

Z-CAN: prevention of unintended pregnancy in an emergency setting



Prevention of unintended pregnancy is a primary strategy to reduce adverse pregnancy and birth outcomes related to Zika virus infection. Infection during pregnancy, either through a mosquito bite or sex with an infected partner, increases the risk of the child developing congenital microcephaly and other fetal brain abnormalities, resulting in the birth of a child with severe disabilities that will necessitate lifelong care.^{1,2}

Zika virus infection is still a reproductive health issue for women living in the southern part of North America and in South America because of limited contraceptive choices and lack of knowledge of long-acting contraceptives (LARC).² Effective interventions are well known and recommended by WHO. These include access to contraceptives and reducing barriers to obtaining contraception for women and girls, as well as providing health-care workers with evidence-based information about the Zika virus and contraceptive options.³

In some countries, governments responded to the 2016–17 Zika virus outbreak by issuing recommendations to avoid mosquito bites but made no family planning initiatives to assist women in preventing pregnancy.² Puerto Rico, which saw the highest numbers of Zika virus infections in the USA in 2016,⁴ has set an example of initiatives to improve access to contraception.

In *The Lancet Public Health*, Eva Lathrop and colleagues⁵ describe the Zika Contraception Access Network (Z-CAN) programme in Puerto Rico. Using technical expertise from the US Centers for Disease Control and Prevention (CDC), and in collaboration with a diverse group of stakeholders and private donors, the goal of Z-CAN was to create a simple but effective process to educate health-care providers on the use and application of modern contraceptives and to provide free contraception services to women attending the Z-CAN clinics who chose to prevent pregnancy during the 2016–17 Zika virus outbreak. This goal was accomplished in two stages. The first stage consisted of a 1-day training course for health-care providers at established health-care centres in Puerto Rico. The course offered an overview of the

Zika virus and the importance of condoms, a client-centred contraceptive counselling curriculum, a review of evidence-based information on contraceptives (including the full range of reversible contraceptives available, practical training on the insertion and removal of intrauterine devices, and FDA-approved etonogestrel implants), and an overview of the Z-CAN programme goals and policies.^{3,4} For the second stage, private donors and stakeholders provided funding to cover the cost of the contraception of choice for all women attending the 139 Z-CAN clinics.

153 providers were trained in the Z-CAN programme. 20 110 (95%) of the 21 124 women attending the Z-CAN clinics received the contraception of their choice at their first appointment, and 14 259 (68%) women chose a LARC. Most of the women who completed a satisfaction survey after their visit were very satisfied with the services provided. The programme and implementation are in line with current CDC and WHO recommendations for combatting the Zika virus outbreak.^{6–8} Since the programme has proved effective, it could be duplicated in other areas that are affected by the Zika virus outbreak.^{3,5}

It is impressive that a simple intervention can have such a high impact. The devastating effects of the Zika virus outbreak were surely compelling the women to choose contraception at this point in time, and the question that remains is whether the outcomes of Z-CAN are due to the immediate and highly visible effects of Zika virus infection on the infant or are correlated to the better quality of care and free services provided by Z-CAN. Surely it was easier to raise funds for contraceptives from private donors and stakeholders during the emergency situation than it would have been during a non-emergency situation. Nevertheless, this short-term response model for rapid implementation deserves high visibility and should be scaled up and rolled out. Perhaps we can learn lessons from the emergency response to the 2016–17 Zika virus outbreak and test a similar model of short, evidence-based training of health-care providers combined with increased availability of contraceptive methods in non-emergency settings.

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We declare no competing interests.

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- 1 Shapiro-Mendoza CK, Rice ME, Galang RR, et al. Pregnancy outcomes after maternal Zika virus infection during pregnancy—US territories, January 1, 2016–April 25, 2017. *MMWR Morb Mortal Wkly Rep* 2017; **66**: 615–21.
- 2 Darney BG MPH, Aiken AR, Kung S. Access to contraception in the context of Zika: health system challenges and responses. *Obstet Gynecol* 2017; **129**: 638–42.
- 3 Oussayef NL, Pillai SK, Honein MA, et al. Zika virus—10 public health achievements in 2016 and future priorities. *MMWR Morb Mortal Wkly Rep* 2017; **65**: 1482–88.
- 4 Ellington SR, Devine O, Bertolli J, et al. Estimating the number of pregnant women infected with Zika virus and expected infants with microcephaly following the Zika virus outbreak in Puerto Rico, 2016. *JAMA Pediatr* 2016; **170**: 940–45.
- 5 Lathrop E, Romero L, Hurst S, et al. The Zika Contraception Access Network: a feasibility programme to increase access to contraception in Puerto Rico during the 2016–17 Zika virus outbreak. *Lancet Pub Health* 2018; published online Jan 18. [http://dx.doi.org/10.1016/S2468-2667\(18\)30001-X](http://dx.doi.org/10.1016/S2468-2667(18)30001-X).
- 6 McNeil DG Jr. Delay pregnancy in areas with Zika, WHO suggests. *New York Times*, June 9, 2016.
- 7 Oduyebo T, Petersen EE, Rasmussen SA, et al. Update: interim guidelines for health care providers caring for pregnant women and women of reproductive age with possible Zika virus exposure—United States, 2016. *MMWR Morb Mortal Wkly Rep* 2016; **65**: 122–27.
- 8 Dehlendorf C, Gavin L, Moskosky S. Providing family planning care in the context of Zika: a toolkit for providers from the US Office of Population Affairs. *Contraception* 2017; **95**: 1–4.