped to mitigate were exacerbated. Through these avenues, the GGR thwarts countries' progress towards national commitments to reduce maternal mortality, expand equitable access to contraception, and ensure that the full range of contraceptive methods are available.<sup>22, 42, 43</sup> For example, Madagascar's 2016–2020 Costed Implementation Plan for Family Planning included commitments from a non-certifying NGO to extend mobile LARC services to 1250 public health centres, and establish short and long-term contraception on a permanent basis in 500 public health centres.<sup>22</sup> These commitments were not met, largely because the GGR hindered the non-certifying NGO.

The GGR disrupted women's ability to obtain SRH services in all three countries. In Kenya and Nepal, we found that this was often due to the chilling effect. Overinterpretation of the GGR led some organisations to refrain from referring clients to other organisations that declined to certify the GGR, even for services not mentioned by the policy, like contraception. While reduced contraceptive access was also observed in Madagascar, it was largely due to the fact that facilities were unable to provide contraceptive services after they lost support from NGO partners who declined to certify the GGR. Moreover, given the gaps in contraceptive service provision and accessibility reported by participants, it is likely that the GGR contributed to increases in unintended pregnancy and unsafe abortion in all three countries. This hypothesis is supported by other research on previously enacted versions of the policy<sup>12–15</sup>; one study

found lower contraceptive use and higher unintended pregnancies and abortions among women living in highly impacted countries in Africa, including in Kenya and Madagascar.<sup>13</sup>

We hypothesise that some of the differences we observed across countries were related to the size and influence of SRHR civil society. In countries with greater NGO presence (eg, Kenya and Nepal), where more organisations were faced with the decision to certify the policy, it is reasonable to expect greater variation in how the policy is interpreted, and bifurcation of civil society into GGR certifying and non-certifying groups. These chilling effects were not mentioned by participants in Madagascar, where there are fewer organisations that work on SRHR and receive USG global health funds. A smaller SRHR NGO sector may make it more difficult to exclude service delivery partners from coordination efforts based on their compliance with the GGR.

In addition, strengthened SRHR advocacy partnerships emerged uniquely in Kenya as a response to the reinstatement and expansion of the GGR. This aligns with larger civil society organising in Kenya in opposition to an influential anti-choice movement. Recent years have seen increasing public debate on abortion in Kenya, in response to several anti-SRHR policy decisions made by the Kenyan government, and influenced by faith based groups and US foreign policy.<sup>29</sup> In contrast, abortion is far less politicised in Nepal, and there is strong civil society support for safe and legal abortion provision. This may be why we did not hear similar reports of reinvigorated SRHR advocacy in Nepal, despite finding that the GGR disrupted meetings and advocacy spaces in both countries. And in Madagascar, backlash from the President, policy-makers and the Catholic Church stifle opportunities for public debate related to SRHR, and human rights more broadly; a 2019 CIVICUS report described civic space in Madagascar as 'obstructed'.<sup>44–46</sup>

While the manifestation of GGR-related changes was not always the same across countries, the impacts on the overall health system and clients were nearly identical in all contexts. Participants described lost NGO funding and partnerships, disruptions to SRH service availability and accessibility, and negative impacts on contraceptive clients' overall well-being, including their reproductive autonomy and trust in the health system.

### Limitations

This analysis is limited in several ways. Although interview participants included a range of relevant stakeholders in each country, our findings do not represent the experiences of all NGOs and service providers in the three countries. The policy's chilling effect may have encouraged some GGR-certifying NGOs to decline our requests for interviews. Additionally, the research teams encountered challenges determining when to attribute changes reported by study respondents to the GGR. This was due to some respondents' limited knowledge and understanding of the GGR, continuously changing funding/

project lifecycles, and preexisting health systems challenges, as well as the simultaneous implementation of other USG funding restrictions for SRH. These include the Helms Amendment to the Foreign Assistance Act, which has prohibited the use of USG Foreign Assistance to pay for abortion as a method of family planning, or to motivate or coerce anyone to perform abortion since 1973, and the withdrawal of USG funding to UNFPA from 2017 to 2021. However, study teams conducted follow-up when needed, in order to clarify ambiguities in the data, and compared transcripts of NGO and affiliated provider interviews. In Madagascar, the research team conducted client interviews in areas where non-certifying NGOs stopped providing support. While the reported changes in client experiences may not be wholly due to the GGR, we are confident that they are related to it.

