

I. INTRODUCTION

The Global Health Justice Partnership (GHJP) is a joint initiative between Yale Law School and Yale School of Public Health that collaborates with NGOs domestically and worldwide to provide research and advocacy to support to critical health interventions. This parecer is submitted on behalf of GHJP by: MPH Candidate Paige Baum, MPH/MEM Candidate Anna Fiasco, JD Candidate Shane Kunselman, JD Candidate Miriam Rosenbaum, MSc., and JD Candidate Camila Vega, with editorial support from Professor Alice M. Miller, JD and Clinical Fellow Christine Ricardo, ScM, JD.

Based on GHJP's expertise in research and analysis of the intersections between public health, law, human rights, and policy advocacy, the National Association of Public Defenders (Anadep) invited us to submit a parecer analyzing the Ministry of Health's Zika and Microcephaly Protocol (the "Protocol"). This analysis provides a framework for the Federal Supreme Court to ensure women's rights and health in the face of the Zika virus epidemic.

II. SUMMARY OF FINDINGS

After reviewing the Version 2.0 of the Protocol, literature on the Brazilian government's public health policies and efforts related to the recent Zika and congenital Zika syndrome epidemics, and regarding Brazil's national and international human rights obligations, we find the following:

- The Brazilian government's failure to ensure adequate infrastructure, public health resources, and mosquito control programs in certain areas has greatly exacerbated the Zika and Zika-related congenital Zika syndrome epidemics particularly among poor women of racial minorities.
- In addition to contributing to the severity of the Zika and Zika-related congenital Zika syndrome epidemics, the Brazilian government has failed to enact adequate measures to ensure that all women have access to comprehensive reproductive health information and options, as required by Brazil's public health and human rights commitments.
- The Protocol presents a critical opportunity for Brazil to affirm its commitment to women's health and rights and to fulfill its national and international obligations to protect those women most affected by the Zika epidemic. To take advantage of this opportunity, the Protocol must:
 1. Account for the practical difficulties, including social and cultural barriers, many women face in accessing and using contraception;
 2. Provide information about all available reproductive health services, including what to do in the event that contraception fails, as well as guidance about when and how women may access legal abortions; and
 3. Equip healthcare professionals with medically accurate language to appropriately respond to women's inquiries and concerns about safe pregnancy termination, regardless of the professional's ability to provide the procedure.

III. THE GOVERNMENT'S INFRASTRUCTURE AND PUBLIC HEALTH FAILINGS HAVE EXACERBATED THE ZIKA EPIDEMIC

Brazil's 1988 Constitution creates an affirmative duty to ensure individual access to health care and to promote policies that address social, economic, and environmental determinants of health for all Brazilians.¹ Despite many practical barriers, Brazil has previously followed its constitutional obligation to promote the health of marginalized populations in the face of public health crises. For example, in response to the HIV/AIDS epidemic, Brazilian health officials successfully supported expanded testing access, overcame cultural barriers, and promoted diverse and appropriate prevention and treatment options, regardless of race, sex, or class.^{2 3 4}

In the context of Zika, the government has thus far failed to meet its constitutional duties: it has failed to provide adequate infrastructure and it has failed to provide access to comprehensive, quality health services to all Brazilians, regardless of socio-economic status or race. The cost of these failings are now being disproportionately borne by poor, racial minority women and their families.

A. The government's inadequate investments in infrastructure have contributed to mosquito proliferation and consequently the prevalence of Zika among Brazil's poorest women and communities.

Current government policies neglect serious infrastructural deficiencies. These shortcomings in basic infrastructure are amplified in disorganized and crowded urban communities.^{5 6} Approximately 25% of Brazil's population lives in slum communities with minimal

¹ Constituição Federal de 1988, artigos 182, 196, 197, 200, 225.

² Galvão J. Brazil and access to HIV/AIDS drugs: a question of human rights and public health. *American Journal of Public Health* [Internet]. 2011 [cited 2016 Mar 8]; 95(7). Available from: <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2004.044313>

³ Nunn AS, da Fonseca, EM, Bastos FI, Gruskin S. AIDS treatment in Brazil: impacts and challenges. *Health Affairs* [Internet]. 2009 [cited 2016 Mar 8];28(4), 1103–13. Available from :<http://doi.org/10.1377/hlthaff.28.4.1103>

⁴ Levi GC, Vitoria MA. Fighting against AIDS: the Brazilian experience. *Ovid* [Intenet]. 2002 [cited 2016 Mar 8]; 16(18). Available from: <http://www.ncbi.nlm.nih.gov/pubmed/12461410>.

⁵ Brum E. The Zika virus mosquito is unmasking Brazil's inequality and indifference. *The Guardian* [Online]. 2016 Feb 16 [Cited 2016 Mar 8]. Available from: <http://www.theguardian.com/commentisfree/2016/feb/16/zika-mosquito-brazil-inequality-brazilian-government>

⁶ Editorial Board. Delays ahead: The government is getting serious about attracting private investment in roads, railways and airports. It will not happen quickly *The Economist* [Online]. 9 June 2015 [cited 2016 Mar 8]. Available from: <http://www.economist.com/news/americas/21653949-government-getting-serious-about-attracting-private-investment-roads-railways-and-airports>.

infrastructure and access to government services.⁷ As described below, inadequate urban infrastructure has allowed Zika-carrying mosquitos to rapidly proliferate. The Zika epidemic is thus largely a symptom of urban poverty. Urban slum residents are both at higher risk of exposure to the disease and have fewer resources than non-slum residents to address health problems if and when they arise.⁸

Infrastructural shortcomings that have contributed to the Zika epidemic include, but are not limited to:

