

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

BROWN Alpert Medical School

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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 (\geq 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

Age at HIV Diagnoses, Median (IQR) 27 [21-32] Age at Delivery, Median (IQR) 36 [32-41] Age at Delivery, Median (IQR) 36 [32-41] Hispanic or Latino 19 (32.8) Non-Hispanic or Latino 39 (67.2) Black or African American 31 (53.5) White or Caucasian 22 (37.9) Other 5 (8.6) Country of Origin 10 (46.7) USA 21 (36.2) Non-USA 21 (36.2) Missing 6 %: percent.IQR: Interquartile range; mL: millitler 76 (38.0) Table 2: Pregnancy Characteristics US-born mothers Characteristic US-born vs Foreign-born vomen Case diagnosis, Median (IQR) 21 (36.2) 37 (63.8) Age at diagnosis, Median (IQR) 21 (36.2) 37 (14.17) 17 (28.8) 15 (30.0) Age at diagnosis, Median (IQR) 22 (20.28) 28 (21.43) 27 (27.23) 0.0166 Age at diagnosis, Median (IQR) 2 (36.8) <th>Table 1: Study Population CharacCharacteristic (n, %)</th> <th></th> <th>Prognant Wo</th> <th>men Living v</th> <th>with HIV</th> <th></th> <th></th> <th>and DCYF involvement per 1st Pregnancy</th> <th>2nd F</th>	Table 1: Study Population CharacCharacteristic (n, %)		Prognant Wo	men Living v	with HIV			and DCYF involvement per 1 st Pregnancy	2 nd F
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Not retained (%) 18 (36.0) 32 (64.0) 50 (86.2) US				l l	0.3025	_	volventette was sig		

Characteristic (n, %)		Pregnant Wo	men Living v	vith HIV			1 st Pregnancy	2 nd P
Age at HIV Diagnoses, Median (IQ	R)	v	7 [21–32]		Case Managen	nent		
Age at Delivery, Median (IQR)		3	6 [32-41]		Yes (%)		34 (58.6)	9
Ethnicity					No (%)		15 (25.9)	2
Hispanic or Latino		1	9 (32.8)		Unknown (%)		7 (12.1)	(
Non-Hispanic or Latino		3	89 (67.2)		Declined (%)		2 (3.4)	(
Race								
Black or African American		3	81 (53.5)		DCYF Involvem	nent	0 (4 2 0)	2
White or Caucasian		2	22 (37.9)		Yes (%)		8 (13.8)	2
Other			5 (8.6)		No (%)		46 (79.3)	9
Country of Origin					DCYF: Departme	ent of Children Youth &	Families, %: percent	
USA		2	21 (36.2)					
Non-USA		3	87 (63.8)		Table 5. Inf	ant Retention in P	erinatal HIV Exposure Ca	are
HIV Viral Load at Delivery						US-born mothers	Foreign-born mothers	Tota
Undetectable (< 200 copies/m	L)	5	50 (96.1)		Pregnancy	26 (36.6)	45 (63.4)	71 (100
Detectable (≧200 copies/mL)			2 (3.8)			× ,		, , , , , , , , , , , , , , , , , , ,
Missing			6		1 st visit 2 nd visit	21 (80.8) 8 (30.8)	44 (97.8) 30 (66.7)	65 (91
%: percent, IQR: Interquartile range; mL	.: milliliter				3 rd visit	15 (57.7)	27 (60.0)	38 (53 42 (59
					4 th visit	9 (34.6)	15 (33.3)	24 (33
		– · ·			US: United State	(/		
Table 2: Pregnancy Characteris		•			1			
Characteristic	US-born	Foreign-born		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			onclusion	
Age at first delivery, Median [IQR]	33 [32, 36]	38 [33, 43]	36 [32-41]	0.0232				
HIV diagnosis during pregnancy, (%	6) 2 (9.5)	17 (41.7)	17 (29.8)	0.0105			delivery for most patie	nts, reg
C-section at first delivery, (%)	5 (23.8)	15 (40.5)	20 (34.5)	0.1976	having a d	detectable viral lo	ad during pregnancy	
DCYF involvement, (%)	7 (26.9)	3 (6.7)	10 (14.1)	0.0441				
US: United States, #: number, %: percent,	IQR: Interguartile	e range;					ng with HIV in RI are for	-
		0			with a sig	nificant number c	liagnosed during pregn	ancy
					Detention	in noothoortune []	N/ aara daaraaad batu	
Table 3: Retention in HIV care c						• •	IV care decreased betw	veen ye
	US-born	Foreign-born	Total	P-value	regardles	s of maternal cou	intry of birth	
1 year	0 (20 0)	04 (70 0)	20 (54 7)		 Infant rate 	ntion was higher	st at 1 month hut dooro	acad wi
Retained (%)	9 (30.0)	21 (70.0) 16 (57.1)	30 (51.7) 28 (48.3)	0.3086		maternal country	st at 1 month but decrea	ลวธน WI
Not ratainad (0/)			ZO (40 J)					
Not retained (%)	12 (42.9)	10 (07.17)	20 (1010)		rogara to			
Not retained (%) 2 years Retained (%)	3 (37.5)	5 (62.5)	8 (13.8)		C		gnificantly higher in mot	thers ho

Table 3: Retention in HIV care of US-born vs Foreign-born wome	n
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	US-born	Foreign-born	Total
1 year			
Retained (%)	9 (30.0)	21 (70.0)	30 (51.7)
Not retained (%)	12 (42.9)	16 (57.1)	28 (48.3)
2 years			
Retained (%)	3 (37.5)	5 (62.5)	8 (13.8)
Not retained (%)	18 (36.0)	32 (64.0)	50 (86.2)
US: United States, %: percent			

This work was supported by the National Institutes of Health Grants R01-AI-108441 and P30-AI-042853 (Providence-Boston Center for AIDS Research)

Results