## CONCLUSION

Ultimately, we found that the GGR had similar devastating impacts in three countries with very different abortion laws. Despite the recent reversal of the policy by the Biden Administration, the policy's impacts cannot be as swiftly reversed. Just as it took time for organisations to transition to a new reality that aligned with the demands of the GGR, it will take time to replace funding and re-establish partnerships, programmatic infrastructure, and SRH clients' trust in the health system. When the Obama Administration reversed a prior iteration of the GGR, the lack of clear guidance from USAID left some local NGOs in Ethiopia unaware of the policy shift, while others chose to continue to curtail activities due to confusion about what abortion-related restrictions accompanied USG funding postreversal.<sup>11</sup> Similar impacts are now being surfaced in Nepal, where some NGOs that are solely dependent on USG funds continue to implement the GGR despite being aware of its reversal, because they do not want to antagonise their prime partners and/or USAID.<sup>47</sup> It is critical that the Biden Administration provide clear guidance about what the policy reversal means for NGOs in practice, and direct USAID to ensure that this guidance is flowed down to all prime and sub-recipients of USG global health assistance.

Our findings suggest that the repercussions of this policy will be difficult to undo, which means that women and girls may continue to experience limited or no access to SRH services for the foreseeable future. The COVID-19 pandemic and the UK government's 85% funding reduction to UNFPA in 2021 placed additional strain on these countries' health systems, compounding and potentially extending the GGR's impacts on access to and provision of SRH services.<sup>48–50</sup> National governments must increase their SRH investments to protect against future foreign policy incursions on their health systems and development progress. In the USA, the GGR must be repealed entirely and permanently at the legislative level in order to end residual impacts and a repeating cycle of harm in aid-dependent countries.

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## REFERENCES

- 1 Health and Human Services - Standard Provision. Protecting Life in Global Health Assistance [Internet], 2017. Available: [https://grants.nih.gov/sites/default/files/HHS%20Standard%20%20Provision\\_ProtectingLifeinGlobalAssistance\\_HHS\\_May%202017.pdf](https://grants.nih.gov/sites/default/files/HHS%20Standard%20%20Provision_ProtectingLifeinGlobalAssistance_HHS_May%202017.pdf)
- 2 Kaiser Family Foundation,. The Mexico City Policy: An Explainer [Internet], 2019. The Henry J. Kaiser family Foundation. Available: <https://www.kff.org/global-health-policy/fact-sheet/mexico-city-policy-explainer/> [Accessed 31 Mar 2020].
- 3 Lasher C. With a Stroke of the Pen — Trump's Global Gag Rule Dramatically Expands Harmful Health Impacts [Internet], 2017. PAI. Available: <https://pai.org/resources/with-a-stroke-of-the-pen-trumps-global-gag-rule-dramatically-expands-harmful-health-impacts/> [Accessed 21 Apr 2021].



