The Impact of the Zika Epidemic on Women's Reproductive Intentions and Behaviors in Brazil

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INTRODUCTION

The epidemic caused by the Zika virus has been a major public health shock for Brazil, particularly for reproductive-age women. The virus is transmitted via mosquito, sexual intercourse, blood transfusions and amniotic fluid. Infection at any point during pregnancy can have deleterious effects on fetal development and lead to birth defects such as microcephaly and other types of congenital Zika syndrome. Despite its wide range of potential symptoms, Zika virus infection can often be asymptomatic, allowing it to go unnoticed or to be unknowingly transmitted.

The only ways to guarantee against Zika-related birth defect, at least until a vaccine is developed, the epidemic subsides, or an effective treatment becomes available are to avoid becoming pregnant or to terminate a pregnancy. However, the ability to prevent pregnancy is not equally shared among women of different social statuses. Indeed, women of lower socioeconomic status (SES) are more likely to have an unintended pregnancy while women with greater economic resources are typically more successful in preventing unwanted pregnancy, regardless of the Zika epidemic. Likewise, abortion in Brazil, where its access is highly restricted, is easier for wealthier women to obtain.

Moreover, women living in the Northeast region of Brazil may be at higher risk of contracting the Zika virus than those living in other regions; they are also more likely to know others who have been affected by the virus. A combination of lower overall levels of economic development than in richer parts of the country such as the Southeast region, high temperatures, stagnant water, and sanitation problems are possible explanations for why the Northeastern region was affected first and most severely by the Zika virus epidemic.

This research brief reports on a study that explores how and why the Zika virus affects reproductive processes in Brazil. The authors pay special attention to the ways women's socioeconomic status and geographic location are related to their responses to the epidemic. In eight focus groups conducted with women in Recife, Pernambuco (Northeast region) and eight focus groups in Belo Horizonte, Minas Gerais (Southeast region) approximately 18 months after the epidemic began in Brazil, the interplay of women's desires, behaviors, and healthcare access and use are examined. Within each city, half of the focus groups were conducted with women of low socioeconomic status and half with women of high socioeconomic status. Each focus group consisted of six to eight women between the ages of 18 and 49 years for a total of 114 women in the study.

KEY FINDINGS

Reproductive Intentions

- Women in both cities and both SES groups were motivated to postpone pregnancy. On the other hand, older high SES women in both cities had no desire to postpone pregnancy if they had not yet reached their ideal number of children.
- Low SES women in both cities felt a limited sense of control over their fertility. In contrast, high SES women in both cities felt a sense of control over their reproductive intentions.
- Women in both cities and both SES groups expressed a willingness to seek an abortion to avoid giving birth to child with microcephaly.

Reproductive Behaviors

- > Women in low SES groups in Recife more commonly recounted improving their contraceptive behaviors because of high exposure to the risk of contracting the Zika virus. In contrast, high SES women in both cities reported continuing their nearly perfect contraceptive use (use that resulted in few or no unintended pregnancies) as they had before the Zika outbreak.
- Low SES women in both cities reported inconsistent contraceptive use and an inability to get a desired sterilization.
- Low SES women in both cities described more limited bargaining power with sexual partners on condom use compared to high SES women.
- Low SES women noted two primary barriers to obtaining contraceptives from public clinics: multiple violations of their medical privacy and limited access to contraceptive methods.
- Both low and high SES women in Recife felt a tangible risk of Zika because of their greater media and personal exposure to individuals affected by the virus.
- Women in both cities and both SES groups described obtaining an abortion to avoid giving birth to a Zika-infected child. On the other hand, high SES women had better access to safe abortion and could wait longer than low SES women before deciding to get an abortion. Moreover, the high SES women were more likely to have a safe abortion if they chose one.

