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)

T. Soto1, G. Komaie1, T.B. Neilands2, M.O. Johnson2
1AIDS Foundation of Chicago, Research, Evaluation and Data Services, Chicago, United States
2University California at San Francisco, Center For AIDS Prevention Studies, San Francisco, United States

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
- An HIV stigma scale
- The Social Provisions Scale
- The HIV Adherence Self-Efficacy Scale (AES)
- A HIV medication adherence rating scale
- Treatment expectations scale

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

RESULTS
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

<table>
<thead>
<tr>
<th>Type of Trauma</th>
<th>Never</th>
<th>Some</th>
<th>2–3 times</th>
<th>&gt;3 times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime</td>
<td>54%</td>
<td>17%</td>
<td>20%</td>
<td>9%</td>
</tr>
<tr>
<td>Physical</td>
<td>47%</td>
<td>23%</td>
<td>25%</td>
<td>6%</td>
</tr>
<tr>
<td>Sexual</td>
<td>79%</td>
<td>14%</td>
<td>6%</td>
<td>1%</td>
</tr>
</tbody>
</table>

We also compared PTSD symptoms by ART adherence, adjusting for age and race. All three types of trauma exposure were positively correlated with perceived HIV stigma, with the magnitude of the association consistently in the moderate range.

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

<table>
<thead>
<tr>
<th>Trauma Type</th>
<th>Crime</th>
<th>Physical</th>
<th>Sexual</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD severity</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ART adherence</td>
<td>.16</td>
<td>.12</td>
<td>.12</td>
</tr>
<tr>
<td>Treatment readiness</td>
<td>.12</td>
<td>.12</td>
<td>.12</td>
</tr>
<tr>
<td>Treatment satisfaction</td>
<td>.12</td>
<td>.12</td>
<td>.12</td>
</tr>
<tr>
<td>Treatment expectation</td>
<td>.12</td>
<td>.12</td>
<td>.12</td>
</tr>
</tbody>
</table>

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 with 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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