- 4 Population Action International (PAI). The Interpretation That Vastly Extended the Harm of the Global Gag Rule [Internet], 2019. PAI. Available: <https://pai.org/data-and-maps/the-interpretation-that-vastly-extended-the-harm-of-the-global-gag-rule/> [Accessed 11 Mar 2020].
- 5 U. S. Government Accountability Office. Global Health Assistance: Awardees' Declinations of U.S. Planned Funding Due to Abortion-Related Restrictions [Internet], 2020. Available: <https://www.gao.gov/products/gao-20-347> [Accessed 25 Oct 2021].
- 6 Schaaf M, Maistrellis E, Thomas H, *et al*. 'Protecting life in global health assistance'? towards a framework for assessing the health systems impact of the expanded global Gag rule. *BMJ Glob Health* 2019;4:e001786.
- 7 Center for Health and Gender Equity. Prescribing Chaos in Global Health: The Global Gag Rule from 1984-2018 – Change [Internet], 2018. Available: <https://srhrforall.org/prescribing-chaos-in-global-health-the-global-gag-rule-from-1984-2018/> [Accessed 25 Oct 2021].
- 8 amfAR The Foundation for AIDS Research. The Effect of the Expanded Mexico City Policy on HIV/AIDS Programming: Evidence from the PEPFAR Implementing Partners Survey [Internet], 2019. Available: <https://www.amfar.org/issue-brief-the-effect-of-the-expanded-mexico-city-policy/> [Accessed 11 Mar 2020].
- 9 International Women's Health Coalition. Crisis in Care: Year Two Impact of Trump's Global Gag Rule [Internet]. Available: [https://iwhc.org/wp-content/uploads/2019/06/IWHC\\_GGR\\_Report\\_2019-WEB\\_single\\_pg.pdf](https://iwhc.org/wp-content/uploads/2019/06/IWHC_GGR_Report_2019-WEB_single_pg.pdf)
- 10 The White House. Memorandum on Protecting Women's Health at Home and Abroad [Internet], 2021. The white house. Available: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/28/memorandum-on-protecting-womens-health-at-home-and-abroad/> [Accessed 29 Nov 2021].
- 11 Walter Leitner International Human Rights Clinic. Exporting Confusion U.S. Foreign Policy as an Obstacle to the Implementation of Ethiopia's Liberalized Abortion Law, 2010. Available: [http://www.leitnercenter.org/files/LeitnerCtr\\_EthiopiaReport\\_WebVersion2010.pdf](http://www.leitnercenter.org/files/LeitnerCtr_EthiopiaReport_WebVersion2010.pdf)
- 12 Bendavid E, Avila P, Miller G. United States aid policy and induced abortion in sub-Saharan Africa. *Bull World Health Organ* 2011;89:873–80.
- 13 Brooks N, Bendavid E, Miller G. Usa aid policy and induced abortion in sub-Saharan Africa: an analysis of the Mexico City policy. *Lancet Glob Health* 2019;7:e1046–53.
- 14 Rodgers Y. The Global Gag Rule and women's reproductive health: rhetoric versus reality [Internet]. New York Oxford University Press; 2018. <https://books.google.com/books?hl=en&lr=&id=GM90DwAAQBAJ&oi=fnd&pg=PP1&ots=2OzRkvVwPB&sig=3yw1FDi0wYKb3fZEQ9Stn1ZmuhA>
- 15 Jones KM, Supply C. And fertility outcomes: evidence from Ghana. *Econ Dev Cult Change* 2015;64:31–69.
- 16 Skuster P. Advocacy in Whispers: The Impact of the USAID Global Gag Rule Upon Free Speech and Free Association in the Context of Abortion Law Reform in Three East African Countries (PDF) [Internet], 2004. Center for Reproductive Rights. Available: <https://reproductiverights.org/advocacy-in-whispers-the-impact-of-the-usaid-global-gag-rule-upon-free-speech-and-free-association-in-the-context-of-abortion-law-reform-in-three-east-african-countries-pdf/> [Accessed 25 Oct 2021].
- 17 Mavodza C. Care Denied: Year Three Impact of Trump's Global Gag Rule [Internet]. International Women's Health Coalition, 2021. Available: <https://iwhc.org/resources/care-denied-year-three-impact-of-trumps-global-gag-rule/> [Accessed 25 Oct 2021].
- 18 Ushie BA, Juma K, Kimemia G, *et al*. Foreign assistance or attack? impact of the expanded global Gag rule on sexual and reproductive health and rights in Kenya. *Sex Reprod Health Matters* 2020;28:23–38.
- 19 Ravaoarisoa L, Razafimahatratra MJJ, Rakotondratsara MA, *et al*. Slowing progress: the US Global Gag rule undermines access to contraception in Madagascar. *Sex Reprod Health Matters* 2020;28:39–53.
- 20 Tamang J, Khanal A, Tamang A, *et al*. Foreign ideology vs. national priority: impacts of the US Global Gag Rule on Nepal's sexual and reproductive healthcare system. *Sex Reprod Health Matters* 2020;28:5–22.
