Sexual Risk Behaviors and Partnership Characteristics Among Women who Exchange Sex in NYC

Sarah L. Braunstein, PhD MPH
HIV Epidemiology and Field Services Program
NYC Department of Health and Mental Hygiene
Outline for today

- HIV among women who exchange sex
- National HIV Behavioral Surveillance
- NYC DOHMH’s *Women To Women* study
  - Formative research
  - Design & sample
  - Survey results
- Summary
- Challenges & limitations
- Conclusions
HIV risk and prevention among women who exchange sex in the U.S.

- Structural and social barriers to health care access and utilization, including HIV prevention services, are well-documented

- Little research on burden of HIV among women who exchange sex in US; existing data are outdated
  
  - Systematic review\(^1\) found 14 studies from 1987 to 2013 → HIV prevalence across studies was 17.3%

- In-depth, up-to-date information on HIV risk and prevention needed to inform programming

NATIONAL HIV BEHAVIORAL SURVEILLANCE
National HIV Behavioral Surveillance (NHBS)

- Ongoing, cyclical study of three groups:
  - men who have sex with men (MSM)
  - persons who inject drugs (PWID)
  - high-risk heterosexuals (HET)
- Currently conducted in 22 cities through the U.S.
- Funded and designed by CDC
- Cross-sectional study design
- Anonymous, structured interview and optional HIV testing
NHBS study objectives

- Determine frequency and correlates of HIV risk behaviors
- Assess HIV testing history and patterns
- Assess exposure to and use of HIV prevention services
- Estimate the prevalence of HIV infection
- Understand trends in HIV risk and prevalence
WOMEN TO WOMEN STUDY
Women To Women

NYC was one of 5 cities nationally to conduct its HET4 NHBS cycle among high-risk women only, and with a focus on women who exchange sex for money or drugs.
FORMATIVE RESEARCH FOR WOMEN TO WOMEN
Formative research

Part I: Data and literature review on women who exchange sex in NYC

Part II: Primary data collection:
  - Semi-structured interviews with key stakeholders
  - Focus group discussions
Part I: Data and literature review

• Data on exchange sex among women from previous PWID and HET NHBS cycles:
  • HET3 and IDU3: of 424 women interviewed, 102 (24%) reported exchange sex in the past 12 months
    o Women who reported exchange sex in these cycles were predominately black and Latina, >40 years of age, US-born, had less than a high school education, and had an annual household income <$20,000.
  • HET1\(^1\): 41% of women reported exchange sex partner in past year. More common among women who reported: homelessness, a higher number of total sex partners, a higher number of unprotected sex partners, and frequent non-injection drug use.

Differences in HIV risk behaviors and drug use depending on type of exchange:1

- women who exchanged sex for **drugs only or for drugs and money** more likely to report smoking crack, using alcohol, engaging in unprotected sex, and sex with PWID
- women who exchanged sex for **drugs only** reported less sexual activity/partnerships but more unprotected sex
- women who exchanged sex for **money only** were the least likely to report unprotected sex but most likely to inject drugs

Part II: Primary data collection

Objectives:

• **Garner the support** of the community and its stakeholders

• Describe the **spectrum of exchange sex** in NYC

• Obtain information needed for conducting **field operations**

• Identify potential **barriers** to recruitment and participation, and develop **solutions** to address them
Primary data collection

- >80 potential key informants identified and contacted
- 15 interviews with professional key informants
- 1 interview with a community key informant
- 2 focus groups composed of women who reported lifetime history of exchange sex (n=7)
Themes from interviews and FGDs

- Women who exchange sex are a diverse group
- Exchange sex takes many forms; HIV risk varies by specific circumstance
- Women are often engaged in multiple types of exchange sex at one time and throughout their lifetime
- Variability in pay, levels of agency for women and coerciveness
- Networks are generally small; stigma and shame limit disclosure within networks
- Effect of criminalization of prostitution on engagement in research
- Inequities (e.g., by race/ethnicity, education level) affect opportunities and economics of exchange sex
Challenges during formative research

• Mostly positive feedback and support for the study from stakeholders, though some skepticism from sex-worker advocates
• Difficulty identifying seeds, recruiting community key informants
• Difficulty forming a community advisory board
• Organizational divisions re: women’s agency within exchange sex
• Unable to conduct street observations, outreach, or intercepts due to safety concerns
WOMEN TO WOMEN DESIGN & SAMPLE
W2W study design

- Interviewer-administered survey and optional HIV testing
- Recruitment target: 500 women who exchange sex
- Data collected from August – December 2016
  - August – September: Manhattan and Queens
  - October – November: Bronx and Brooklyn
  - December: Bronx only
- Referrals: HIV and other healthcare, trafficking resources, domestic violence resources, legal/social work services
W2W eligibility criteria

- Identifies as female (not male or transgender)
- Between the ages of 18 and 60 years old
- Resident of NYC metropolitan statistical area
- Has had vaginal or anal sex with a man in the past 12 months
- Is able to complete the interview in English or Spanish
- Recruited by another participant (except for seeds)
W2W participant recruitment

