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Requests for Abortion in Latin America in the Wake of Zika Virus

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On November 17th 2015, the Pan American Health Organization (PAHO) issued an epidemiological alert regarding Zika virus in Latin America.¹ Several countries subsequently issued health advisories, including cautions about microcephaly, declarations of national emergency, and unprecedented warnings urging women to avoid pregnancy. Yet in most Latin-American countries, abortion is illegal or highly restricted,² leaving pregnant women with few options.

For several years, one such option for women in Latin America has been Women on Web (WoW), a nonprofit organization that provides medical abortion outside the formal healthcare setting through online telemedicine, in countries where safe abortion is not universally available.³ We analyzed data on requests for abortion through WoW between January 1st 2010 and March 2nd 2016 in 19 Latin-American countries. Using a regression-discontinuity design, we assessed whether requests for abortion increased after the PAHO alert on November 17th, compared to pre-announcement trends.

We classified requests by self-reported country of origin and divided countries into three groups: Group A, with autochthonous Zika transmission, legally restricted abortion, and public advisories to pregnant women; Group B, with no autochthonous Zika transmission and legally restricted abortion; and Group C, with autochthonous Zika transmission, legally restricted abortion, and no advisories. We also included three control countries where no Zika-related rise in requests was expected: Chile, Poland, and Uruguay (see online appendix). During the final three study weeks, women were asked specifically if they were seeking abortion because of Zika.

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In all Group A countries (except Jamaica), requests for abortion through WoW exhibited statistically significant increases of 36–108% over existing trends (Table 1 and appendix, Figure S3). In Group B, small increases were observed in two countries: Argentina and Peru (where officials sparked concern about Zika by asking the government to declare a preemptive state of emergency⁴). No significant increases were observed in Group C or any control countries. We cannot definitively attribute the rapid acceleration in requests in Group A to worries about Zika. However, the percentage of women in each country who reported Zika as their reason for seeking abortion correlates with the observed country-specific increases over baseline trends (appendix, Table S1).

In Latin-American countries that issued warnings to pregnant women about Zika-related complications, requests for abortion through WoW increased substantially. Our approach may underestimate the impact of the advisories on demand for abortion, since many women may have used an unsafe method, accessed misoprostol via local pharmacies or the black market, or visited local underground providers. But accurate data on these choices are difficult to obtain.⁵ Our data thus provide a window on how Zika has affected the lives of pregnant women in Latin America.

World Health Organization (WHO) mathematical models predict 3–4 million Zika cases across the Americas over the next year, and Zika will inevitably spread to other countries where access to safe abortion is restricted. Official information and advice about Zika must be accompanied by efforts to ensure that all reproductive choices are safe, legal, and accessible. To do otherwise would be irresponsible public-health practice and unjust policy.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1

Actual versus expected numbers of requests in the post-Zika period for each country included in the study.

Country	Actual Requests	Expected Requests	Percent Increase Over Baseline Trend	p-value
Group A: Zika; no abortion; pregnancy advisory				
Brazil	1210	581.7	108.0	<0.001
Colombia	141	101.7	38.7	<0.001
Costa Rica	67	49.2	36.1	0.043
El Salvador	24	17.7	35.6	0.010
Ecuador	71	34.2	107.7	<0.001
Honduras	36	20.5	75.7	<0.001
Jamaica	25	37.2	-32.9	0.654
Venezuela	86	44.5	93.3	<0.001
Group B: No Zika; no abortion				
Argentina	270	221.7	21.8	0.004
Bahamas	15	10.5	42.8	0.277
Peru	81	67.2	20.5	0.035
Trinidad and Tobago	12	10.0	20.6	0.704
Group C: Zika; no abortion; no pregnancy advisory				
Bolivia	21	12.5	68.4	0.166
Dominican Republic	17	21.2	-20.0	0.608
Guatemala	32	29.5	8.4	0.651
Mexico†	172	184.4	-6.7	0.982
Nicaragua	11	8.8	24.3	0.811
Panama	21	17.3	21.3	0.122
Paraguay	16	12.8	24.5	0.356
Controls				
Chile	442	463.4	-4.6	0.984
Uruguay	5	5.1	-1.0	0.852
Poland	1574	1487.7	5.8	0.731

† Abortion is highly restricted except in the capital, the Federal District, which decriminalized first-trimester abortions in 2007.

Actual and expected requests are cumulative counts for the post-Zika period since November 17th 2015. Expected requests are obtained as forecasts using each country's null model, assuming no discontinuity on November 17th 2015. Percent increases are percentages, calculated as $100 \times (\text{Actual} - \text{Expected}) / \text{Expected}$. P-values are obtained from a likelihood ratio test of the regression-discontinuity model versus the null model of no discontinuity. Low p-values indicate evidence for the presence of a discontinuity (i.e. that the percent increase over baseline is statistically significant).