Increase in Perinatal HIV Infection in North Florida – Increased Access to Prenatal Case Management is Urgently Needed in Rural Areas

Kathleen Ryan MD 1,2, Vicky Campbell ARNP3, Matthew Washam MD 1,2, Judy Lew MD 1,2, Robert Lawrence MD 1
Department of Pediatrics, Division of Infectious Disease University of Florida, Gainesville, FL1, Emerging Pathogens Institute, University of Florida, Gainesville, FL2,

**BACKGROUND**

The rate of mother to child transmission of human immunodeficiency virus (HIV) in the United States has significantly declined due to:
1) Routine op-out HIV testing of pregnant women – testing is performed in the first trimester and repeated in the third trimester in areas with high HIV prevalence and in high risk social situations
2) Prenatal Antiretroviral (ARV) treatment of HIV infected women during pregnancy
3) Intrapartum administration of intravenous zidovudine
4) Postnatal prophylaxis of infants with 1-3 ARV medications for 6 weeks.

The University of Florida Pediatric Infectious Disease Division serves a 33 county region for pediatric HIV care that includes Gainesville, Tallahassee and the entire Florida Panhandle encompassing numerous rural counties. This entire region comprises 14.9% of the population of Florida and has 14.5% of the total live births. There are currently two perinatal coordinators for HIV pregnant women serving only 19 of the counties.

The Targeted Outreach for Preganant Women Act (TOPWA) was formed in 1999 to assist high risk pregnant women providing case management as well as mental health and substance abuse services. This includes women with HIV infection. TOPWA operates in 7 urban areas of Florida. Rural areas like the North Florida region are not served by TOPWA.

**OBJECTIVE**

The main objective was to identify factors associated with the increase in perinatal HIV infection in North Florida

**METHODS**

A retrospective case review was performed for all known HIV pregnant women and their infants in the North Florida UF catchment area. State and regional data were also used from FLHealthCHARTS from the Bureau of Vital Statistics

**RESULTS**

![Graph showing perinatal HIV cases in North Florida from 2013-2018](image)

**CONCLUSIONS**

- The rate of perinatal HIV Transmission in North Florida is almost double the rate in the rest of the state
- In the past 2 years North Florida has had 31% of the total number of HIV infected infants in Florida
- HIV incidence is lower for women 13-39 in North Florida than in other areas of Florida
- ARV non-compliance, mental illness, and substance abuse are common in HIV-infected mothers whose infants become perinatally infected in North Florida
- Acute HIV infection in the third trimester results in a high rate of perinatal infection
- Lack of case management could be related to the increase in HIV transmission in North Florida

**FUTURE DIRECTIONS**

- Increasing access to comprehensive programs for pregnant women in rural areas could result in decreased perinatal HIV transmission
- Increased HIV screening during pregnancy is needed to detect late third trimester infection.