

# CASE-BASED LEARNING COLLABORATIVE ON STIMULANTS CME SERIES

**1<sup>st</sup> and 3<sup>rd</sup> - Fridays at 12pm-1pm PT**

The Center For Behavioral And Addiction Medicine  
UCLA Department Of Family Medicine  
Los Angeles County Substance Abuse Prevention and Control  
UT Southwestern Clinical Trials Network Big South/West Node



UT Southwestern CTN Big South/West Node



# **Substance Use, Violence and HIV/AIDS (SAVA) Syndemic among Women who Use Drugs:**

## ***Socio-Cultural Contexts and Tailored Interventions***

**Nabila El-Bassel, PhD  
Columbia University, School of Social Work  
New York, NY**

**Presentation:  
Center for HIV Identification, Prevention, and Treatment Services (CHIPTS)  
UCLA David Geffen School of Medicine  
Department of Family Medicine**



# No Conflict of Interests to Report

Funding from:

- National Institute of Mental Health (NIMH)
- National Institute of Drug Abuse
- SAMSAH – Substance Abuse and Mental Health Services

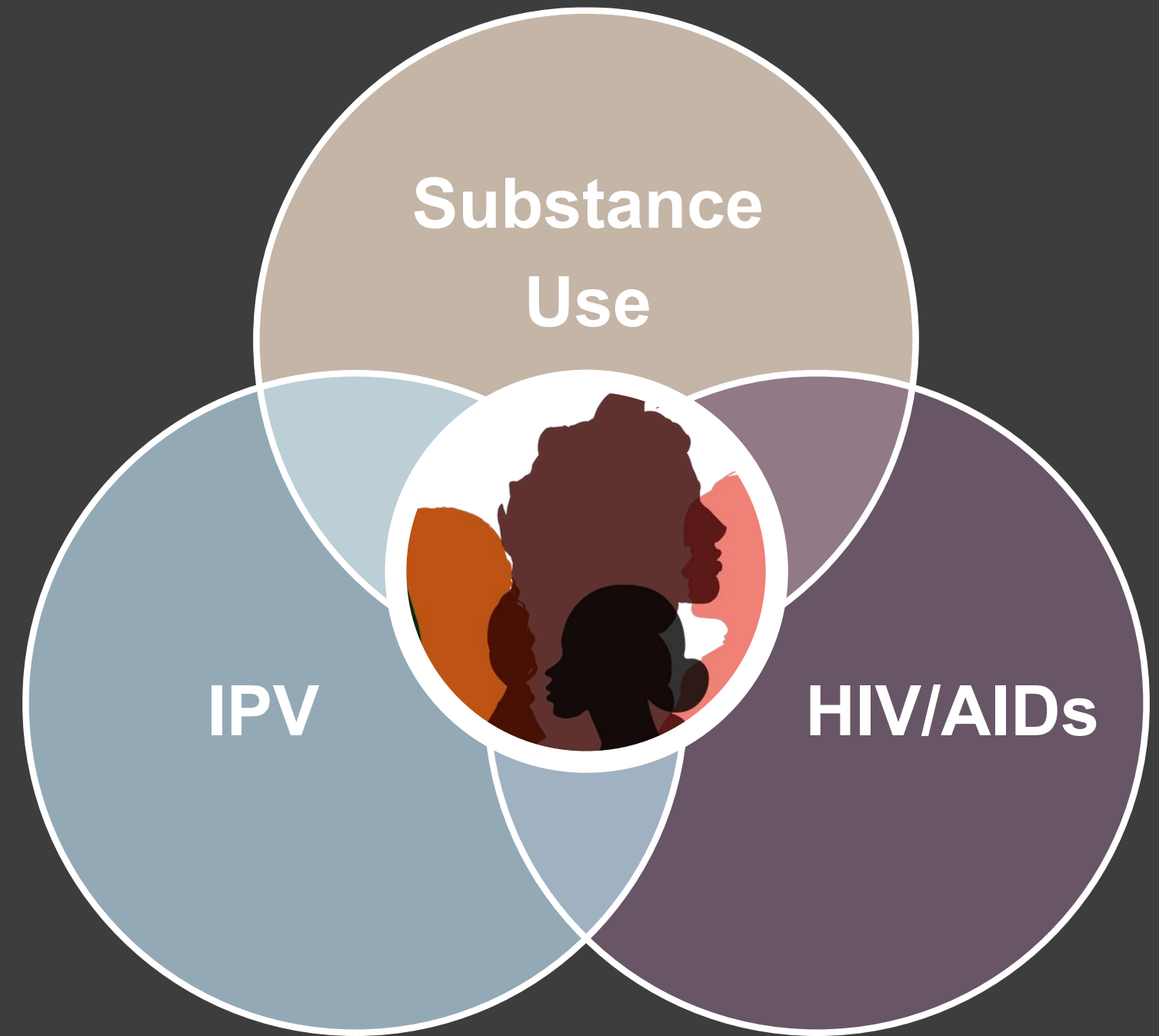


**Epidemiology** of the SAVA syndemic among women who use drugs

**Interconnections and multi-level contexts** linking the SAVA syndemic

**Evidence-based multi-level interventions** targeting the SAVA Syndemic's contexts and mechanisms

**Gaps, future research directions, and intervention strategies** to address SAVA

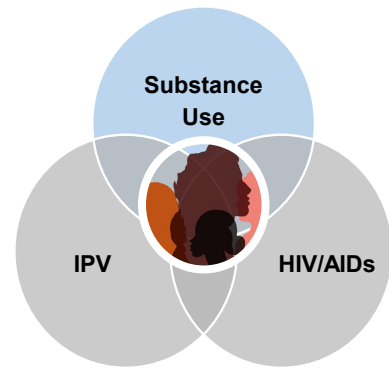


# **Epidemiology of the SAVA Syndemic among Women who Use Drugs**



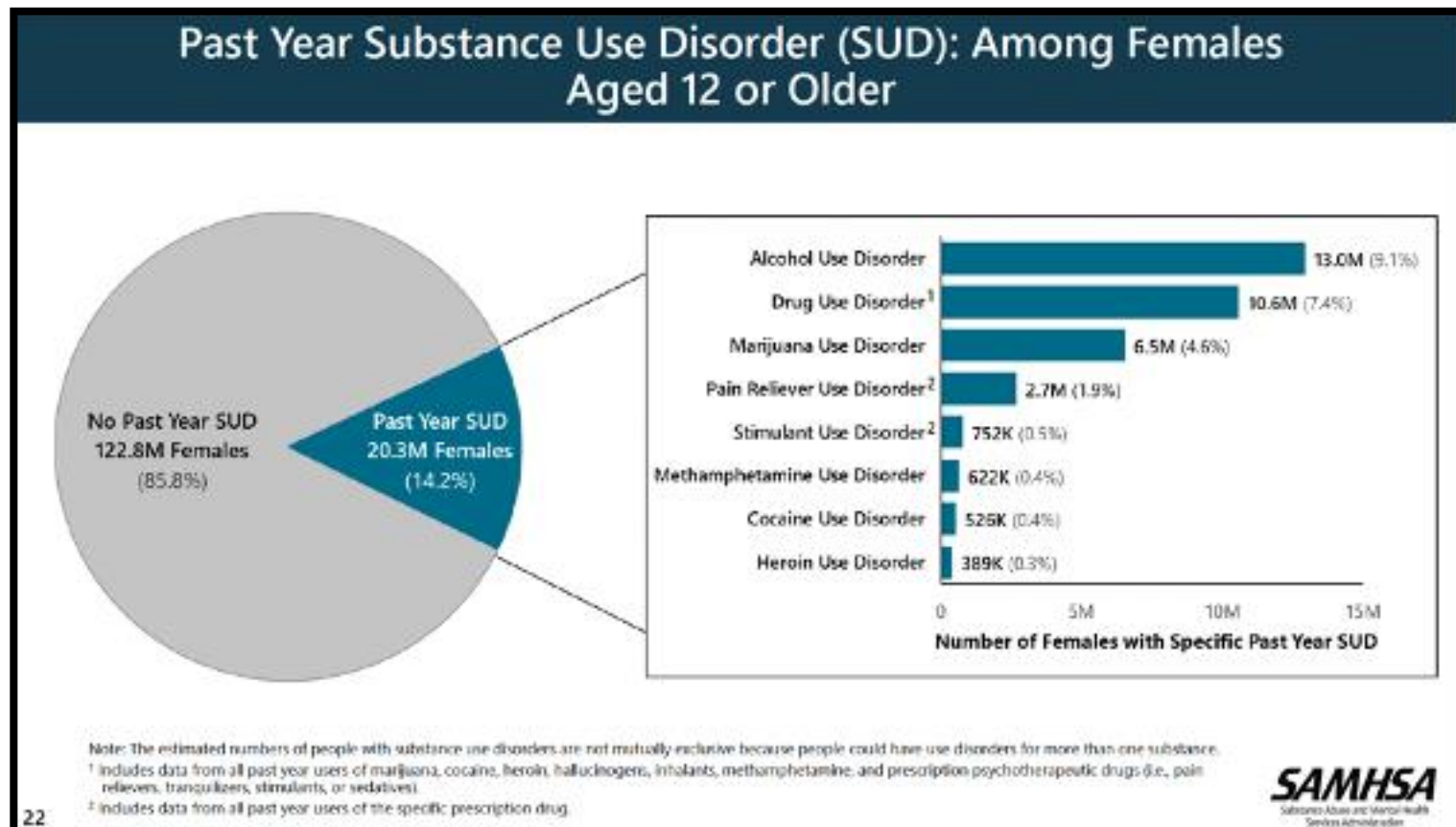
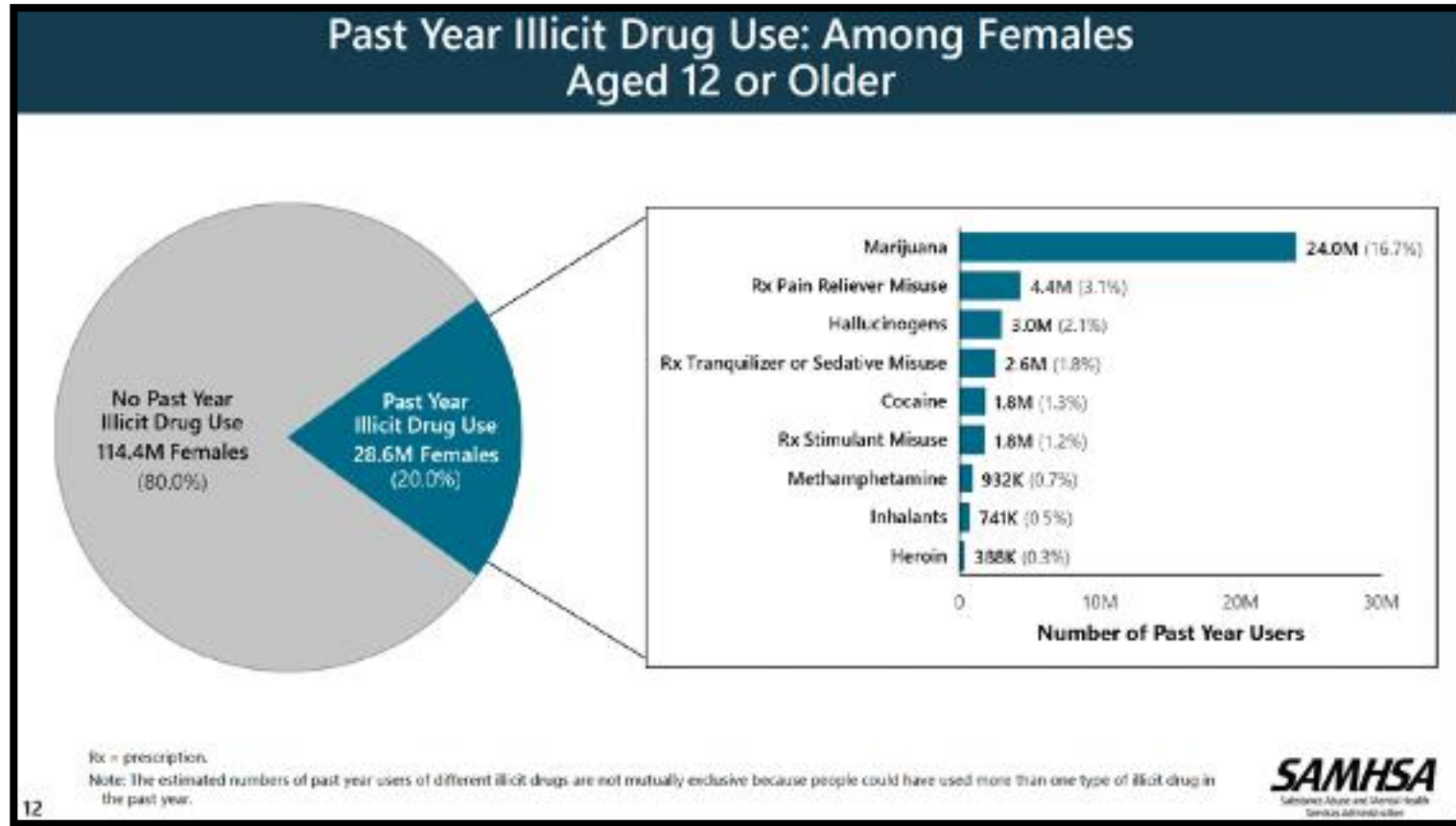
**COLUMBIA | SIG**  
SOCIAL INTERVENTION GROUP

# Prevalence of illicit drug use and Substance Use Disorders among women in the US (2021)

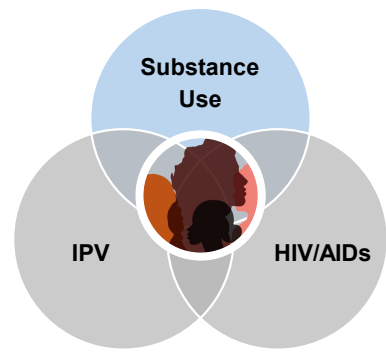


**28.6M**  
**Females**  
aged 12 or older  
(20% population)  
reported using  
**illicit drugs** in the  
past 12 months

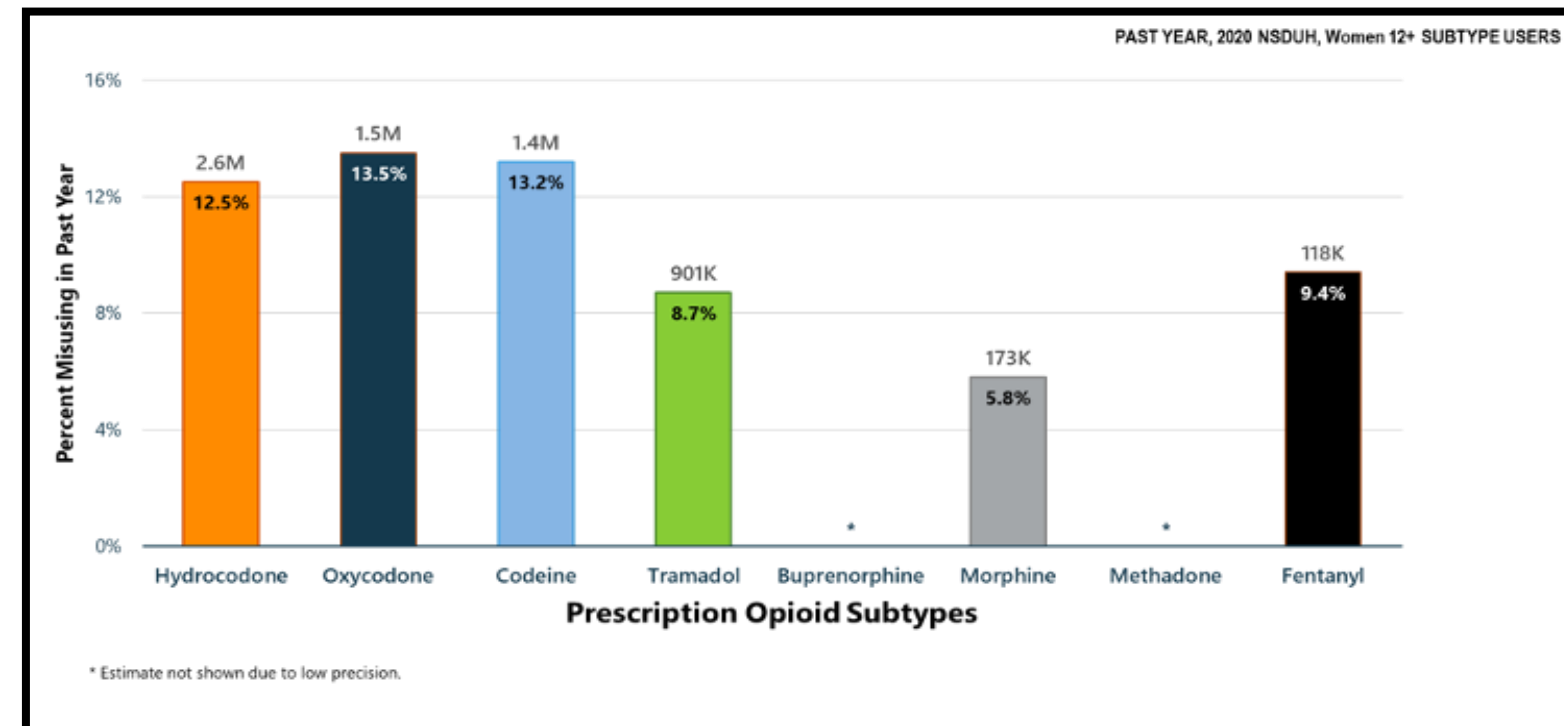
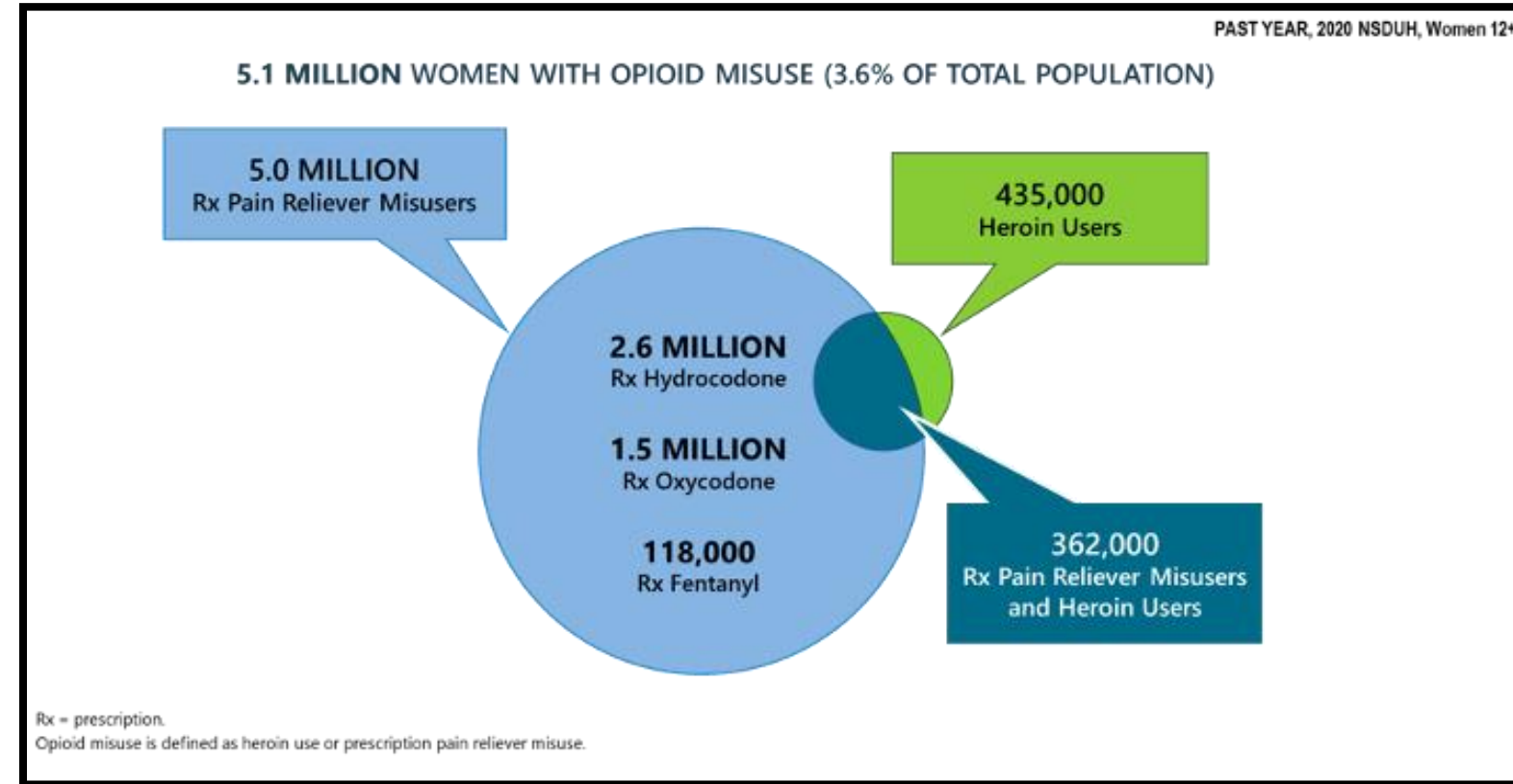
**20.3M**  
**Females**  
aged 12 or older  
(14.2% population)  
reported  
**Substance Use Disorders** in the  
past 12 months



