Sexual behavior and drug consumption among young adults in a shantytown in Lima, Peru

J.A. Gálvez-Buccollini (1, 2), S. DeLea (2, 3), P. Herrera (2), R. H. Gilman (2, 4), V. Paz-Soldan (5)

(1) Harvard South Shore psychiatry residency training program, (2) Asociación Benéfica PRISMA, (3) University of New Mexico, (4) Johns Hopkins Bloomberg School of Public Health University, (5) Tulane University School of Public Health and Tropical Medicine

Abstract: Risky sexual behaviors of young adults have received increasing attention during the last decade. However, few studies have focused on the sexual behavior of young adults in shantytowns of Latin America. Specifically, studies on the association between sexual behaviors and other risk factors for sexually transmitted infections (STIs) and HIV/AIDS transmission, such as the consumption of illicit drugs or alcohol, are scarce in this specific context.

Background: Risks sexual behaviors of young adults have received increasing attention during the last decade. However, few studies have focused on the sexual behavior of young adults in shantytowns of Latin America. Specifically, studies on the association between sexual behaviors and other risk factors for sexually transmitted infections (STIs) and HIV/AIDS transmission, such as the consumption of illicit drugs or alcohol, are scarce in this specific context.

Methods: The study participants were 397 men and 400 women between 18 and 30 years of age, from a shantytown in Lima, Peru. Data were obtained via survey: one section applied by a trained research assistant, and a self-reporting section. Logistic regression was used to estimate associations between use of any illicit drug, high-risk sexual behaviors and reported STI symptoms, adjusting for alcohol consumption level and various socio-demographic characteristics.

Results: Among men, age of sexual debut was lower, number of lifetime sexual partners was higher, and there were higher risk types of sexual partners, compared to women. Though consistent condom use with casual partners was low in both groups, reported condom use at last intercourse was higher among men than women. Also, a lifetime history of illicit drug consumption decreased the probability of condom use at last sexual intercourse by half. Among men, the use of illicit drugs doubled the probability of intercourse with a casual partner during the last year and tripled the probability of reported STI symptoms.

Conclusion: Drug consumption is associated with high-risk sexual behaviors and reported STI symptoms in Lima shantytowns after controlling for alcohol consumption level. Development of prevention programs for risky sexual behaviors, considering gender differences, is discussed.

Background

The HIV epidemic is still concentrated in high-risk populations, especially among men who have sex with men.

• The estimated HIV prevalence is 0.3% in the general population, 1% among sex workers, and between 14% to 25% among MSM.

• Young adults are at higher risk of acquiring sexually transmitted infections (STIs) and HIV because most are sexually active, single, have multiple partners, engage in intercourse with sex workers, and frequently mix with alcohol or drugs.

• High-risk sexual behaviors are associated with an individual’s history of drug and alcohol consumption among men and women.

• It is likely that varying cultural and environmental factors related to young adults’ sexual practices and drug use influence this association in different ways in different regions of the world.

Methods

Study site

This cross-sectional study took place in Las Parques de San Juan de Miraflores (PSM), a shantytown with an estimated population of 40,000 located approximately 15 kilometers south of downtown Lima, Peru.

• Physically, this environment consists of steep and rocky desert hills with dusty soil, no natural vegetation, and less than one inch of annual rainfall. Most households have electricity, but only about half have water or sewage connections.

Discussion

• Heavy episodic drinking doubled the probability of intercourse with a casual partner in the past year and tripled the probability of intercourse with a high-risk sexual partner under the influence of alcohol in the last 3 months.

• Use of illicit drugs doubled the probability of intercourse with a casual partner in the past year and tripled the probability of reported STI symptoms.

• Use of illicit drugs reduced the half the probability of using a condom during the last sexual encounter, even after controlling for alcohol consumption.

• Men reported more risky sexual behaviors than women. However, consistent condom use was low in both groups.

• The lifetime prevalence of illicit drug use was higher in our study than that reported for the same age group in the national survey in 2005 (24% vs. 19%).

• Alcohol and drug use interferes with the process of reasoning and decision-making, increasing the chance of high-risk sexual behaviors and consequently, STIs.

• Also, it is possible that history of alcohol or illicit drug use and high-risk sexual behaviors are maladaptive behaviors that share a common origin.

Programmatic implications

• Gender-specific culturally tailored prevention efforts need to target different behaviors for men and women.

• Condoms need to be made available in locations where women can access them easily.

• Among males, interventions may need to be focused on decreasing the trend for engaging in risky sexual behaviors and improving their perception of personal costs (i.e., getting an STI) associated with these behaviors.

• Interventions should address the existing double standard in which risky sexual behaviors of men and women, such as heavy drinking or drug use, are culturally accepted among men and discouraged among women, and instead promote responsible and safe sexual lives for both.


Acknowledgements: This work was supported via a Peruvian-Belgian Cooperation grant, NIDA D43 TW50829-10 grantee, NISI 881/882/883, NISI TR3 A071464 and Elinier Foundation.

Table 1: Socio-demographic, behavioral, and risk-factor characteristics of the study sample by gender (p < 0.05)

<table>
<thead>
<tr>
<th>Gender</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>0.003</td>
</tr>
<tr>
<td>Women</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Table 2: Associated association between illicit drug use and sexual behavior among young men aged 18–30 years in Lima, Peru (p < 0.05)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever used illicit drug</td>
<td>3.0 (2.0 – 4.5)</td>
</tr>
</tbody>
</table>

Table 3: Associated association between illicit drug use and sexual behavior among young women aged 18–30 years in Lima, Peru (p < 0.05)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever used illicit drug</td>
<td>2.5 (1.6 – 3.9)</td>
</tr>
</tbody>
</table>

Table 4: Associated association between illicit drug use and sexual behavior among young adults aged 18–30 years in Lima, Peru (p < 0.05)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever used illicit drug</td>
<td>2.9 (2.0 – 4.5)</td>
</tr>
</tbody>
</table>