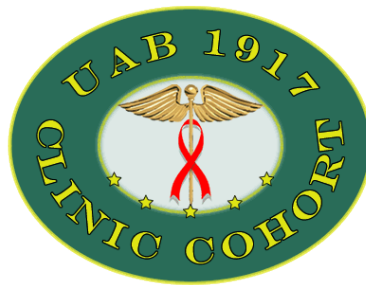


Gender and Race Differences in Persistence of HIV Treatment Regimens

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Disclosure



- Relevant Financial Relationship(s):
 - None

Background

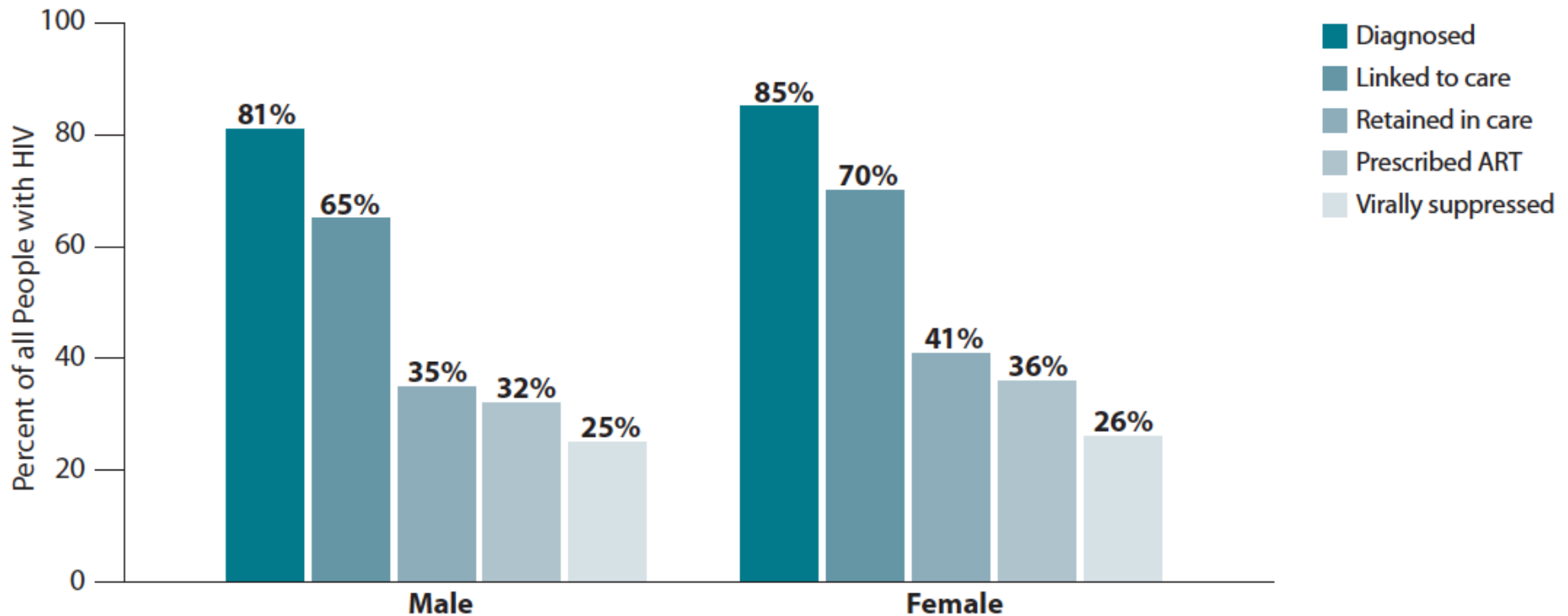
Women and HIV in the US



- Women represent 25% of HIV infections in the US, with Women of color being disproportionately affected
- 1.49% of Black Women in the US (18-49yrs old) are HIV positive (22 times the rate of White Women)
- Heterosexual sex accounts for 84% of HIV infections among Black Women
- Majority of HIV-positive women (81%) are infected during childbearing ages (13-44 years)

HIV Treatment Cascade

BY GENDER: Although men are less likely to be retained in care, men and women are equally likely to be virally suppressed.



Objective

To evaluate differences in ARV discontinuation rates stratified by gender and race.

Methods

- Retrospective medical chart review
- HIV-infected patient seeking care at an urban Outpatient Clinic in Birmingham, AL between Jan 2004 and Feb 2009
- Inclusion Criteria:
 - HIV-positive
 - ART naïve
 - Age ≥ 18 years

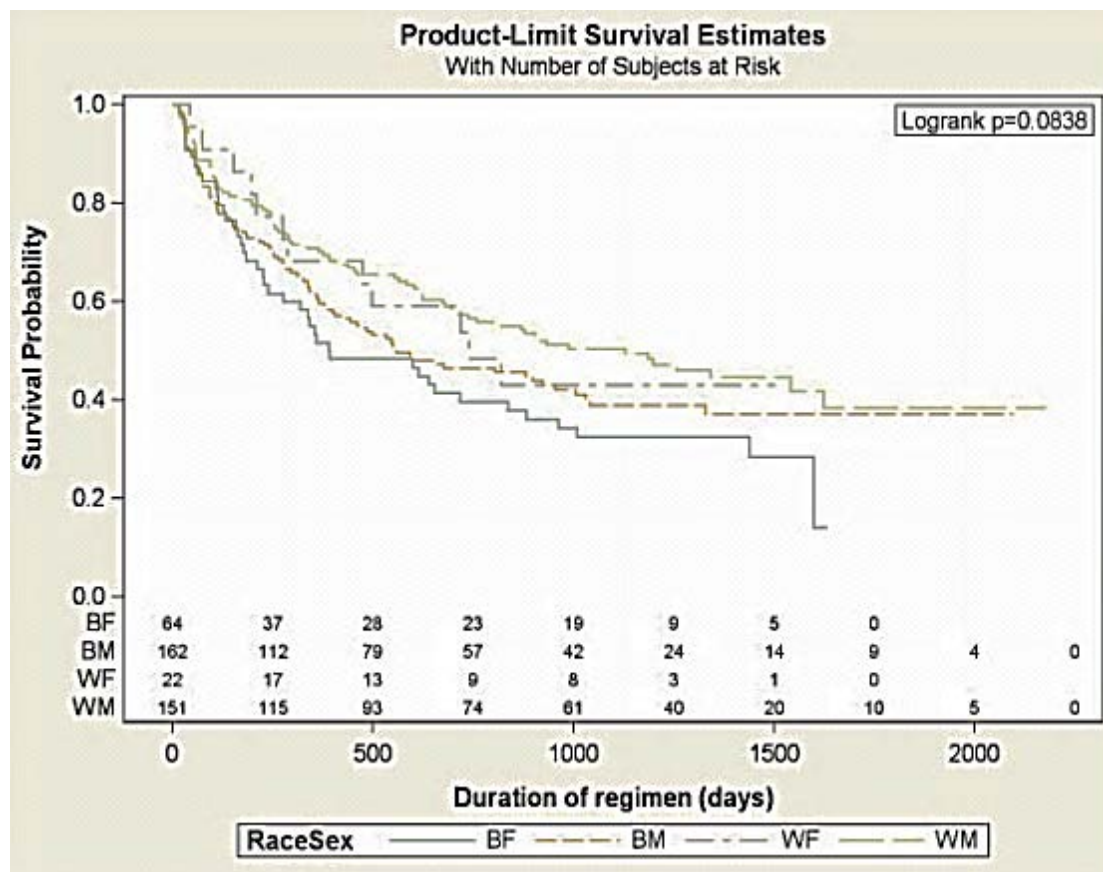
Analysis

- Ascertainment of socio-demographic- and clinical factors, ARV regimens, ARV start- and stop dates, reasons for change
- Regimens considered discontinued/changed if:
 - any ARV within regimen was discontinued
 - any additional ARV was added
- Time to individual regimen discontinuation was modeled using Cox proportional hazards regression
- Patient-level count of the number of days on drug holiday (off ARV therapy ≥ 14 days) was modeled using Poisson regression

Cohort Characteristics

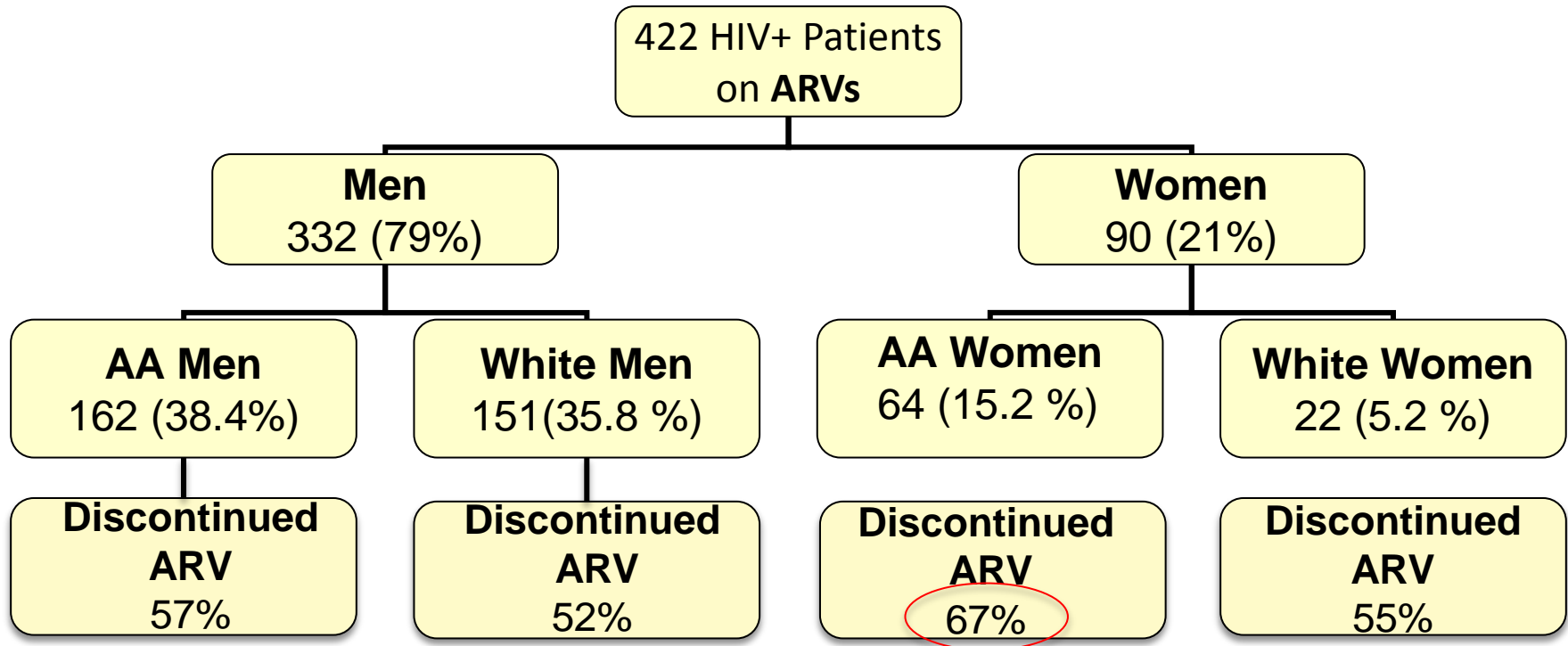
Characteristic	N= 422	(%)	Females		Males	
			N=90	(21%)	N=332	(79%)
Age, yrs (mean, STD)	37.5	± 9.9	40.1	± 9.8	36.8	± 9.9
Race						
White	173	(41.0)	22	(24.4)	151	(45.5)
Black	226	(53.6)	64	(71.1)	162	(48.8)
Hispanic	11	(2.6)	2	(2.22)	9	(2.71)
Asian	1	(0.24)	0	(0)	1	(0.30)
Other	11	(2.6)	2	(2.22)	9	(2.71)
HIV Risk Assessment						
MSM	221	(52.3)	2	(2.22)	219	(66.0)
IDU	23	(5.5)	5	(5.56)	18	(5.42)
Heterosexual	178	(42.2)	83	(92.2)	95	(28.6)
Insurance						
Private	171	(40.6)	28	(31.5)	143	(43.1)
Public	110	(26.1)	40	(44.9)	70	(21.1)
Uninsured	140	(33.3)	21	(23.6)	119	(35.8)

Discontinuation Rates by Race/Gender



Race and Sex	Hazard Ratio (95% CI)	<i>P</i>
Black Females	1.6 (1.2-2.2)	0.004
Black Males	1.4 (1.1-1.8)	0.011
White Females	1.2 (0.70-2.0)	0.538

ARV Discontinuation and Holiday Rates



Race/Sex	N	Holiday Rate/yr	P
Black Females	64	17.67	0.1290
Black Males	162	16.64	0.0978
White Females	22	12.74	0.6423
White Males	151	9.01	Ref.
White	173	9.45	Ref.
Non-White	249	17.52	0.0525

Reasons for Discontinuation	Females		Males	
	Black	White	Black	White
Virologic Failure	6.8%	5.6%	11.0%	6.5%
Poor Adherence	57.5%	38.9%	63.7%	55.1%
GI Toxicity	9.6%	16.7%	12.3%	14.0%
Psychiatric Effects	4.1%	11.1%	1.4%	11.2%
Hematologic Toxicity	1.4%	0	2.7	1.9%
Neurologic Toxicity	1.4%	0	2.7	5.6%
Renal/GU Toxicity	0	0	2.1	0.9%
Dermatologic Toxicity	0	22.2%	0.7%	0.9%
Musculoskeletal Toxicity	0	0	0	0
Constitutional Effects	2.7%	11.1%	2.7%	4.7%
Metabolic/Endocrine Effects	1.4%	0	2.7	3.7%
Other Medical Conditions	15.1%	0	5.5%	1.9%
Drug Effects	2.7%	16.7%	2.1%	2.8%

Conclusions

- Gender and race differences in treatment discontinuation/change may explain some of the differences seen in unfavorable treatment outcomes among Female Patients and especially African American Female HIV patients.
- Further investigations into the reasons for higher ARV discontinuation rates and longer ARV holidays among African American females are warranted.