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# The Zika Outbreak: A Public Health Challenge Highlighting Structural Power

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The current outbreak of Zika virus disease, centred in Brazil, highlights the population-level fears that can arise in response to infectious disease pandemics. While the virus is considered to present only a very low risk of death to adults—through increased incidence of Guillain-Barré syndrome (GBS)—people fear that their unborn babies are at risk of microcephaly with associated life-long severe disabilities, and the current lack of a vaccine heightens peoples' fears.

In this essay I argue, using a Buzan securitisation lens, that the Zika virus does not currently present a threat to national and international security, as it does not pose an existential threat to societies, states or the international order. It should be treated as a challenge to public health and actors should construct the virus in a non-securitised way to ensure its impacts are addressed comprehensively. I then argue that the virus can be conceptualised as a lens providing a focus on how structural and political factors condition whom it infects and impacts and how the international community privileges the health of people in powerful states over others. The Zika virus then brings into stark relief issues of international health injustice.

#### Introduction

The Zika virus, discovered in 1947 and considered until recently to have mild effects, is currently the cause of a pandemic that might result in at least thousands of cases of microcephaly and an increased incidence of GBS. As at 18 May 2016, sixty countries and territories reported ongoing transmission of Zika via mosquitoes, up from fifty-eight one week earlier, and ten countries and territories reported human-to-human transmission (WHO 2016g, 1; WHO 2016i, 1). Brazilian national authorities estimate that epidemic will have infected between 500,000 and nearly 1.5 million people by the end of 2016 (UN Women 2016).

While the disease from Zika virus is comparatively mild, with only approximately twenty per cent of those infected showing minor symptoms over a period of two to seven days (WHO 2016e), the World Health Organization (WHO) considers there is scientific consensus that the virus is a cause of microcephaly and GBS (WHO 2016h). The WHO states the best way to protect people from Zika is prevention—stopping mosquito bites and abstaining from sex or using condoms (WHO 2016d).

The number of cases of Zika-related microcephaly is increasing rapidly. As at 19 May 2016, there were 1,413 cases of microcephaly or related conditions reported to the WHO from eight countries or territories, up from 1,354 cases one week earlier; with Brazil the centre of the outbreak having 1,384 cases. In addition, thirteen countries and territories reported an increased incidence of GBS and/or confirmation of Zika infection among GBS cases (WHO 2016g, 5; WHO 2016h, 5).

Microcephaly and GBS are serious conditions. The former involves a baby being born with a small head or their head stopping growing after birth; the condition has no treatment. Many children with microcephaly develop cerebral palsy, epilepsy, and problems with learning, hearing and vision (WHO 2016b). Guillain-Barré syndrome, which also has no known cure, is a condition in which a person's own immune system attacks their peripheral nerves. While most

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people with GBS fully recover, some "continue to experience weakness", and at least three to five per cent die (WHO 2016c).

The Zika virus may threaten the economic security of families of babies with microcephaly or people with GBS, e.g. if they incur additional caring or medical costs or cannot support themselves. It might also threaten the emotional security of expectant parents through concern about whether their babies will have microcephaly (Boseley 2016). The virus is also likely to have financial impacts on state health systems and on the ability of adults born with microcephaly to support themselves later in life. It is unknown whether the virus has the potential to mutate and become more virulent (Fox 2016).

Zika is not a threat to national or international security

Under a Buzan securitisation lens, threats are socially constructed and any issue can become securitised depending on the circumstances (Buzan et al 1998, 23-4). In this essay, I define something to be a threat to national and international security if it poses one or more of the following: an existential threat to states and the international order; a threat to social order on national or international scales; an existential threat to large numbers of people; or threats to the human security of substantial numbers of people. I take such a broad definition of the notion of threat to cover many potential aspects of the social construction of the virus as a threat.

The Zika virus currently satisfies none of the above dimensions of threat, based on current knowledge. It may, however, satisfy one or more of them if knowledge or population-level feeling about the virus changes.

First, it is clear that the virus does not pose an existential threat to large numbers of people given its low apparent mortality rate. Second, of the four dimensions of threat, possibly the one about which the virus presents the greatest level of threat relates to human security as it will likely impact the economic and emotional security of families of babies with microcephaly (Boseley 2016). However, the risk of microcephaly might be quite low, with virologist Dr Lobal of the Uganda Virus Research Institute (UVRI) being quoted as referencing a 2016 paper that estimated the risk of microcephaly among women infected with Zika during the first trimester at about one in one hundred (Doshi 2016, 2). Using data from the Zika outbreak in French Polynesia, medical researchers also estimated the risk of GBS to be 0.24 per 1,000 Zika infections (Cao-Lormeau et al 2016). While microcephaly and GBS can impact the human security of the individuals affected and their families, it appears unlikely that the virus will heighten the human insecurities of substantial numbers of people.

Third, the virus does not pose a threat to social order on national or international scales. Possibly the greatest threats to social order would arise from the social and economic impacts of a reduced birthrate, which could result from women being fearful about the impacts of the virus on their unborn babies and from suggestions of some governments that women delay becoming pregnant (Anon 2016). A severely reduced birth rate for a number of years, potentially followed by a temporarily increased birthrate, may have substantial countrywide social and economic impacts, including changes in the demand for goods and services and to the structure of the labour force. It is likely, however, that societies could adapt to these impacts through policies promoting economic and social resilience such as universal health systems and unemployment insurance.