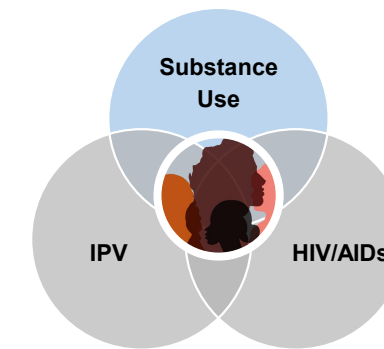
# Opioid Misuse among Women



**5.1M Women  
(3.6% population)  
misused opioids in 2020**

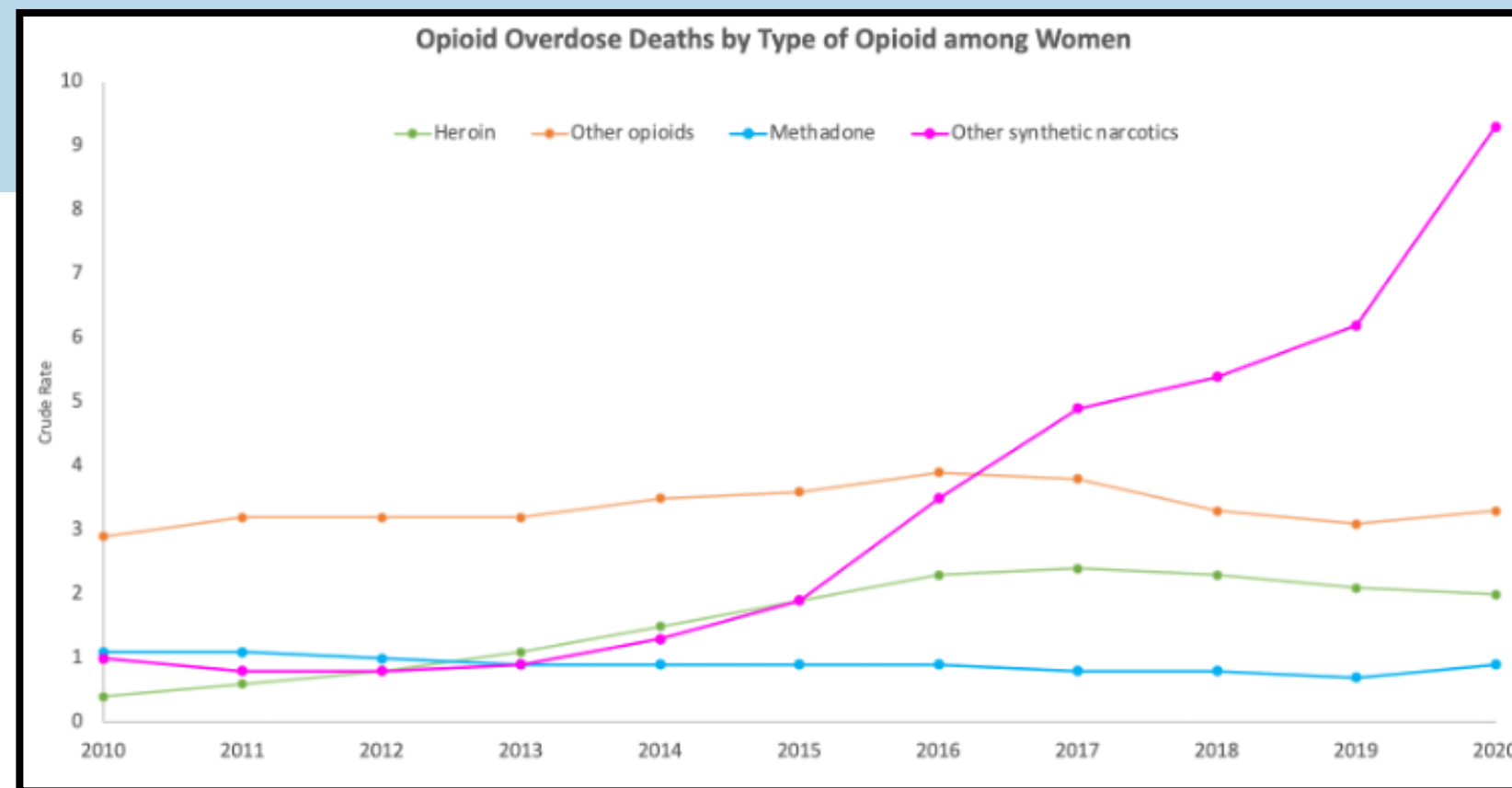
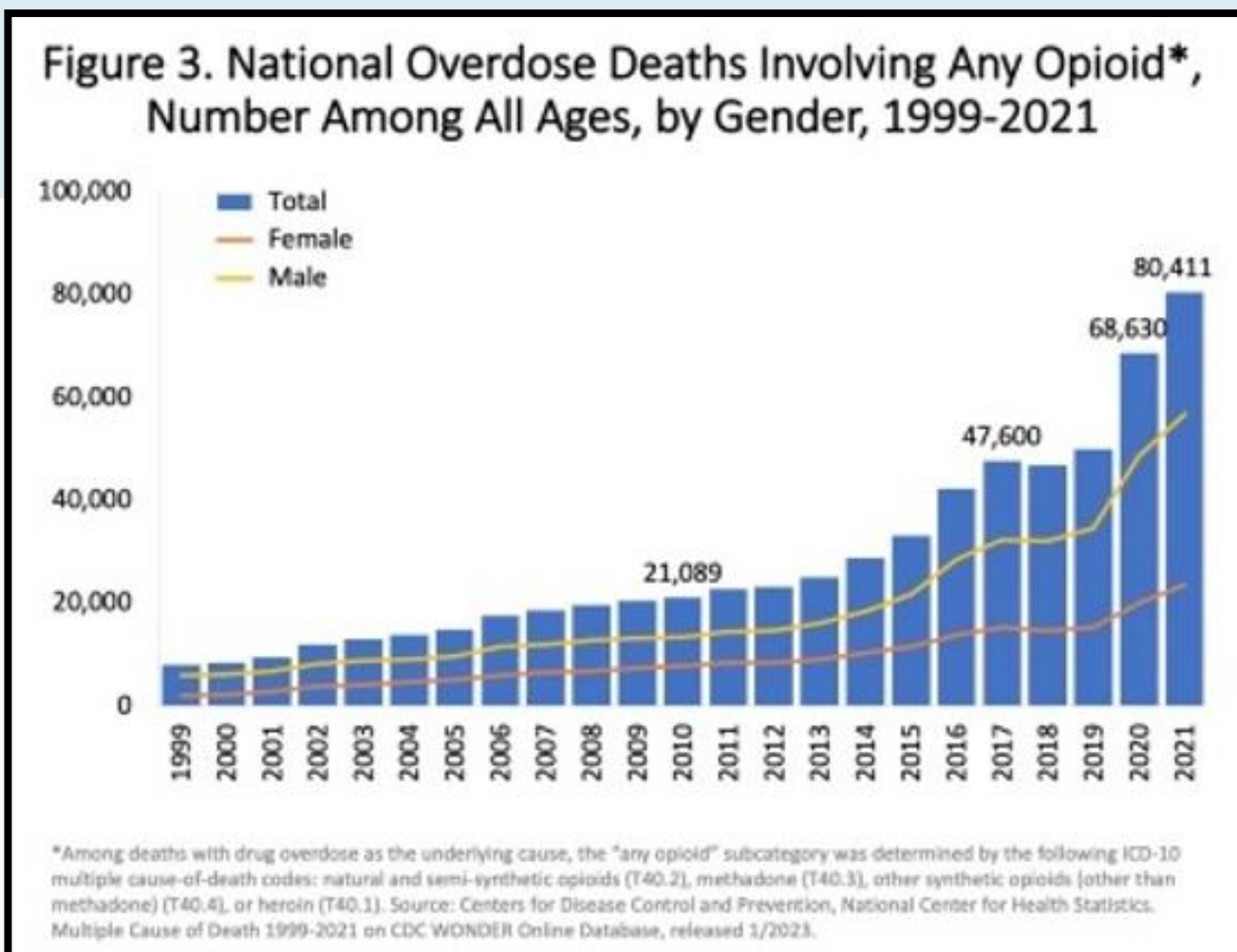


# Rising Drug Overdose Deaths Among Women



Since 1999, opioid overdose deaths increased **+642% among women** (+439% among men)

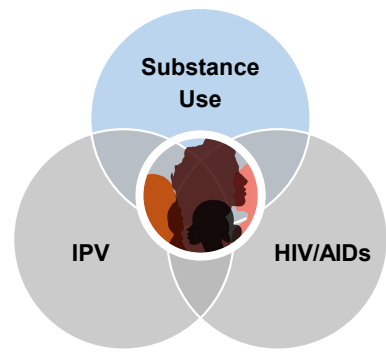
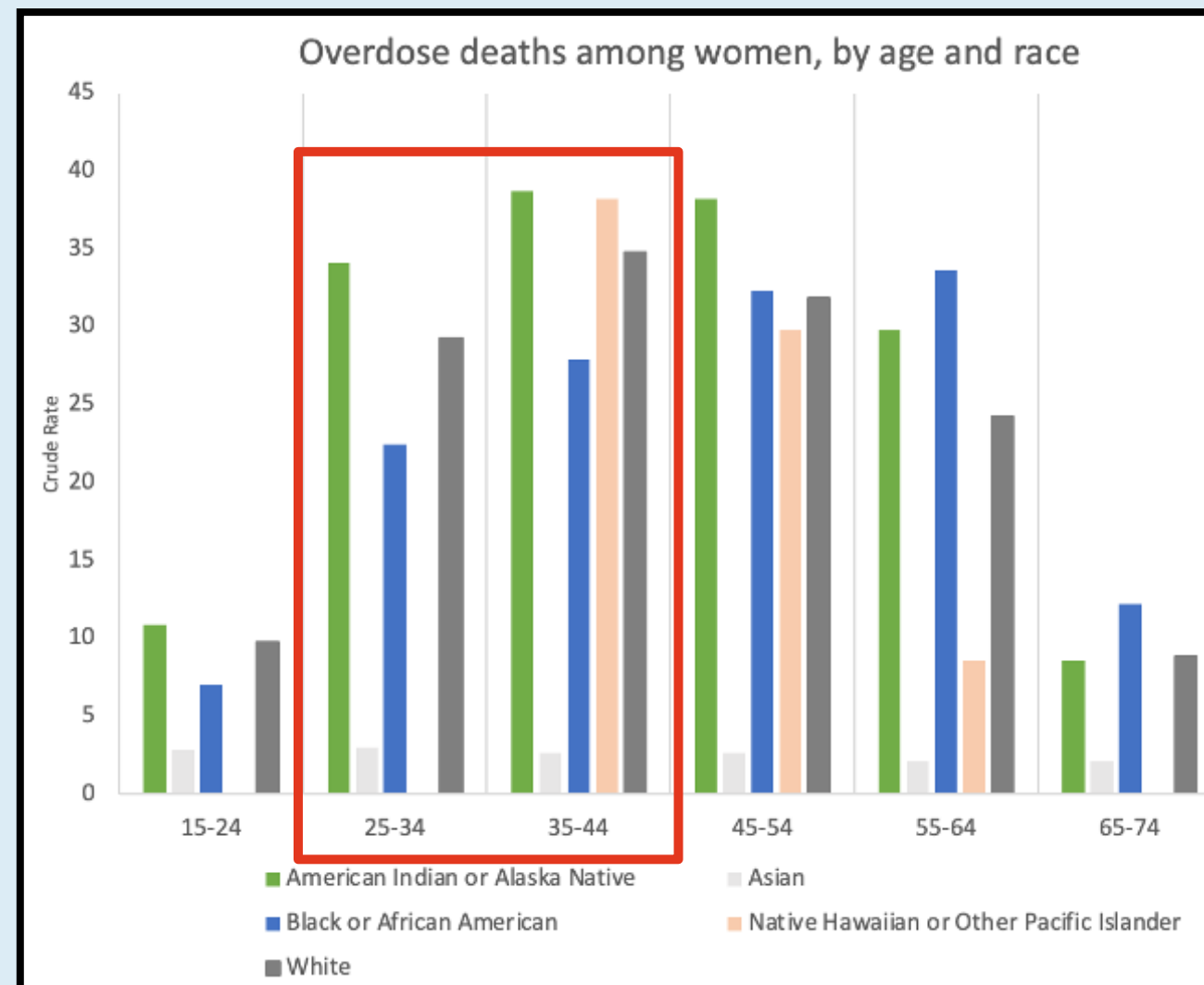
Opioid overdose deaths among women are primarily driven by **synthetic opioids**





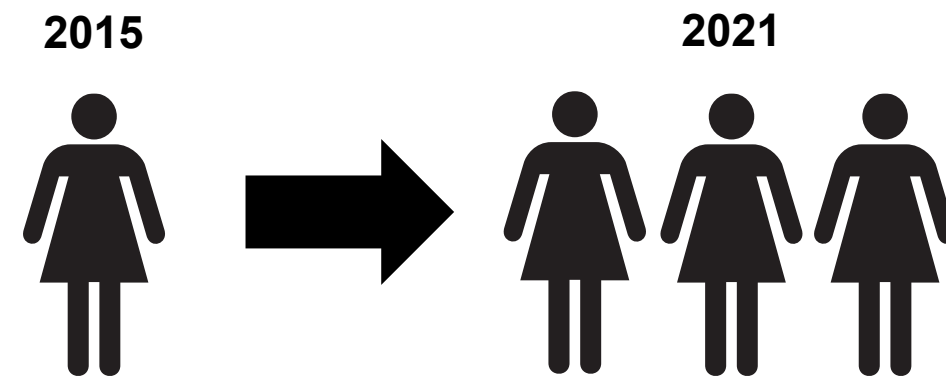
# Race and age-related disparities in overdose deaths

Overdose death rates among American Indian, Alaska Native, and Black women have increased faster than those among White women (age 25-44 years)



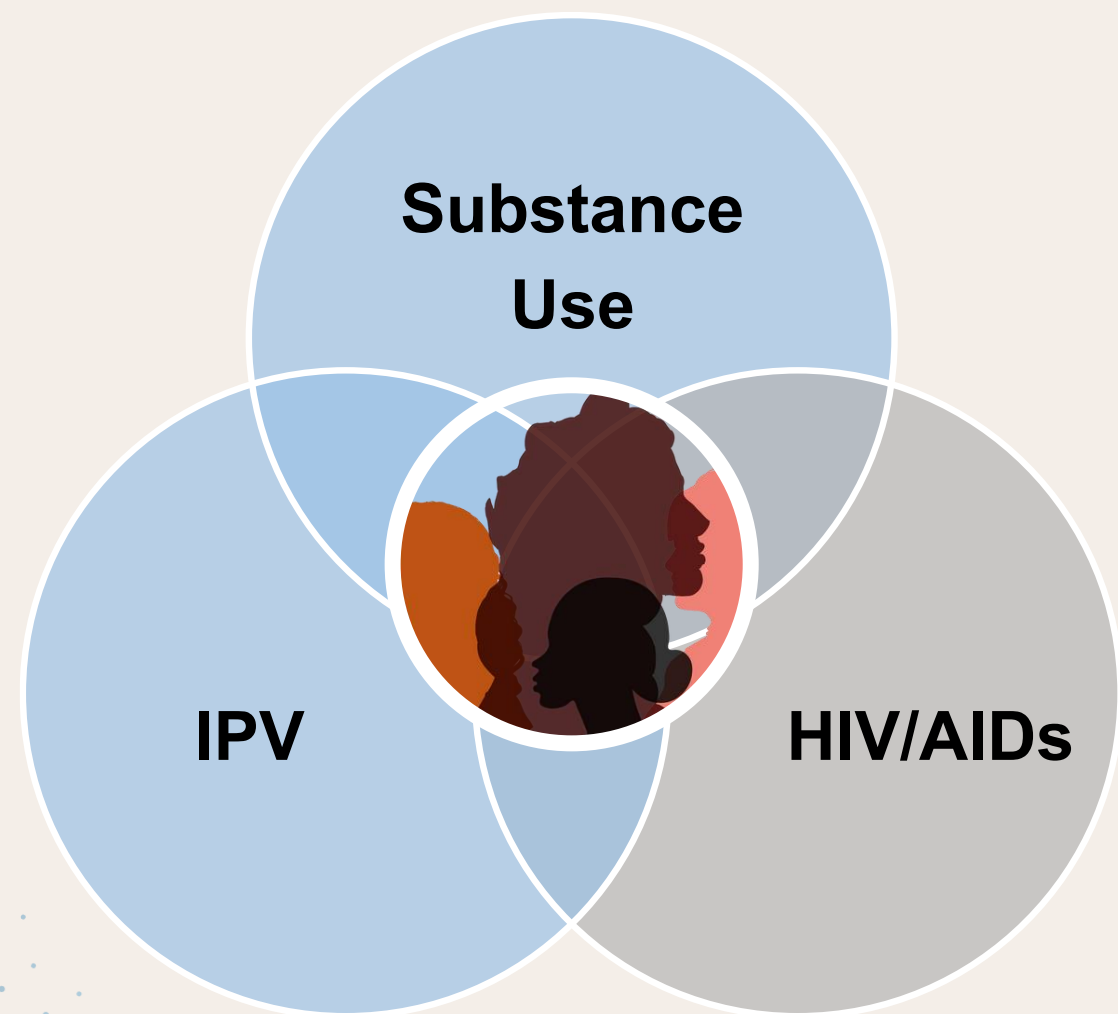
## Impact on Black Women

Annual overdose deaths among Black women **tripled** between 2015 and 2021 (1,725 to 5,060)



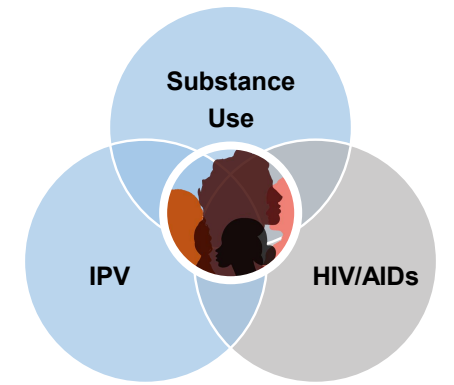
**0.75 Million**

Years of Life Lost (YLL) due to overdose deaths



## **SAVA: Substance Use & IPV**

# Prevalence of IPV among Women who Use Drugs



Among **10+ SIG studies** of women who use drugs, including those recruited from

- Drug treatment programs
- Emergency departments
- Jails or community supervision programs

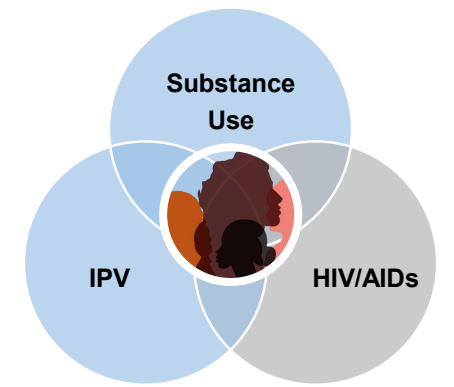
**25% - 57%**

Past-year prevalence rates of IPV

**2x – 5x times higher** than the prevalence found among general female populations

Higher IPV prevalence occurs among users of crack/cocaine, polydrug use and, more recently, fentanyl. However, findings are inconsistent in the literature.

