

TIME OF HIV DIAGNOSIS AND PRENATAL CARE IMPACT OUTCOMES IN PREGNANT WOMEN WITH HIV

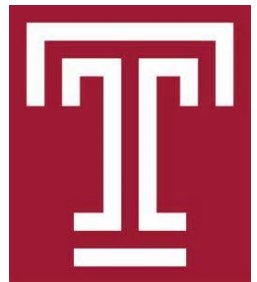
Florence Momplaisir, MD MSHP

Kathleen A. Brady, MD

Thomas Fekete, MD

Dana Thompson, MPH

Baligh R. Yehia, MD MPP MSHP



Disclosures

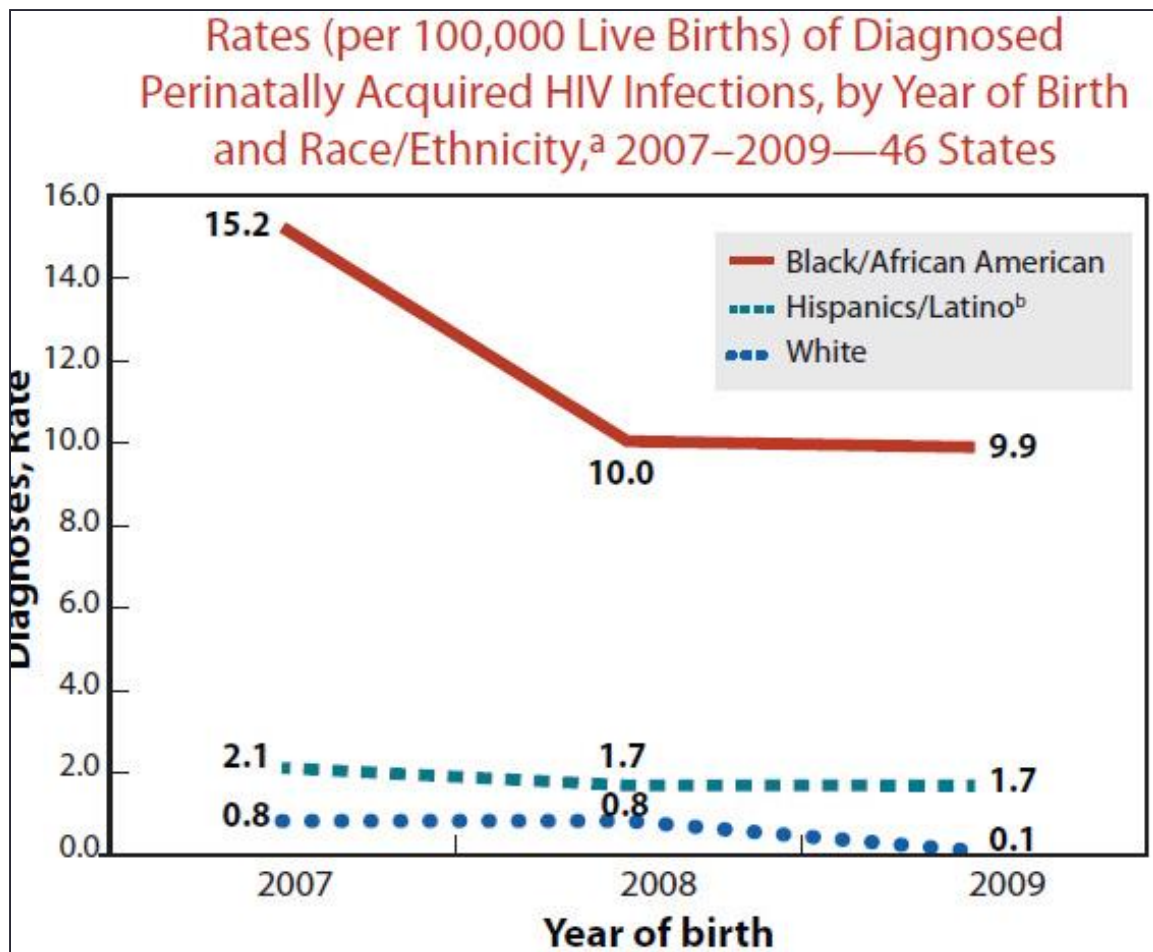
I have no actual or potential conflict of interest in relation to this presentation

Background

- Suppression of HIV is crucial to prevent mother to child transmission (MTCT) of HIV.
- Public health interventions have reduced HIV MTCT from 22% to <2%.
- However, there is room for improvement, particularly for racial/ethnic minority women.