- 21 Gates Foundation. Global Progress and Projections for Maternal Mortality [Internet], 2021. Available: <https://www.gatesfoundation.org/goalkeepers/report/2021-report/progress-indicators/maternal-mortality/> [Accessed 30 Apr 2022].
- 22 Government of Madagascar. Plan d'action national budgétisé en planification familiale Madagascar 2016-2020 [Internet], 2020. Available: [http://www.healthpolicyplus.com/ns/pubs/2024-2046\\_PANBMadagascarsp.pdf](http://www.healthpolicyplus.com/ns/pubs/2024-2046_PANBMadagascarsp.pdf)
- 23 FP 2020. Nepal Family Planning Commitments [Internet], 2018. Available: <https://fp2030.org/nepal> [Accessed 30 Apr 2022].
- 24 Government of Kenya. Family planning 2020 commitment, 2017. Available: [https://fp2030.org/sites/default/files/Kenya\\_FP2020\\_Commitment\\_2017\\_1.pdf](https://fp2030.org/sites/default/files/Kenya_FP2020_Commitment_2017_1.pdf)
- 25 USAID. Family planning and reproductive health program overview, 2021. Available: [https://www.usaid.gov/sites/default/files/documents/2021.11.04\\_PRH\\_FP\\_RH\\_Program\\_Overview.pdf](https://www.usaid.gov/sites/default/files/documents/2021.11.04_PRH_FP_RH_Program_Overview.pdf)
- 26 Organisation for Economic Co-Operation and Development. Creditor Reporting System (CRS) [Internet]. OECD.Stat. Available: <https://stats.oecd.org/>
- 27 The Republic of Kenya. The Constitution of Kenya [Internet], 2010. National Council for law reporting. Available: <http://www.kenyalaw.org:8181/exist/kenyalex/actview.xql?actid=Const2010>
- 28 The Republic of Kenya. Kenya Penal Code, Revised Edition 2012 [Internet], 2012. National Council for law reporting. Available: <https://www.ilo.org/dyn/natlex/docs/ELECTRONIC/28595/115477/F-857725769/KEN28595.pdf>
- 29 Opondo E. Perspectives of an SRHR advocate on the impact of the global Gag rule in Kenya. *Sex Reprod Health Matters* 2020;28:64–7.
- 30 African Population and Health Research Center., Ministry of Health, Kenya, Ipas, Guttmacher Institute. Incidence and Complications of Unsafe Abortion in Kenya: Key Findings of a National Study [Internet], 2013. Available: <https://aphrc.org/wp-content/uploads/2019/07/Incidence-and-Complications-of-Unsafe-Abortion-in-Kenya-Key-Findings-of-a-National-Study.pdf>
- 31 Hussain R. Abortion and Unintended Pregnancy in Kenya [Internet] Guttmacher Institute; 2012, Report No.: Series 2012, No. 2. <https://www.guttmacher.org/report/abortion-and-unintended-pregnancy-kenya> [Accessed 17 Jan 2020].
- 32 USAID. U.S Foreign Assistance By Country [Internet], 2021. Foreign Assitance. Available: <https://foreignassistance.gov/> [Accessed 25 Oct 2021].
- 33 Constitution of Nepal [Internet], 2015. Available: <http://www.lawcommission.gov.np/en/archives/981> [Accessed 24 Mar 2020].
- 34 Law Commission Nepal. *The right to safe motherhood and reproductive health act, 2075*, 2018.
- 35 Center for Reproductive Rights. Safe motherhood and reproductive health rights act in English, 2018. Available: <https://reproductiverights.org/sites/default/files/2020-01/Safe%20Motherhood%20and%20Reproductive%20Health%20Rights%20Act%20in%20English.pdf>
- 36 Center for Reproductive Rights. Decriminalization of Abortion in Nepal: Imperative to Uphold Women's Rights, 2021
- 37 Puri M, Wagle K, Rios V. Early impacts of the expanded global Gag rule in Nepal, 2019. Available: [http://crehpa.org.np/wp-content/uploads/2019/03/Report\\_GGR-Early-Impacts-Nepal\\_March-08-2019.pdf](http://crehpa.org.np/wp-content/uploads/2019/03/Report_GGR-Early-Impacts-Nepal_March-08-2019.pdf)
- 38 WJ W, Maru S, Regmi K. Abortion care in Nepal, 15 years after Legalization. *Health Hum Rights* 2017;19:221–30.
- 39 Republic of Madagascar. Loi fixant les règles générales régissant la Santé de la Reproduction et la Planification Familiale [Internet]; 2017, Report No.: Loi no 2017-043. [http://genderlinks.org.za/wp-content/uploads/2019/04/Sexual-Education\\_Madagascar\\_Adolscnt-SRHR\\_2017.pdf](http://genderlinks.org.za/wp-content/uploads/2019/04/Sexual-Education_Madagascar_Adolscnt-SRHR_2017.pdf)