- **Poor access to clean water:** The government has failed to properly maintain water infrastructure in many parts of Brazil, which has lead to inconsistent water delivery to many homes.⁹ This forces residents to stockpile water within their homes, creating prime breeding places for Zika-carrying mosquitos.¹⁰
- **Inadequate sanitation:** The neglect of basic sanitation and waste disposal services has contributed to the spread of Zika. Only 45% of Brazilians have access to proper sewage systems.¹¹ Many people, especially in crowded urban areas, are regularly exposed to open sewers, which are known mosquito breeding grounds.¹²
- **Inconsistent waste removal:** Lack of consistent trash pickup and disposal results in trash piles - also known mosquito breeding grounds - building up around people's homes.¹³ Again, this problem disproportionately affects the urban poor.¹⁴

⁷ UN-HABITAT. State of the World's Cities 2010/11: Cities for All: Bridging the Urban Divide [Internet]. Taylor & Francis; 2011[cited 2016 Mar 8]. Available from: http://books.google.com.br/books?id=Yf0dMEc_IwoC

⁸ Kikuti M, et al. Spatial Distribution of Dengue in a Brazilian Urban Slum Setting: Role of Socioeconomic Gradient in Disease Risk. PLoS Neglected Tropical Diseases [Internet]. 2009 [Cited 2016 Mar 8]; 9(7). Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4510880/>

⁹ WHO/UNICEF joint monitoring program for water supply and sanitation: Brazil coverage estimates improved drinking water [Internet]. 2016 Mar 8. Available from: <http://www.wssinfo.org/>

¹⁰ Khazan O. What the U.S. can learn from Brazil's healthcare mess. The Atlantic [Internet]. 2014 May 8 [cited 2016 Mar 8]. Available from:

<http://www.theatlantic.com/health/archive/2014/05/the-struggle-for-universal-healthcare/361854/>

¹¹ WHO/UNICEF joint monitoring program for water supply and sanitation: Brazil coverage estimates improved drinking water [Internet]. 2016 Mar 8. Available from: <http://www.wssinfo.org/>

¹² Khazan O. What the U.S. can learn from Brazil's healthcare mess. The Atlantic [Internet]. 2014 May 8 [cited 2016 Mar 8]. Available from:

<http://www.theatlantic.com/health/archive/2014/05/the-struggle-for-universal-healthcare/361854/>

¹³ Osterholm MT. How scared should you be about Zika? New York Times [Internet]. 2016 Jan 29 [Cited 2016 Mar 8]. Available from:

<http://www.nytimes.com/2016/01/31/opinion/sunday/zika-mosquitoes-and-the-plagues-to-come.html>

These infrastructural deficiencies disproportionately place impoverished women at high risk of exposure and transmission of Zika.^{15 16} Limited opportunities for formal employment and socio-cultural expectations about caregiving roles mean that poor women generally spend more time at home - near stagnant water, open sewage, and garbage-based mosquito breeding grounds - than males and women of higher socioeconomic status.¹⁷ In addition to the elevated risk of exposure to Zika, these women are burdened with the prospect of infection during pregnancy and the causal link with microcephaly or congenital Zika syndrome.¹⁸

B. The government’s failure to provide a quality, comprehensive public health care system has compounded Zika’s impact on the poorest women and communities.

In combination with the infrastructural deficiencies described above, inadequate public health services have amplified the Zika epidemic. Again, the health burden associated with such deficiencies falls disproportionately on the poorest Brazilians. Two particularly Zika-exacerbating factors are (1) a lack of access to quality healthcare services and (2) failed mosquito control programs.

1. Because of the government’s failure to ensure universal and equal access to quality public health services, poor women and communities receive inadequate health care.

¹⁴ Mercer M. There’s a cheap fix in Zika Virus’s ground zero. The Daily Beast [Internet]. 2016 Jan 29 [cited 2016 Mar 8]. Available from: <http://www.thedailybeast.com/articles/2016/01/29/there-s-a-cheap-fix-in-zika-virus-s-ground-zero.html>

¹⁵ Hennigan T. Brazil struggles to cope with Zika epidemic. BMJ (Clinical Research Ed.) [Internet]. 2016 Mar 8; 352, i122. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26931360>

¹⁶ Roa M. Zika virus outbreak: reproductive health and rights in Latin America. The Lancet [Internet]. 2016 March 8. Available from: [http://doi.org/10.1016/S0140-6736\(16\)00331-7](http://doi.org/10.1016/S0140-6736(16)00331-7)

¹⁷ International Fund for Agricultural Development (IFAD). Investing in rural people in Brazil [Internet]. 2015 [Cited 2016 Feb 29]. Available from: http://www.ifad.org/operations/projects/regions/PL/factsheet/brazil_e.pdf; Bekhouche Y, et al. Global gender gap report 2013. World Economic Forum [Internet]. 2015 [Cited 2016 Mar 8]; 37-38. Available from: <http://www3.weforum.org/docs/GGGR13/Brazil.pdf>

¹⁸ Hennigan T. Brazil struggles to cope with Zika epidemic. BMJ (Clinical Research Ed.) [Internet]. 2016 Mar 8; 352, i122. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26931360>; Rasmussen SA, Jamieson DJ, Honein MA, Petersen LR. Zika virus and birth defects—reviewing the evidence for causality. New England Journal of Medicine. 2016 Apr 13.

Brazil's public health system falls far short of the constitutional promise of universal and equal access to health services.¹⁹ For example, there are dramatic differences in regional health care coverage.²⁰ The Northeast, the epicenter of the Zika epidemic, is home to more than half of all poor Brazilians, and is one of the most under-resourced areas of the public health care system.²¹ Rural areas also suffer inferior health care on average.²² Scarcity of doctors and medicine, long queues at hospital emergency departments, bed shortages, and outdated and malfunctioning equipment are all common in rural communities.²³ In addition to regional disparities, there are dramatic inequities in burden of disease and access to care associated with race, with Brazilians of color suffering higher child and adult mortality as well as reduced access to care.^{24 25} These, among others, are issues that must be addressed to assure adequate health services.