Background

- HIV MTCT remain elevated among blacks.
- No. of women with HIV giving birth has increased.



Study Objectives

1. Determine ART receipt and HIV suppression rates (close to delivery) among HIV-infected pregnant women.
2. Evaluate how timing of HIV diagnosis and quality of prenatal care impact these outcomes.

Methods

- Data Sources

- Philadelphia Enhanced Perinatal Surveillance
- Philadelphia Enhanced HIV/AIDS Reporting System

- Study Population

- HIV-infected women who delivered in Philadelphia between 2005 and 2013.

Outcomes of Interest

- ART receipt
 - Receipt of ART at any point during pregnancy.
- HIV viral suppression
 - HIV VL \leq 400 copies/ml closest to delivery (measured as far out as 1 month postpartum).

Study Variables

Sociodemographic

- Age at delivery
- Race/ethnicity
- Insurance status
- Substance abuse
- Delivery year

Clinical

- Adequacy of Prenatal Care, measured by Kessner Index
 - adequate
 - intermediate
 - inadequate
- Timing of HIV diagnosis
 - before pregnancy
 - during pregnancy

Statistical Analysis

- Descriptive statistics
 - By receipt of ART and HIV viral suppression.
- Multivariable logistic regression
 - Unadjusted and adjusted analyses.
 - All demographic and clinical variables included in the final models.