# IPV and Non-Fatal Overdose: New York City



## Association Between Multiple Experiences of Violence and Drug Overdose Among Black Women in Community Supervision Programs in New York City

Journal of Interpersonal Violence  
2022, Vol. 37(23-24) NP21502–NP21524  
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DOI: 10.1177/08862605211057269  
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Louisa Gilbert, PhD<sup>1</sup>, Phillip L. Marotta, PhD<sup>2</sup>,  
Dawn Goddard-Eckrich, EdD<sup>1</sup>, Ariel Richer, MS<sup>1</sup>,  
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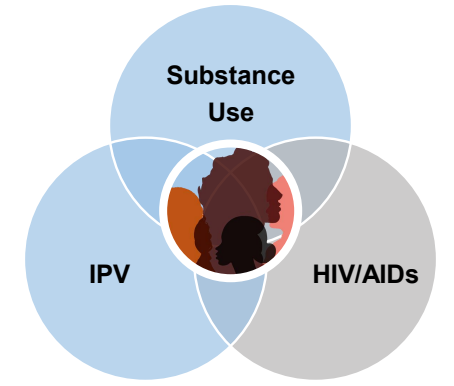
### Abstract

Research has documented associations between all types of violence and substance misuse among Black women. However, research has yet to examine how different experiences of violence may be contributing to the surging epidemic of drug overdose among Black women. This study was conducted between 2015 and 2018 among 296 Black women who were mandated to community supervision programs (CSPs) in New York City (NYC). We used generalized linear modeling (GLM) to estimate associations of the adjusted relative risk (aRR) of experiencing a non-fatal overdose based on exposure to each type of violence after controlling for potentially confounding variables. Lifetime prevalence of a non-fatal drug overdose was

## 296 Black Women from NYC Community Supervision Programs Experienced:

- 14% non-fatal overdose in lifetime, 7% in the past year
- 61.8% severe sexual and physical violence perpetrated by intimate partners
- 29.1% severe sexual violence perpetrated by non-intimate partners
- 14.9% sexual violence perpetrated by police and/or correctional guards
- 7.4% forced by an intimate partner to exchange sex for money or drugs

# IPV and Non-Fatal Overdose: New York City



## Findings

### Association Between Multiple Experiences of Violence and Drug Overdose Among Black Women in Community Supervision Programs in New York City

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Louisa Gilbert, PhD<sup>1</sup>, Phillip L. Marotta, PhD<sup>2</sup>, Dawn Goddard-Eckrich, EdD<sup>1</sup>, Ariel Richer, MS<sup>1</sup>, Jasmine Akuffo, MPH<sup>1</sup>, Timothy Hunt, PhD<sup>1</sup>, Elwin Wu, PhD<sup>1</sup>, and Nabila El-Bassel, PhD<sup>1</sup>

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Sexual and Physical IPV was associated with **greater relative risk of experiencing an overdose**

Adjusted Relative Risk (aRR=3.41, 95%CI=1.19, 9.73, p<001)

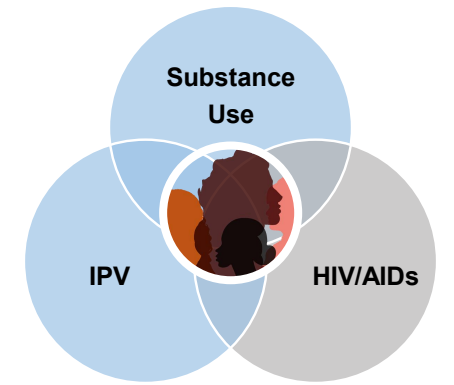
Sexual and physical violence from a Non-intimate partner was associated **greater relative risk of experiencing an overdose**

Adjusted Relative Risk (aRR=2.31, 95% CI=1.4, 3.75, p<001)

Sexual and physical violence from police/guards was associated **greater relative risk of experiencing an overdose**

Adjusted Relative Risk (aRR=1.271, 95% CI=1.14, 1.42, p<001)

# IPV and Non-Fatal Overdose: Kazakhstan



JAMA Network | **Open**™

Original Investigation | Substance Use and Addiction

## Association of Violence Against Female Sex Workers Who Use Drugs With Nonfatal Drug Overdose in Kazakhstan

Nabila El-Bassel, PhD; Andrea Norcini Pala, PhD; Trena I. Mukherjee, MPH; Tara McCrimmon, MPH, MIA; Gaukhar Mergenova, MD, MS; Assel Terlikbayeva, MSW, MD; Sholpan Primbetova, MS, MSW; Susan S. Witte, PhD

### Abstract

**IMPORTANCE** Female sex workers (FSWs) who use drugs face increased risk of intimate partner violence (IPV) and nonpartner violence (NPV). The association between violence and drug overdose is unknown.

**OBJECTIVE** To examine the association between IPV, NPV, and nonfatal drug overdose among FSWs who use drugs in Kazakhstan.

**DESIGN, SETTING, AND PARTICIPANTS** This cross-sectional study included 400 adult FSWs in Kazakhstan who reported illicit drug use in the past year, exchanged sex for money or drugs, and reported having unprotected sex in the past 90 days. Baseline data were collected from February 2015 to May 2017 from Project Nova, an HIV prevention study among FSWs who use drugs in Kazakhstan. Data analysis was conducted from April 2019 to March 2020.

### Key Points

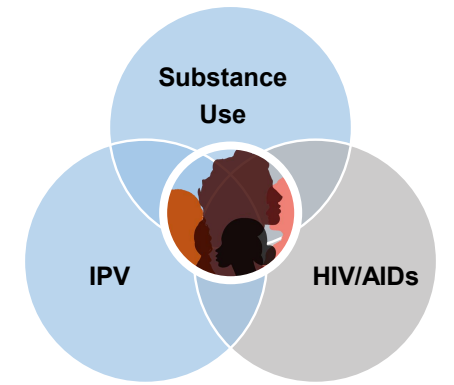
**Question** Is violence against female sex workers (FSWs) who use drugs associated with an increased risk of nonfatal overdose in Kazakhstan?

**Findings** This cross-sectional study of 400 FSWs who use drugs found that intimate partner and nonpartner violence, especially severe physical violence, were significantly associated with experiencing nonfatal overdose. This study also found that a history of incarceration was associated with increased risk of overdose in this

## 400 Female who Engage in Sex Work in Kazakhstan

- **37.5%** non-fatal overdose in their lifetime, 18.0% in the past 90 days
- **89.7%** physical and sexual IPV in their lifetime, 51.1% in the past 90 days
- **40%** reported some form of violence from
  - Clients (28.3%)
  - Pimps (6.5%)
  - Police (24.0%)

# IPV and Non-Fatal Overdose: Kazakhstan



JAMA Network | **Open**™

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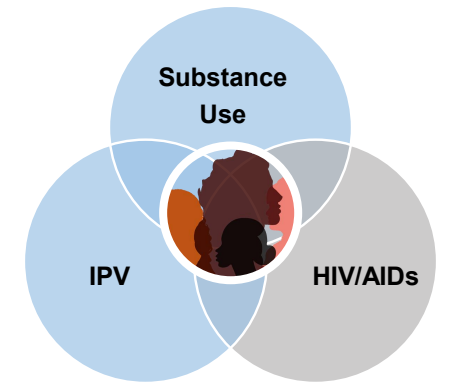
## Findings

Severe **physical violence** was associated with **76%** increased odds of non-fatal overdose

Severe **sexual violence** was associated **56%** increased odds of non-fatal overdose

No significant associations found when social and structural factors were controlled for

# Contexts Linking IPV and Overdose



## Findings : Qualitative Research

- Overdose is a chronic condition
- Drugs are used as a mechanism to cope with history of trauma (CSA) and IPV
- Lack of support increases drug use, overdose, and IPV
- Using drugs while alone leads to overdose
- Engaging in sex work is traumatizing and leads to increased drug use and overdose

PLOS ONE

RESEARCH ARTICLE

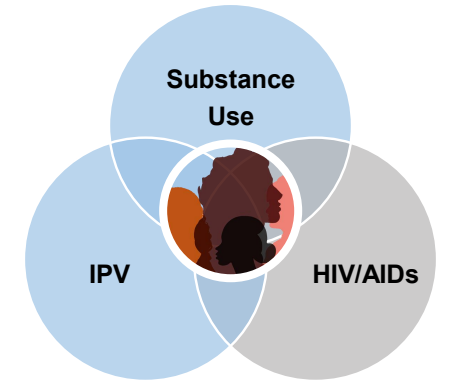
Drug overdose among women in intimate relationships: The role of partner violence, adversity and relationship dependencies

Nabila El-Bassel<sup>1</sup>, Phillip L. Marotta<sup>2\*</sup>, Dawn Goddard-Eckrich<sup>1</sup>, Mingway Chang<sup>1</sup>, Tim Hunt<sup>1</sup>, Ewin Wu<sup>1</sup>, Louisa Gilbert<sup>1</sup>

<sup>1</sup> Columbia University, School of Social Work, New York, New York, United States of America, <sup>2</sup> Yale University, School of Medicine, Department of Psychiatry, New Haven, Connecticut, United States of America



# Gendered Experiences of Fentanyl Use



**Competing risks of women and men who use fentanyl: “*The number one thing I worry about would be my safety and number two would be overdose*”**

Miriam TH. Harris, MD, MSc<sup>a,b</sup>, Sarah M. Bagley, MD, MSc<sup>a,b,c</sup>, Ariel Maschke, BS<sup>d</sup>,  
Samantha F. Schoenberger, BA<sup>a</sup>, Spoorthi Sampath, BS<sup>d</sup>, Alexander Y. Walley, MS, MSc<sup>a,b</sup>,  
Christine M. Gunn, PhD<sup>d,e</sup>

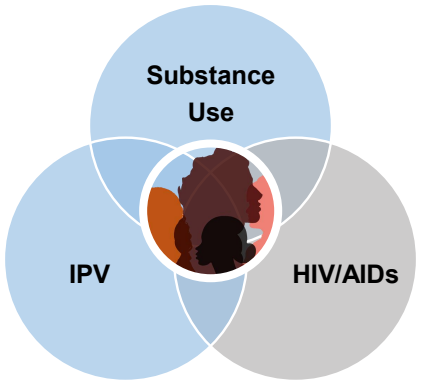
## **The Paper Underscores:**

Gender-responsive programs are needed to enhance engagement with addiction services.

## 20 Participants, 10 Women

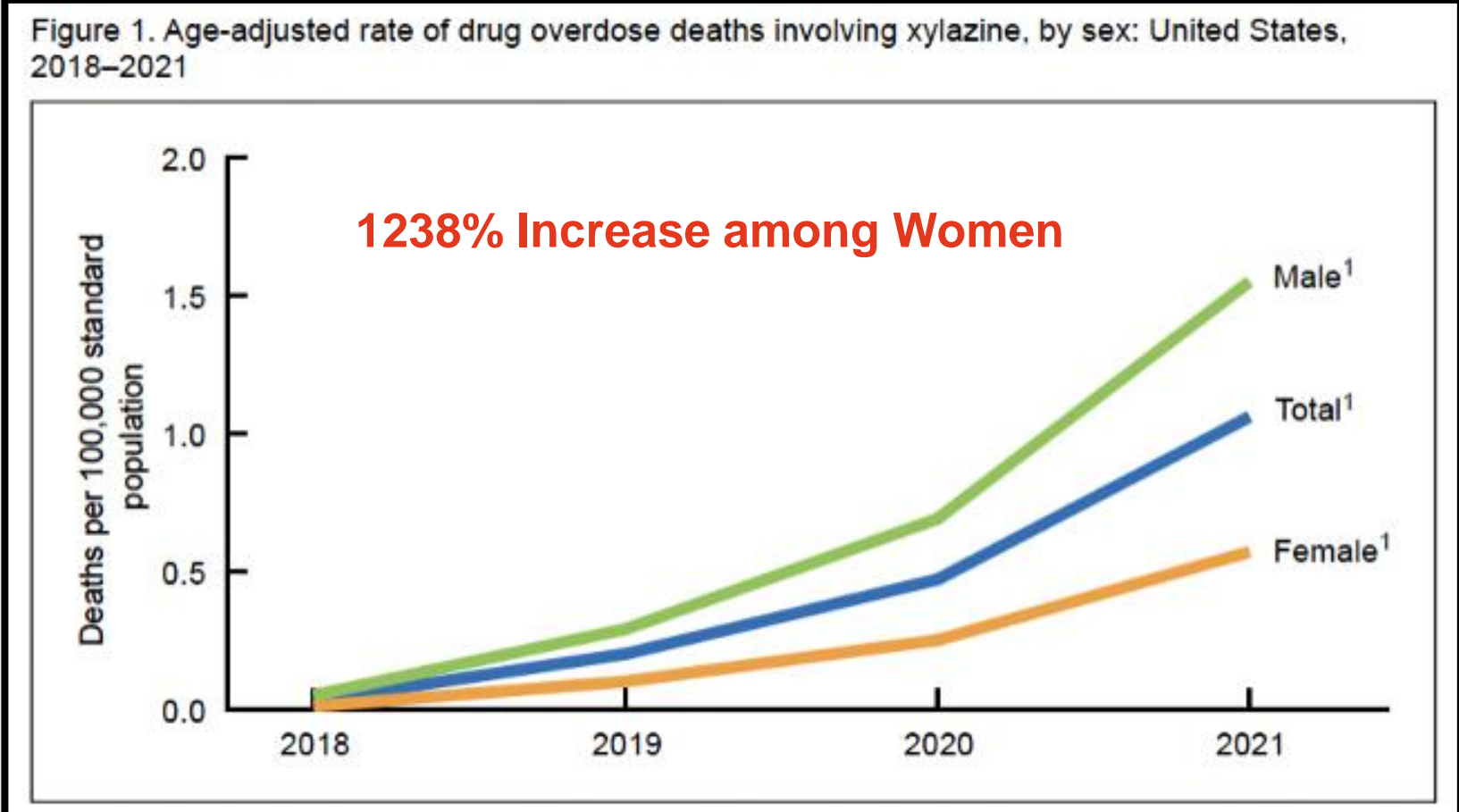
- **Fentanyl use increased overdoses** which led to overdose being defined as a chronic condition
- **Women were more concerned about physical and sexual violence, parenting, and losing their children to Child Protective Services** than overdose
- **Men feared HIV risks and incarceration**, which sometimes superseded fears of overdose

# Increasing Overdose Deaths from Xylazine (Tranq/Dope) Among Women



Xylazine, commonly known as “tranq,” is a veterinary drug used to relax or sedate animals. Xylazine is not an opioid.

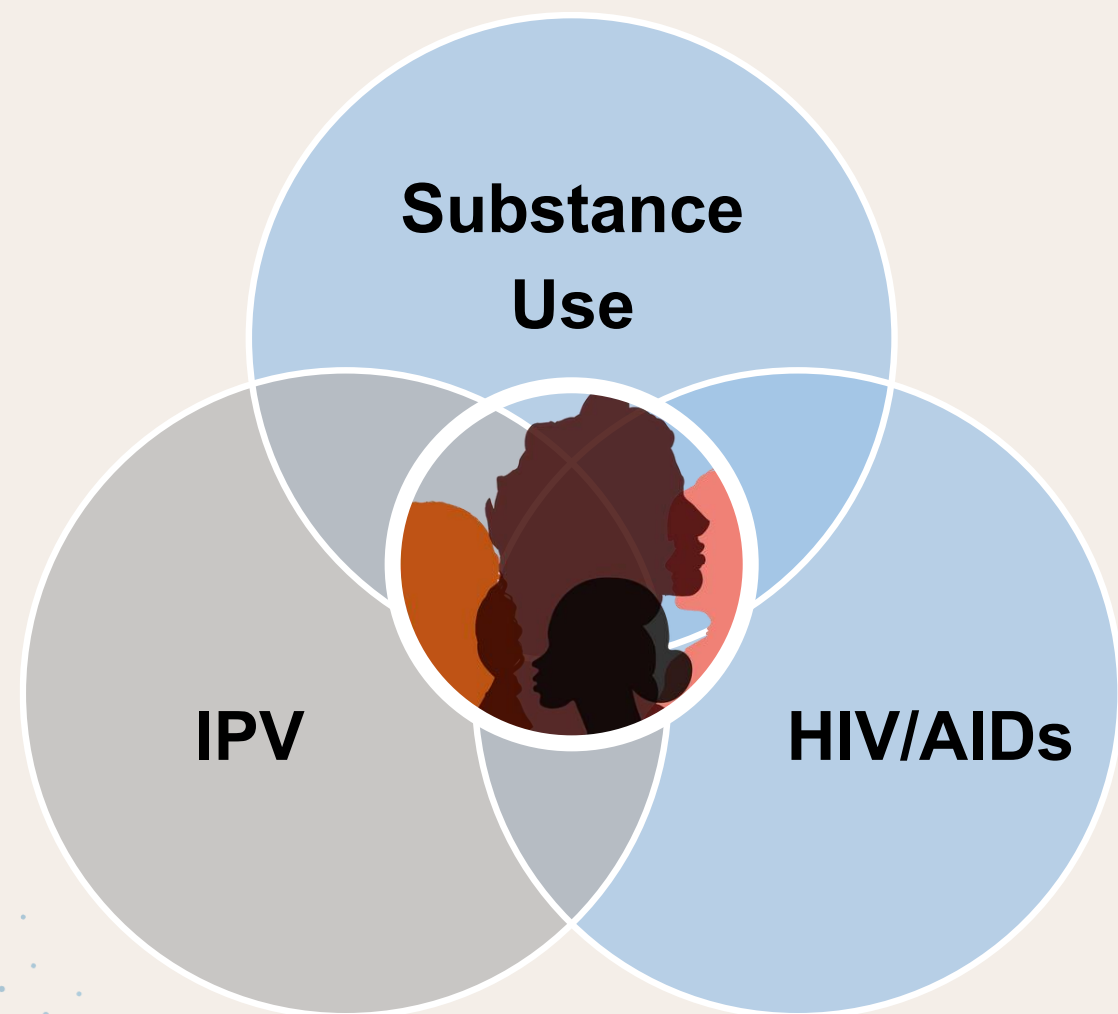
It has long been found in the illicit drug supply and is frequently mixed with fentanyl.