2. Because of the government's failure to sustain effective mosquito control programs, poor women and communities suffer a disproportionate burden of mosquito-borne illnesses.

¹⁹ Buss P, Gadelha P. Health care systems in transition: Brazil part I: an outline of Brazil's health care system reforms. *Journal of Public Health Medicine*. 1996; 18(3), 289-95.

²⁰ Castro MC. Overview of health risk factors in Brazil. Swiss Re Centre for Global Dialogue [Internet]. 2014 Feb 14 [Cited 2016 Mar 8]. Available from: http://cgd.swissre.com/risk_dialogue_magazine/Cardiovascular_risks_in_HGM/Overview_of_health_risk_factors_in_Brazil.html

²¹ WHO. Flawed but fair: Brazil's health system reaches out to the poor [Internet]. 2008 [Cited 2016 Mar 8], Available from: <http://www.who.int/bulletin/volumes/86/4/08-030408/en/>

²² WHO. Flawed but fair: Brazil's health system reaches out to the poor [Internet]. 2008 [Cited 2016 Mar 8], Available from: <http://www.who.int/bulletin/volumes/86/4/08-030408/en/>

²³ Buss P, Gadelha P. Health care systems in transition: Brazil part I: an outline of Brazil's health care system reforms. *Journal of Public Health Medicine*. 1996; 18(3), 289-95.

²⁴ Martins AL. Higher risks for black women in Paraná-Brazil. *Online Brazilian Journal of Nursing* [Internet]. 2003 [Cited 2016 Mar 8]; 2(1), 9-14.

²⁵ Martins LA. Mortalidade materna de mulheres egras no Brasil. *Cad Saude Publica* [Internet]. 2006 [Cited 2016 Mar 8]; 22(11). Available from:

<http://www.scielosp.org/pdf/csp/v22n11/22.pdf>; United Nations Children's Fund. The state of Brazil's children 2006: the right to survival and development. UNICEF [Internet]. 2005 [Cited 2016 Mar 8]; 10-11. Available from: <http://www.unicef.org/sowc08/docs/Figure-4.5.pdf>; Wood

CH, Lovell PA. Racial inequality and child mortality in Brazil. *Social Forces* [Internet]. 1992 [Cited 2016 Mar 8]; 70(3), 703-724. Available from:

http://www.jstor.org/stable/2579750?seq=1#page_scan_tab_contents; Racial inequality in Brazil: a look at how race/color affects women in terms of health care. *Black Women of Brazil* [Internet]. 2013 Oct 15 [Cited 2016 Mar 8]. Available from:

<https://blackwomenofbrazil.co/2013/10/15/racial-inequality-in-brazil-a-look-at-how-racecolor-affects-women-in-terms-of-health-care/>; Barros M, Belon AP, Marín-León L. Mortality among adults: gender and socioeconomic differences in a Brazilian city. *BioMed Central* [Internet]. 2012 Jan 17 [Cited 2016 Mar 8]. Available from:

<http://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-12-39>

For more than a century, Brazil has failed to implement appropriate and vigorous mosquito control measures, thereby allowing malaria, dengue, and other mosquito-borne illnesses to persist and become endemic.²⁶ As is now the case with Zika, these mosquito-borne illnesses have long had a disproportionate impact on the poor and marginalized.²⁷ Failed mosquito control programs are evidence of Brazil's neglect to fulfill the right to health of the many women facing racial and socioeconomic barriers to health care.

IV. THE PROTOCOL FAILS TO ADEQUATELY ADDRESS WOMEN'S REPRODUCTIVE RIGHTS AND HEALTH CARE NEEDS DESPITE NATIONAL AND INTERNATIONAL OBLIGATIONS

As with the HIV/AIDS epidemic, effectively combating Zika will require the Brazilian government to work within a diverse cultural and social context to evaluate the needs of vulnerable populations, and to expand the availability of health resources to those populations. The Protocol appropriately acknowledges the importance of contraceptive use as well as men's role in pregnancy.²⁸ It does not, however, reflect an understanding of social context adequate to address the Zika epidemic in a way that supports Brazil's commitment to public health and human rights goals.

Specifically, the Protocol ignores the complex realities associated with women's reproductive decisions. It does not account for the practical challenges that many individuals, particularly poor women, face in obtaining and using contraception, nor does it make any mention of abortion, legally available or otherwise. To advance public health and human rights, the protocol must be rooted in women's lived experiences, rather than merely in theoretical solutions. Further, the Protocol's exclusion of comprehensive reproductive health options demonstrates the Brazilian government's neglect of its international obligations to protect women's health.

There is strong evidence that there is a relationship between infection Zika during pregnancy and congenital malformations.^{29 30} Therefore, the Protocol should emphasize that health professionals must respect the woman's autonomy in decision making. Women who have been

²⁶ Griffing SM, Tauil PL, Udhayakumar V, Silva-Flannery L. A historical perspective on malaria control in Brazil. *Memórias Do Instituto Oswaldo Cruz* [Internet]. 2015 [Cited 2016 Mar 8]; 110(6), 701–18. Available from: <http://doi.org/10.1590/0074-02760150041>

²⁷ Kikuti M, et al. Spatial Distribution of Dengue in a Brazilian urban slum setting: role of socioeconomic gradient in disease risk. *PLoS Neglected Tropical Diseases* [Internet]. 2015 [Cited 2016 Mar 8]; 9(7). Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4510880/>

²⁸ Ministério da Saúde-Secretaria de Atenção à Saúde. Protocolo de atenção à saúde e reposta à ocorrência de microcefalia relacionada à infecção pelo Vírus Zika (versão 2.0). Plano Nacional de Enfrentamento à Microcefalia. 2016.

