

MALE INTENTION, BEHAVIOR AND ATTITUDES IN TIMES OF ZIKA



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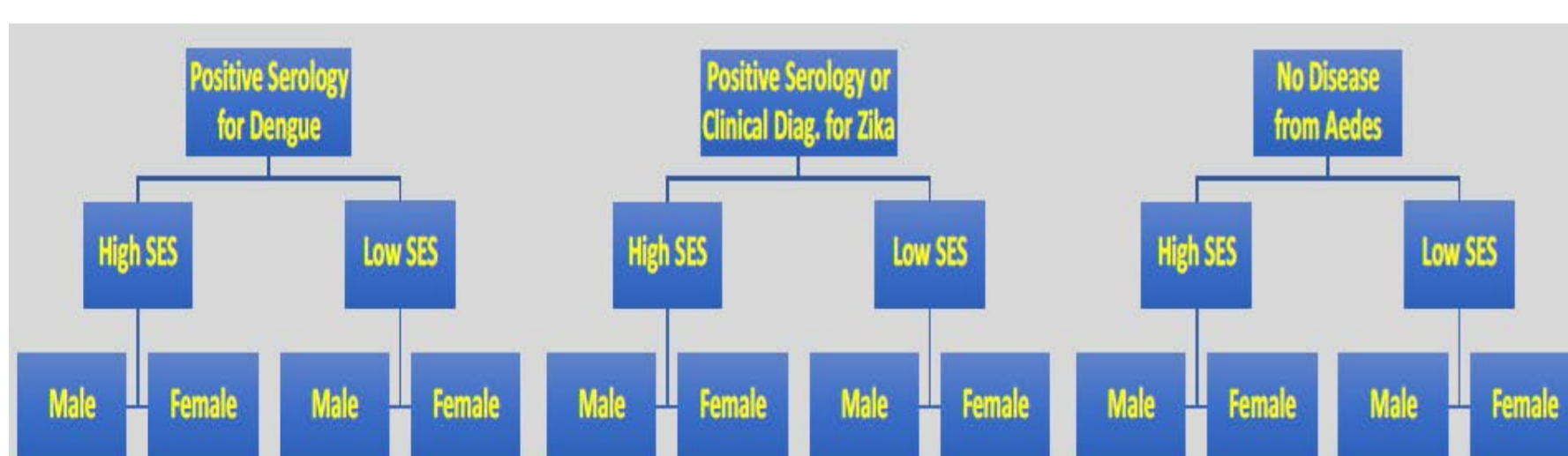
Motivation

- The Zika epidemic, which hit Latin America in 2015, in Brazil is to blame for the 2,366 cases of microcephaly confirmed in the country between the years of 2015 and 2016 (Brasil, 2017).
- The possibility of pregnant women contracting Congenital Zika Syndrome raised the alarm for the necessity of taking preventive actions that came in three different fronts: mosquito elimination, pregnancy prevention and measures of self-protection to avoid mosquito bites and/or sexual transmission (Brasil, 2017).
- Generally, demographic studies on reproductive preferences and behavior focus on women, although preferences and behavior are not necessarily similar for partners.

Data

Data come from the survey *Demografia da exceção: Intenções Reprodutivas e Migração em um contexto de Zika Vírus e Desastres Socioambientais* (Guedes et al. 2017), which interviewed 150 urban residents of the city of Governador Valadares (GV), Minas Gerais, Brazil. Respondents were randomly drawn from another baseline probabilistic survey conducted one year prior to the Zika epidemics as shown below.