## Being under the influence of Xylazine led women to:

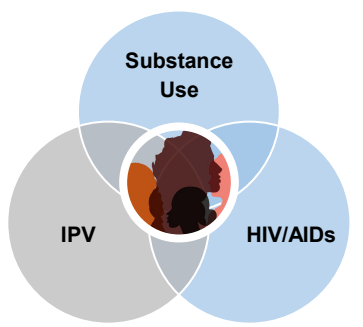
- Increase their risk for robbery or assault
- Increase their vulnerability to sexual assault and violence because of being unaware of their surroundings
- Increase risk and experience of overdose

[Spencer et al, CDC, 2023](#)



## **SAVA: Substance Use & HIV/AIDS**

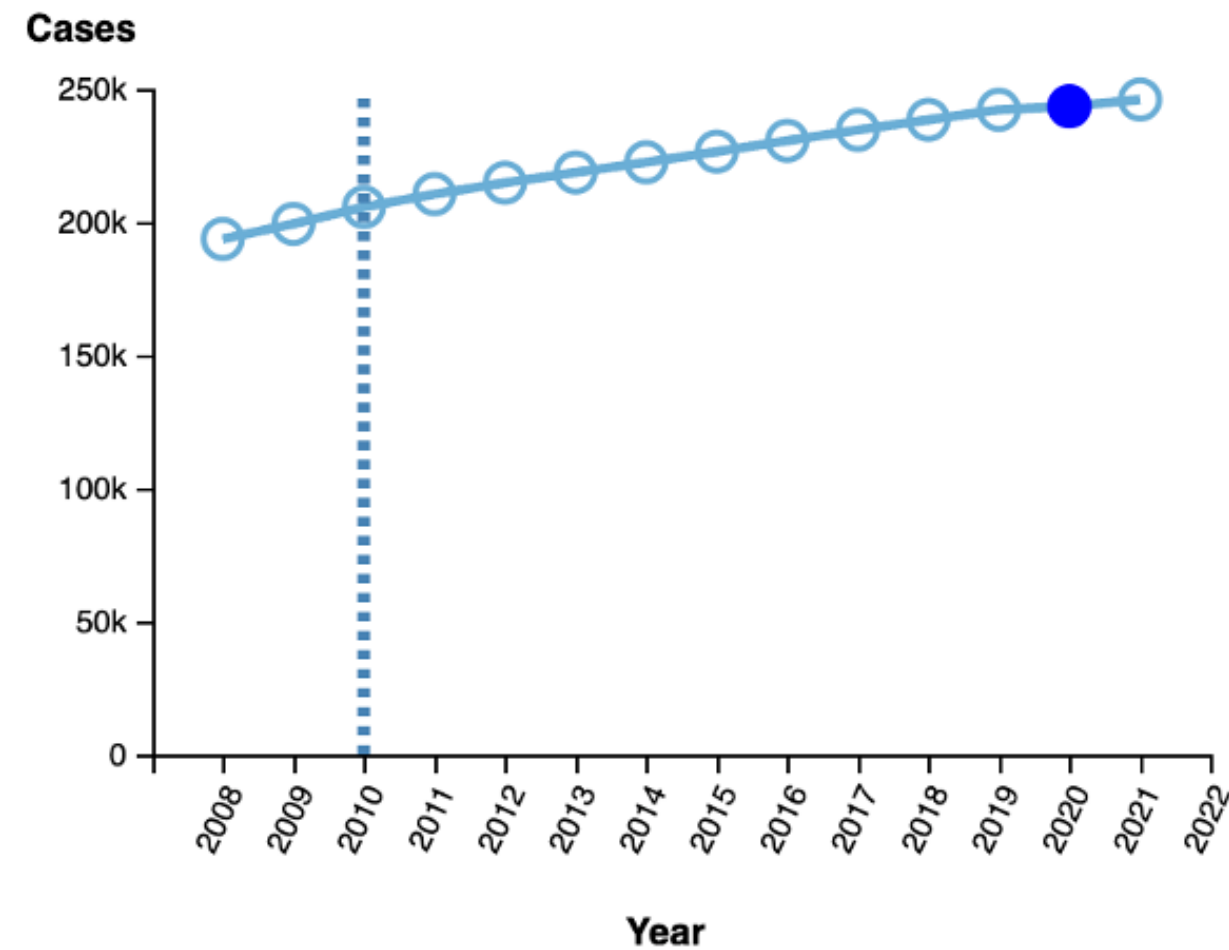
# HIV Among Women



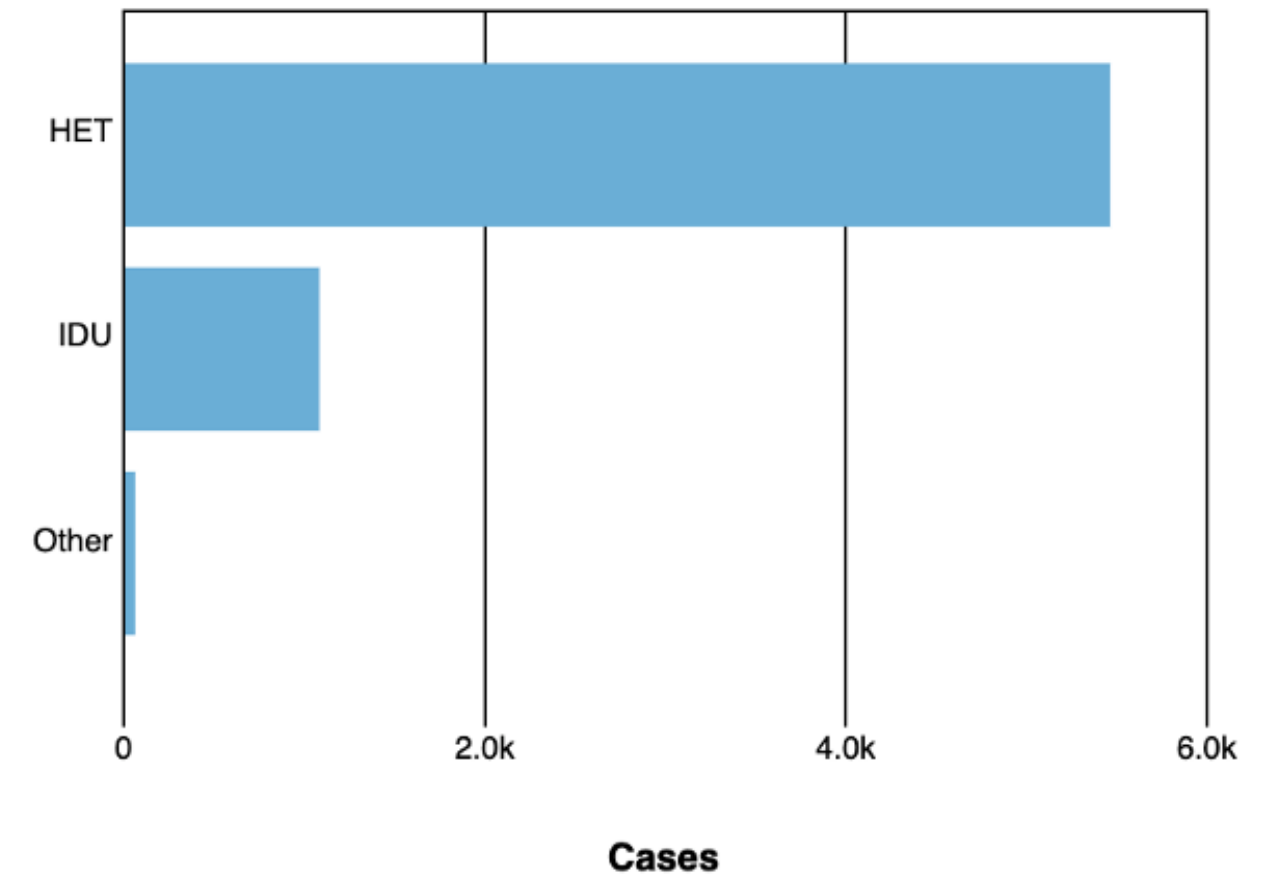
Women accounted for **18%** of the 36,136 **new HIV diagnoses** in 2021

- Most HIV transmission was attributed to heterosexual contact (82%)
- 1100 (3%) were among women who inject drugs

HIV prevalence | 2008-2021 | Ages 13 years and older | All races/ethnicities | Female | All transmission categories | United States



HIV diagnoses | 2021 | Ages 13 years and older | All races/ethnicities | Female | All transmission categories | United States

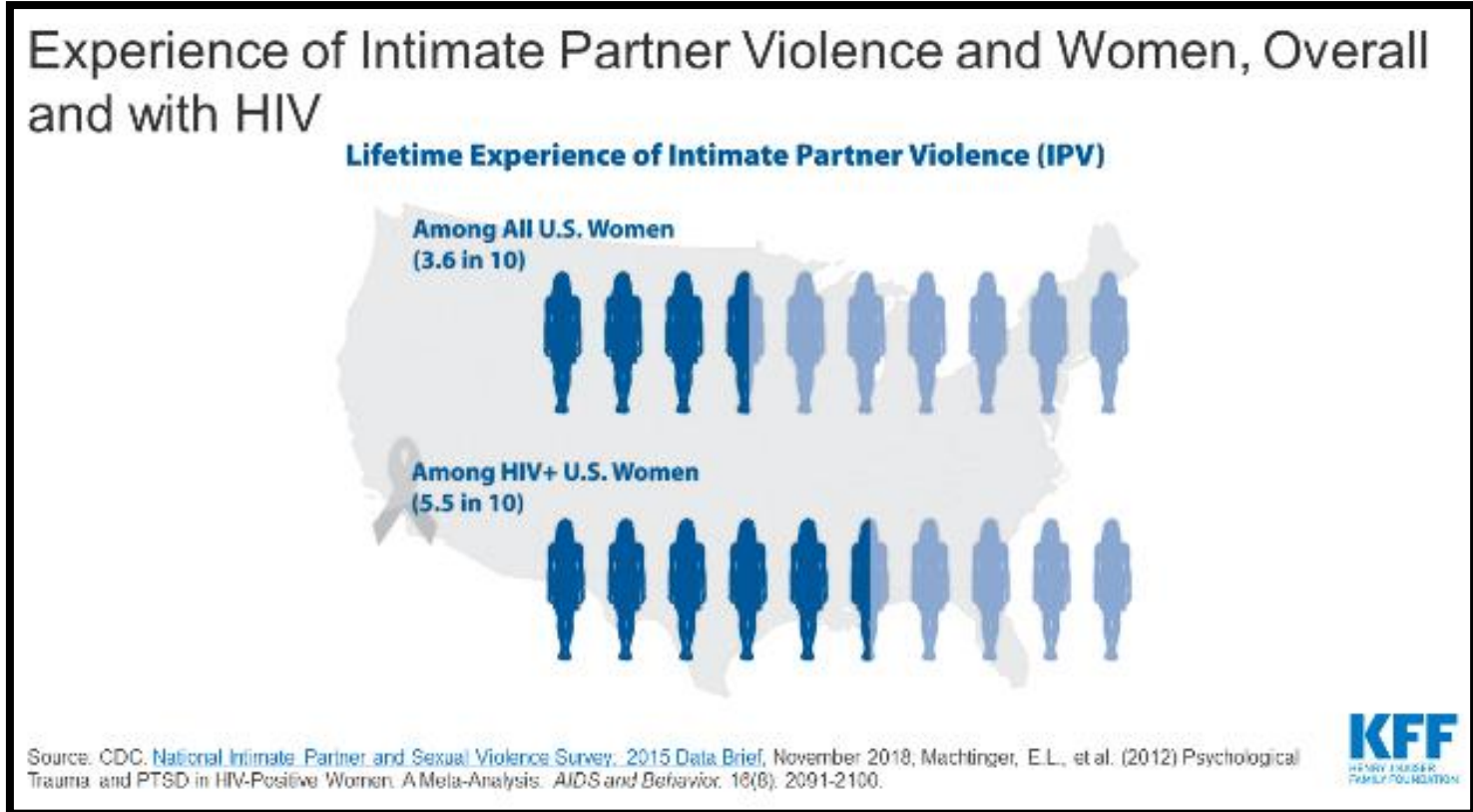
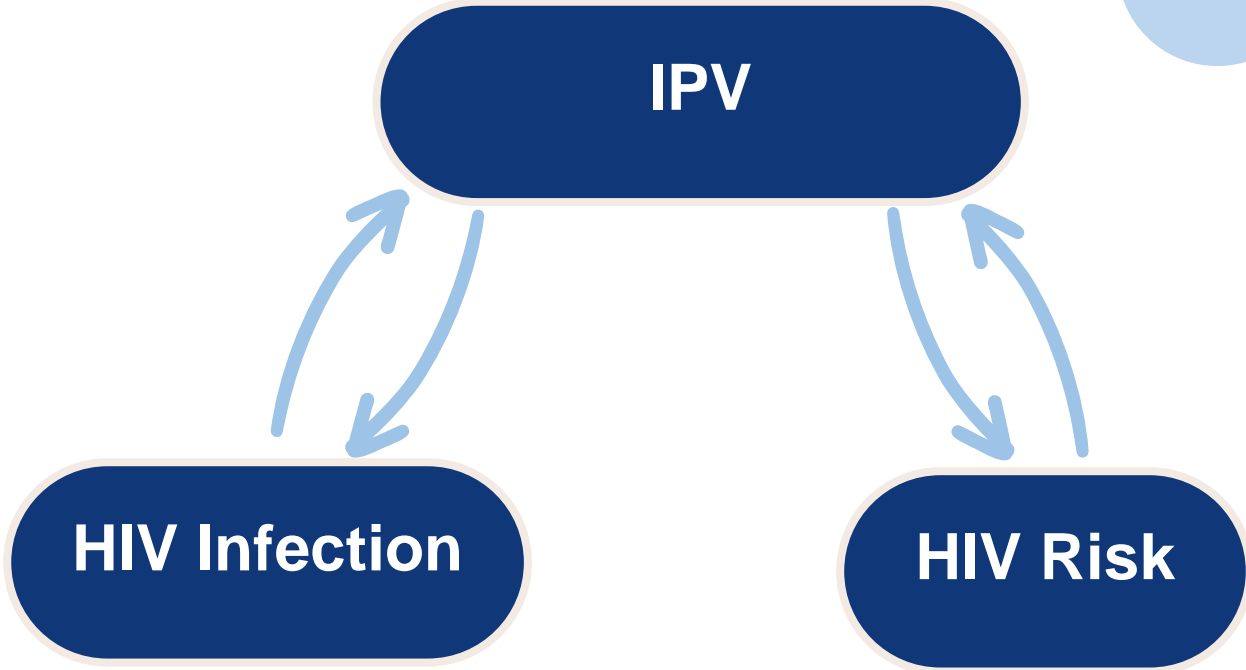
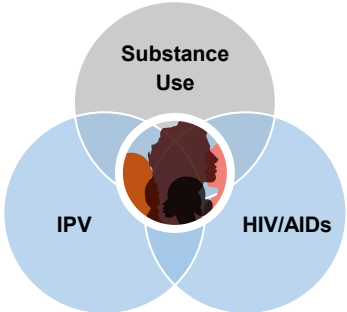


# IPV increases risk of HIV acquisition

# HIV infection increases risk of IPV

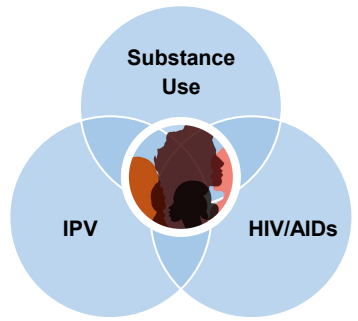
In the US, 55% of women living with HIV have experienced **IPV in their lifetime**

IPV is associated with poor HIV treatment outcomes and higher sexual transmission risks



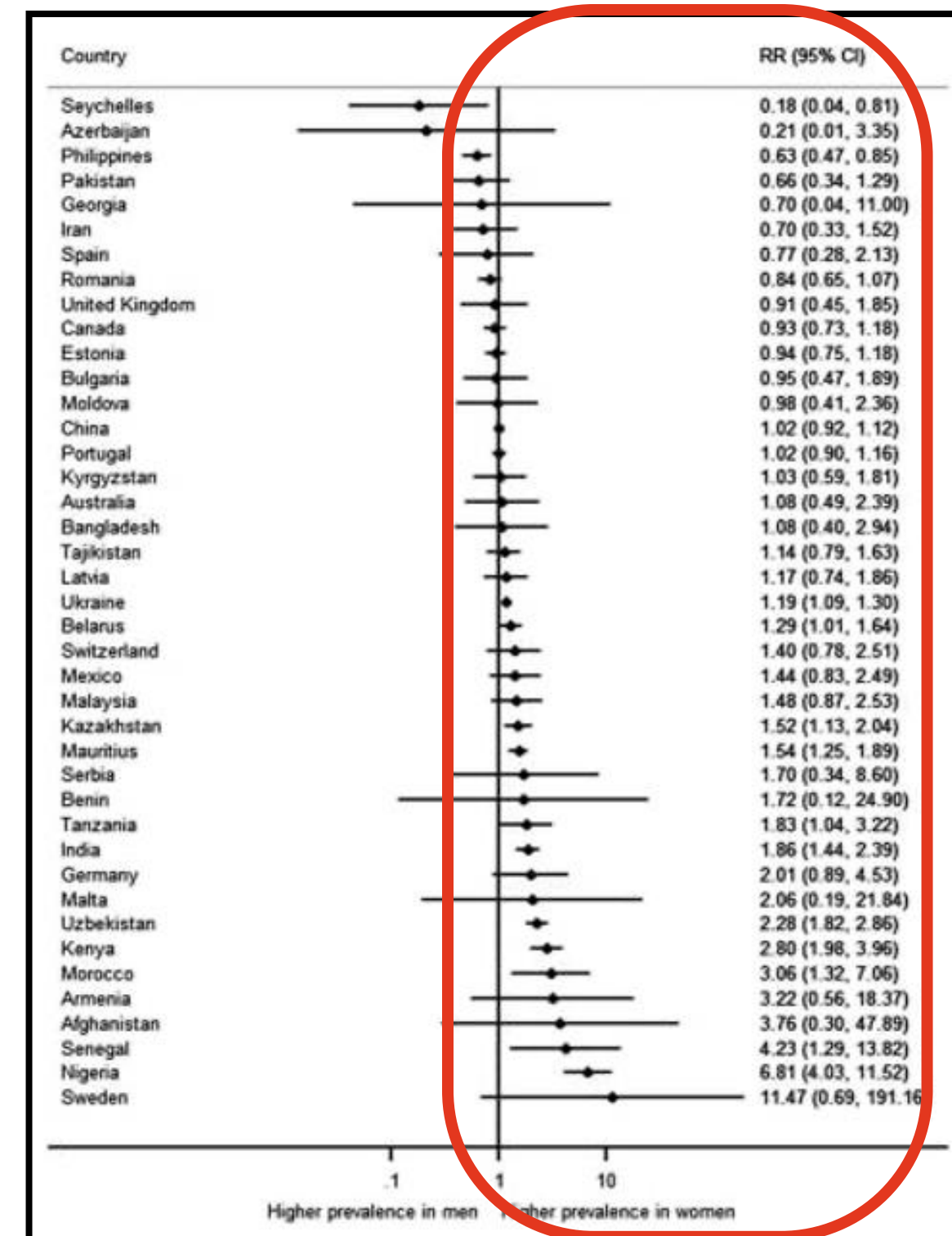
[CDC, 2014](#); [CDC, 2018](#); [Siemieniuk et al, JAIDS, 2013](#); [Machtinger et al, AIDS & Behavior, 2012](#)

# IPV and substance use associated with increased risk of HIV/AIDS among women who use drugs in high prevalence settings



Meta-analysis identified that

- Sexual IPV has strongest effects on HIV transmission (compared to other forms of IPV), increases HIV risk by **77%**
- Physical IPV increases risk for HIV acquisition by **28% - 52%**

