UNSOM Program reduces mother-to-child HIV transmission rate

About 1.5 million women living with HIV become pregnant each year, according to the World Health Organization. Without receiving antiretroviral drugs and treatment, the chance that their children will also become infected is between 15 and 45 percent.

Translating that statistic to the local level, since 2007, more than 100 women in Las Vegas infected with HIV have given birth. But thanks to the efforts of the Nevada Care Program, under the guidance and direction of Echezona Ezeanolue, M.D., MPH, associate professor of pediatrics at the University of Nevada School of Medicine, the rate of mother-to-child transmission of the virus for patients following the treatment protocol in Las Vegas is less than one percent. The goal is to keep it that way.

The idea to create the Nevada Care Program came to Ezeanolue in 2005 while he was researching the lack of prenatal care for mothers living with HIV in New Jersey, the state which at the time, had the highest prevalence of the virus among women of child-bearing age. Over the last several years, the Nevada Care Program has become a collaborative effort between the departments of pediatrics, obstetrics and gynecology and AIDS Education and Training.
Center (AETC) at the School of Medicine and several community partners including the Wellness Center at University Medical Center, the Southern Nevada Health Department and Aid for AIDS of Nevada.

“Our objectives are to provide comprehensive, prenatal care for mothers infected with HIV,” Ezeanolue says. “Generally, the interventions can reduce the rate of mother-to-child transmission from 30 percent to less than 2 percent.”

Ezeanolue made it clear that the synergy between medical and community partners is responsible for the program’s intervention successes—that no one partner alone can make this outcome possible.

Directed at women of child-bearing age who are HIV positive and who are or may become pregnant, the intervention program follows a four-step process. First, physicians identify HIV-infected pregnant women. Second, HIV-infected pregnant women are treated throughout their pregnancy. Third, HIV-infected pregnant women are treated during labor and delivery. Finally, the Nevada Care Program provides prophylaxis—or protective or preventive treatment—to the infant for six weeks after birth.

“Mothers are seen throughout their entire pregnancy and after the birth too,” Ezeanolue says. “Housing, medication—it’s comprehensive care.”

However, intervention services don’t end when infants turn 6 weeks old. The Nevada Care Program offers primary care services to mothers—and patients from birth to 21 years old—exposed to or infected with HIV or AIDS.

In addition, the Nevada Care Program offers immunizations, tuberculosis, hepatitis, T-cell and viral load testing, family planning and contraception counseling, pregnancy consultations, dental care, mental health, substance abuse, case management and other screening services.

The program is made possible through funding from organizations including the American Academy of Pediatrics, the Nevada Department of Health and Human Services, the Health Resources and Services Administration, the Ryan White HIV/AIDS program and the National Institute of Health and the Mapuje Foundation.

Recently, the National Institutes of Health asked the Nevada Care Program to bring its innovative approach to work with HIV and AIDS positive mothers in other countries to ensure they have safe deliveries and healthy babies. In 2012, the program received $850,000 from the National Institutes of Health to develop a Nigerian program that has similar objectives as the Nevada Care Program.

The Nigerian intervention program couldn’t come fast enough. According to the World Health Organization, each year there are around 75,000 babies in Nigeria born with HIV, and it is estimated that 360,000 children are living with HIV in the country, most of whom were infected from their mothers. According to data from the Nigerian government, around 10 percent of the global population of people infected with HIV live in that country.

“There is a global impact,” Ezeanolue says. “It’s not just the state of Nevada that benefits from this program—it’s the world.”

The Nevada Care Program and Ezeanolue have received multiple awards for their contributions to public health including the Nevada Public Health Leader of the Year, the Nevada Health Care Hero for innovation and the AAP Local Heroes Award. Most recently, Ezeanolue was appointed to the Patient Centered Outcome Research Institute Advisory Panel for Reducing Disparities.