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The Impact of Internalized HIV Stigma on Retention in HIV Care

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Background

- Internalized HIV stigma, defined as *the shame associated with HIV/AIDS and the fear of being discriminated against, which are both felt by persons living with HIV*, maybe an important construct in terms of explaining poor retention in HIV care
- Studies suggest internalized HIV stigma may be associated with reduced health behaviors
- Little research to date to assess the effect of internalized HIV stigma on retention in HIV care
- Relationship with one's HIV care provider is associated with retention in care



Aims

- AIM1: To assess the association of stigma on retention in HIV care
- AIM2: To explore if relationship with HIV care provider moderates the relation of stigma and retention



Methods

Secondary Data Analysis

- **Participants:** 194 HIV positive men and women receiving HIV care at the University of Miami/Jackson Memorial Hospital Special Immunology Clinics.
- **Timeline:** Data was collected from August 2009 to May 2011
- **Data:** Baseline questionnaires and 14 months of EMR data on HIV medical care visits



Measures

Outcome measure: Retention in HIV Care

Clinical Purposes

- Measuring retention in care for clinical purposes:
 - Missed Visits - A simple count of the number of scheduled visits that were missed (or “no-shows”), irrespective of the number of visits that were scheduled.

Policy/Administrative purposes

- Measuring retention in care for policy/administrative purposes
 - Appointment Adherence - Calculated as the percentage of total scheduled medical appointments at the outpatient SI clinics that were kept during the 14-month period.



Methods

Independent Variable

- Internalized HIV stigma: 13-item HIV Stigma Scale was developed by Sowell et al. (1997) to measure subjective perceptions of stigma by persons living with HIV/AIDS.
 - Women infected with the HIV disease
- Further validated by Emlet (2005) with other HIV-infected populations.
 - Men and women 20 years and older



Methods

Covariates

- **Social Support:** The Interpersonal Support Evaluation List (Cohen et al., 1985) is a 40-item scale designed to measure perceptions of social support availability.
- **Depression:** The Center for Epidemiological Studies - CES-D10; (Andersen et al., 1994) 10-item scale.
- **Patient-Provider Relationship:** Engagement with Healthcare Provider Scale (Bakken et al., 2000), a 13-item scale.
 - Will also be used as a moderator variable



Characteristic	Frequency (%)
Male	86 (46%)
Age 18-44	49 (26%)
Age 45 and above	139 (74%)
African American	156 (83%)
High school or greater educ.	98 (52%)
Heterosexual	158 (84%)
IDU ever	155 (82%)
Alcohol/drug use	103 (55%)
Prescribed cART	179 (95%)
Viral suppression	113 (60%)
	Range/ Mean(SD)
Years living with HIV	0-37/12.6(7.4)
Social Support	11-40/32.3(7.0)
Engagement w/Healthcare Provider Scale*	13-44/16.2(5.4)
CES-D10	0-30/10.1(6.2)
Internalized HIV Stigma	13-46/21.1(7.8)

**Higher scores denote lower engagement*



HIV Care Retention

- Fourteen percent of participants did not miss a medical care appointment during the study period.
 - Mean number of missed appointments was 3.7 (SD 3.4, range 1-16), while mean appointment adherence was 55% (SD 28%, range 2%-100%).



Results from Spearman correlation

- Missed Visits was significantly correlated at $p > 0.10$ with Appointment Adherence ($p > 0.001$), gender ($p > 0.01$) and age ($p > 0.015$)
- Appointment Adherence was significantly correlated at $p > 0.10$ with gender ($p > 0.028$) age ($p > 0.008$), and Engagement with Provider ($p > 0.082$).
- Internalized HIV stigma, was significantly correlated with Depression ($p > 0.001$) Social Support ($p > 0.001$), and Engagement with Provider ($p > 0.001$).



Results

Univariate & Multivariate Analysis - Results from the Linear regression analysis [R² = .09, p=0.005]

Characteristics	Mean Diff (95% CI)	P value	Adj Mean Diff (95% CI)	P value
Gender		0.0213*		0.019*
Female vs Male	-0.094 (-0.173, -0.014)		-0.095 (-0.176, -0.015)	
Age		0.0056*		0.006*
18-44 vs 45 +	-0.126 (-0.215, -0.037)		-0.125(-0.214, -0.034)	
Engagement with Provider		0.4828		0.254
Per score increase	-0.003 (-0.010, 0.005)		-0.025 (-0.052,0.001)	
Internalized HIV stigma		0.9290		0.915
Per Score Increase	0.001 (-0.005-0.005)		-0.015 (-0.034, 0.004)	
HIV Internalized Stigma/Eng with Provider				0.102
(Per stigma score increase)			0.001 (-0.001, 0.002)	



Results

Multivariate Analysis - Results from the Poisson regression analysis model

Characteristics	aIRR	95% CI	P value
Gender			<0.0001
Male	1	Ref	
Female	1.749	1.487-2.057	
Age			<0.0001
18-44	1.383	1.181-1.621	
45 and above	1	Ref	
Internalized HIV Stigma*Engagement with Provider			0.003
Low Internalized HIV Stigma/ Engagement with Provider	1.033	1.013-1.053	0.001
Medium Internalized HIV Stigma/ Engagement with Provider	1.018	1.004-1.032	0.009
High Internalized HIV Stigma/ Engagement with Provider	0.9969	0.980-1.014	0.723



Conclusions

- Findings from the bivariate and multivariate analysis indicate that there is not a direct association between internalized HIV stigma and either of the retention in HIV care measures assessed in this study.
- Results from our analysis examining missed medical appointment visits showed that engagement with provider moderates the relationship between internalized HIV stigma and retention in care.
- Our findings indicate that engagement with provider does have a significant effect in reducing missed visits in patients reporting low to medium levels of HIV stigma. However, for subjects with high HIV stigma, the perceived quality of the relationship with providers is not as effective in reducing missed visits.

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THANK YOU