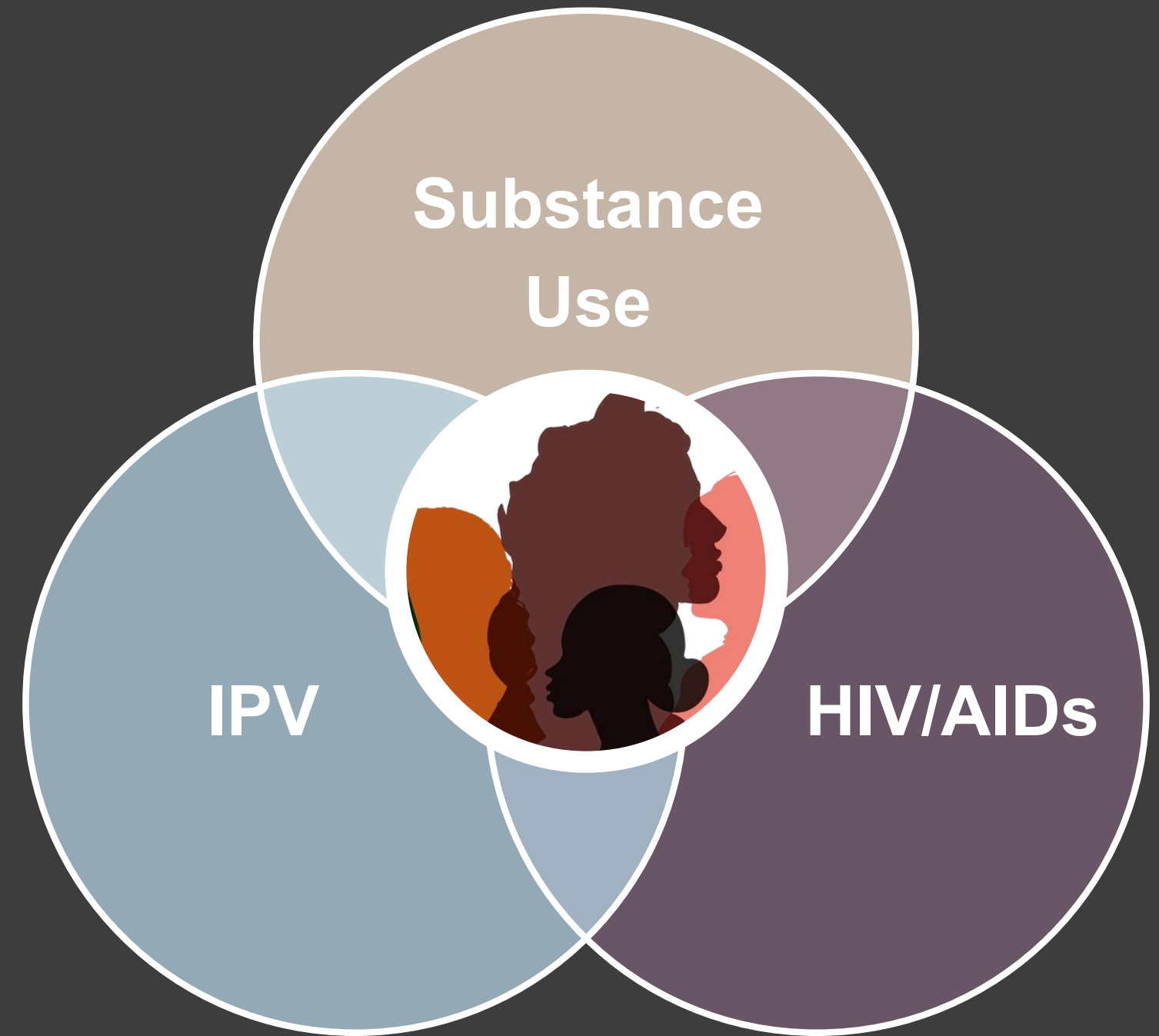


# HIV, IPV and Methamphetamine Use

Methamphetamine use is associated with **IPV**

Methamphetamine is linked to **risky sexual behavior that places people at greater HIV risk**

Women who use methamphetamines report that it acts as **a barrier to accessing sexual and reproductive healthcare.**



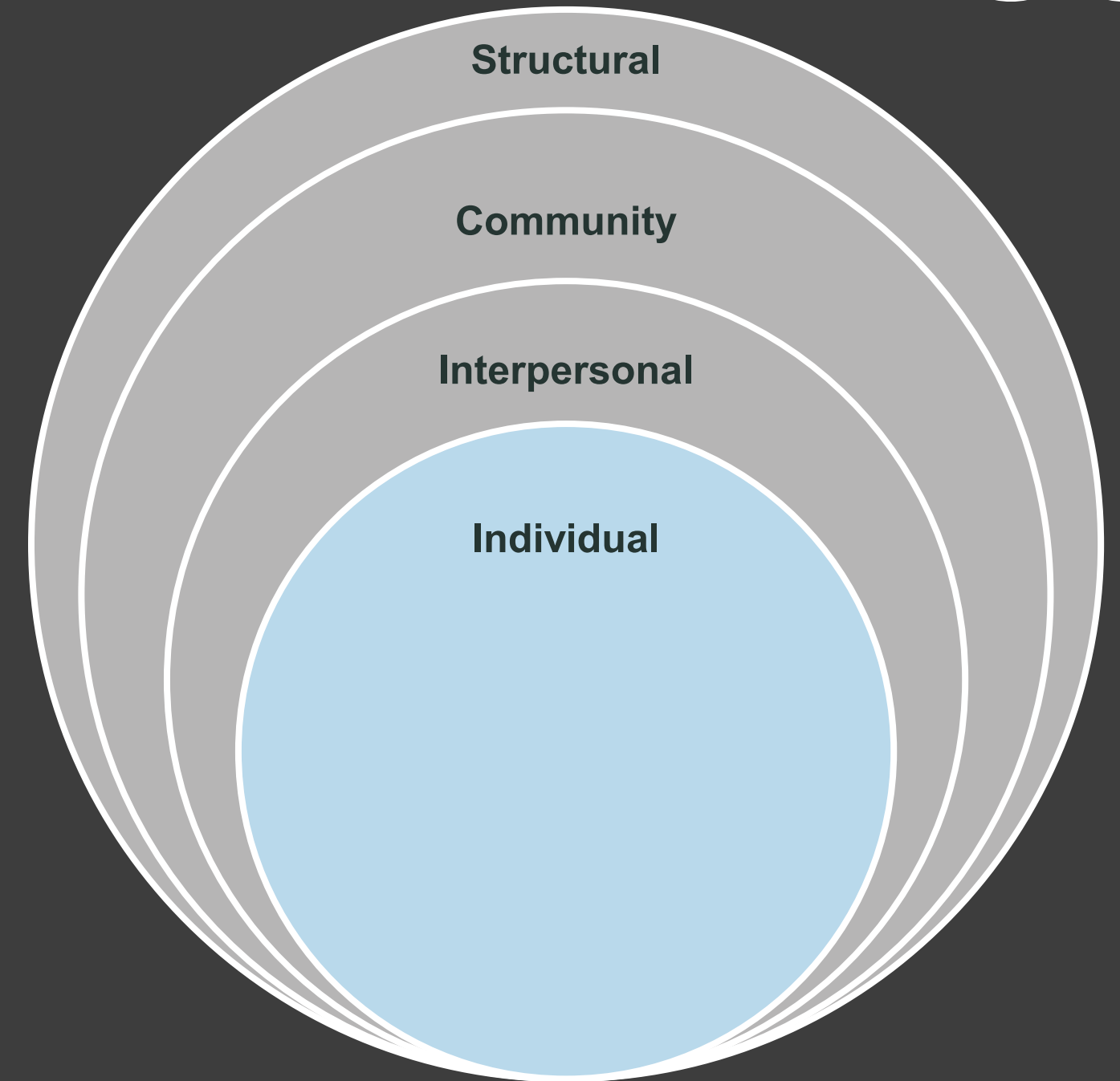
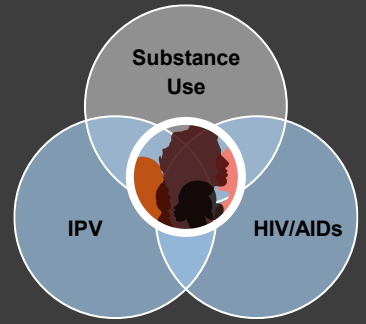
# **Socio-cultural contexts and mechanisms that link IPV, Substance Use, and HIV/AIDS**



# Individual-level factors linking IPV and HIV/AIDS

3 biological explanations were identified in the literature that link sexual violence and risk of HIV/AIDS:

- Forced sexual intercourse with an HIV-positive male intimate partner
- Forced sexual intercourse led to vaginal lacerations and abrasions
- Presence of other STIs and when exposed to sexual secretions and/or blood

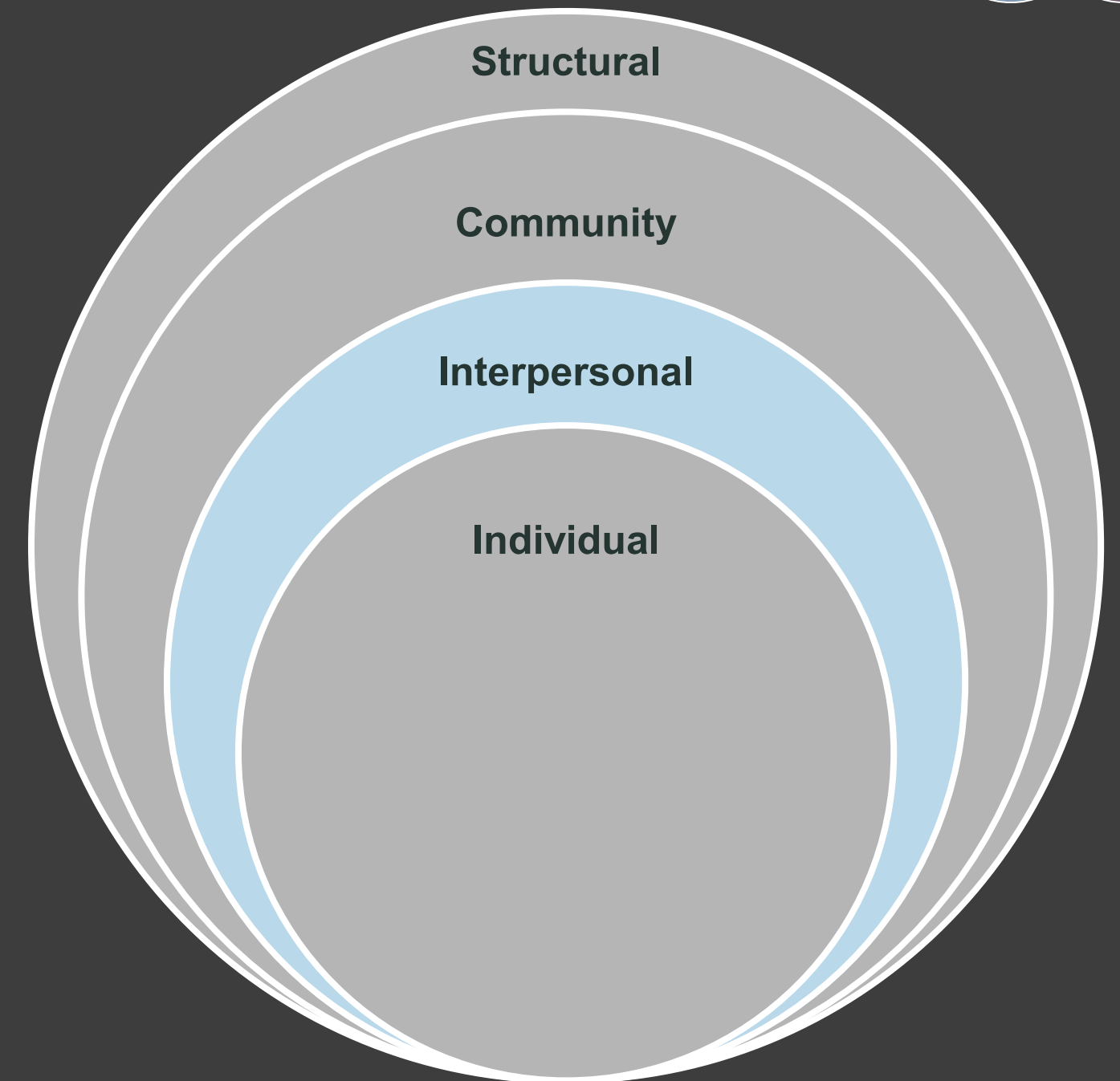
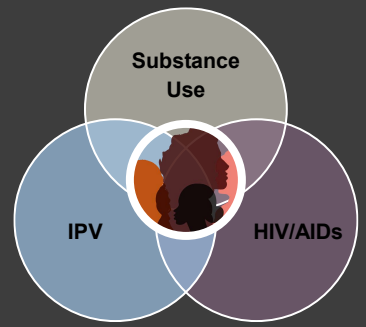


# Condom negotiation failure leads to IPV and unprotected sex

**Infidelity:** Asking the male partner to use condoms can imply mistrust or indicate suspicions of infidelity, which can lead to accusations and violence

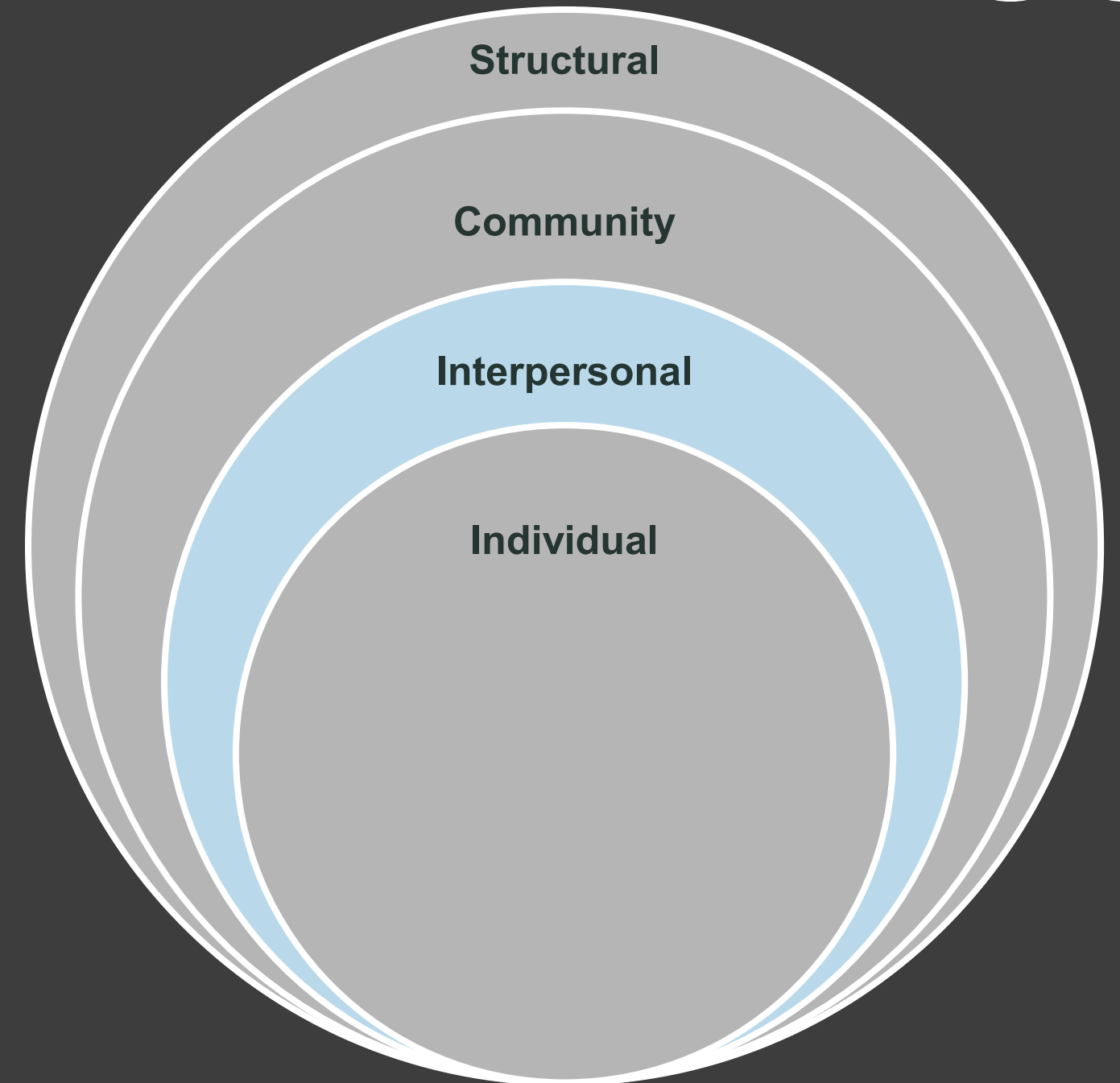
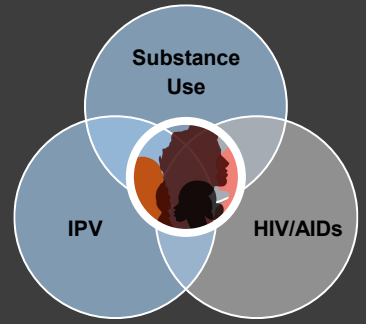
**Economic Dependence:** Economic dependency on a male partner can make it more difficult for a woman to assert her desires or negotiate condom use

**Refusal of sex:** Seen as a sign of disinterest or infidelity, can lead men to react violently, driven by insecurity and jealousy

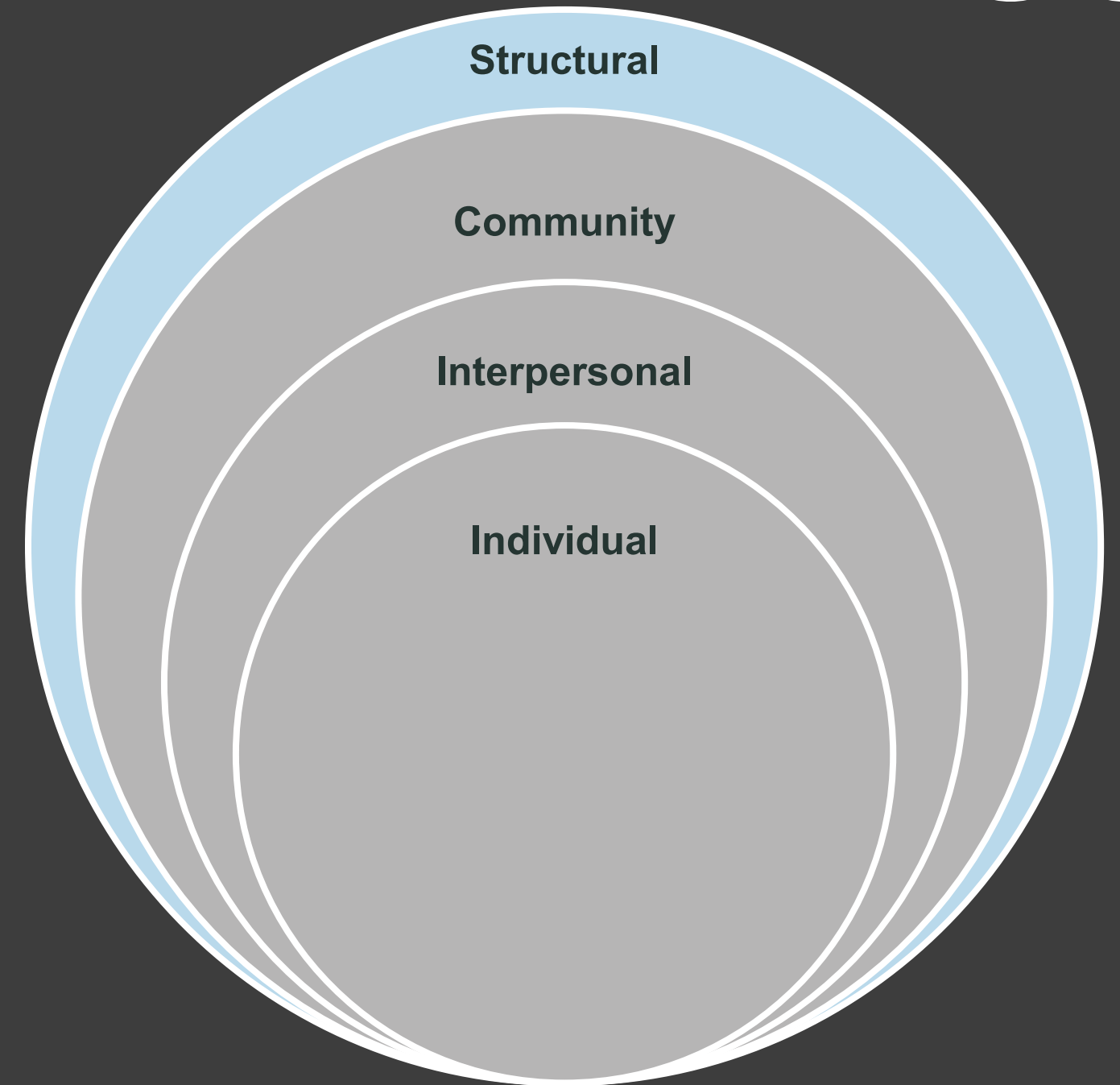
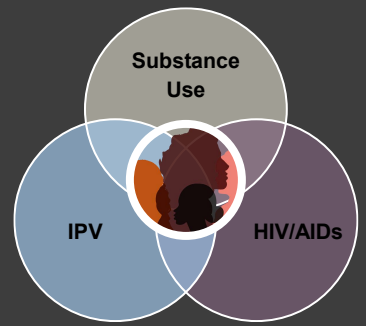