Fourth, the limited impacts of the virus suggest that it is unlikely to pose an existential threat to states and the international order. This is because it is unlikely to challenge neither the financial viability and legitimacy of states, nor the legitimacy of the international order.

Actors should construct Zika in a non-securitised way

The response to the Zika virus outbreak has resembled a response to an emergency with the WHO declaring a Public Health Emergency of International Concern (PHEIC) on 1 February 2016 (WHO 2016a) and the El Salvador Government suggesting that women delay getting pregnant for two years (Anon 2016). Some public health actors have also called for the 2016 summer Olympics in Rio de Janeiro be postponed, cancelled or moved (Drury 2016).

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The Zika virus does currently pose a threat to public health. However, instead of treating it as an emergency, the international community should use a non-securitised approach to tackle the immediate risks and address the broader factors that provide an environment conducive to the spread of the disease (e.g. by strengthening accessible drinking water systems). The spread of the virus is strongly associated with two species of mosquito, and actors are experienced at seeking to control these insects (e.g. to control dengue).

For tactical reasons, actors should not construct the Zika virus as an existential threat. Doing so may place a mental straitjacket over the potential responses policymakers could use to address it, in a similar way as human beings' involuntary "flight or fight" responses to perceived threats may narrow their range of reactions to such threats. Constructing the virus as a threat focuses attention on aspects of the outbreak seen as related to the immediate danger to the neglect of other aspects, likely constraining the range of conceivable and legitimate responses actors may draw on.

An example of a potential non-securitised response to the Zika virus outbreak could involve proactively monitoring diseases and aggressively containing identified outbreaks. Andrew Green argued recently in *Foreign Policy* that this approach, used in Uganda, is far superior at containing disease than the crisis management model WHO has used to address recent Zika and Ebola outbreaks. Green argued that ongoing surveillance has led to UVRI being aware of all outbreaks occurring in Uganda and that the institute identified and contained two outbreaks of Ebola in Uganda in 2012. Relatively few individuals—21—died in these outbreaks (Green 2016; WHO 2016i).

While threats are socially constructed, individual actors can choose to not securitise the virus. While the relationship between the individual and the social in constructing threats is beyond the scope of the essay, individual persons have agency in consciously deciding how to frame and promote an issue to others. Actors often consciously frame issues in order to achieve political ends; Zika need be no different.

The Zika virus is a lens on structural factors

Conceptualising Zika as a security threat is also likely to neglect the impacts of structural factors on the spread of the virus and on whom it infects and impacts. The virus can be viewed as a lens on the ways the spread of the disease and its impacts can be conditioned by political and structural factors. It also provides a case study about how the international community privileges the health of people in powerful states over others.

Zika can be seen as a disease of poverty, similar to dengue, as it disproportionately affects lower-income people who live near mosquito breeding grounds and do not have the resources to prevent themselves from being bitten (Brum 2016; Cuadros 2016; Wenham 2016). It also has a gendered impact as women may cease to work in order to care for children with microcephaly (Boseley 2016). The virus, through GBS and/or microcephaly, may also strengthen the cycle of poverty for families and women by heightening their economic insecurities.

The virus highlights structural and political factors that impact the spread of the disease. The lack of public investment in accessible drinking water and adequate sewage systems in Brazil has led to widespread use of water storage systems, creating prime mosquito breeding conditions (Brum 2016). In addition, public hospitals in the most affected areas of the country—some of its poorest parts—have received insufficient funding to address the outbreak, and the Brazilian Government rationed larvicide during August-October 2015 (AP 2016). Lack of public investment is not restricted to poorer countries: there is no mosquito control in nearly half of the United States (US), including areas thought to be at risk of Zika (Goodman 2016).

Zika also highlights how the international community privileges the health of people in powerful states over others, with the actions of powerful states suggesting a strong lack of cosmopolitan concern about Zika. The virus is primarily affecting people in poorer states and, as at 10 May 2016, donors had provided only US\$3.9 million of the \$25 million the WHO and Pan American Health Organization (PAHO) had requested to fund their initial six-month response to the virus (WHO 2016f).

In February 2016, President Obama requested the US Congress appropriate US\$1.89 billion to address Zika, which

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included \$325 million for activities outside the US and only \$13.5 million for international organisations including WHO and PAHO (Epstein and Lister 2016). As at 23 May 2016, Congress has not passed a bill appropriating funds for Zika (Rhodan 2016), and it is likely that any legislation would require substantial negotiations between Obama and members of Congress.

#### Conclusion

In this essay I argued, using a Buzan securitisation lens, that Zika is not a threat to national or international security and that while the virus poses a threat to public health, actors should construct it in a non-securitised way to ensure that its impacts are addressed comprehensively. I further argued that the virus provides a lens on political and structural factors that condition whom the virus infects and impacts, and that it provides a case study about how the international community privileges the health of people in powerful states over others.

While there could be a strong tendency for actors to securitise the virus, especially if it is seen to threaten children in powerful countries (Brum 2016), doing so would focus attention on the (powerful) referents as opposed to the poor currently impacted by the virus, and fail to address structural factors behind the outbreak. The Zika virus then brings into stark relief issues of international health injustice, with one potential impact being that scholars and actors will better address these issues and strengthen health justice aspects of future responses to disease.

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