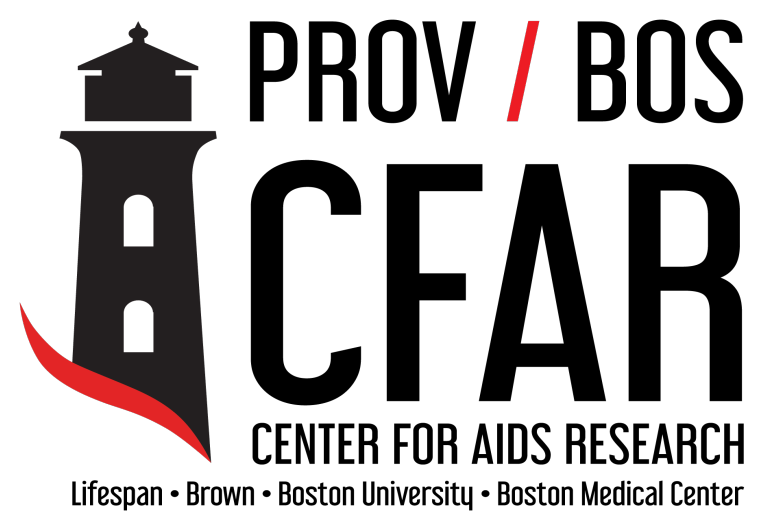




Pregnancy Outcomes and Engagement in HIV Care for Pregnant Women Living with HIV in Rhode Island 2012-2019



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Introduction

- Maternal diagnosis and treatment of Human Immunodeficiency Virus (HIV) during pregnancy decreases mother to child transmission of HIV
- Prevention of mother to child transmission of HIV requires a comprehensive approach with understanding of the cultural backgrounds of pregnant women living with HIV
- In Rhode Island (RI), 70% of women newly diagnosed with HIV are foreign-born despite representing only 14% of RI's population
- Understanding the similarities and differences of pregnancy characteristics, clinical outcomes, and retention in care in United States (US)-born vs foreign-born women living with HIV in RI is needed to ensure appropriate resources are provided to all women living with HIV in our state

Objectives

- To describe and compare the pregnancy outcomes and retention in care between US born and foreign-born pregnant women living with HIV in RI

Methods

- Retrospective review of the medical records of pregnant women living with HIV and their infants evaluated in our hospital system were analyzed from January 2012 to December 2019
- Inclusion criteria:
 - Pregnant women (≥ 18 years of age) living with HIV who were diagnosed or treated for HIV infection during the study period
 - HIV-exposed infants born to women who met criteria 1
 - Maternal retention in postpartum HIV care was defined as attending 2 or more visits each postpartum year, measured for 2 years.
 - Infant retention in care was defined as attending HIV clinic at 1, 2, 6, and 18 months (correlates with visits 1-4 in **Table 5**)
- Data analyzed using SAS and p-values calculated using Chi-Square

Results

Table 1: Study Population Characteristics

Characteristic (n, %)	Pregnant Women Living with HIV
Age at HIV Diagnoses, Median (IQR)	27 [21–32]
Age at Delivery, Median (IQR)	36 [32–41]
Ethnicity	
Hispanic or Latino	19 (32.8)
Non-Hispanic or Latino	39 (67.2)
Race	
Black or African American	31 (53.5)
White or Caucasian	22 (37.9)
Other	5 (8.6)
Country of Origin	
USA	21 (36.2)
Non-USA	37 (63.8)
HIV Viral Load at Delivery	
Undetectable (< 200 copies/mL)	50 (96.1)
Detectable (≥ 200 copies/mL)	2 (3.8)
Missing	6

%, percent, IQR: Interquartile range; mL: milliliter

Table 2: Pregnancy Characteristics of US-born vs Foreign-born women

Characteristic	US-born	Foreign-born	Total	P-value
Total # of women, (%)	21 (36.2)	37 (63.8)	58 (100.0)	0.0356
Age at diagnosis, Median [IQR]	22 [20, 28]	28 [24, 33]	27 [21–32]	0.0196
Age at first delivery, Median [IQR]	33 [32, 36]	38 [33, 43]	36 [32–41]	0.0232
HIV diagnosis during pregnancy, (%)	2 (9.5)	17 (41.7)	17 (29.8)	0.0105
C-section at first delivery, (%)	5 (23.8)	15 (40.5)	20 (34.5)	0.1976
DCYF involvement, (%)	7 (26.9)	3 (6.7)	10 (14.1)	0.0441

US: United States, #: number, %: percent, IQR: Interquartile range;

Table 3: Retention in HIV care of US-born vs Foreign-born women

	US-born	Foreign-born	Total	P-value
1 year				
Retained (%)	9 (30.0)	21 (70.0)	30 (51.7)	0.3086
Not retained (%)	12 (42.9)	16 (57.1)	28 (48.3)	
2 years				
Retained (%)	3 (37.5)	5 (62.5)	8 (13.8)	0.3025
Not retained (%)	18 (36.0)	32 (64.0)	50 (86.2)	

US: United States, %: percent

Table 4: Case Management and DCYF involvement per pregnancy

	1 st Pregnancy	2 nd Pregnancy
Case Management		
Yes (%)	34 (58.6)	9 (81.8)
No (%)	15 (25.9)	2 (18.2)
Unknown (%)	7 (12.1)	0 (0.0)
Declined (%)	2 (3.4)	0 (0.0)
DCYF Involvement		
Yes (%)	8 (13.8)	2 (18.2)
No (%)	46 (79.3)	9 (81.8)

DCYF: Department of Children Youth & Families, %: percent

Table 5: Infant Retention in Perinatal HIV Exposure Care

	US-born mothers	Foreign-born mothers	Total	P-value
Pregnancy	26 (36.6)	45 (63.4)	71 (100.0)	0.0241
1st visit	21 (80.8)	44 (97.8)	65 (91.5)	0.0207
2nd visit	8 (30.8)	30 (66.7)	38 (53.5)	0.0035
3rd visit	15 (57.7)	27 (60.0)	42 (59.1)	0.8489
4th visit	9 (34.6)	15 (33.3)	24 (33.8)	0.9124

US: United States

Conclusion

- HIV VL was suppressed at delivery for most patients, regardless of having a detectable viral load during pregnancy
- Most pregnant women living with HIV in RI are foreign-born (63.8%) with a significant number diagnosed during pregnancy
- Retention in postpartum HIV care decreased between year 1 and 2, regardless of maternal country of birth
- Infant retention was highest at 1 month but decreased without regard to maternal country of birth
- DCYF involvement was significantly higher in mothers born in the US