# Pharmacological effects of drugs on sexual desire, jealousy and performance increased IPV

- Women using crack cocaine reported low sexual desire; however, men on crack cocaine reported increased sexual desire, but a decreased ability to perform
- Crack-induced paranoia would incite both partners to accuse each other of infidelity that led to physical or sexual abuse
- Heroin made male partners unable or slow to ejaculate, which caused sex to become painful for the woman and led to IPV
- Women under the influence of drugs endure forced sex because of fear of the increased potential for physical violence

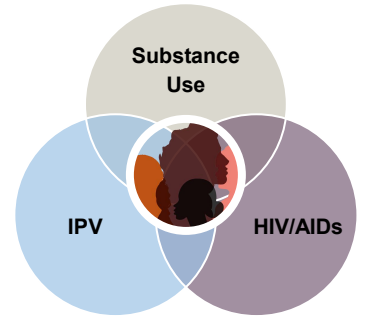


# Structural-level factors

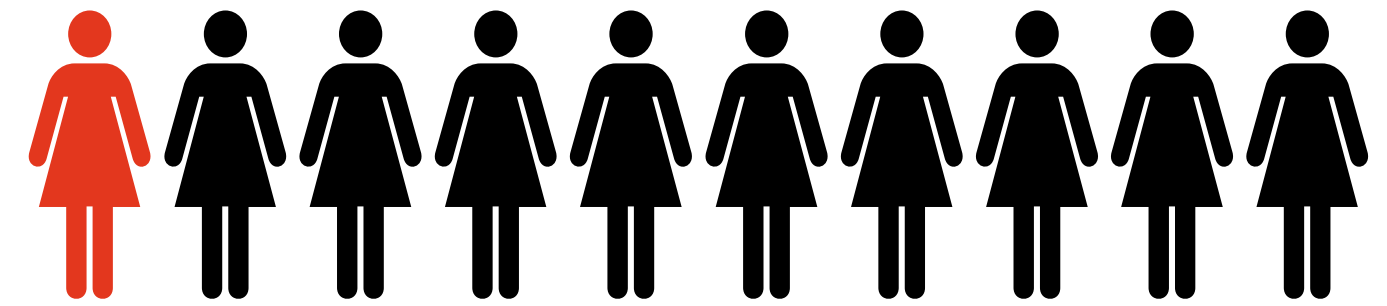


El-Bassel et al, *Lancet HIV*, 2022; Shannon et al, *Social Science & Medicine*, 2008; Rhodes et al, *Rethinking Social Epidemiology*, 2011; Erickson et al, *AIDS Care*, 2020; Gupta et al, *Lancet*, 2008

# Gendered barriers to substance use treatment that increase IPV and HIV



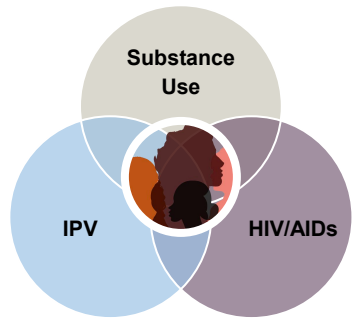
- HIV and women who use drugs: double neglect, double stigmatization
- High social stigma against women who use drugs makes it harder to seek drug treatment, harm reduction, IPV care and other health services
- Stigma against women who use drugs by the health care system and society increases HIV, IPV and drug use



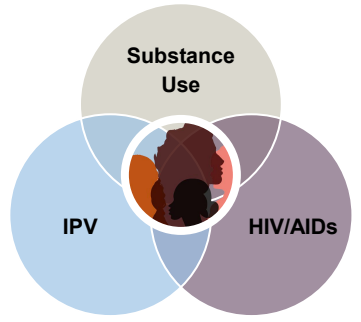
Only **1 in 10 women** who need substance use treatment are receiving it.

# Gendered barriers to substance use treatment that increase IPV and HIV

- Drug treatment programs have typically been designed for the health needs of men
- Women report that the environment seems unwelcoming and the services offered do not target their needs such as Sexual and reproductive health and IPV
- Lack of culturally tailored approaches to address women of color
- Many discontinue treatment due to gendered roles as caretakers, family responsibilities, and work
- Inability to access IPV services. In many cases, domestic violence shelters do not accept women who use drugs



# Unique Treatment Needs of Women



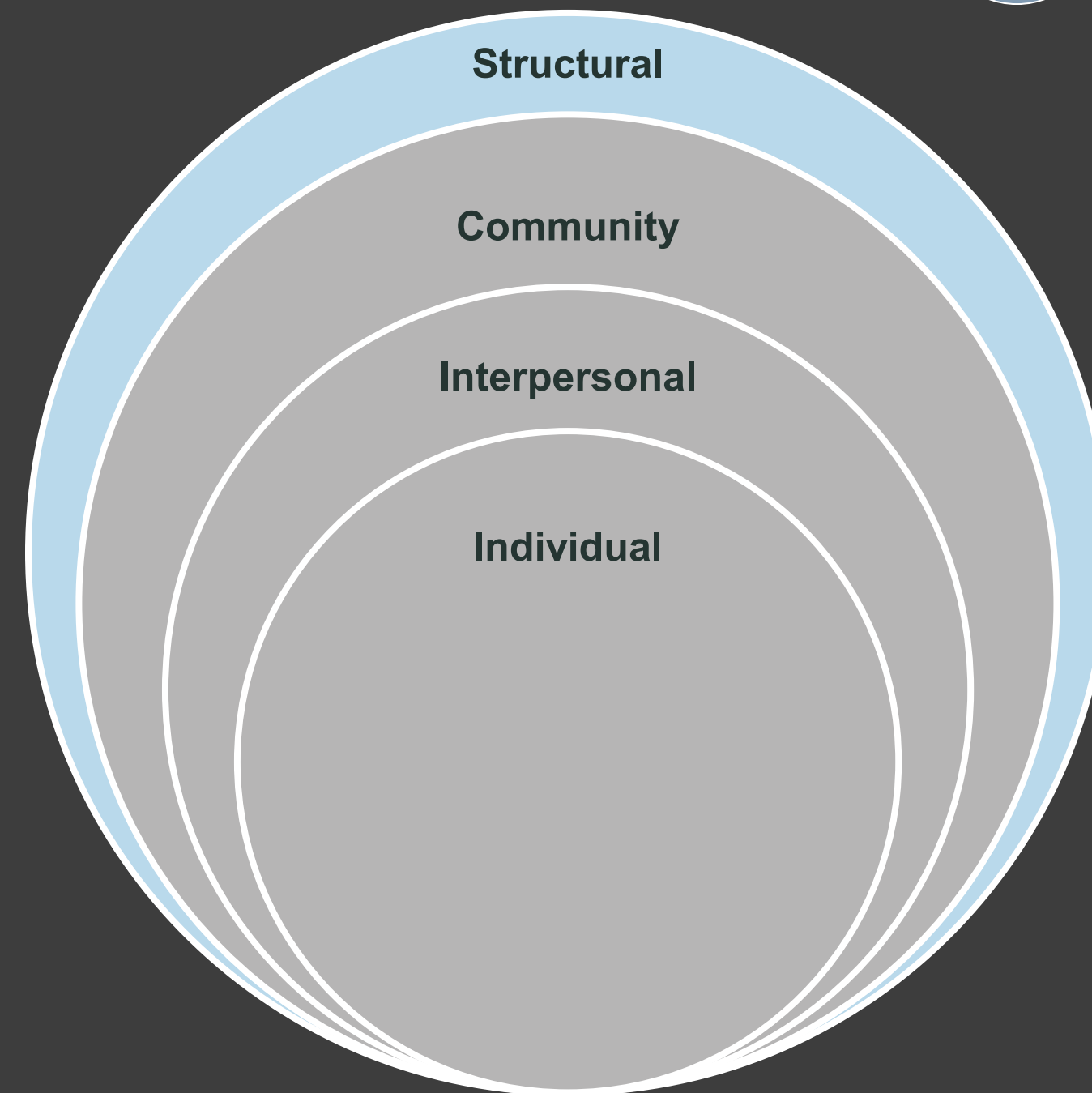
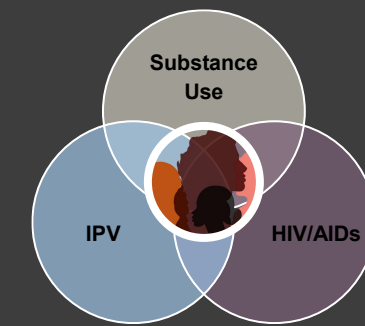
Women who are pregnant or have young children may not seek treatment for fear of having their children removed from their care.

The combined burdens of work, home care, childcare, and other family responsibilities, can make attending treatment untenable.

**Successful treatment may need to provide an increased level of support to address these needs.**

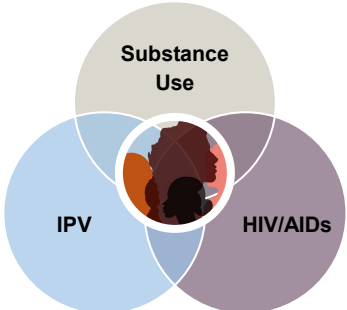
# Structural-level factors

- Criminalization of drug use, sex work and HIV



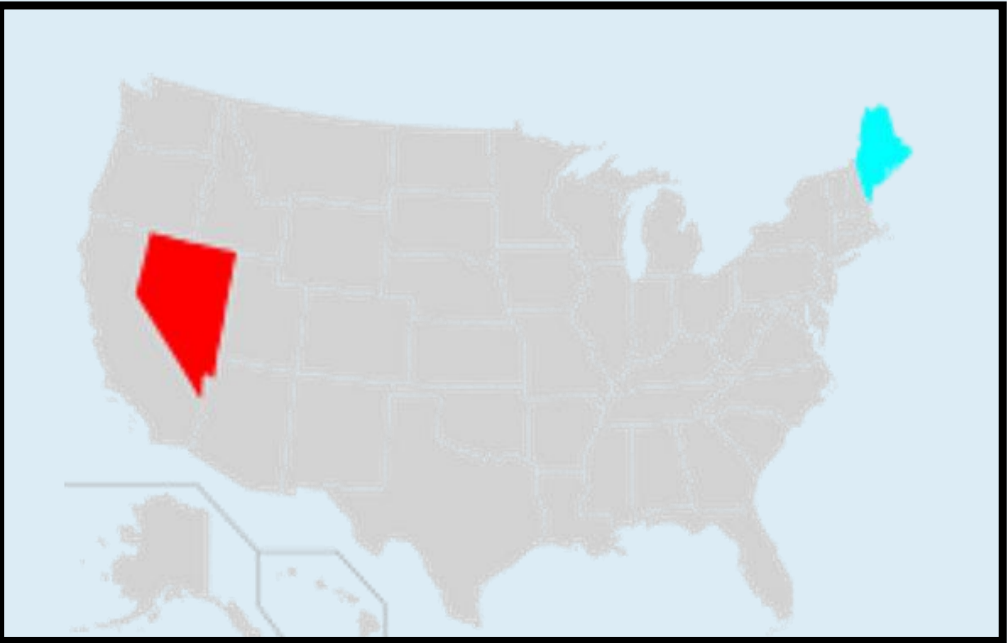


# Harmful laws reinforce stigma and increase risk of violence for women at risk for HIV and living with HIV

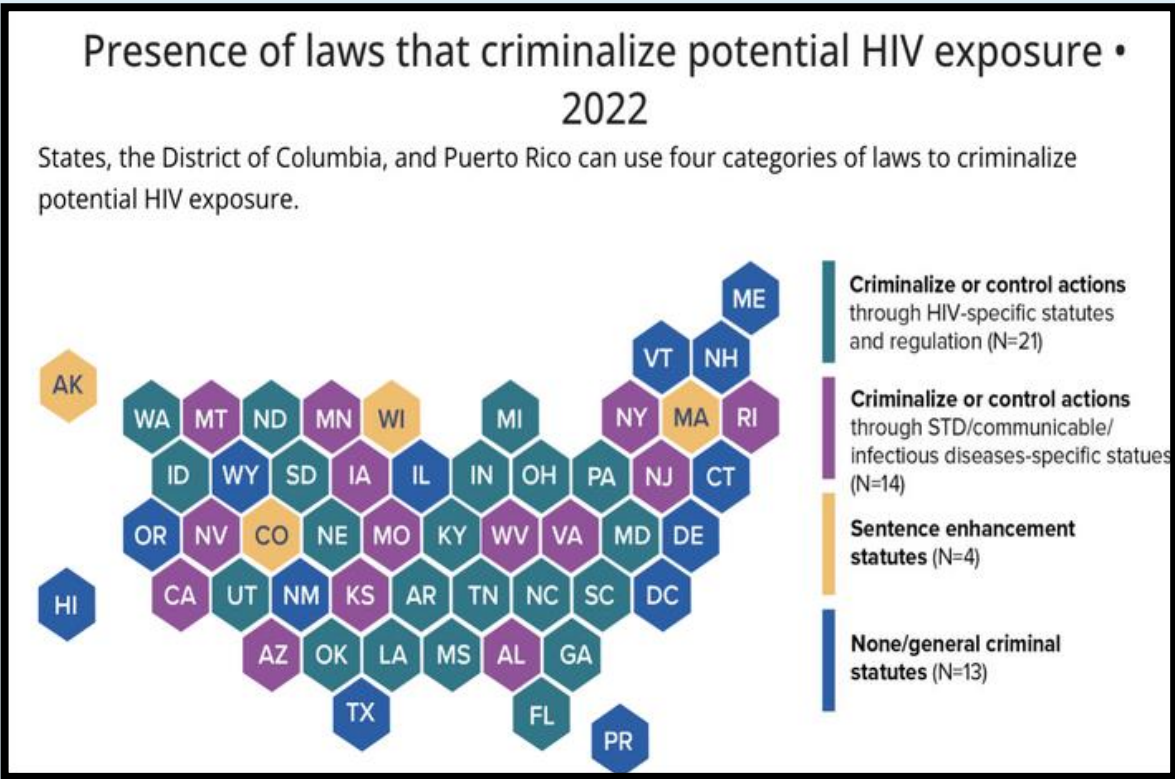


## Nearly all states criminalize sex work

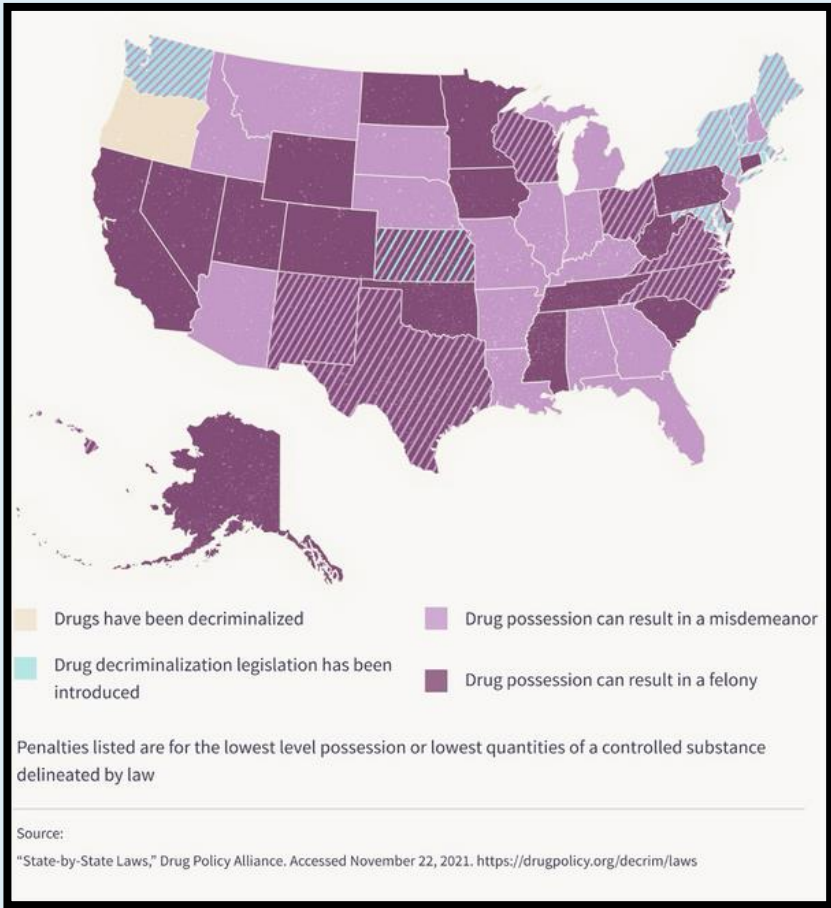
Sex work is legal (in certain parts) in Nevada, and decriminalized in Maine