- Respondent-driven sampling -- ‘chain referral method’
- Hard-to-reach populations; used in international settings to recruit women who exchange sex

How it works:
- Initial participants (“seeds”) recruited through community outreach
- Seeds then recruit up to 5 peers in their social networks
- If eligible, 5 peers participate and recruit up to 5 more peers until sample size met
W2W sample

- Total Seeds: n=31
- Eligible Seeds: n=29
- Eligible Recruits: n=436
- Total Recruits: n=505
- Reported Exchange Sex: n=25
- Reported Exchange Sex: n=330 (76%)
- HIV Tested: n=328 (99%)
- Confirmed HIV Result: n=325 (99%)
Participant characteristics

W2W – women who exchange sex (N=330)

Race/Ethnicity

- Black: 58%
- Hispanic/Latina: 31%
- White: 9%
- Other*: 2%

Age

- 18-29: 55%
- 30-39: 28%
- 40-49: 13%
- 50+: 4%

*‘Other’ category includes American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander
Participant characteristics (Cont’d)

W2W – women who exchange sex (N=330)

<table>
<thead>
<tr>
<th>Education</th>
<th>Birthplace</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;High school grad</td>
<td>United States</td>
</tr>
<tr>
<td>45%</td>
<td>92%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Homeless¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Married</td>
<td>Past 12 mos.</td>
</tr>
<tr>
<td>65%</td>
<td>50%</td>
</tr>
<tr>
<td>Currently Married or Cohabiting</td>
<td>Currently</td>
</tr>
<tr>
<td>7%</td>
<td>27%</td>
</tr>
<tr>
<td>Previously Married</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>28%</td>
<td>Incarcerated (12m)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Household Income (12m)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; $10k/year</td>
<td></td>
</tr>
<tr>
<td>52%</td>
<td></td>
</tr>
</tbody>
</table>

¹Defined as living on the street, in a shelter, in a Single Room Occupancy (SRO), or in a car.
Most Common Way Women Found Men for Exchange Sex

W2W – women who exchange sex (N=330)

- Street: 30%
- Through friends, family, or neighbors: 22%
- Through a drug dealer: 4%
- Through boyfriend or husband: 5%
- Public places (not street): 16%
- Online: 9%
- Other: 13%
SURVEY RESULTS
Mental health – psychological distress

*W2W – all eligible recruits (N=436)*

- Exchange Sex
  - Low: 29%
  - Moderate: 32%
  - High: 38%

- No Exchange Sex
  - Low: 21%
  - Moderate: 26%
  - High: 53%
Drug use history

W2W – all eligible recruits (N=436)

- Exchange sex
- No exchange sex

IDU
- Ever: 29%
- Past 12 months: 14%

IDU
- Ever: 14%
- Past 12 months: 7%

Non-injection drug use
- Ever: 84%
- Past 12 months: 45%
Experience of violence in past 12 months

W2W – all eligible recruits (N=436)
Sexual Partnerships and Behaviors
Partner types

• Main partner: Someone who the participant feels committed to above anyone else
• Casual partner: Someone who the participant does not feel committed to or does not know very well
  o Casual/non-exchange: casual partner who *did not* give money or drugs in exchange for sex
  o Casual/exchange partner: casual partner who *did* give money or drugs in exchange for sex
Type of Sexual Partnerships\(^1\) in Past 12 Months

\(W2W\) – women who exchange sex, with HIV-/unknown status (\(N=255\))

- **Main Partner\(^2\)**: 69%
- **Casual Partner\(^3\)**: 98%
- **Female Partner**: 60%

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\(^1\) Oral, vaginal, or anal sex
\(^2\) Someone who the participant feels committed to above anyone else
\(^3\) Someone who the participant does not feel committed to or does not know very well
Number of Male Sex Partners\(^1\) by Partner Type in Past 12 Months

*W2W – women who exchange sex, with HIV-/unknown status (N=255)*

<table>
<thead>
<tr>
<th>Partner Type</th>
<th>Median</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main(^2)</td>
<td>1</td>
<td>3.2</td>
</tr>
<tr>
<td>Casual(^3) (Non-Exchange)</td>
<td>0</td>
<td>0.7</td>
</tr>
<tr>
<td>Casual Exchange(^4)</td>
<td>4</td>
<td>39.3</td>
</tr>
<tr>
<td>Any Exchange</td>
<td>6</td>
<td>39.5</td>
</tr>
<tr>
<td>All Types</td>
<td>6</td>
<td>42.2</td>
</tr>
</tbody>
</table>

\(^1\)Oral, vaginal, or anal sex  
\(^2\)Someone who the participant feels committed to above anyone else  
\(^3\)Someone who the participant does not feel committed to or does not know very well  
\(^4\)Casual partner who gave money or drugs in exchange for sex
Sexual Risk Behavior at Last Sex by Male Partner Type