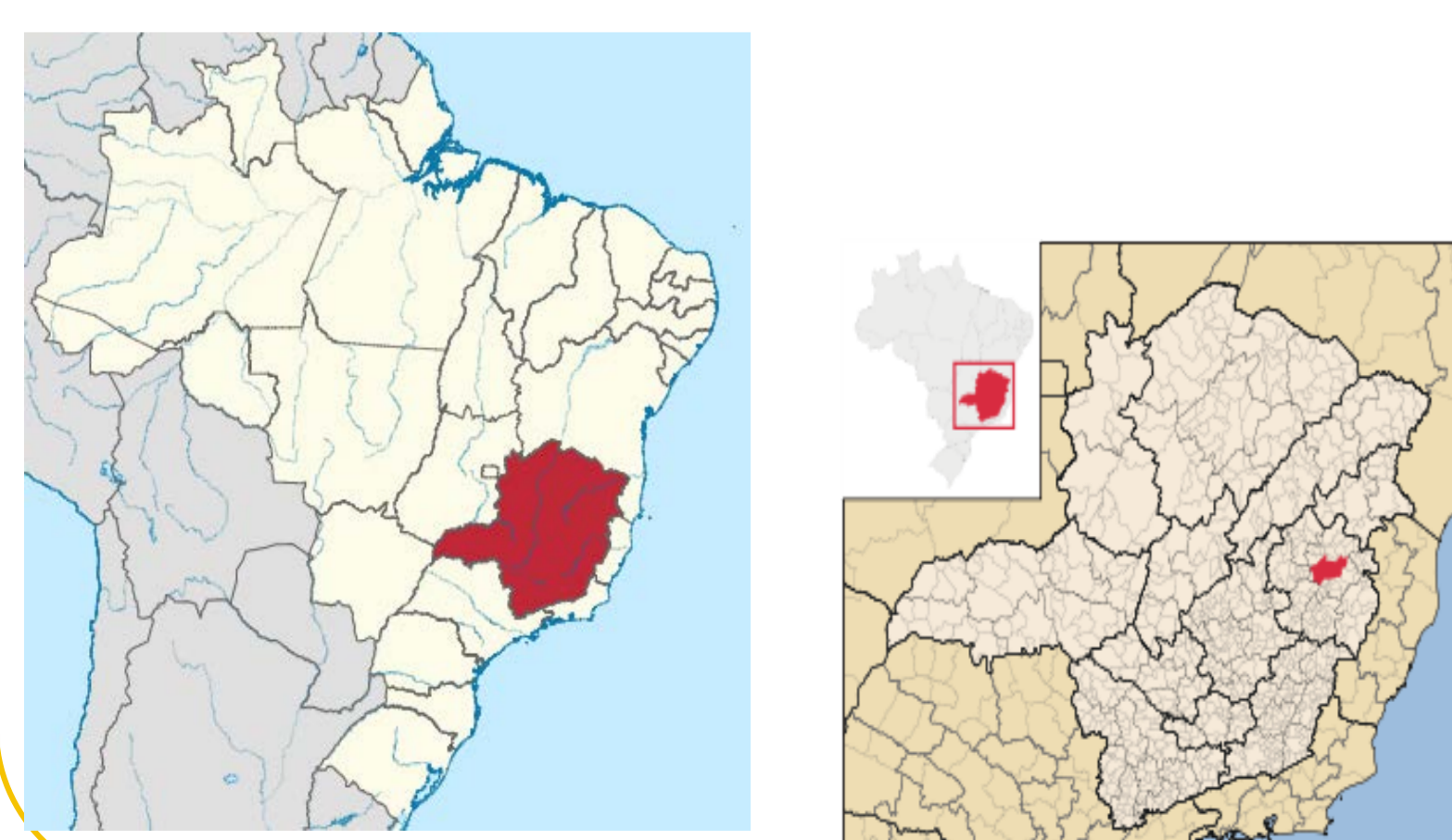
Due to the rarity of the ZIKV event, it was not possible to complete all quotas for Zika within the probability sample. Positive-Zika persons were actively sought in the same physical address (neighborhoods) of the other respondents.



Methods and Research Questions

How are men performing under the epidemics of Zika compared to their female counterparts? What are their fertility intentions, type of contraceptive methods, and abortion attitudes? Are men applying fewer measures of self-protection against the virus compared to women, as well as fewer actions of mosquito eradication? Are those distinct behaviors mediated by education level (since education increases understanding and exposure to correct information), by having a pregnant woman in one's social network (might raise more attention to pregnancy related problems) or having already acquired the Zika or Dengue infection?