## 35 states have laws that criminalize HIV exposure

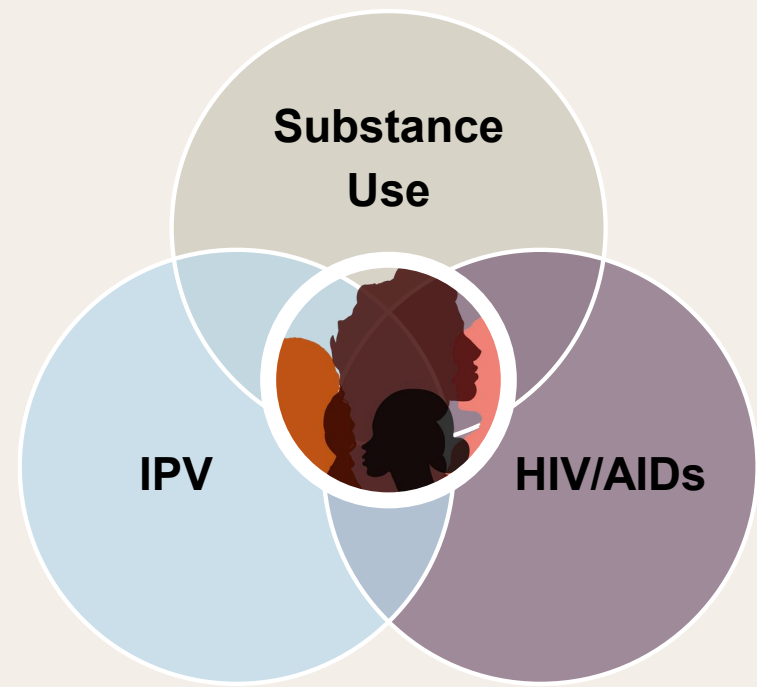


## Nearly all states criminalize some aspect of drug use

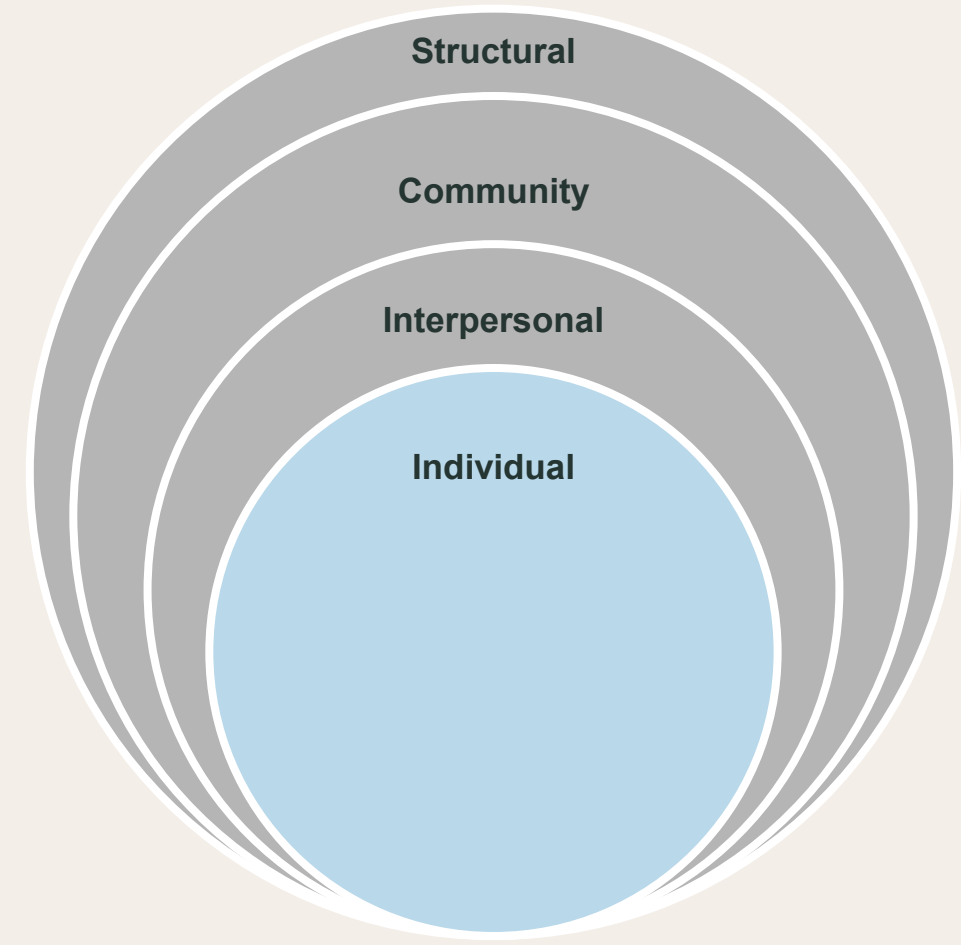


# What can we do about it?

## Interventions



# Individual SAVVA Interventions



# SIG has developed and evaluated interventions at the intersection of HIV, IPV and substance use since 2000



## Intervening on the Intersecting Issues of Intimate Partner Violence, Substance Use, and HIV: A Review of Social Intervention Group's (SIG) Syndemic-Focused Interventions for Women

Research on Social Work Practice  
2023, Vol. 33(2) 178–192  
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SAGE

Louisa Gilbert<sup>1</sup> , Claudia Stoicescu<sup>1,2</sup>, Dawn Goddard-Eckrich<sup>1</sup> , Anindita Dasgupta<sup>1</sup>, Ariel Richer<sup>1</sup>, Shoshana N. Benjamin<sup>1</sup> , Elwin Wu<sup>1</sup>, and Nabila El-Bassel<sup>1</sup> 

### Abstract

Intimate partner violence (IPV), HIV, and substance use are serious intersecting public health issues. This paper aims to describe the Social Intervention Group (SIG)'s syndemic-focused interventions for women that address the co-occurrence of IPV, HIV, and substance use, referred to as the SAVA syndemic. We reviewed SIG intervention studies from 2000 to 2020 that evaluated the effectiveness of syndemic-focused interventions which addressed two or more outcomes related to reducing IPV, HIV, and substance use among different populations of women who use drugs. This review identified five interventions that co-targeted SAVA outcomes. Of the five interventions, four showed a significant reduction in risks for two or more outcomes related to IPV, substance use, and HIV. The significant effects of SIG's interventions on IPV, substance use, and HIV outcomes among different populations of women demonstrate the potential of using syndemic theory and methods in guiding effective SAVA-focused interventions.

### Keywords

syndemic theory, intimate partner violence, drug use, alcohol use, HIV/AIDS, SAVA, syndemic, intervention science

## 5 SIG Studies (funded by NIDA)

- Domestic and Global
- Individual and group levels
- **4 Studies** showed reduction of HIV, IPV and substance use outcomes
- **1 Study** showed reduction of biological outcome (STIs)

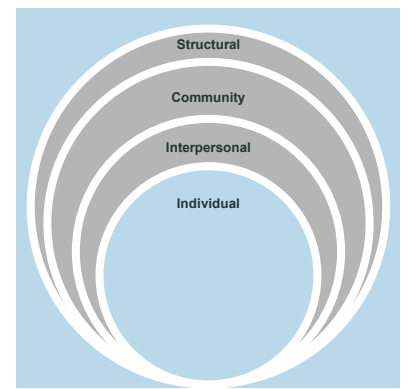
## Methods: RCT evaluated

- Citizen Science
- Community engagement
- Implementation science

Identified as CDC  
best practice  
intervention



# Individual-level Intervention: WORTH



Skills-building, problem-solving, negotiation of safer sex practices and drug risk reduction, alternative ways of negotiation to avoid physical and sexual IPV

Sexual and reproductive health and sexual and drug risk reduction

Safety planning and referrals to services for IPV

HIV testing and linkages to HIV care and drug treatment

Personal goal setting for HIV and IPV risk reduction and staying in care

Identifying unmet service needs and linkage to care

OPEN ACCESS Freely available online

PLOS ONE

**Efficacy of a Group-Based Multimedia HIV Prevention Intervention for Drug-Involved Women under Community Supervision: Project WORTH**

Nabila El-Bassel<sup>1\*</sup>, Louisa Gilbert<sup>1</sup>, Dawn Goddard-Eckrich<sup>1</sup>, Mingway Chang<sup>1</sup>, Elwin Wu<sup>1</sup>, Tim Hunt<sup>1</sup>, Matt Epperson<sup>2</sup>, Stacey A. Shaw<sup>1</sup>, Jessica Rowe<sup>3</sup>, Maria Almonte<sup>4</sup>, Susan Witte<sup>1</sup>

<sup>1</sup> Social Intervention Group, Columbia University, New York, New York, United States of America, <sup>2</sup> School of Social Service Administration, University of Chicago, Chicago, Illinois, United States of America, <sup>3</sup> Columbia Center for New Media Teaching and Learning, New York, New York, United States of America, <sup>4</sup> Bronx Community Solutions, Center for Court Innovation, New York, New York, United States of America

**Abstract**

**Importance:** This study is designed to address the need for evidence-based HIV/STI prevention approaches for drug-involved women under criminal justice community supervision.

**Objective:** We tested the efficacy of a group-based traditional and multimedia HIV/STI prevention intervention (Project WORTH: Women on the Road to Health) among drug-involved women under community supervision.

**Design, Setting, Participants, and Intervention:** We randomized 306 women recruited from community supervision settings to receive either: (1) a four-session traditional group-based HIV/STI prevention intervention (traditional WORTH); (2) a four-session multimedia group-based HIV/STI prevention intervention that covered the same content as traditional WORTH but was delivered in a computerized format; or (3) a four-session group-based Wellness Promotion intervention that served as an attention control condition. The study examined whether the traditional or multimedia WORTH intervention was more efficacious in reducing risks when compared to Wellness Promotion; and whether multimedia WORTH was more efficacious in reducing risks when compared to traditional WORTH.

**Main Outcomes and Measures:** Primary outcomes were assessed over the 12-month post-intervention period and included the number of unprotected sex acts, the proportion of protected sex acts, and consistent condom use. At baseline, 77% of participants reported unprotected vaginal or anal sex (n = 237) and 63% (n = 194) had multiple sex partners.

**Results:** Women assigned to traditional or multimedia WORTH were significantly more likely than women assigned to the control condition to report an increase in the proportion of protected sex acts ( $\beta = 0.10$ ; 95% CI = 0.02–0.18) and a decrease in the number of unprotected sex acts (IRR = 0.72; 95% CI = 0.57–0.90).

**Conclusion and Relevance:** The promising effects of traditional and multimedia WORTH on increasing condom use and high participation rates suggest that WORTH may be scaled up to redress the concentrated epidemics of HIV/STIs among drug-involved women in the criminal justice system.

**Trial Registration:** ClinicalTrials.gov NCT01784809

**Citation:** El-Bassel N, Gilbert L, Goddard-Eckrich D, Chang M, Wu E, et al. (2014) Efficacy of a Group-Based Multimedia HIV Prevention Intervention for Drug-Involved Women under Community Supervision: Project WORTH. PLoS ONE 9(11): e111528. doi:10.1371/journal.pone.0111528

**Editor:** Mark Stoove, Burnet Institute, Australia

**Received:** June 6, 2014; **Accepted:** September 23, 2014; **Published:** November 5, 2014

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**Data Availability:** The authors confirm that all data underlying the findings are fully available without restriction. Data supporting this manuscript have been deposited in Academic Commons (<http://academiccommons.columbia.edu/>), Columbia University's institutional research repository. The permanent URL is <http://dx.doi.org/10.7916/D8N01530>.

**Funding:** The study was funded by the National Institute of Drug Abuse (NIDA) to NE (R01DA025878). The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

**Competing Interests:** The authors have declared that no competing interests exist.

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# Individual-level Intervention: WORTH Outcomes



## Intervening on the Intersecting Issues of Intimate Partner Violence, Substance Use, and HIV: A Review of Social Intervention Group's (SIG) Syndemic-Focused Interventions for Women

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Louisa Gilbert<sup>1</sup> , Claudia Stoicescu<sup>1,2</sup>, Dawn Goddard-Eckrich<sup>1</sup> , Anindita Dasgupta<sup>1</sup>, Ariel Richer<sup>1</sup>, Shoshana N. Benjamin<sup>1</sup> , Elwin Wu<sup>1</sup>, and Nabila El-Bassel<sup>1</sup> 

### Abstract

Intimate partner violence (IPV), HIV, and substance use are serious intersecting public health issues. This paper aims to describe the Social Intervention Group (SIG)'s syndemic-focused interventions for women that address the co-occurrence of IPV, HIV, and substance use, referred to as the SAVA syndemic. We reviewed SIG intervention studies from 2000 to 2020 that evaluated the effectiveness of syndemic-focused interventions which addressed two or more outcomes related to reducing IPV, HIV, and substance use among different populations of women who use drugs. This review identified five interventions that co-targeted SAVA outcomes. Of the five interventions, four showed a significant reduction in risks for two or more outcomes related to IPV, substance use, and HIV. The significant effects of SIG's interventions on IPV, substance use, and HIV outcomes among different populations of women demonstrate the potential of using syndemic theory and methods in guiding effective SAVA-focused interventions.

### Keywords

syndemic theory, intimate partner violence, drug use, alcohol use, HIV/AIDS, SAVA, syndemic, intervention science

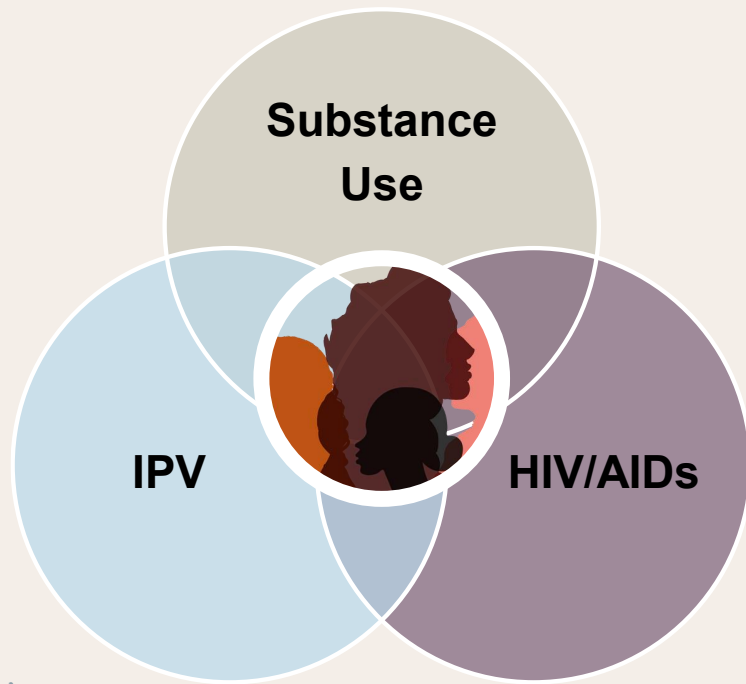
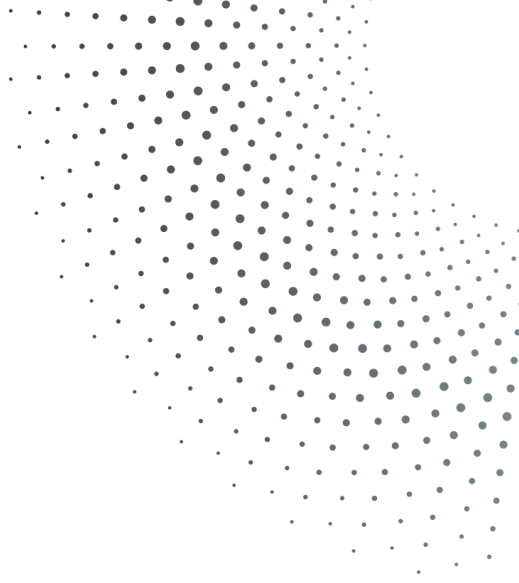
Reduction in the number of unprotected sex acts with their intimate sex partners and Non-intimate partner

More likely to have consistent condom use during sex with their intimate sex partners Non-intimate partner

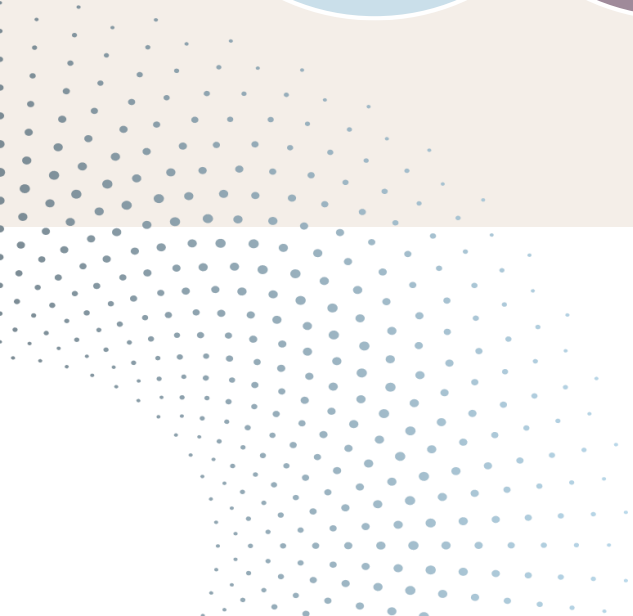
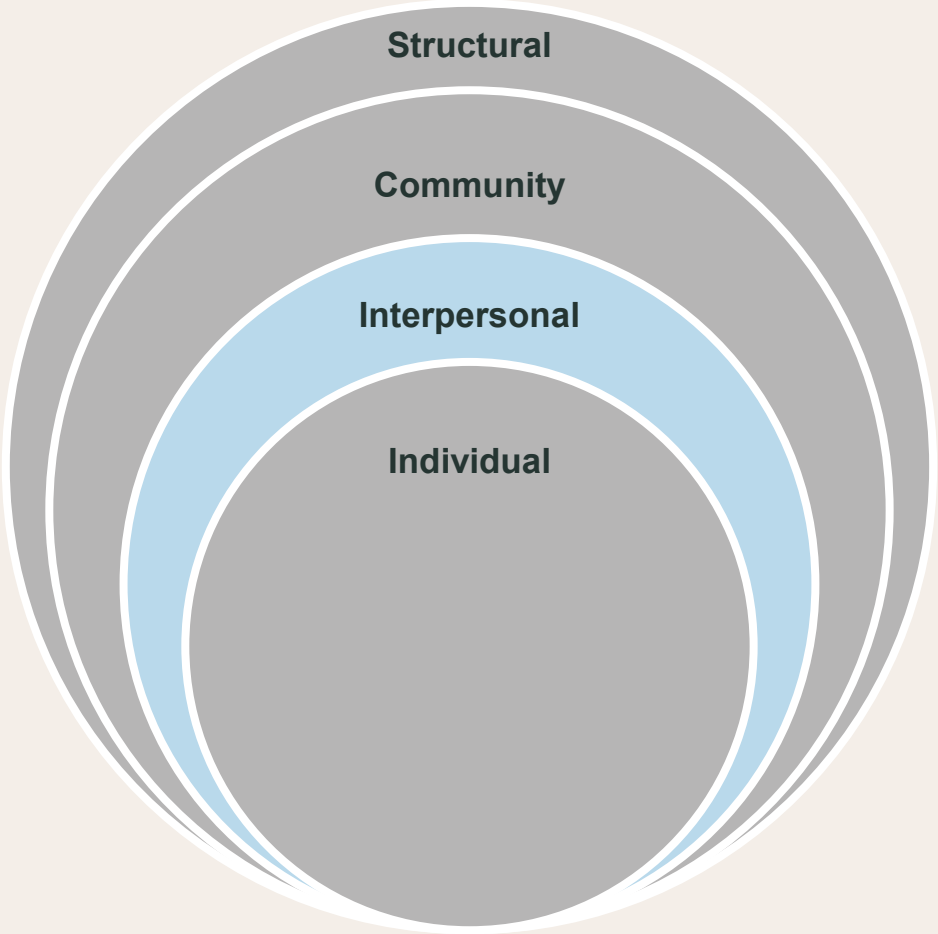
Lower odds of experiencing severe sexual IPV

Reduction of STIs

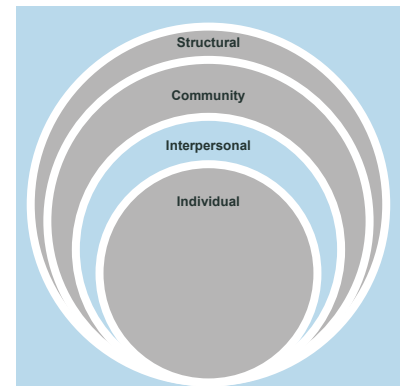
Linkage to services and increase safety planning



# Couple-Based SAVA Interventions










# 9 Couple-Based Interventions



## Couple-Based Behavioral HIV Interventions by the Social Intervention Group: Progress, Gaps, and Future Directions

Research on Social Work Practice  
2023, Vol. 33(2) 147–177  
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DOI: 10.1177/10497315221118850  
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SAGE

Nabila El-Bassel<sup>1</sup> , Tim Hunt<sup>1</sup>, Dawn A. Goddard-Eckrich<sup>1</sup> , Mingway Chang<sup>1</sup>, Tara R. McCrimmon<sup>1,2</sup>, Trena Mukherjee<sup>3</sup>, Robert H. Remien<sup>4</sup>, Assel Terlikbayeva<sup>2</sup>, Sholpan Primbetova<sup>2</sup> , Alissa Davis<sup>1</sup> , Tina Jiwatram-Negrón<sup>5</sup>, Shoshana N. Benjamin<sup>1</sup> , Susan S. Witte<sup>1</sup> , Elwin Wu<sup>1</sup>, and Louisa Gilbert<sup>1</sup> 

### Abstract

**Purpose:** This paper reports a review of couple-based behavioral HIV interventions conducted by the Social Intervention Group (SIG); and addresses gaps, future directions, and implications for couple-based HIV interventions. **Method:** We performed a literature review for SIG research on intervention and prevention studies involving couples/partners. **Results:** We identified nine couple-based interventions. Outcomes included reduced sexual and substance use-related risk behaviors and improved use of anti-retroviral treatment. We conducted these studies in diverse venues, including needle/syringe exchange programs, primary care clinics, and criminal justice settings. **Conclusions:** The findings of this review provide strong evidence for the efficacy of couple-based HIV interventions in reducing sexual HIV risks and linkage to HIV and substance-use treatment. SIG has advanced couple-based HIV intervention research science by improving study design, intervention core components, conceptual models, and implementation strategies; which have informed scientific directions and transformed couple-based HIV prevention research.