*W2W – women who exchange sex, with HIV-/unknown status (N=255)*
Sexual Risk Behavior at Last Sex by Participants’ Race/Ethnicity

W2W – women who exchange sex, with HIV-/unknown status (N=250)\(^1\)

1\(^\text{Other’ race (American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander) not shown due to small sample size}\)
Characteristics of Last Male Partner by Partner Type

W2W – women who exchange sex, with HIV-/unknown status (N=255)

- **Partner HIV+/Unknown Status**
  - Non-Exchange: 45%
  - Exchange: 65%

- **Partner Ever IDU**
  - Non-Exchange: 22%
  - Exchange: 33%

- **Partner Ever Used Crack**
  - Non-Exchange: 61%
  - Exchange: 56%

- **Partner Ever Incarcerated**
  - Non-Exchange: 81%
  - Exchange: 62%

- **Partner Ever Had Sex with Men**
  - Non-Exchange: 9%
  - Exchange: 18%

Definite/Probable
Risk Characteristics of Last Male Partner by Participants’ Race/Ethnicity

W2W – women who exchange sex, with HIV-/unknown status (N=250)

1Other’ race (American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander) not shown due to small sample size
HIV Prevalence
HIV Prevalence

W2W – women with confirmed HIV result (N=325)

- 34.5% HIV-positive
- 65.5% HIV-negative
HIV Prevalence by Race/Ethnicity

W2W – women with confirmed HIV result (N=325)
HIV Prevalence by Age

W2W – women with confirmed HIV result (N=325)
HIV Prevention Experience
HIV Testing History by Race/Ethnicity

W2W – women who exchange sex, with HIV-/unknown status (N=250)

Ever Tested

- Hispanic/Latina: 94%
- Black: 87%
- White: 93%

Tested in Past Year

- Hispanic/Latina: 56%
- Black: 52%
- White: 64%

Notes:
1. Other race (American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander) not shown due to small sample size
Medical Visits and HIV Testing in Past 12 Months by Race/Ethnicity

W2W – women who exchange sex, with HIV-/unknown status (N=250)¹

1¹Other’ race (American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander) not shown due to small sample size

²Of those who visited a medical provider
HIV Prevention Engagement in Past 12 Months by Race/Ethnicity

W2W – women who exchange sex, with HIV-/unknown status (N=250)

1 Other race (American Indian or Alaska Native and Native Hawaiian or Other Pacific Islander) not shown due to small sample size
Pre-Exposure Prophylaxis (PrEP) Awareness and Utilization in Past 12 Months

W2W – women who exchange sex, with HIV-/unknown status (N=255)

Among those who heard of PrEP

- Heard of PrEP: 29%
- Discussed taking PrEP with Provider: 34%
- Took PrEP: 8%
- Took PrEP Among all: 2%
Summary

• Many participants experienced violence, poverty, homelessness, and incarceration

• Participants reported high numbers of recent sexual partners and most reported condomless sex

• Sexual partnerships with high-risk partners (HIV+/unknown status, people who inject drugs, previously incarcerated, MSM) were frequent

• No significant racial/ethnic differences found in recent sexual risk or partnerships
Summary (cont’d)

• Gaps in engagement with prevention services:
  • Relatively low frequency of recent HIV testing despite high risk
  • Most participants received free condoms in the past 12 months, but less than half reported receiving HIV prevention counseling
  • Awareness of PrEP was low and very few participants reported taking PrEP in the past 12 months
  • HIV prevalence was higher than in general population
Challenges & limitations

• Subgroups of women who exchange sex not fully represented (i.e., brothel/massage parlor workers; escorts; online; women who do not speak English/Spanish)
• Other recruitment challenges – e.g., street-based exchange sex, women who are disconnected from services, “homophily” by HIV within networks
• Study findings may not be generalizable to broader population
Conclusions

• Special NHBS study successfully sampled women who exchange sex with multiple types of modalities and risks
• Study method (RDS) can reach “hidden” populations for which no sampling frame exists
• Extensive formative research supported data collection
• Study findings help fill information gaps around HIV burden, risk and unmet needs for women who exchange sex in NYC ➔ inform tailored programming
NYC’s Women To Women Team

NYC Department of Health

Principal Investigator
  Sarah Braunstein
Project Director
  Alexis Rivera
Project Coordinator/Field Supervisor
  Sidney Carrillo
Ethnographer
  Suzan Walters
Special Assistant
  Michaela McDonald

Data Collection Team
  Andrea Hernandez
  Carolyn Hernandez
  Janell Johnson-Dash
  Michelle McAbee
  Elias Rivera
  Evelyn Silva

CDC
  Gabriela Paz-Bailey
  Dita Broz
  Lina Nerlander
THANK YOU!

Sarah Braunstein  
NHBS Principal Investigator  
347-396-7760  
sbraunstein@health.nyc.gov

Alexis Rivera  
NHBS Project Director  
347-396-7750  
arivera6@health.nyc.gov