See table on following pages for representative quotations of these key themes

REPRESENTATIVE QUOTATIONS FOR KEY THEMES WOMEN'S REPRODUCTIVE INTENTIONS AND BEHAVIORS DURING THE ZIKA EPIDEMIC IN BRAZIL

Theme	Low Socioeconomic Status Groups	High Socioeconomic Status Groups	Group Differences
Reproductive	Intentions		
Desire to post- pone pregnancy	So, I thought about getting pregnant and now I don't think as much, so I will wait until everything is solved. This is a tragedy and could happen with anyone and I wouldn't like it to happen to me and to my family, so this is something that changed in my mind. I avoid getting pregnant now much more than beforeBelo Horizonte	I think about fear and about not wanting to get preg- nant now. If I had a plan of having a child in one year, it wouldn't be one year anymore, it would be at least 4 years just because of Zika. -Recife	No difference by SES* or city
No desire to postpone preg- nancy among high SES older women	Not applicable	Moderator: Why do you think [she got pregnant with the risk of getting Zika]? Respondent: Because of her age. She said "I am 35 and I want to have my daughter. With or without a Zika outbreak." -Recife	No difference by city
Limited sense of control over fertility	I'm going to tell you something. I was very sad. I took my pre-natal classes with 15 women, and I was the only one who wanted to get pregnant. All of them didn't want to get pregnant. It's very sad. -Belo Horizonte	Not applicable	No difference by city
Sense of control over reproduc- tive intentions	Not applicable	Moderator: Do you know anyone who is trying to pre- vent pregnancy right now? Respondent: Me. I am on the pill, but it has nothing to do with ZikaBelo Horizonte	No difference by city
Willingness to seek an abortion	When she heard she was pregnant, and that she had Zika, she had it [an abortion]. If you see this TV show, and you know what Zika isand I know a whole bunch of women who had dengue, Zika, and they had children with microcephaly. Then, you fear it. -Recife	Respondent 1: I even think that abortion should be legal in case of microcephaly. Respondent 2: I totally agree. Respondent 3: Me too. Respondent 1: People should have the right to choose [an abortion] because if the government is unable to prevent Zika, then it needs to deal with the consequences. Respondent 2: That's what I thinkBelo Horizonte	No difference by SES or city
Reproductive	Behaviors		
Improved contraceptive behaviors due to higher exposure to risk of con- tracting Zika	I didn't want to get [pregnant] and after this outbreak, I am always preventing. I do not delay my injection, I do not delay anythingRecife	Not applicable	More common among low SES groups in Recife
Continuing nearly perfect contraceptive use as before Zika outbreak	Not applicable	Yes, I am using oral contraceptives and I had Zika. In none of those moments I wanted to be a mother, so I didn't even bother to worry about having a child with microcephaly. I have been taking contraceptives for years, doing every- thing right, so I wasn't even concerned with the possibility. -Recife	No difference by city
Inconsistent contraceptive use	I continue to forget about the pill, but when I forget, I get worried [about a pregnancy during the Zika epidemic] and then I take two [at once]Recife	Not applicable	No difference by city
Inability to get desired sterilization	Respondent: We don't think about having [more children], but we are not ligada [sterilized], so we are risking. Moderator: You think you are risking [a pregnancy] because you didn't do the tubal ligation? Respondent: Because I didn't do the tubal ligation. So, I just intend not to get pregnant [respondent's emphasis on intend]Recife	Not applicable	No difference by city

