

Timing of HIV diagnosis prior to pregnancy: a Canadian perspective



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Background

- The majority (80%) of women living with HIV (WLWH) in Canada are of reproductive age
- WLWH are increasingly planning to become pregnant and give birth
- Initiating combination antiretroviral therapy (cART) prior to conception is recommended for all WLWH regardless of CD4 count or clinical stage to reduce HIV transmission risk to the newborn
- Women need to be aware of their HIV status prior to pregnant in order to initiate early cART and thereby virtually eliminate perinatal HIV transmission

Methods

- Unique encoded identifiers at ICES were used to link the health administrative data of Ontario women who gave birth between 2006 and 2018 to the Ontario HIV database to establish maternal HIV status and timing of HIV diagnosis
- Women were identified using the MOMBABY database, including inpatient admission records for >98% of all in-hospital births

Majority of women living with HIV in Ontario are diagnosed prior to pregnancy

Results

Table 1. Demographic characteristics of pregnant women living with HIV in Ontario between 2006/07 and 2017/18

Characteristics	HIV Status Women living with HIV n=1012
Age (mean, SD)	32.36 ± 5.65
Immigrant status	
Long-term resident	478 (47.2)
Recent immigrant	210 (20.8)
Long-term immigrant	295 (29.2)
Country of Origin	
Canadian or other	560 (55.3)
African or Caribbean	452 (44.7)
Rurality	
Rural	16 (1.6)
Urban	990 (97.8)
Other	6 (0.6)
Income quintile	
1 (lowest)	477 (47.1)
2	197 (19.5)
3	148 (14.6)
4	113 (11.2)
5 (highest)	69 (6.8)

Table 2. Timing of HIV diagnosis among pregnant women living with HIV over time

Timing of HIV Diagnosis	Year		
	2006/07 - 2009/10 n=312 (%)	2010/11 - 2013/14 n=360-370 (%)	2014/15 - 2017/18 n=331 (%)
HIV diagnosed prior to conception	265 (84.9%)	332 (90%)	293 (88.5%)
HIV diagnosed during first trimester	12 (3.8%)	1-6	11 (3.3%)
HIV diagnosed during second trimester	23 (7.4%)	26 (7.7%)	18 (5.4%)
HIV diagnosed during third trimester	12 (3.8%)	1-6	9 (2.7%)

Figure 1. Timing of HIV diagnosis among cohort of pregnant women living with HIV between 2006-2018

Figure 2. Proportion of women giving birth from 2014/15-2017/18 by LHIN distribution. Women living with HIV

Women living without HIV