²⁹ Mlakar J, et al. Zika virus associated with microcephaly. *New England Journal of Medicine* [Internet]. 2016 Mar 12. Available from: <http://www.nejm.org/doi/pdf/10.1056/NEJMoa1600651>

³⁰ Brasil P, et al. Zika Virus infection in pregnant women in Rio de Janeiro - preliminary report. *New England Journal of Medicine* [Internet]. 2016 Mar 12. Available from: <http://doi.org/10.1056/NEJMoa1602412>.

infected by Zika , or who are vulnerable to infection, should receive counseling, assistance and information to enable them to make better decisions regarding pregnancy and contraception.

A. The Protocol ignores the challenges many women, especially poor women, experience in obtaining and using contraception.

The World Health Organization (WHO) has declared that access to contraceptive information and services, regardless of race and socioeconomic status, is a human right.³¹ Contraception may be legal and free in Brazil, but the government has failed to ensure that individuals have actual access to information and services.³² The Protocol correctly recognizes that proper contraceptive use will play a large role in curbing the impact of the Zika epidemic. However, the Protocol must acknowledge the barriers many women, particularly poor women, face to contraceptive use. It must also provide guidance to health care professionals on delivering contraceptive information and services in a way that “ensures fully informed decision-making, respects dignity, autonomy, privacy and confidentiality, and is sensitive to individuals’ needs and perspective.”³³

Contraception is theoretically widely available in Brazil, but research indicates that there are still significant levels of unmet need. As many as 20% of sexually active adolescent women in Brazil are not using birth control, and approximately half of all births in Brazil are unintended.³⁴

Persistent social and gender inequalities – from under-resourced public health care clinics and lack of proper sexual education in public schools to unequal power dynamics in intimate relationships – create difficulties for poor and other marginalized women in accessing and using contraceptive information and methods.³⁵ Other barriers include: cost and difficulty of transportation to health care clinics; access to information and services about the full range of methods, including emergency contraception; and lack of training and supervision of health care

³¹ WHO. Ensuring human rights in the provision of contraceptive information and services: guidance and recommendations [Internet]. 2014 [Cited 2016 Feb 11]. Available from: http://www.who.int/reproductivehealth/publications/family_planning/human-rights-contraception/en.

³² Claro LBL, et al.. Adolescentes e suas relações com serviços de saúde: estudo transversal em escolares de Niterói, Rio de Janeiro, Brasil. *Cad Saude Publica*. 2006; 22(8), 1565-1574.

³³ WHO. Ensuring human rights in the provision of contraceptive information and services: guidance and recommendations [Internet]. 2014 [Cited 2016 Feb 11]. Available from: http://www.who.int/reproductivehealth/publications/family_planning/human-rights-contraception/en.

³⁴ Rozenberg R, et al. Práticas contraceptivas de adolescentes brasileiras: vulnerabilidade social em questão. *Ciência & Saúde Coletiva* [Internet]. 2014 [cited 2016 Feb 14];18(12), 3645-3652. Available from: <https://dx.doi.org/10.1590/S1413-81232013001200020>

³⁵ de Bessa GH. Ethnophysiology and contraceptive use among low-income women in urban Brazil. *Health Care for Women International*. 2006; 27(5), 428-452; Alves CA, Brandão ER. Vulnerabilidades no uso de métodos contraceptivos entre adolescentes e jovens: interseções entre políticas públicas e atenção à saúde. *Ciência & Saúde Coletiva*. 2009;14(2):661-670

personnel.³⁶ The Protocol, as a guide to health professionals consistent with their legal and ethical duties, is required to explicitly address these barriers.

There are strong indications of a link between Zika infection during pregnancy and birth defects. Therefore, the Protocol must emphasize that health professionals must respect women's autonomy in decision-making. Women who have been infected with Zika, or are vulnerable to infection, should receive counseling, advice, and information that enables them to make the contraceptive and pregnancy decisions that are best for themselves.

B. The Protocol fails to acknowledge the widespread reality of abortion in Brazil and the urgency of improving access to information and services.

One of the most concerning aspects of the Protocol is its complete silence on the subject of abortion, therapeutic or otherwise. Despite restrictions, abortions are legal in certain circumstances.³⁷ Moreover, abortion, legal or otherwise, is common in Brazil.³⁸ Evidence-based public health interventions like the Protocol must address the health realities faced by Brazilian women. One in five Brazilian women have terminated at least one pregnancy in their lifetimes, and there are approximately 860,000 abortions in the country each year.^{39 40} Severe restrictions to legal abortion cause the vast majority of these abortions to occur outside the ambits of the law and the formal public health system. As the WHO has declared: "Whether abortion is legally more restricted or available on request, a woman's likelihood of having an unintended pregnancy and seeking induced abortion is about the same. However, legal restrictions, together with other barriers, mean many women induce abortion themselves or seek abortion from unskilled providers."⁴¹

³⁶ Rozenberg R, Silva K, Silveira da, Bonan C, Ramos EG. Práticas contraceptivas de adolescentes brasileiras: vulnerabilidade social em questão. *Ciência & Saúde Coletiva*. 2013; 18(12), 3645-3652.

³⁷ Human Rights Watch. Abortion: Brazil [Internet]. 2016 Mar 7. Available from: <https://www.hrw.org/legacy/women/abortion/brazil.html>.

