What is resistance?
When a person becomes infected with HIV, the virus enters the person’s body and begins to make copies of itself.

The medicines used to treat HIV are called antiretrovirals (ARVs). When taken properly, ARVs stop the virus from making copies of itself and help people with HIV to feel better and live longer. Taking ARVs properly usually means taking 3 different ARV medicines, because it takes more than one ARV medicine to stop HIV from making copies of itself.

However, ARVs are not perfect, and sometimes they are not able to stop all of the HIV viruses from making copies. When this happens, the HIV that is able to continue making copies of itself is called “resistant.”

Why is resistance to ARV medicines a problem?
When resistance happens, the person needs to stop taking the ARV that is no longer working and start taking a different ARV medicine. Because of this, a person who has resistant HIV has fewer choices of ARV medicines that they can take to help them stay well. Additionally, they could infect others with resistant virus.

Why is resistance to ARV medicines a concern in this research study?
The vaginal ring contains an ARV called dapivirine. Dapivirine is being used only for HIV prevention, and is not used to treat persons infected with HIV. However, if a woman becomes infected with HIV and keeps using the ring, the virus in her body could become resistant to dapivirine and similar ARV medicines used for treating HIV or for preventing mother-to-child transmission of HIV.

How can resistance to ARV medicines be avoided while participating in HOPE?

1. Avoid Getting HIV: Resistance to ARV medicines cannot occur in a person who does not have HIV. There are many things you can do to reduce your risk of HIV:
   - Use the dapivirine vaginal ring consistently
   - Use condoms consistently
   - Use oral PrEP (e.g. Truvada)
   - Reduce your number of sex partners
   - Engage in lower-risk sexual behaviors
   - If you have an STI, get treatment
   - Encourage your partner to get tested for HIV
   - If your partner is HIV positive, encourage them to be adherent to their ARV medications.
   - Ask your counselor about the “Information about HIV Prevention Options” handout for more information on these options.

2. Have Regular HIV Testing: HIV testing will be done at every study visit. You should also come to the clinic for HIV testing if you think you may have been infected with HIV between visits. If testing shows you have HIV, it is important to immediately stop using the vaginal ring to help prevent resistance. If study visits are missed, a participant might get HIV, not know it, and keep using the ring. This could cause resistance to some ARV medicines.
3. Do Not Share Vaginal Rings: Participants in the research study get regular health checks and HIV tests. People who are not in the study do not get these health checks. These people could have HIV, and not know it. If people who have HIV use the vaginal ring, this could cause resistance to some ARV medicines.

The study staff are here to help. Study staff are available to inform and counsel study participants, their partners, and other community members about resistance and any questions or concerns they may have.

If you have questions or need more information, please visit the study clinic: