

# Differences in Burden of Internalized HIV Stigma (IHS) by Race/Ethnicity among People with HIV (PWH) Living in the US

Abstract: EPD404

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## BACKGROUND

- HIV stigma can have a detrimental impact on the well-being of people with HIV (PWH).
- Internalized HIV stigma (IHS) relates to how an individual feels about him/her/themselves with respect to their HIV status based on their internalization of social norms.
- While HIV stigma has been associated with adverse health outcomes among PWH, little is known about which subgroups are most affected by IHS and hence may experience greater adverse effects.
- We examined IHS in a large cohort for PWH receiving care in 7 sites across the US to determine differential burden of IHS in different subgroups of PWH.**

## METHODS

- PWH receiving care at CFAR Network of Integrated Clinical System (CNICS) locations complete patient reported outcomes and measures (PRO) assessments every 4-6 months.
- Beginning in 2016, **PWH responded to 4 Likert scale IHS questions, ranging from strongly disagree (1) to strongly agree (5).**
- Initial IHS responses were transformed into a score, theta, using Item Response Theory models.
- Differences in thetas across PWH who responded to questions on IHS were examined by sociodemographic characteristics using multiple linear regression stratified by race/ethnicity.**

## RESULTS

- 10,825 PWH in clinical care at CNICS sites responded to questions regarding IHS at least once.**
- The overall cohort had a mean age of 47 years.
- Most identified as cisgender men (79.8%), about 1/2 identified as gay (51.8%), most had been in care  $\geq 5$  years, with wide representation across US regions, however, these characteristics differed by race/ethnicity (Table 1).

**Table 1** Distributions and differences in subgroup characteristics by self-reported race/ethnicity among people with HIV (PWH) (n=10,825)

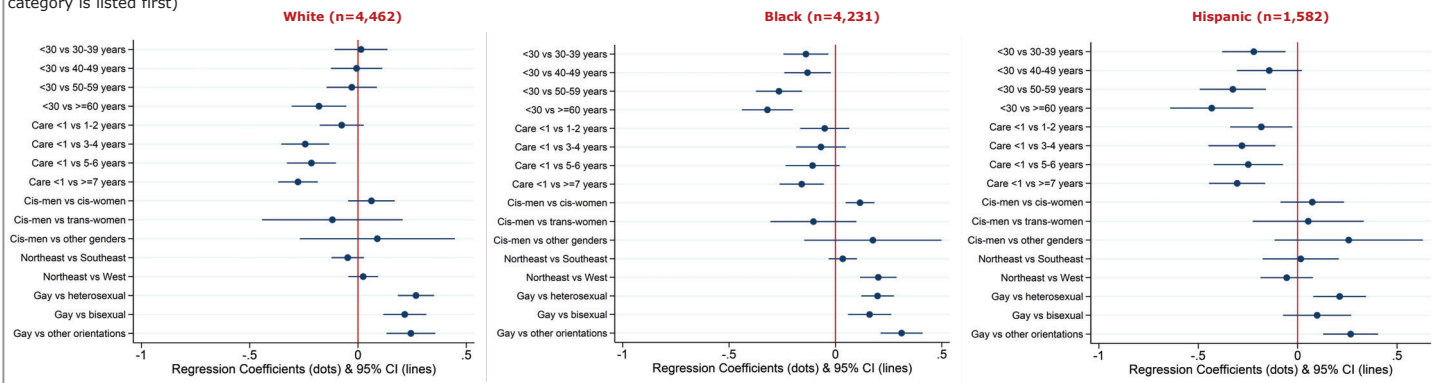
Subgroup Characteristics	Total (N=10,825) n (%)	White (n=4462) n (%)	Black (n=4231) n (%)	Hispanic (n=1582) n (%)	Other (n=550) n (%)	p-value
<b>Age</b>						<0.001
<30 years	988 (9.1)	276 (6.2)	448 (10.6)	181 (11.4)	83 (15.1)	
30-39 years	2113 (19.5)	717 (16.1)	827 (19.6)	411 (26.0)	158 (28.7)	
40-49 years	2608 (24.1)	1107 (24.8)	932 (22.0)	439 (27.8)	130 (23.6)	
50-59 years	3504 (32.4)	1643 (36.8)	1307 (30.9)	415 (26.2)	139 (25.3)	
$\geq 60$ years	1612 (14.9)	719 (16.1)	717 (17.0)	136 (8.6)	40 (7.3)	
<b>Years in Care</b>						<0.001
<1 year	1173 (10.8)	459 (10.2)	375 (8.9)	237 (15.0)	102 (18.6)	
1-2 years	1749 (16.2)	728 (16.3)	640 (15.1)	261 (16.5)	120 (21.8)	
3-4 years	1432 (13.2)	508 (11.4)	651 (15.4)	204 (12.9)	69 (12.6)	
5-6 years	1138 (10.5)	472 (10.6)	416 (9.8)	186 (11.8)	64 (11.6)	
$\geq 7$ years	5333 (49.3)	2295 (51.4)	2149 (50.8)	694 (43.9)	195 (35.5)	
<b>Gender</b>						<0.001
Cis men	8634 (79.8)	3996 (89.6)	2820 (66.7)	1342 (84.8)	476 (86.6)	
Cis women	1947 (18.0)	415 (9.3)	1302 (30.8)	177 (11.2)	53 (9.6)	
Trans women	160 (1.5)	28 (0.6)	79 (1.9)	41 (2.6)	12 (2.2)	
Other	84 (0.8)	23 (0.5)	30 (0.7)	22 (1.4)	9 (1.6)	
<b>Location</b>						<0.001
Northeast	2351 (21.7)	874 (19.6)	1178 (27.8)	208 (13.2)	91 (16.6)	
Southeast	3883 (35.9)	1335 (29.9)	2338 (55.3)	145 (9.2)	65 (11.8)	
West	4591 (42.4)	2253 (50.5)	715 (16.9)	1229 (77.7)	394 (71.6)	
<b>Sexual Orientation</b>						<0.001
Gay, same sex	5604 (51.8)	3090 (69.3)	1215 (28.7)	949 (60.0)	350 (63.6)	
Heterosexual	3323 (30.7)	790 (17.7)	2140 (50.6)	304 (19.2)	89 (16.2)	
Bisexual	895 (8.3)	327 (7.3)	402 (9.5)	114 (7.2)	52 (9.5)	
Other	1003 (9.3)	255 (5.7)	474 (11.2)	215 (13.6)	59 (10.7)	

- Number of years in HIV care and older age were associated with lower IHS scores** for many, but not all, racial/ethnic groups (Table 2).
- Identifying with a sexual orientation other than gay was associated with higher IHS scores** for most racial/ethnic groups.
- Black PWH in the West vs Northeast and cis-women vs cis-men also had a higher IHS.

**Table 2:** Adjusted multiple linear regression models of the theta internalized stigma scores by population characteristics stratified by self-reported race/ethnicity among PWH (n=10,825)

Subgroup Characteristics	White (n=4462)		Black (n=4231)		Hispanic (n=1582)		Other (n=550)	
	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
<b>Age</b>								
<30 years	REF		REF		REF		REF	
30-39 years	0.014	0.822	-0.139	0.010	-0.221	0.007	0.036	0.770
40-49 years	-0.007	0.914	-0.131	0.018	-0.143	0.086	-0.004	0.978
50-59 years	-0.029	0.629	-0.265	<0.001	-0.326	<0.001	-0.205	0.126
$\geq 60$ years	-0.180	0.005	-0.320	<0.001	-0.432	<0.001	-0.314	0.078
<b>Years in Care</b>								
<1 year	REF		REF		REF		REF	
1-2 years	-0.075	0.148	-0.051	0.388	-0.183	0.022	-0.146	0.227
3-4 years	-0.243	<0.001	-0.068	0.251	-0.280	0.001	-0.127	0.362
5-6 years	-0.215	<0.001	-0.107	0.097	-0.248	0.005	-0.282	0.051
$\geq 7$ years	-0.277	<0.001	-0.158	0.003	-0.304	<0.001	-0.096	0.405
<b>Gender</b>								
Cis men	REF		REF		REF		REF	
Cis women	0.062	0.257	0.116	0.001	0.074	0.364	0.258	0.100
Trans women	-0.118	0.475	-0.103	0.315	0.053	0.708	-0.606	0.022
Other	0.089	0.625	0.176	0.284	0.257	0.176	-0.008	0.980
<b>Location</b>								
Northeast	REF		REF		REF		REF	
Southeast	-0.047	0.213	0.034	0.308	0.016	0.872	-0.102	0.489
West	0.024	0.491	0.201	<0.001	-0.055	0.413	-0.030	0.776
<b>Orientation</b>								
Gay, same-sex	REF		REF		REF		REF	
Heterosexual	0.268	<0.001	0.198	<0.001	0.211	0.002	0.180	0.168
Bisexual	0.216	<0.001	0.161	0.002	0.102	0.262	0.242	0.067
Other	0.244	<0.001	0.311	<0.001	0.267	<0.001	0.231	0.081
<b>Constant</b>	0.193	0.004	0.148	0.023	0.475	<0.001	0.293	0.055

**Figure 1:** Adjusted multiple linear regression models of the theta internalized HIV stigma scores by population characteristics stratified by race/ethnicity (for all variables reference category is listed first)



## DISCUSSION

- IHS is prevalent among PWH in care**
- Some subgroups of PWH report higher IHS, which differs by self-reported race/ethnicity.**
- Specifically, more years in HIV care and older age are associated with reductions in IHS burden to some extent among most racial/ethnic groups.
- While identification with sexual orientations other than gay appear to increase IHS burden for most groups, geographic location and gender identity difference were only observed among Black PWH.

## CONCLUSIONS

- These findings highlight the need for routine screening for IHS among PWH.**
- Interventions to reduce IHS among PWH are needed, which could be optimized by targeting/tailoring to different subgroups of PWH



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