³⁸ Diniz D, Medeiros M. Abortion in Brazil: a household survey using the ballot box technique. *Ciência & Saúde Coletiva* [Internet]. 2010 [Cited 2016 Mar 7]; 15(Suppl. 1), 959-966. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232010000700002&lng=en&tlng=en.

³⁹ Diniz D, Medeiros M. Abortion in Brazil: a household survey using the ballot box technique. *Ciência & Saúde Coletiva* [Internet]. 2010 [Cited 2016 Mar 7]; 15(Suppl. 1), 959-966. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232010000700002&lng=en&tlng=en

⁴⁰ Monteiro MF, Adesse L, Drezett, J. Atualização das estimativas da magnitude do aborto induzido, taxas por mil mulheres e razões por 100 nascimentos vivos do aborto induzido por faixa etária e grandes regiões. *Brasil, 1995 a 2013. Reprodução & Climatério*. 2015; 30(1), 11-18.

⁴¹ WHO. Safe abortions: technical and policy guidance for health systems [Internet]. 2012 [Cited 2016 Mar 8]. Available from: http://apps.who.int/iris/bitstream/10665/70914/1/9789241548434_eng.pdf.

As with many of Brazil's other public health failings, it is poor women who suffer the burden of restrictive abortion laws.^{42 43} Therefore, not only is the Protocol's silence on abortion a failure of the government's public health promise of equitable health care, it also undermines women's human rights and contradicts international health standards.

1. The Protocol misses a crucial opportunity to educate health services providers about existing legal exceptions for abortion and the proper procedures for ensuring access.

Abortion is legally available in instances of rape, anencephaly, or risk to the woman's life, but the Protocol does not address how health care providers should assess for these factors or inform women of the necessary procedures by which abortions can be accessed in such cases.⁴⁴ In particular, educating health care professionals about the rape-exception is paramount - it is estimated that a staggering 527,000 women suffer rape each year.⁴⁵ Therefore, the protocol misses a crucial opportunity to educate health providers, and in turn women, about legal abortion. Current levels of health provider ignorance about abortion law are unacceptable; a national survey of OB-GYNs found that less than half had accurate knowledge of abortion law.⁴⁶

⁴⁷ The Ministry of Health's Technical Standards on abortion care for victims of sexual violence - Humanized Care for Abortion and Prevention and Treatment of Injuries Resulting from Sexual Violence against Women and Adolescents - are relevant guidelines that could help supplement the Zika Protocol on this question.^{48 49}

⁴² Galli B. Negative impacts of abortion criminalization in Brazil: systematic denial of women's reproductive autonomy and human rights. *University of Miami Law Review*. 2011; 15(12), 969-980.

⁴³ Fusco CL. Aborto inseguro: um sério problema de saúde pública em uma população em situação de pobreza. *Reprodução & Climatério* [Internet]. 2013 [Cited 2016 Mar 7]; 28(1), 2-9. Available from: <http://www.sciencedirect.com/science/article/pii/S1413208713000095>.

⁴⁴ Ministério da Saúde-Secretaria de Atenção à Saúde. Protocolo de atenção à saúde e reposta à ocorrência de microcefalia relacionada à infecção pelo Vírus Zika (versão 2.0). Plano Nacional de Enfrentamento à Microcefalia. 2016.

⁴⁵ IPEA. Estupro no Brasil: uma radiografia segundo os dados da Saúde (versão preliminar). Brasília: IPEA [Internet]. 2014 [cited 2016 Apr 13]. Available from http://www.ipea.gov.br/portal/images/stories/PDFs/nota_tecnica/140327_notatecnicadiest11.pdf.

⁴⁶ Goldman LA, Garcia SG, Diaz J, Yam EA. Brazilian obstetrician-gynecologists and abortion: a survey of knowledge, opinions and practices. *Reproductive Health* [Internet]. 2005 [cited 2016 Mar 7]; 2(10). Available from: <http://reproductive-health-journal.biomedcentral.com/articles/10.1186/1742-4755-2-10>.

⁴⁷ Galli B, Gomes EC. Representações dos profissionais de saúde EM relação ao aborto: entre direitos e deveres na atença [Internet]. 2014 Aug 20 [cited 2016 Mar 7]. Available from: <http://ssrn.com/abstract=2484267>.

⁴⁸ Ministério da Saúde. Atenção humanizada ao abortamento [Internet]. 2011 [cited 206 Mar 7]. Available from: http://bvsmis.saude.gov.br/bvs/publicacoes/atencao_humanizada_abortamento_norma_tecnica_2e_d.pdf.

2. *The Protocol fails to appropriately acknowledge and respond to the scientifically documentable fact that unsafe abortion is a public health reality in Brazil and one that disproportionately affects poor women.*

Abortion, regardless of the legal restrictions on the procedure, remains a relevant and important health topic to be discussed with women who have been exposed to Zika and face a potential fetal congenital Zika syndrome diagnosis. For women choosing not to carry their pregnancies to term but who do not fall into one of Brazil's legal exceptions for abortion, clandestine abortions are an unfortunate reality.⁵⁰ For poor women, this generally means unsafe abortions.^{51 52}

Unsafe abortions are the fourth leading cause of maternal mortality in Brazil.⁵³ According to the Sistema Unico de Saude, complications due to unsafe abortions account for 250,000 annual emergency room visits each year.⁵⁴ In fact, the Ministerio da Saude has acknowledged that, "O abortamento representa uma das principais causas de mortalidade materna no Brasil."⁵⁵

⁴⁹ Ministério da Saúde. Prevenção e tratamento dos agravos resultantes da violência sexual contra mulheres adolescentes [Internet]. 2012 [[cited 2016 Mar 7]. Available from: http://bvsmms.saude.gov.br/bvs/publicacoes/prevencao_agravo_violencia_sexual_mulheres_3ed.pdf.