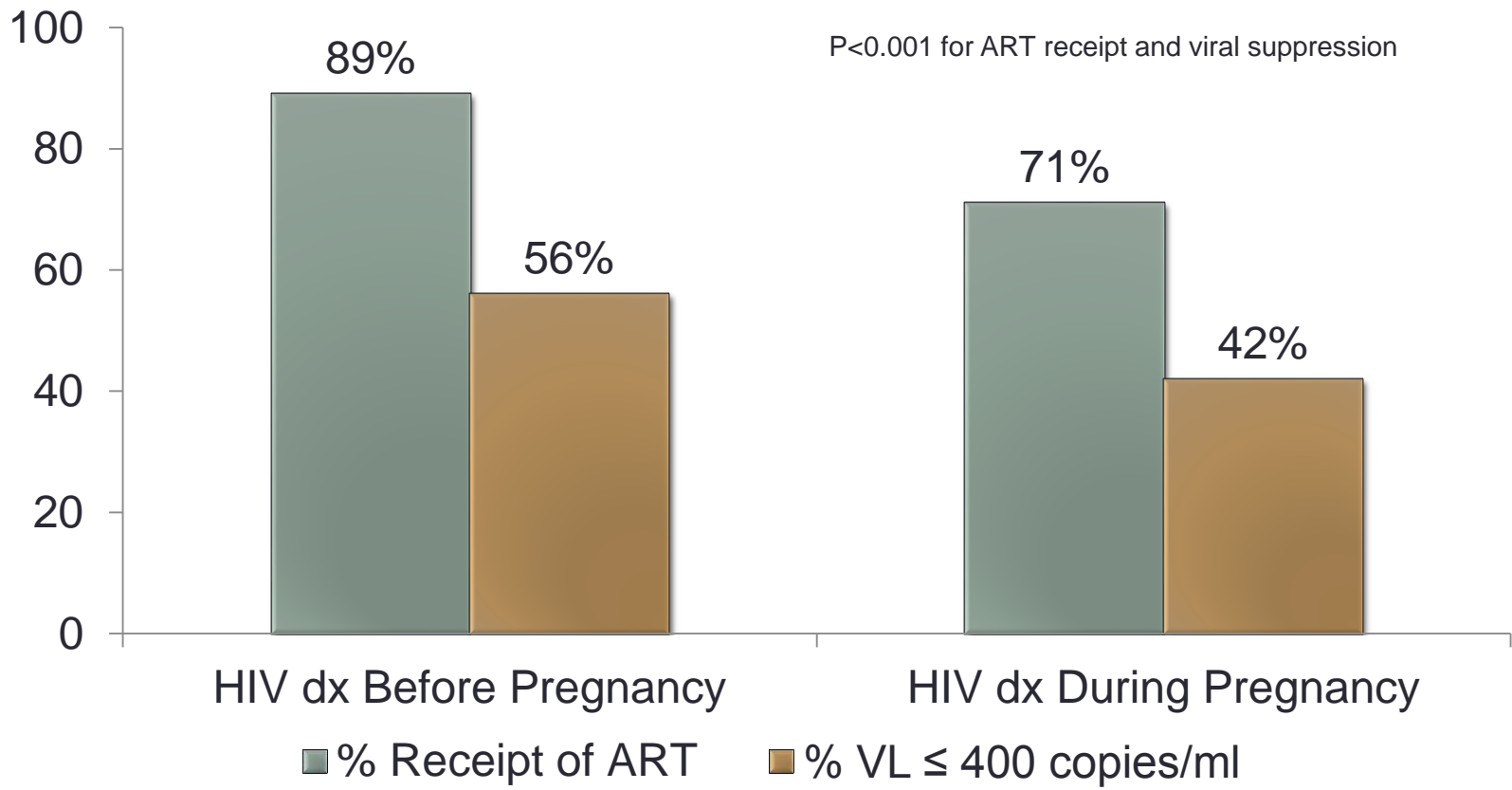
Sample Characteristics

Socidemographics	n, % (total n=836)
Age 25-34	431 (52)
Black, non-Hispanic	661 (79)
Public Health Insurance	650 (78)
Drug Use During Pregnancy	191 (23)

