A Convergence of Risk: The Association Between Homelessness, Food Insecurity, and HIV Risk Behaviors in Oakland, CA

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HOMELESSNESS

FOOD INSECURITY

HIV RISK BEHAVIORS
Study Objectives

• To determine whether there was an association between homelessness and food security among HIV-uninfected African American adults seeking HIV testing in Oakland, California.

• To examine the association between homelessness and high-risk behaviors associated with HIV acquisition.
Methods

• The present study represents a secondary analysis of data collected as part of the Oakland Connect study to increase demand for HIV testing and counseling (HTC) among African American adults.

• The study was conducted at four community agencies that offer client-initiated HTC.

• Participants were recruited for an in-person interview between March 2011 and February 2012 in Oakland, CA.
Indicator Definitions

**Homelessness**
- Self-reported
- Ever vs. Never
- Recent (last 12 months) vs. Not Recent

**HIV-related risk behaviors**
- Any one of the following behaviors (last 12 months):
  - Injection drug use, sex in exchange for money/drugs; sex with injection drug user; sex with someone HIV-positive; being diagnosed with STD; if male, sex with other men

**Food Insecurity**
- Either skipping or reducing the size of a meal because there was not enough money for food (last 12 months)
Stratification by Homeless Status

Study Population

Total (n=291, 100%)

Homeless within Lifetime

Ever Homeless (n=206, 71%)

Never Homeless (n=85, 29%)

Recent Homelessness

Homeless within Past Year (n=112, 54%)

Not Homeless within Past Year (n=94, 46%)
Results

• Overall, 149 (51%) of the 291 participants were food insecure.

• Also, 178 (61%) reported one or more HIV-related risk behaviors and were classified as high-risk.
Prevalence of HIV-Related Risk Behaviors and Food Insecurity by Homeless Status

- **High-Risk HIV**
  - Never Homeless: 51%
  - Ever Homeless (>12 months prior): 57%
  - Recently Homeless (<12 months): 72%

- **Food Insecurity**
  - Never Homeless: 31%
  - Ever Homeless (>12 months prior): 44%
  - Recently Homeless (<12 months): 73%
The association between homeless status and reporting high-risk HIV-related behavior among 291 African American respondents in Oakland, CA (2011-2012).

| Homelessness status¹ | Unadjusted | | Adjusted | |  
| --- | --- | --- | --- | --- | --- |
| | PR | 95% CI | PR | 95% CI |  
| **Homeless at any point during lifetime** | | | | |  
| Ever Homeless (n=206) | 1.30 | (0.92, 1.83) | 1.27 | (0.89, 1.80) |  
| Never homeless (n=85) | 1.00 | -- | 1.00 | -- |  
| **Homeless at any point during the past year** | | | | |  
| Homeless within the past 12 mo. (n=112) | 1.26 | (0.89, 1.78) | 1.26 | (0.87, 1.77) |  
| Homeless >12 mo. prior (n=94) | 1.00 | -- | 1.00 | -- |  

PR=prevalence ratio; CI=confidence interval

¹Poisson model includes high-risk HIV-negative as the dependent variable and the measures of effect are interpreted as prevalence ratios (PR) which indicates the strength of association between the exposure and outcome (preferred when exposure is common)

Respondents characterized as “high-risk” if in the last 12 months they reported: sex in exchange for money and/or drugs, sex with IDU, sex with someone who was HIV-positive, been diagnosed with a STD, and MSM. Those who reported injection drug use ever in their lifetime. Models adjusted for age, sex, income, and education.
The association between homeless status and food insecurity among 291 African American respondents in Oakland, CA (2011-2012).

<table>
<thead>
<tr>
<th>Homelessness status¹</th>
<th>Unadjusted</th>
<th>Adjusted</th>
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<tr>
<td></td>
<td>PR</td>
<td>95% CI</td>
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<td>1.96**</td>
<td>(1.29, 3.00)</td>
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<tr>
<td>Homeless within the past 12 mo. (n=112)</td>
<td>1.67**</td>
<td>(1.15, 2.43)</td>
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<td>Homeless &gt;12 mo. prior (n=94)</td>
<td>1.00</td>
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N=number; PR=prevalence ratio; APR=adjusted prevalence ratio; CI=confidence interval;

*p<0.05, **p<0.01

¹Poisson model includes high-risk HIV-negative as the dependent variable and the measures of effect are interpreted as prevalence ratios (PR), which indicate the strength of association between exposure and outcome (preferred when exposure is common)
Models adjusted for age, sex, income, and education.
Limitations

• Data is cross-sectional; temporality of exposure cannot be established
• Study size is small and limited to African Americans; results cannot be generalized
• Survey tool did not measure duration of homelessness; no differentiation between chronically homeless or episodic homelessness can be made
Conclusions

• This study links homelessness with 1) food insecurity; and 2) potentially an increased reporting of high-risk behaviors associated with HIV acquisition.

• Experiencing recent homelessness within the last 12 months increases the likelihood of both food insecurity and possibly high-risk HIV-related behaviors

• Identifying those who are recently homeless is critical to both reduce food insecurity and HIV risk among homeless persons.
Thank You!
References


