

Zika Kit Distribution Evaluation
Miami-Dade County
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Background:

Zika virus is a vector-borne flavivirus which has been associated with congenital birth defects should a woman become infected during pregnancy. During the 2016 Zika virus outbreak in Miami-Dade County, Zika prevention kits were distributed to pregnant women through the Florida Department of Health in Miami-Dade (DOH-Miami-Dade). This study is the first attempt at evaluating the utility and effectiveness of that distribution program.

Methods:

A three-page, 15 question survey was conducted by DOH-Miami-Dade staff members over the phone. The survey evaluated which items included in the kit were used by the kit recipients, which items were not used or not considered useful, and if the recipients who used these kits were tested for Zika virus and/or had a positive laboratory confirmation. The assessment also tested for basic Zika-related knowledge, seeking to determine whether or not the education materials that were included in the Zika prevention were used, and if they helped in increasing understand of the virus among the kit recipients.

Results:

Of the 461 women who were on file as having received a kit from DOH-Miami-Dade, 217 were called by staff. Of these, 90 agreed to complete the survey. Of those that completed the survey, 58 were Spanish speakers, 86 had been pregnant during the 2016 Zika outbreak, and 82 had been tested for Zika virus. The item in the kit which was most used by participants was mosquito repellent (n=80), while the least used item was the mosquito bed net (n=37). The bed net was also the item which was considered to be "least useful" by participants (n=20), followed by water treatment tablets (n=13). Most participants were able to correctly identify mosquitoes as the primary Zika virus transmission route (n=66), but only 5 participants were able to correctly identify three or more Zika transmission routes. There was no real difference in the knowledge levels between the women that reported using the included education materials and those who reported that they did not use the education materials.

Conclusions:

Health departments should continue to distribute insect repellent, permethrin spray, and condoms during large scale Zika outbreaks. Items such as bed nets and water treatment tablets may not be utilized in urban areas like Miami-Dade County. Printed education materials such as flyers and pamphlets may not be effective in educating pregnant women about the transmission routes and symptoms of Zika. Educational efforts should place more emphasis on internet and social media campaigns, and on encouraging clinicians to increase their own educational efforts with pregnant patients. Further evaluation is needed on a larger scale to determine whether fully equipped Zika prevention kits would be cost-effective and useful during large scale outbreaks.