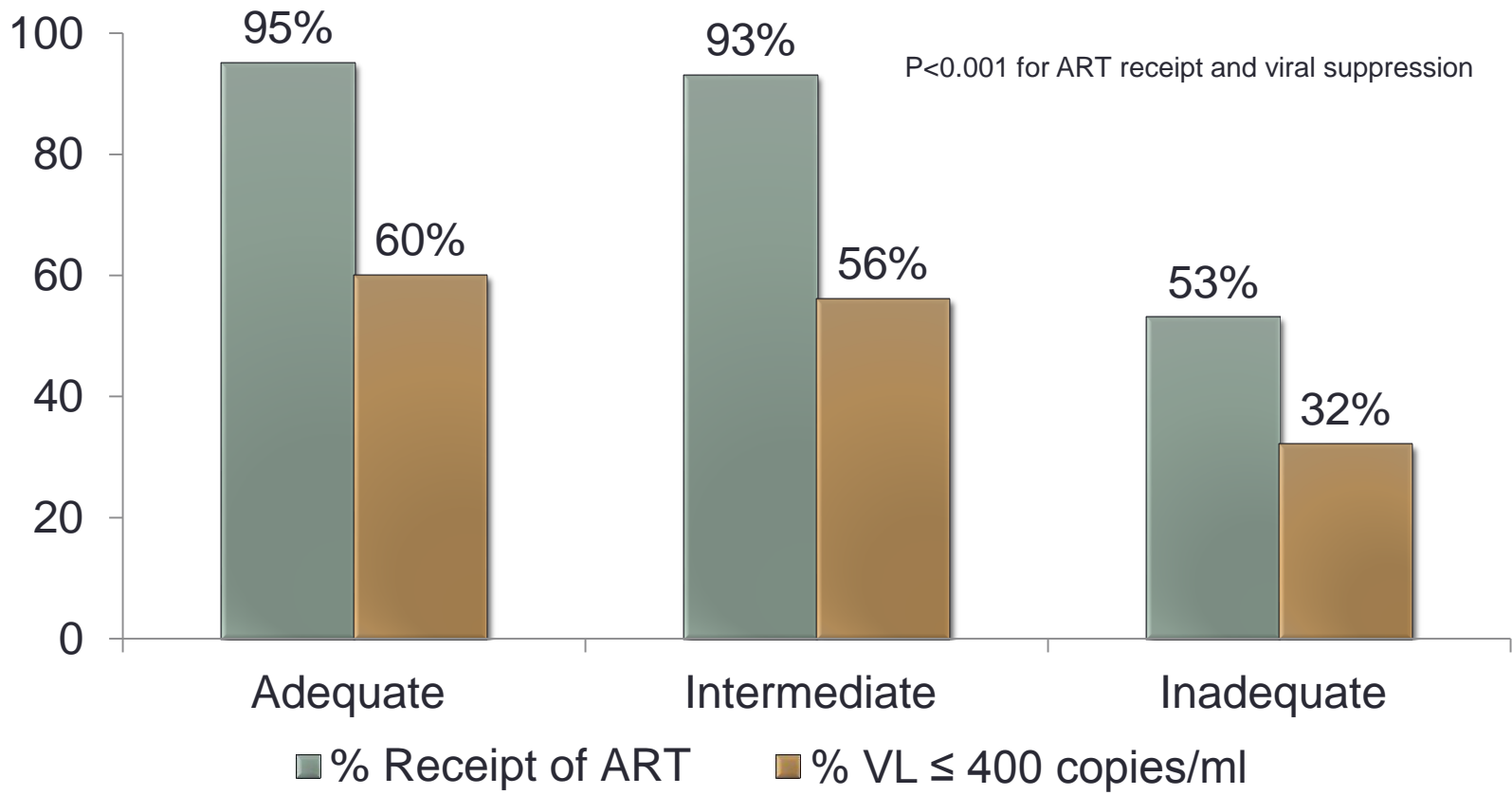
Sample Characteristics

Clinical	n, % (total n=836)
Adequacy of Prenatal Care	
Adequate	325 (39)
Intermediate	319 (38)
Inadequate	192 (23)
HIV Diagnosis Before Pregnancy	625 (75)
Receipt of ART during Pregnancy	708 (85)
HIV VL \leq 400 copies/ml	437 (52)

Receipt of ART and Viral Suppression by Timing of HIV Diagnosis



Receipt of ART and Viral Suppression by Adequacy of Prenatal Care



Factors Associated with the Outcomes

	Receipt of ART AOR (95% CI)	Viral Suppression AOR (95% CI)
Age (ref: 16-24)		
25-34	0.5 (0.3-0.9)	1.0 (0.7-1.5)
≥ 35	0.4 (0.2-0.9)	0.9 (0.6-1.4)
Race (ref: white, non-Hispanic)		
Black, non-Hispanic	0.5 (0.3-1.1)	0.9 (0.5-1.4)
Hispanic or Latino	0.3 (0.1-0.9)	0.8 (0.4-1.7)
Illicit Drug Use (ref: no)		
Yes	0.7 (0.4-1.2)	0.7 (0.5-1.1)
Insurance (ref: public)		
Private	0.80 (0.36-1.75)	1.21 (0.74-1.99)
Uninsured	1.09 (0.50-2.38)	1.25 (0.72-2.18)

Factors Associated with the Outcomes

	Receipt of ART AOR (95% CI)	Viral Suppression AOR (95% CI)
Adequacy of Prenatal Care (ref: adequate)		
Intermediate	0.6 (0.3-1.2)	0.7 (0.5-1.0)
Inadequate	0.06 (0.03-0.11)	0.3 (0.2-0.5)
Timing of HIV Diagnosis (ref: before pregnancy)		
During Pregnancy	0.4 (0.2-0.6)	0.7 (0.5-1.0)
Year of Delivery	1.3 (1.1-1.4)	1.3 (1.2-1.4)

Limitations

- Incomplete data recording by providers.
- ART receipt variable obtained by chart abstraction.
- Limited extrapolation to other populations.

Conclusions

- 25% of women were diagnosed with HIV during pregnancy.
- Only 39% engaged adequately in prenatal care and half achieved suppression at delivery.
- HIV dx during pregnancy and inadequate prenatal care were strongly associated with detectable virus at delivery.

Policy Implications

- Targeted interventions for early HIV diagnosis and improved engagement in prenatal care are needed
 - Full implementation of opt-out testing
 - Use of Social media
 - Peer navigators during pregnancy and postpartum
 - Case management involvement
- HIV care has to be integrated among the HIV specialist, obstetrician, and pediatrician.

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