*SES=socioeconomic status; table continues on next page

Representative Quotations for Key Themes, continued

Theme	Low Socioeconomic Status Groups	High Socioeconomic Status Groups	Group Differences
Reproductive	Behaviors, continued		
Bargaining power with partners	Moderator: Do you think Zika changed the behavior of the men you know? All respondents together: No! Moderator: Have you heard men saying they were worried about Zika? All respondents together: No! Respondent 1: I think they don't even know [about it]. -Belo Horizonte	Respondent: If you aren't firm and don't say that it will have to be with a condom, then it'll be without a condom. Moderator: And can your friends be firm about it? All respondents: Yes, of course. -Recife	Low SES* women have limited bargain- ing power com- pared to high SES women
Violations of privacy in public clinics	Full of gossipy women. Like for your pregnancy test. You are sitting there. Instead of calling you inside the room, they call you out loud and say: here it is, go there and pee here [showing the recipient]. Then, they give you a huge paper and say out loud: go to the reception and schedule your prenatal care. -Belo Horizonte	Not applicable	No difference by city
Limited access to contraception in public clinics	Respondent: The epidemics here started in December or January, right? She got pregnant during carnival [February]. The epidemic was really strong during De- cember and January, when I had Zika, when you would go to a hospital and everything was crowded. I got there at 7 in the morning and left at 8 at night. There were no UPA [Public Urgent Care Unit] that could assist you because everywhere was crowded. All respondents: Crowded, crowdedRecife	Not applicable	No difference by city
Geographic location: Risk of Zika more concrete in Recife	Moderator: Do you think about having more [children]? Respondent: I do. But I am seriously considering [not to]. Because I see my friend's child [with microcephaly], and he is almost the size of my baby and I am almost giving up. And staying with only one. I cried so much before having my child. The father would say "don't cry now because the baby was not born with the little head yet. Save your cries for when the baby is born, because you will have the rest of your life to cry." It was on TV all the time. Thank God the baby wasn't born [with micro- cephaly]Recife	Respondent 1: <i>I have a friend who had a child with</i> <i>microcephaly.</i> Moderator: <i>And then what</i> ? Respondent 1: <i>I know a father who has [such a child].</i> Respondent 2: <i>When you see it, you think, "now I really</i> <i>do not want to get pregnant at all," got it?</i> -Recife	No difference by SES
Obtaining an abortion	Moderator: Your friend got an abortion? But did she have Zika? Respondent 1: When she heard she was pregnant, and it was a time of Zika, she took the baby out. Respondent 5: If you watch these programs every day and you know what Zika is I know a lot of women who had Dengue, Zika, and had a child with microcephaly. Then, you fear it. She was already suffering with so many problems, the love, the concern is bigger so she did it [an abortion]Recife	Respondent: <i>My doctor told me: I don't do it. But my</i> <i>"insemination" doctor told me that he understands that</i> <i>the person has the right to have a healthy baby, so if the</i> <i>person wants one, he can refer them</i> -Belo Horizonte	No difference by SES or city
Obtaining a <u>safe</u> abortion procedure	Respondent: They [friends] were doing it [abortion], I learned from them. Moderator: You say you don't know where to go or who to look for Respondent: I needed the Pau Brasil [Brazilian native tree], you know, I got the Pau Brasil around here, cut down the bark, made the tea and smoke Moderator: So you did it in your house, relaxed, no sequels? Respondent: No, I went to the hospital. Moderator: You felt bad? Respondent: I went into cardiac arrest, stayed in the ER for 15 days. After that, I had another [pregnancy]. Moderator: Wait, after that you got pregnant again and [attempted another abortion]? Respondent: Again, I did it again the same way. -Recife	Respondent: <i>I know a couple, a woman who got preg- nant, and she said: I simply don't see myself taking care of a child and I won't be able to give him what I wish. One day I want to get pregnant, but not now. Then, this person looked for a doctor, explained to her and the doctor was super Moderator: Her own doctor?</i> Respondent: Yes, she was super open minded. She accepted it, did the right procedure, she got the abortion and didn't have any problems. -Recife	High SES women could wait longer than low SES women before deciding whether to have an abor- tion and that abortion would be safer.

*SES=socioeconomic status

POLICY IMPLICATIONS

One of the main recommendations put forth by Brazilian health officials is for women of reproductive age to postpone pregnancy until the Zika epidemic has subsided. Yet half of pregnancies in Brazil are unintended, suggesting that women face many obstacles to controlling their fertility. It is therefore critical for state ministries to reduce barriers to contraceptive use. This could be achieved by subsidizing all methods of contraception and making all methods available at public health clinics, extending the type of sexual and reproductive health services offered at clinics, and creating an accountability system that reduces the extent to which patient privacy is violated.

In addition, policymakers must address longstanding disparities in reproductive health services that put lowincome women at disproportionate risk of an unwanted pregnancy during the epidemic. Specific steps include conducting sensitivity trainings aimed at reducing racial and socioeconomic discrimination among healthcare workers; widely disseminating information about forms of contraceptive use beyond condoms, pills, and sterilization—the most commonly used methods; and offering long-acting reversible forms of contraception in public clinics.

For women who are still unable to prevent pregnancy, legalizing abortion would help prevent women from having to carry unwanted pregnancies to term. Considering that many women report seeking abortion despite its illegal status and demand for abortion has increased during the epidemic, continuing to restrict access and thus push women to illegal channels will likely have unnecessary, undesired health outcomes among women, such as hemorrhage, secondary infertility, and death. This is particularly true among the poorest, most vulnerable women who have the least access to private, high quality doctors.

Finally, policymakers should remain conscientious of the fact that some women still want to become pregnant during the epidemic. Healthcare workers should respect these women's desires and refrain from stigmatizing these women and their future children. Failure to do so could inadvertently jeopardize the health and wellbeing of women who actively pursue pregnancy during the Zika epidemic.

REFERENCE

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