⁵⁰ Diniz D, Medeiros M. Abortion in Brazil: a household survey using the ballot box technique. *Ciência & Saúde Coletiva* [Internet]. 2010 [cited 2016 Mar 7]; 15(Suppl. 1), 959-966. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1413-81232010000700002&lng=en&tlng=en.

⁵¹ Ministério da Saúde. Atenção humanizada ao abortamento [Internet]. 2011 [cited 2016 Mar 7]. Available from: http://bvsmms.saude.gov.br/bvs/publicacoes/atencao_humanizada_abortamento_norma_tecnica_2ed.pdf.

⁵² Grimes DA, Benson J, Singh S, Romero M, Ganatra B, Okonofua FE, Shah IH. Unsafe abortion: the preventable pandemic. *The Lancet*. 2006; 368(9550), 1908-1919.

⁵³ Fusco CL. Aborto inseguro: um sério problema de saúde pública em uma população em situação de pobreza. *Reprodução & Climatério* [Internet]. 200 [cited 2016 Mar 7]; 28(1), 2-9., Available from: <http://www.sciencedirect.com/science/article/pii/S1413208713000095>.

⁵⁴ Ministério da Saúde. Atenção humanizada abortamento [Internet]. 2011 [cited 2016 Mar 7]. Available from: http://bvsmms.saude.gov.br/bvs/publicacoes/atencao_humanizada_abortamento_norma_tecnica_2ed.pdf.

⁵⁵ Ministério da Saúde. Atenção humanizada abortamento [Internet]. 2011 [cited 2016 Mar 7]. Available from: http://bvsmms.saude.gov.br/bvs/publicacoes/atencao_humanizada_abortamento_norma_tecnica_2ed.pdf.

Evidence suggests that these figures will rise in light of the congenital Zika syndrome epidemic and Brazil's failure to provide a comprehensive public health response.⁵⁶

The Protocol provides a critical opportunity to equip health service professionals to help limit harm to women at risk of undergoing unsafe abortions. Health professionals have the professional and ethical duty to act to reduce the risks and harm associated with unsafe abortions by offering women information and counseling on their options.⁵⁷ This “harm reduction” model, which seeks to ensure that women have access to scientifically-based and neutral counseling, has been implemented in other jurisdictions with similarly restrictive abortion laws.^{58 59 60} Such neutral counseling includes information on the risks associated with different means to induce abortion and signs of complications that require immediate attention.^{61 62} The health care professional is not involved in inducing the abortion, only in providing information to help women reduce avoidable harm.

C. The Protocol's silence on abortion undermines Brazil's national and international human rights commitments.

⁵⁶ Miller ME. With abortion banned in Zika countries, women beg on web for abortion pills. Washington Post [Internet]. 2016 Feb 17 [cited 2016 Mar 9]. Available from: <https://www.washingtonpost.com/news/morning-mix/wp/2016/02/17/help-zika-in-venezuela-i-need-abortion>.

⁵⁷ Carino G, Friedman J, Rueda Gomez M, Tatum C, Briozzo L. A rights-based model: perspectives from health service providers. Institute of Development Studies Bulletin [Internet]. 2008 [cited 2016 Mar 9]; 39(3). Available from:

<http://onlinelibrary.wiley.com/doi/10.1111/j.1759-5436.2008.tb00465.x/epdf>; World Health Organization. Safe Abortions: Technical and Policy Guidance for Health Systems [Internet]. Geneva, World Health Organization. 2012 [cited 2016 Apr 13]. Available from http://apps.who.int/iris/bitstream/10665/70914/1/9789241548434_eng.pdf.

⁵⁸ Erdman JN. Harm reduction, human rights, and access to information on safer abortion. International Journal of Gynecology and Obstetrics [Internet]. 2012 [cited 2016 Mar 7]; 118, 83-86. Available from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2127415.

⁵⁹ Erdman J. Access to information on safe abortion: a harm reduction and human rights approach. Harvard Journal of Law and Gender. 2011; 34, 413–462

⁶⁰ Kapp N, Glasier A. WHO technical and policy guidance emphasizes the health systems' responsibility to provide safe abortion services. Contraception [Internet]. 2011 [cited 2016 Mar 7]; 87(5), 511-512. Available from:

<http://www.sciencedirect.com/science/article/pii/S0010782413000462>

⁶¹ Romero K, Houlihan S. Maternal mortality, unsafe abortion, and the harm reduction model. Women's Link Worldwide and International Planned Parenthood Federation. 2012.

⁶² Briozzo L, Vidiella G, Rodríguez F, Gorgoroso M, Faúndes A, Pons J. A risk reduction strategy to prevent maternal deaths associated with unsafe abortion. International Journal of Gynecology & Obstetrics [Internet]. 2006 [cited 2016 Mar 8]; 95(2), 221-226. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/17010348>.