- We conducted descriptive analysis and multinomial logit regressions and collected data on the representation of Zika virus utilizing the Free Words Association Technique (TALP).



City is ranked third in the state for the LIRAA index (Quick Assessment of the Infestation Index by the *Aedes aegypti*), and is classified in the very high incidence cluster for Dengue in the country (Brasil, 2015). The city was also hit by the contaminated mud from the Samarco dam failure in November 2015.

Procedure	Male	Female	Chi-square P-value
Use chemical repellents in the body (freq)	13.33%	34.67%	10.27 / 0.004
Odds ratio	Ref.	3.42	
Prevent / delay pregnancy (freq)	5.33%	18.67%	8.89 / 0.025
Odds ratio	Ref.	3.85	
Destroy mosquito breeding sites (freq)	61.33%	72.00%	6.91 / 0.169
Odds ratio	Ref.	1.64	
Use elec. or chem. repel. at home (freq)	20%	30.67%	3.66 / 0.150
Odds ratio	Ref.	1.74	
Kill mosquitoes with elec. Racket (freq)	38.67%	29.33%	3.70 / 0.288
Odds ratio	Ref.	0.68	
Stay in front of the fan (freq)	69.33%	68%	10.75 / 0.944
Odds ratio	Ref.	0.97	
Install screens in windows (freq)	16%	14.67%	0.98 / 0.704
Odds ratio	Ref.	0.83	
Install air conditioning at home (freq)	12%	10.67%	2.79 / 0.844
Odds ratio	Ref.	0.9	
Use a condom during intercourse (freq)	29.33%	30.67%	0.50 / 0.856
Odds ratio	Ref.	1.06	

RESULTS

ABORTION

Our results indicate that men and women have similar beliefs in regarding to abortion. An expressive percentage of respondents believe abortion is acceptable in cases of malformation (45.5%) and Zika (33.5%), what shows a demand for policies to avoid unsafe abortion.



REPRODUCTIVE BEHAVIOR

ZIKV was not considered as a reason for delaying pregnancy. Among those few respondents who delayed pregnancy because of Zika, women were the majority. These results reflect that, although the process of decision making depends on communication, negotiation and the degree of men's influence on choices and outcomes related to fertility (Blanc, 1996), the task of contraception is still on women's shoulders.



MEASURES OF SELF-PROTECTION

When it comes to measures of self-protection, women have higher probability to use chemical repellents in the body and destroy mosquitoes breeding sites. These results reflect a female normative behavior to take care of their body, what includes using creams and lotions, and it may also reflect the gendered campaigns against Zika (Coutinho et al. 2017). We also found that people who have previously been infected with Zika have 30% the chance of people who have not had of using the fan as a measure of protection ($P < 0.001$), and 53% fewer odds of actively destroying mosquito breeding sites ($P < 0.087$). It can be an indication that once people get infected, they stop collaborating for the wellbeing of the household. These facts deserves special attention of policymakers designing campaigns.



Respondents evocations about ZKV



EVOCATIONS

Most of respondents (59.33%) believe that mosquitoes are the only form of transmission. The absence of evocations related to prevention through condom or the possibility of infection by sexual relationship strengthens the finding about lack of information about Zika. Public campaigns should raise awareness about other possibilities of transmission beyond the mosquito vector.

References:
Brasil, Ministério da Saúde. Secretaria de Vigilância em Saúde e Secretaria de Atenção à Saúde. Orientações integradas de vigilância e atenção à saúde no âmbito da Emergência de Saúde Pública de importância Nacional: Procedimentos para o monitoramento das alterações no crescimento e desenvolvimento a partir da gestação até a primeira infância, relacionadas à infecção pelo vírus Zika e outras etiologias infecciosas dentro da capacidade operacional do SUS. Brasília: Ministério da Saúde; 2017.

Blanc, Ann K., et al. Negotiating reproductive outcomes in Uganda. *Macro international*, 1996.

Coutinho, R. Z.; Marteleto, L.; Weitzman, A. Zika Virus: understanding the mechanisms of gender inequality. In: *International Population Conference, 2017*, Cape Town. IUSSP., 2017.