Exposure to crime-related, physical, and sexual trauma is associated with barriers to engagement in HIV care among an urban, US sample of predominately minority HIV+ men who have sex with men (MSM)

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ISSUE

Active engagement and retention in clinical care and strict adherence to antiretroviral therapy (ART) are critical to reducing HIV-related mortality and morbidity.

While there is a rich literature documenting correlates of ART adherence, there is a more limited body of evidence documenting factors associated with the broader construct of engagement in HIV clinical care. One such factor that has potential to inform this area is exposure to traumatic events.

Trauma exposure and Post Traumatic Stress Disorders (PTSD) are increasingly recognized as important factors associated with poor psychological and health outcomes

AIMS and OBJECTIVES

We present preliminary findings from an ongoing study of engagement in HIV clinical care among HIV-infected MSM who are either newly HIV-diagnosed or have evidence of poor engagement in HIV clinical care

Specific study objectives are to : (1) report rates of trauma exposure (crime, physical, and sexual) and (2) explore relationships of level of trauma exposure with hypothesized barriers and facilitators to engagement in care

METHODS

From August, 2010 through November 2011, we surveyed 303 HIV-infected adult MSM recruited from clinic and community based settings who consented to participate in a multi-site access and linkage to care intervention (Positive Charge)

We enrolled participants who were 18 years of age and older and either newly diagnosed (diagnosed HIV-infected within the past 3 months) or met the US National HIV/AIDS Strategy definition of inconsistent engagement in HIV care

A baseline interview was administered which included questions about:

- Background and demographic information,
- General health status
- Whether respondents were taking ART
- A version of the Trauma History Questionnaire
- A HIV stigma scale
- The Social Provisions Scale
- The HIV Adherence Self-Efficacy Scale (ASES)
- A HIV medication adherence rating scale
- Treatment expectancies scale

One-way frequency tables were generated for each demographic variable, followed by Pearson correlations to assess bivariate associations among variables.

RESULTS

Table 1: Participant Characteristics (N=303)	
Age m (SD)	37.0 (10.4)
Race/Ethnicity (%)	
Black (non-Hispanic)	72.6
Hispanic	18.2
White (non-Hispanic)	6.0
Other	3.2
Non US-born (%)	17.0
Sexual Orientation (%)	
Homosexual	73.9
Bisexual	13.9
Heterosexual	5.0
Not sure/Other	3.7
Not specified	3.5
Education[1] (%)	
Less than HS	15.1
HS diploma or equivalent	27.1
Some college or technical school	42.7
College degree or higher	14.7
Relationship Status (%)	
Single	76.6
Partnered	17.4
Other	6.0
Currently on HIV medications (%)	41.9
Newly diagnosed (% < 3 months)	31.3
Mos. since HIV+ m (SD)[2]	106.6 (2562)
Note:	
[1] does not include 85 cases due to missing data from early version of survey	
[2] N=200, excludes newly diagnosed	

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RESULTS (con't)

Of the men in the sample, 64%, 33%, and 32% reported exposure to at least one occurrence of crime-related, physical, and sexual event. The three types of exposure appeared to cluster together, with 70%, 41%, and 18% endorsing at least one instance of exposure to trauma (Table 2)

Table 2, Self-reported exposure to traumatic event, by item

	Never	Once	2 – 3 times	4+ times
Crime				
1. Has anyone ever tried to take something directly from you by using force or the threat of force, such as a stick-up or mugging?	54%	17%	20%	9%
2. Has anyone ever attempted to rob you or actually robbed you (i.e. stolen your personal belongings?)	47%	23%	25%	6%
3. Has anyone ever attempted or succeeded in breaking into your home when you weren't there?	79%	14%	6%	1%
4. Has anyone ever tried to or succeeded in breaking into your home while you were there?	94%	5%	1%	0%
5. Have you ever seen someone seriously injured or killed?	54%	18%	18%	10%
6. Have you ever had a close friend or family member murdered, or killed by a drunk driver?	91%	5%	3%	1%
Sexual				
8. Has anyone ever made you have intercourse, oral or anal sex against your will?	77%	8%	8%	7%
9. Has anyone ever touched private parts of your body, or made you touch theirs, under force or threat?	76%	5%	12%	8%
10. Other than incidents mentioned in Questions 8 and 9, have there been any other situations in which another person tried to force you to have unwanted sexual contact?	81%	5%	8%	5%
Physical				
11. Has anyone, including family members or friends, ever attacked you with a gun, knife or some other weapon?	82%	10%	5%	3%
12. Has anyone, including family members or friends, ever attacked you without a weapon and seriously injured you?	78%	8%	9%	5%
13. Has anyone in your family ever beaten, "spanked" or pushed you hard enough to cause injury?	78%	8%	4%	10%

All three types of trauma exposure were positively correlated with perceived HIV stigma, with the magnitude of the association consistently in the moderate range Smaller but statistically significant correlations were detected between crime and physical trauma exposure and lower ratings of perceived social support, and higher reports of unmet HIV disclosure need (Table 3)

Among those not on ART, higher endorsement of all three types of trauma experiences were associated with unfavorable scores of expectancies of anticipated treatment ease (lower scores) and social concerns about ART initiation (higher scores)

Table 3. Correlations among trauma scores and key variables of interest

	Crime	Physical	Sexual
1. Crime-related trauma	1	-	-
2. Physical trauma	.53[c] 244	1	-
3. Sexual trauma	.50[c] 235	.40[c] 237	1
4. General Health	-.22[c] 262	-.18[b] 256	-.06 255
5. HIV Stigma	.29[c] 258	.32[c] 251	.25[c] 252
6. Social Support	-.17[b] 250	-.14[a] 251	-.11 252
7. Disclosure to friends	.09 253	.14[a] 247	.06 247
8. Disclosure to family	.08 251	.08 246	-.04 246
9. Unmet disclosure need	.16[b] 249	.17[b] 243	.12 243
10. Adherence self-efficacy	-.16 97	-.19 95	-.14 93
11. ART adherence	-.11 104	-.11 102	-.01 99
12. Treatment Ease	-.22[b] 147	-.24[b] 144	-.26[b] 146
13. Treatment Social Concerns	.25[b] 148	.27[b] 145	.18[a] 146
14. Treatment Readiness	-.11 147	-.00 145	-.11 147

Notes: [a] p<.05, [b] p<.01, [c] p<.001. Sample sizes vary pairwise due to missing data; NA= not applicable (dependent on whether respondent was on ART). ART Adherence and Adherence Self-Efficacy only assessed for respondents on ART; variables 12-14 only assessed for respondents not on ART.

CONCLUSIONS

Exposure to trauma is common among adult MSMs

- Two-thirds experience a crime related event
- Nearly a third of participants reported exposure to physical and/or sexual trauma

Trauma exposure in all three categories was associated with:

- Higher perceived HIV stigma, which is correlated of HIV transmission risk behavior and a barrier to engagement in HIV clinical care
- Greater concerns around treatment ease
- Social concerns about starting HIV medications

This is one of few studies that also examined exposure to crime related events among HIV-infected MSM, and one of the first to link trauma exposure with HIV stigma, social support and other factors that likely impact treatment engagement

Findings are preliminary, and generalizations should be made with caution. The data are cross-sectional and thus preclude causal inferences. The use of a convenience sample and self-reported measures raises the possibility of selection and social desirability biases

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