Currently, thousands of Brazilian women are facing tremendous uncertainty and suffering as a result of the Zika epidemic.⁶³ The Protocol's reluctance to acknowledge the realities faced by women seeking family planning options and its continued failure to respect these women's reproductive autonomy is a violation of its international human rights commitments. Per these commitments, affected women have the right to safe abortion,⁶⁴ as grounded in:

- **The right to health:** All Brazilian women have the right to “the enjoyment of the highest level of physical, mental and social well-being.”⁶⁵ As discussed above, the severe restrictions on abortion force thousands of poor Brazilian women each year to undergo unsafe abortions and compromise their health.⁶⁶ As a result of the Zika epidemic, it is likely that an increased number of poor women will be seeking out unsafe, health-threatening abortions.⁶⁷
- **The right to life:** Deficiencies in access and education surrounding contraception and legal abortion for women, especially pregnant women concerned about the potential health effects of Zika and Zika-related congenital Zika syndrome, may risk their lives by resorting to unsafe clandestine abortions.⁶⁸
- **The right to equality:** Current abortion restrictions discriminate against poor women, many of whom are Afro-Brazilians, because these women lack the resources and information that their wealthier counterparts might use to access safe pregnancy terminations.⁶⁹

⁶³ WHO. Zika situation report [Internet]. 2016 Feb 5 [cited 2016 Feb 29]. Available from: http://apps.who.int/iris/bitstream/10665/204348/1/zikasitrep_5Feb2016_eng.pdf.

⁶⁴ United Nations Committee on Economic, Social and Cultural Rights. General comment no. 22 (2016) on the right to sexual and reproductive health (article 12 of the international covenant on economic, social and cultural rights) [Internet]. 2016 Mar 4 [cited 2016 Mar 12] Available from: http://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=E%2fC.12%2fGC%2f22&Lang=en.

⁶⁵ Organization of American States. Protocol of San Salvador [Internet]. 1988, November 17 [cited 2016 Mar 7]. Available from: <http://www.oas.org/juridico/english/treaties/a-52.html>

⁶⁶ Monteiro MF, Adesse L, Drezett J. Atualização das estimativas da magnitude do aborto induzido, taxas por mil mulheres e razões por 100 nascimentos vivos do aborto induzido por faixa etária e grandes regiões. Brasil, 1995 a 2013. Reprodução & Climatério [Internet]. 2015 [cited 2016 Mar 7]; 30(1), 11-18. Available from: <http://www.sciencedirect.com/science/article/pii/S1413208715000254>.

⁶⁷ Miller ME. With abortion banned in Zika countries, women beg on web for abortion pills. Washington Post [Internet]. 2016 Feb 17 [cited 2016 Mar 9]. Available from: <https://www.washingtonpost.com/news/morning-mix/wp/2016/02/17/help-zika-in-venezuela-i-need-abortion>.

⁶⁸ United Nations Human Rights Committee. Compilation of general comments and general recommendations adopted by human rights treaty bodies. 1982.

⁶⁹ Galli B. Negative impacts of abortion criminalization in Brazil: systematic denial of women's reproductive autonomy and human rights. University of Miami Law Review. 2011; 15(12), 969-980.

- **The right to self-determination:** Forcing a woman to continue a pregnancy she does not want violates her autonomy and right to self-determination. In the reproductive health context, self-determination means “that people are able to have a responsible, satisfying, and safe sex life and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so.”^{70 71}

The United Nations has urged Brazil to live up to its human rights commitments with respect to the Zika epidemic and its effects on reproductive health.^{72 73 74} Regarding safe, available abortions, the UN High Commissioner for Human Rights has stated that Brazilian “[l]aws and policies that restrict [women’s] access to these services must be urgently reviewed in line with human rights obligations in order to ensure the right to health for all in practice.”⁷⁵ The UN has also expressed particular disappointment with the Brazilian government’s decision to combat Zika simply by advising that women avoid pregnancy rather than providing them with

⁷⁰ WHO. Reproductive health [Internet]. 2016 [cited 2016 Mar 7]. Available from: http://www.who.int/topics/reproductive_health/en.

⁷¹ These rights are also expressed by several international compacts joined by Brazil, including: the International Covenant on Economic, Social, and Cultural Rights; the Additional Protocol of San Salvador to the Inter-American Human Rights Convention (Department of International Law, OAS [Internet]. 2016 [Accessed 2016 May 05]. Available at: <http://www.oas.org/juridico/english/treaties/a-52.html>. Several United Nations committees have also recognized these rights, including the Human Rights Committee; The Convention on the Elimination of all Forms of Discrimination against Women (UN Women [Internet]. 2016 [cited 2016 May 05]. Available at: <http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm>.) and the Committee on Economic, Social, and Cultural Rights (UN Human Rights [Internet]. 3 January 1976 [accessed 2016 May 05]. Available at: <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx>).

⁷² United Nations. Upholding women’s human rights essential to Zika response – Zeid [Internet]. 2016, Feb 5 [cited 2016 Mar 7]. Available from: <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=17014&LangID=E>.

⁷³ Watts J. UN tells Latin American countries hit by Zika to allow women access to abortion. The Guardian [Internet]. 2016 Feb 5 [cited 2016 Mar 7]. Available from: <http://www.theguardian.com/world/2016/feb/05/zika-virus-epidemic-abortion-birth-control-access-latin-america-united-nations>.

⁷⁴ Editorial Board. UN calls for Zika-hit countries to loosen abortion restrictions. *Al Jazeera* [Internet]. 2016 Feb 5 [cited 2016 Mar 7]. Available from: <http://america.aljazeera.com/articles/2016/2/5/un-calls-for-loosening-of-abortion-restrictions-in-zika-hit-countries.html>.

⁷⁵ United Nations. Upholding women’s human rights essential to Zika response – Zeid [Internet]. 2016, Feb 5 [cited 2016 Mar 7]. Available from: <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=17014&LangID=E>.

comprehensive reproductive health services.^{76 77 78} Charles Abbott, legal adviser for the Latin America & the Caribbean divisions of the US-based NGO, the Center for Reproductive Rights, urged, “[G]overnments must fulfill their international human rights obligations and cannot shirk that responsibility or pass it off to women. This includes adopting laws and policies to respect and protect women’s reproductive rights.”^{79 80} Neighboring countries have upheld their international human rights commitments by putting the UN’s advice into action. For example, Colombia, a country with similarly restrictive abortion laws - where 99% of abortions are illegal and unsafe abortions are one of the leading causes of maternal mortality - has expressly recognized an exception and is allowing Zika-infected women to seek legal abortions.^{81 82 83}

⁷⁶ United Nations. Upholding women’s human rights essential to Zika response – Zeid [Internet]. 2016, Feb 5 [cited 2016 Mar 7]. Available from:

<http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=17014&LangID=E>.