- 40 Ministère de la Santé Publique. Madagascar code Pénal Du 17 juin 1972 MIS jour Au 30 juin 1998, 1998. Available: <https://abortion-policies.srhr.org/documents/countries/01-Madagascar-Penal-Code-1998.pdf#page=42>
- 41 Ministère de la Santé Publique. Plan de Développement du Secteur Santé 2015-2019 [Internet], 2015. Republic of Madagascar. Available: <http://extwprlegs1.fao.org/docs/pdf/Mad169381.pdf>
- 42 UNFPA. Statement of the Government of Nepal at the Nairobi Summit on ICPD25 [Internet], 2019. UNFPA Nepal. Available: <https://nepal.unfpa.org/en/news/statement-government-nepal-nairobi-summit-icpd25> [Accessed 02 Feb 2022].
- 43 Government of Nepal. Nairobi Summit on ICPD25, 2019. Available: <https://nepal.unfpa.org/en/news/statement-government-nepal-nairobi-summit-icpd25>
- 44 Ministère de la Population, de la Protection Sociale et de la Promotion de la Femme. Rapport de la République de Madagascar dans le Cadre du 25ème Anniversaire de la 4ème Conférence Mondiale sur les Femmes et de l'Adoption de la Déclaration et du Programme d'Action de Beijing en 2015, 2019. Available: [https://sustainabledevelopment.un.org/content/documents/13124Madagascar\\_review\\_Beijing20.pdf](https://sustainabledevelopment.un.org/content/documents/13124Madagascar_review_Beijing20.pdf)
- 45 Gouvernement du Madagascar. Ratification du protocole de Maputo : Plaidoyer de la Commission de l'Union Africaine – Antenimierampienena [Internet], 2019. Available: [Maistrellis E, \*et al\*. \*BMJ Global Health\* 2022;7:e008752. doi:10.1136/bmjgh-2022-008752](https://assemblee-</a></p>
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- nationale.mg/ratification-du-protocole-de-maputo-plaidoyer-de-la-commission-de-lunion-africaine/ [Accessed 29 Nov 2021].
- 46 CIVICUS. Republic of Madagascar joint submission to the universal periodic review 34th session of the UPR Working group, 2019. Available: <https://civicus.org/documents/CIVICUSMadagascarUPRSubmission.pdf>
- 47 Maistrellis E. US foreign policy and abortion [Internet], 2021. Sexual and reproductive health matters (SRHM). Available: <https://podcasts.apple.com/us/podcast/us-foreign-policy-and-abortion/id1558099164?i=1000544990062>
- 48 Hubner S, Kuczura E, Hunter K. COVID-19 and Its Impact on Women in Kenya: Understanding Sexual and Reproductive Health in the Aftermath of the US's Global Gag Rule [Internet], 2020. Duke Global Health Institute. Available: <https://globalhealth.duke.edu/student-showcases/covid-19-and-its-impact-women-kenya-understanding-sexual-and-reproductive-health> [Accessed 29 Nov 2021].
- 49 Columbia University Global Health Justice and Governance. Impacts of COVID-19 on gender-based violence (GBV) and sexual and reproductive health and rights (SRHR) programs and services, 2020. Available: [https://www.publichealth.columbia.edu/sites/default/files/kenya\\_2-pager\\_9\\_april\\_2021.pdf](https://www.publichealth.columbia.edu/sites/default/files/kenya_2-pager_9_april_2021.pdf)
- 50 UNFPA. Studies show severe toll of COVID-19 on sexual and reproductive health, rights around the world [Internet], 2021. Available: <https://www.unfpa.org/news/studies-show-severe-toll-covid-19-sexual-and-reproductive-health-rights-around-world> [Accessed 29 Nov 2021].
- 51 The World Bank. Maternal mortality ratio (modeled estimate, per 100,000 live births) - Kenya, 2019. Available: <https://data.worldbank.org/indicator/SH.STA.MMRT?locations=KE>
- 52 Ministry of Health Nepal, New ERA, ICF. Nepal demographic and health survey 2016; 2017, Ministry of Health Nepal.
- 53 INSTAT, UNICEF, Enquête par grappes indicateurs multiples-MICS Madagascar 2018. Rapport final [Internet]. Antananarivo, Madagascar INSTAT et UNICEF; 2019. [https://mics-surveys-prod.s3.amazonaws.com/MICS6/Eastern%20and%20Southern%20Africa/Madagascar/2018/Survey%20findings/Madagascar%202018%20MICS%20Survey%20Findings%20Report\\_French.pdf](https://mics-surveys-prod.s3.amazonaws.com/MICS6/Eastern%20and%20Southern%20Africa/Madagascar/2018/Survey%20findings/Madagascar%202018%20MICS%20Survey%20Findings%20Report_French.pdf)
- 54 Kenya National Bureau of Statistics. Kenya Demographic and Health Survey 2014 [Internet], 2015. Available: <https://dhsprogram.com/publications/publication-fr308-dhs-final-reports.cfm> [Accessed 10 Feb 2020].