## Women's Perceptions of Zika Virus Prevention Recommendations: A Tale of Two Cities within Fortaleza, Brazil

Authors: Jeni Stolow, Lina Moses, Carl Kendall

Abstract: Zika virus (ZIKV) reemerged as a global threat in 2015 with Brazil at its epicenter. Brazilians have a long history of combatting Aedes aegypti mosquitos as it is a common vector for dengue, chikungunya, and yellow fever. As a response to the epidemic, public health authorities promoted ZIKV prevention behaviors such as mosquito bite prevention, reproductive counseling for women who are pregnant or contemplating pregnancy, pregnancy avoidance, and condom use. Most prevention efforts from Brazil focused on the mosquito vector- utilizing recycled dengue approaches without acknowledging the context in which women were able to adhere to these prevention messages. This study used qualitative methods to explore how women in Fortaleza, Brazil perceive ZIKV, the Brazilian authorities' ZIKV prevention recommendations, and the feasibility of adhering to these recommendations. A core study aim was to look at how women perceive their physical, social, and natural environment as it impacts women's ability to adhere to ZIKV prevention behaviors. A Rapid Anthropological Assessment (RAA) containing observations, informational interviews, and semi-structured in-depth interviews were utilized for data collection. The study utilized Grounded Theory as the systematic inductive method of analyzing the data collected. Interviews were conducted with 35 women of reproductive age (15-39 years old), who primarily utilize the public health system. It was found that women's selfidentified economic class was associated with how strongly women felt they could prevent ZIKV. All women interviewed technically belong to the C-class, the middle economic class. Although all members of the same economic class, there was a divide amongst participants as to who perceived themselves as higher C-class versus lower C-class. How women saw their economic status was dictated by how they perceived their physical, social, and natural environment. Women further associated their environment and their economic class to their likelihood of contracting ZIKV, their options for preventing ZIKV, their ability to prevent ZIKV, and their willingness to attempt to prevent ZIKV. Women's perceived economic status was found to relate to their structural environment (housing quality, sewage, and locations to supplies), social environment (family and peer norms), and natural environment (wetland areas, natural mosquito breeding sites, and cyclical nature of vectors). Findings from this study suggest that women's perceived environment and economic status impact their perceived feasibility and desire to attempt behaviors to prevent ZIKV. Although ZIKV has depleted from epidemic to endemic status, it is suggested that the virus will return as cyclical outbreaks like that seen with similar arboviruses such as dengue and chikungunya. As the next ZIKV epidemic approaches it is essential to understand how women perceive themselves, their abilities, and their environments to best aid the prevention of ZIKV.

 $\textbf{Keywords:} \ \, \textbf{Aedes aegypti, environment, prevention, qualitative, zika} \\ \textbf{Conference Title:} \ \, \textbf{ICOH 2019:} \ \, \textbf{International Conference on One Health} \\$ 

Conference Location: London, United Kingdom

Conference Dates: May 23-24, 2019