⁷⁷ Watts J. UN tells Latin American countries hit by Zika to allow women access to abortion. The Guardian [Internet]. 2016 Feb 5 [cited 2016 Mar 7]. Available from:

<http://www.theguardian.com/world/2016/feb/05/zika-virus-epidemic-abortion-birth-control-access-latin-america-united-nations>.

⁷⁸ Editorial Board. UN calls for Zika-hit countries to loosen abortion restrictions. *Al Jazeera* [Internet]. 2016 Feb 5 [cited 2016 Mar 7]. Available from:

<http://america.aljazeera.com/articles/2016/2/5/un-calls-for-loosening-of-abortion-restrictions-in-zika-hit-countries.html>.

⁷⁹ Watts J. UN tells Latin American countries hit by Zika to allow women access to abortion. The Guardian [Internet]. 2016 Feb 5 [cited 2016 Mar 7]. Available from:

<http://www.theguardian.com/world/2016/feb/05/zika-virus-epidemic-abortion-birth-control-access-latin-america-united-nations>.

⁸⁰ The UN Human Rights Chief has also taken the position that, “efforts to halt this crisis will not be enhanced by placing the focus on advising women and girls not to become pregnant. Many of the key issues revolve around men’s failure to uphold the rights of women and girls, and a range of strong measures need to be taken to tackle these underlying problems.”(United Nations. Upholding women’s human rights essential to Zika response – Zeid [Internet]. 2016, Feb 5 [cited 2016 Mar 7]. Available from:

<http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=17014&LangID=E>.)

⁸¹ Prada E, et al. Unintended pregnancy and induced abortion in Colombia: causes and consequences. Guttmacher Institute [Internet]. 2011 [cited 2016 Mar 7]; 9. Available from: <http://www.guttmacher.org/pubs/Unintended-Pregnancy-Colombia.pdf>.

⁸² Ministerio de Salud y Protección Social. *Lineamientos provisionales para el abordaje clínico de gestantes expuestas al virus zika en colombia*. <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/PP/ET/lineamientos-provisionales-abordaje-clinico-gestantes-expuestas-zika-colombia.p>

⁸³ Reuters. Colombia reports more than 2,100 pregnant women have Zika Virus. The New York Times [Internet]. 2016 Jan 30 [cited 2016 Mar 7]. Available from:

<http://www.nytimes.com/2016/01/31/world/americas/colombia-reports-more-than-2100-pregnant-women-have-zika-virus.html>.; National Abortion Federation [Internet]. 2016 May 05.

Available at: <http://www.orientame.org.co/servicios-y-promociones/>

Brazil's obligation to address maternal mortality and access to safe abortion is not just a matter of fulfilling its own Constitutional "right to health" mandate, but also concerns its international human rights obligations.⁸⁴ Echoing the calls from women and families affected by Zika and the international community, and considering Brazil's duties to respect health and human rights, we urge Brazil to revise its position on access to abortion. Zika is a wakeup call, and it is time for "sensible compromise that protects not only women's reproductive rights but their lives."⁸⁵

V. RECOMMENDATIONS

Foremost, GHJP recommends decriminalizing abortion for women affected by Zika. Ensuring that these women have access to safe abortions is necessary to ensure that they are able to fully control their reproductive lives and make the decisions that are best for them and their families. GHJP also recommends that the government invest in infrastructural and public health reforms in Zika-affected areas to mitigate the effects of the disease on vulnerable populations.

Acknowledging that decriminalization and improvement of services require legal, legislative, or executive action beyond the Ministry of Health's Control, GHJP further recommends that the Ministry of Health immediately amend the Protocol to include:

1. Identification of and guidance to health providers on how to discuss the realities many women face in obtaining and successfully using contraception and other family planning methods. Specifically, this should include information about what to advise women to do when contraception is not available, when contraception is not used consistently, and when contraception fails.
2. Recognition of all forms of available contraception and other reproductive health services. As discussed, the protocol is a prime opportunity to expand awareness about and access to legally available abortions (i.e. in instances of risk to woman's life, rape, and anencephaly).

⁸⁴ United Nations. International covenant on economic, social and cultural rights [Internet]. 1966, Dec 16 [cited 2016 Mar 7]. Available from:

<http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx>; Organization of American States. Protocol of San Salvador [Internet]. 1988 Nov 17 [cited 2016 Mar 7]. Available from: <http://www.oas.org/juridico/english/treaties/a-52.html>; United Nations. Convention on the elimination of all forms of discrimination against women [Internet]. 1979 Dec 18 [cited 2016 Mar 8]. Available from <http://www.un.org/womenwatch/daw/cedaw/text/econvention.htm>.

⁸⁵ Padgett T. Uruguay diverges from a continent where abortion is worse than rape. *Time* [Internet]. 2012 Oct 19 [cited 2016 Mar 7]. Available from: <http://world.time.com/2012/10/19/uruguay-diverges-from-a-continent-where-abortion-is-a-crime-worse-than-rape>.

3. Guidelines on how to provide neutral and accurate information about safe pregnancy termination practices, regardless of whether the health care professional will be involved in providing the termination.

Of course, the Protocol is only as good as its implementation, and the Ministry of Health must invest in health care provider training and monitoring if its guidelines are to successfully improve public health.