Background. Male partner involvement in sub-Saharan Africa has been investigated and shown to improve outcomes for the entire family. However, little research is available in other regions. In Porto Alegre, Brazil, partners of pregnant women are encouraged to attend prenatal care for HIV voluntary counseling and testing (VCT) to decrease acute HIV serconversion during pregnancy. Uptake of this intervention has been sub-optimal.

Methods. From November 2016 to July 2017, 202 men who attended prenatal care at Hospital Conceicao and 201 men who did not attend prenatal care were interviewed using computer-assisted telephone interviews regarding individual, relationship and system-wide facilitators and barriers to attending prenatal care. Multivariable regression was performed to identify factors associated with male involvement in prenatal care.

Results. Of 403 men interviewed, 91% stated they had been invited to prenatal care, 94% of men stated they would accept HIV testing if offered, but only 50% attended. Men identified making their partner happy as the most important facilitator for prenatal care attendance, and having to miss work as the most significant barrier. Frequency of commonly identified barriers and facilities are indicated by Figure 1. Individual factors that predicted prenatal care attendance included over-estimating the risk of mother-to-child transmission (AOR 2.1, 95% CI 1.3–3.3), and endorsing that HIV-infected individuals can live satisfying lives (AOR 7.8, 95% CI 2.1–30.8). Partnership factors associated with attendance included being invited by partner (AOR 5.6, 95% CI 2.4–15.6), whereas admitting jealous behavior was negatively associated with attendance (AOR 0.82, 95% CI 0.7–0.97). Systemic factors negatively associated with prenatal care attendance included a history of not affording medical care (AOR 0.28, 95% CI 0.15–0.55) and identifying work as a barrier (AOR 0.19, 95% CI 0.11–0.31).

Conclusion. Involvement of male partners during pregnancy may be enhanced by providing free care during flexible hours. Partners should be actively invited to participate in prenatal care.

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610. Barriers and Facilitators to Uptake of Male Partner Attendance for HIV VCT During Prenatal Care in Brazil
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611. Placental Pathology and Neonatal Outcomes in Pregnancies of Perinatally vs. Nonperinatally HIV-Infected Women
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Background. Perinatally HIV-infected (PHIV) women are reaching childbearing age, but little is known about the impact of long-term exposure to HIV and antiretroviral therapy on pregnancy outcomes of PHIV women, including the impact on neonatal health and placental pathology.

Methods. We performed a retrospective cohort analysis over a 10-year period (2007–2017) of PHIV women, matched by age and date of delivery in 1:2 ratio, to behaviorally HIV-infected women (BHIV). The primary maternal outcome variable included virologic suppression (viral load ≤ 400 copies/mL) at delivery. Secondary outcome variables included hospital length of stay (LOS), mode of delivery, infectious (chorioamnionitis, funisitis) and vascular (vasculitis) placental complications based on histopathological analysis of placental specimen (composite variable). The primary maternal outcome was preterm birth (<37 weeks); secondary maternal outcomes included AFGAR scores and infant HIV status. Primary and secondary maternal and neonatal outcomes were compared between PHIV and BHIV women. Logistic regression models measured the association between primary maternal and neonatal outcomes and perinatal status, adjusting for age and race.

Results. A total of 60 deliveries were evaluated during the study period (20 from women with PHIV and 40 from women with BHIV). Women with PHIV were significantly younger (20 vs. 29, P < 0.05) and less likely to be suppressed at delivery (55% vs. 90%, P < 0.05) compared with women with BHIV. A total of 19 women experienced placental pathologies but no differences were found by perinatal status (31% vs. 36%, P = 0.7, among PHIV and BHIV, respectively). Other than viral suppression, there were no significant differences among maternal and neonatal outcomes of interest by mode of HIV acquisition. In the multivariable regression, women with PHIV were significantly less likely to be suppressed after adjusting for age and race (AOR 0.07, 95% CI 0.01–0.80). There was no significant difference for preterm birth.

Conclusion. Women with PHIV were significantly less likely to be suppressed at delivery but did not experience other complications at birth. Neonatal outcomes were similar among women with PHIV and BHIV.

Disclosure. All authors: No reported disclosures.

612. Increase in Perinatal HIV Infection in North Florida: Missed Opportunities to Prevent Maternal-to-Child Transmission in Rural Areas
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Background. The rate of mother-to-child transmission of human immunodeficiency virus (HIV) in the United States has significantly declined due to routine opt-out HIV testing of pregnant women and implementation of effective prenatal, intrapartum and postnatal interventions. This includes first trimester HIV testing and retesting in the third trimester in areas with high HIV prevalence or in high-risk social situations. The University of Florida Pediatric Infectious Disease division serves a 31 county area for pediatric HIV care that includes Gainesville, Tallahassee and the entire Florida panhandle encompassing mostly rural counties. There are two HIV perinatal coordinators for pregnant women serving 19 of the counties.

Methods. HIV-positive mother-infant pair chart review 2008–2018.

Results. Between 2008 and 2012 there was one HIV-infected infant in the entire catchment area. From 2013 to 2017, there were 10 HIV-infected infants and two thus far in 2018. Statewide from 2013 to 2017 there were 41 HIV-infected infants. In the past 2 years, the North Florida region had 31% of the total number of HIV-infected infants. Eight of 12 mothers transmitting infection were known to be HIV infected and were prescribed antiretroviral (ARV) therapy with noncompliance documented in all 8. Two were teenagers; four received no prenatal care and insurance problems were reported in 3 as reasons for ARV noncompliance. Mental illness and/or substance abuse was documented in 6. Three were presumed infected during the third trimester—two tested negative in the first trimester, one was retested early in the third trimester and one was tested only at delivery due to lack of prenatal care.

Conclusion. Improved access to prenatal care management and access to mental health and substance abuse services are seriously needed in rural areas. Improving pregnancy compliance with ARV therapy is crucial in preventing vertical transmission. The number of perinatal coordinators needs to be significantly increased to support compliance. This provides services that HIV testing in the first and third trimesters should become routine and testing of all (but especially high-risk women such as teenagers and those with mental illness or substance abuse) should be strongly considered at the time of delivery.

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