### Keywords

HIV, behavioral intervention, couple-based, prevention, drug-use, implementation science

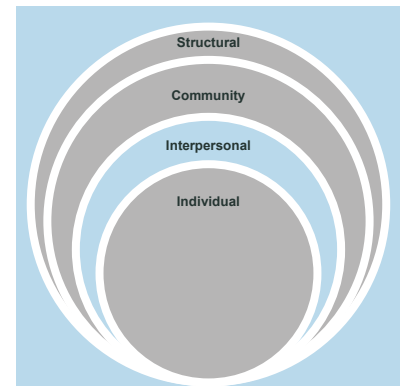
- 7 studies with women and their male sex partners
- 1 with MSM couples
- 1 combination of MSM and heterosexual couples
- 8 evaluated through RCTs

### Modality:

Mostly dyadic, combination of sessions with a group of couples, single-gender groups



# Interpersonal-level Intervention: PACT



## Core Components

- Drug and sexual risk disclosure
- Enhancement of couple communication, social support and goal setting
- Skills for condom use and negotiation
- Biomedical HIV prevention strategies
- Harm reduction
- Education on overdose
- Addresses reproductive health issues, sexual coercion, and IPV
- Linkages to HIV, STI and substance use treatment

Original Investigation | Infectious Diseases

### Effectiveness of a Couple-Based HIV and Sexually Transmitted Infection Prevention Intervention for Men in Community Supervision Programs and Their Female Sexual Partners A Randomized Clinical Trial

Nabila El Basal, PhD; Louisa Gilbert, PhD; Dawn Goddard-Eckrich, EdD; Mingway Chang, PhD; Elwin Wu, PhD; Sharon Goodwin, BS; Richard Tibbetts, MS; Maria Almoré-Weston, MSW; Timothy Hunt, PhD

#### Abstract

**IMPORTANCE** In the United States, the prevalence rates of HIV and sexually transmitted infections (STIs) are higher among individuals in community supervision programs (CSPs) than in the general population. However, to date, no couple-based HIV or STI prevention interventions have been implemented for the large number of men in CSPs.

**OBJECTIVE** To determine the effectiveness of a 5-session couple-based prevention intervention, compared with a 1-session counseling, testing, and referral (CTR) program, in reducing HIV and STIs as well as condomless intercourse among men in CSPs and their female sexual partners.

**DESIGN, SETTING, AND PARTICIPANTS** A randomized clinical trial was conducted from July 11, 2013 (first recruitment), through May 17, 2016 (last randomization). Participants were drug-involved men mandated to a CSP and their female sexual partners (n = 230 couples or 460 individuals). Participants were recruited from various CSP sites in New York, New York, and randomized into either the PACT (Protect and Connect) intervention condition or the HIV CTR control condition (n = 115 couples or 230 individuals in each arm). Analysis of behavioral outcomes used an intent-to-treat approach. Statistical analyses were conducted from November 1, 2017, through June 1, 2018.

**MAIN OUTCOMES AND MEASURES** Self-reported data on sexual behaviors in the past 90 days were used to assess behavioral outcomes at all time points. Biomarkers were collected at baseline and 12 months, and behavioral outcomes were collected at baseline and 3, 6, and 12 months.

**RESULTS** A total of 230 couples (460 individuals) were included. The mean (SD) age of participants was 35.0 (12.8) years, and most participants (341 [74.1%]) self-identified as black or African American race/ethnicity. Of the 18 new cases of STIs identified at the 12-month assessment, 10 came from the PACT arm and 8 from the HIV CTR control arm. Compared with the control participants, PACT participants had 33% fewer acts of condomless vaginal and/or anal intercourse with their main partner (incidence rate ratio [IRR], 0.67; 95% CI, 0.45-0.99; P = .04), 70% fewer acts with other partners (IRR, 0.30; 95% CI, 0.12-0.74; P = .009), and 40% fewer acts with all sexual partners (IRR, 0.60; 95% CI, 0.42-0.85; P = .005) over the entire follow-up period. In addition, PACT participants were less likely to report being under the influence of drugs or alcohol the last time they had vaginal and/or anal intercourse with their study partners (odds ratio, 0.55; 95% CI, 0.31-0.96; P = .04) and had 26% fewer sexual partners in the past 90 days (IRR, 0.74; 95% CI, 0.61-0.88; P = .001). At 12 months, HIV and STI incidence did not differ significantly between the 2 arms.

#### Key Points

**Question** Is a 5-session prevention intervention for HIV and sexually transmitted infections effective in reducing sexual risk behaviors among men in a community supervision program and their main female sexual partners?

**Findings** In this randomized clinical trial of 230 couples, participants randomized to the 5-session couple-based prevention intervention arm reported significantly fewer incidences of unprotected sex, fewer sexual partners, and fewer sexual activities with other partners compared with participants randomized to a 1-session counseling, testing, and referral program.

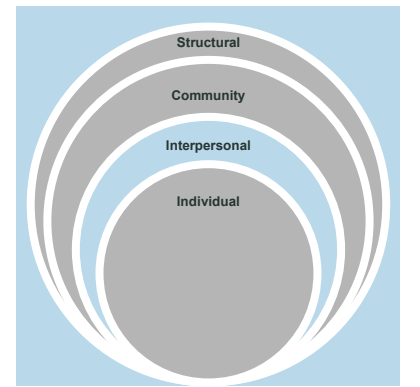
**Meaning** Couple-based HIV and sexually transmitted disease prevention interventions appeared to have a substantial effect on reducing risky sexual behaviors.

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Author affiliations and article information are listed at the end of this article.

# 9 Couple-Based Interventions



## Couple-Based Behavioral HIV Interventions by the Social Intervention Group: Progress, Gaps, and Future Directions

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Nabila El-Bassel<sup>1</sup> , Tim Hunt<sup>1</sup>, Dawn A. Goddard-Eckrich<sup>1</sup> , Mingway Chang<sup>1</sup>, Tara R. McCrimmon<sup>1,2</sup>, Trena Mukherjee<sup>3</sup>, Robert H. Remien<sup>4</sup>, Assel Terlikbayeva<sup>2</sup>, Sholpan Primbetova<sup>2</sup> , Alissa Davis<sup>1</sup> , Tina Jiwatram-Negrón<sup>5</sup>, Shoshana N. Benjamin<sup>1</sup> , Susan S. Witte<sup>1</sup> , Elwin Wu<sup>1</sup>, and Louisa Gilbert<sup>1</sup> 

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### Keywords

HIV, behavioral intervention, couple-based, prevention, drug-use, implementation science

## Intervention Outcomes

Reduced drug use and unsafe injection, non-fatal overdose

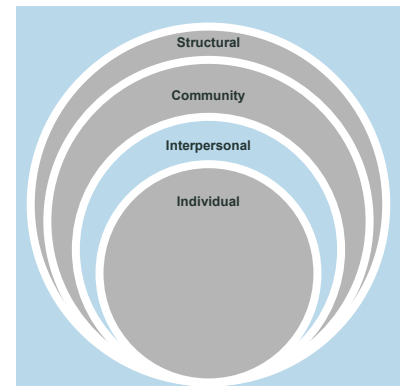
Increased condom use

Increased access to treatment and services

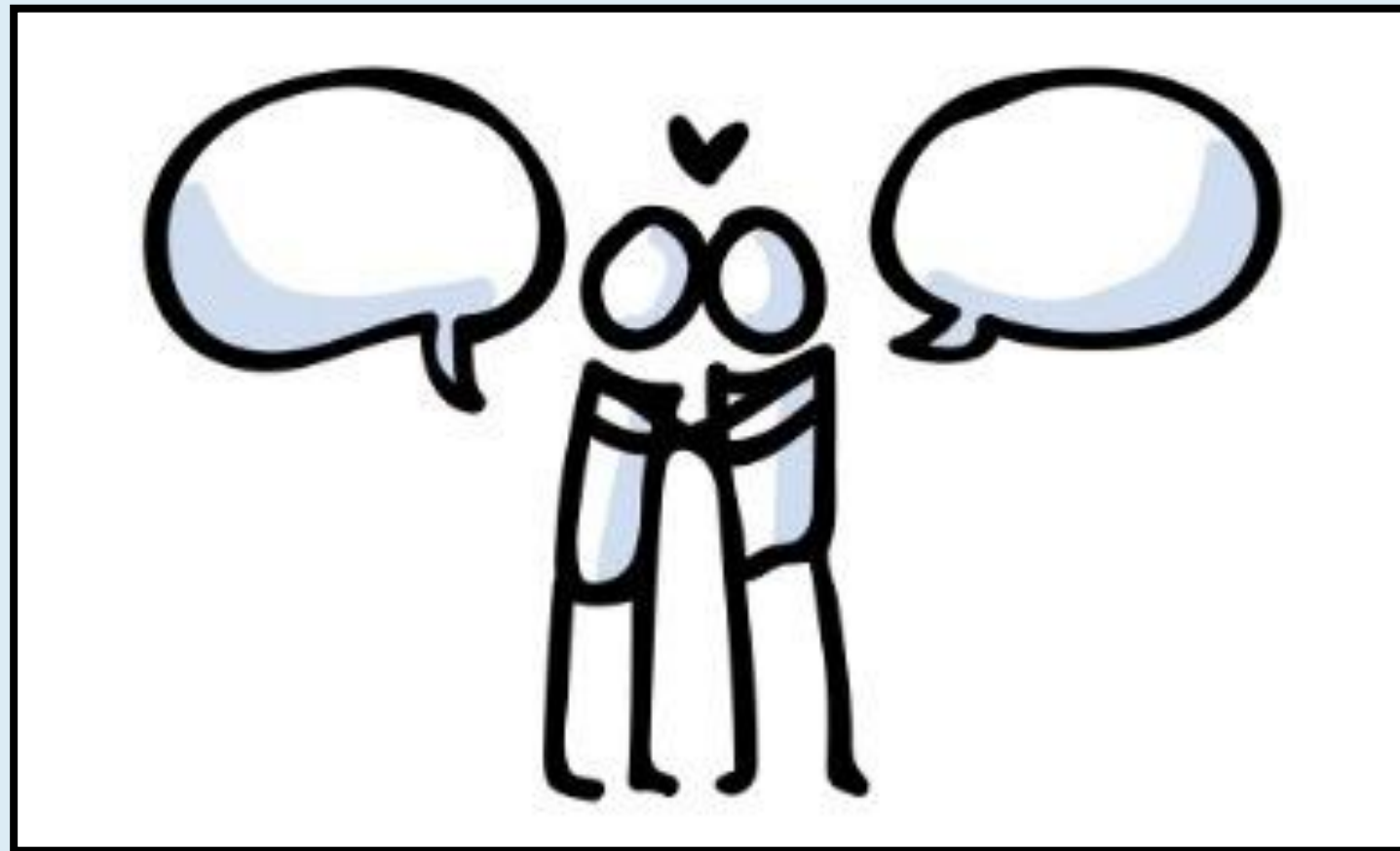
Reduced IPV

Less likely to be under the influence of drugs or alcohol the last time they had vaginal and/or anal intercourse with their main partners

# Advantages of a Couple-Based HIV Approach

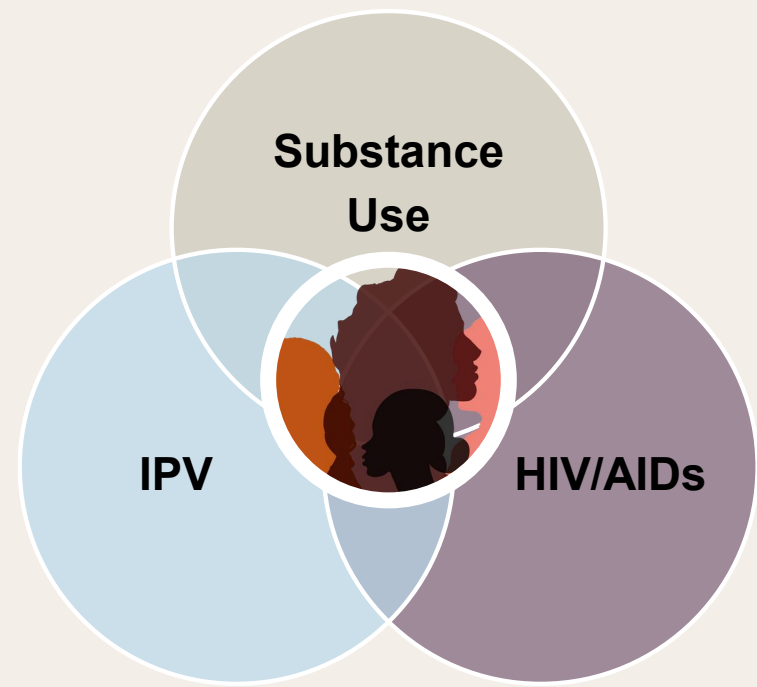


- Responsibility for HIV risk reduction is placed on both members of the dyad
- Improves communication skills by creating a safe environment to discuss sensitive topics:
  - Sexual concurrency
  - Power imbalances, sexual coercion
  - Pregnancy decision-making and safety
  - Disclosure to each other of extra- dyadic partners, history of HCV/STIs, present or past experiences in abusive relationships

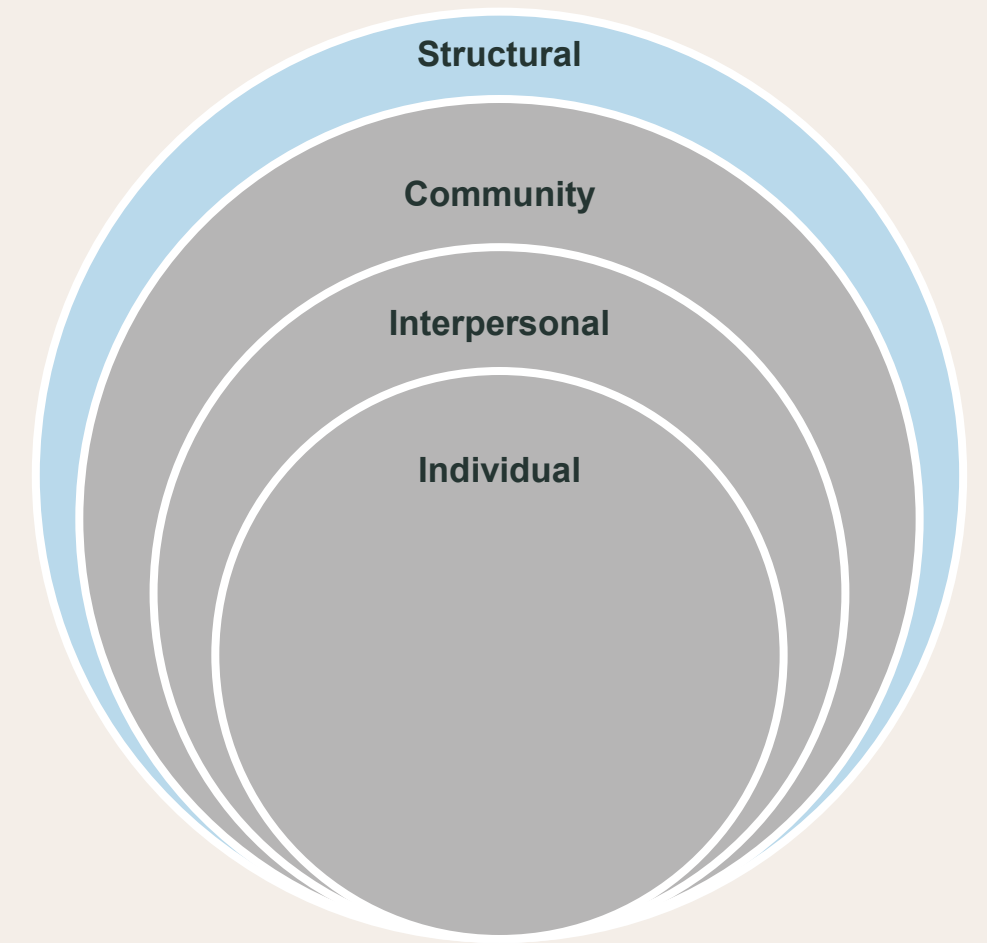


## Challenge

Requires increased funding to treat the dyad as the unit of change, rather than an individual client. Service providers must also be trained to focus on the dyad.

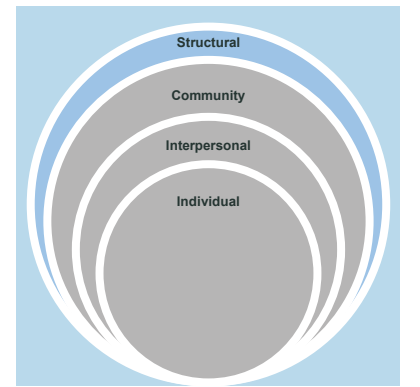


# Structural SAVA Interventions



# Structural-level intervention: NOVA

NOVA



El-Bassel N et al. *Journal of the International AIDS Society* 2021, 24:e25682  
<http://onlinelibrary.wiley.com/doi/10.1002/jia2.25682/full> | <https://doi.org/10.1002/jia2.25682>

**JIAS**  
JOURNAL OF THE INTERNATIONAL AIDS SOCIETY

RESEARCH ARTICLE

## A cluster-randomized controlled trial of a combination HIV risk reduction and microfinance intervention for female sex workers who use drugs in Kazakhstan

Nabila El-Bassel<sup>1,5</sup>, Tara McCrimmon<sup>1</sup>, Gaukhar Mergenova<sup>2</sup>, Mingway Chang<sup>1</sup>, Assel Terlikbayeva<sup>2</sup>, Sholpan Primbetova<sup>2</sup>, Azamat Kuskulov<sup>2</sup>, Bauyrzhan Baiserkin<sup>3</sup>, Alfiya Denebayeva<sup>4</sup>, Kulpan Kurmetova<sup>5</sup> and Susan S. Witte<sup>1</sup>

<sup>5</sup>Corresponding Author: Nabila El-Bassel, Global Health Research Center of Central Asia, Columbia University School of Social Work, 1255 Amsterdam Ave, New York, NY, 10027, USA. Tel: +1 212 851 2391. [nel5@columbia.edu](mailto:nel5@columbia.edu)  
Clinical Trial Number: NCT02405482. Registered March 30<sup>th</sup>, 2015.

**Abstract**  
**Introduction:** Female sex workers (FSW) who use drugs are a key population at risk of HIV in Kazakhstan, and face multiple structural barriers to HIV prevention. More research is needed on the role of structural interventions such as microfinance (MF) in reducing HIV risk. This paper describes the results of a cluster-randomized controlled trial to test the efficacy of a combination HIVRR + MF intervention in reducing biologically confirmed STIs and HIV risk behaviours.  
**Methods:** This study took place from May 2015 to October 2018 in two cities in Kazakhstan. Participants were randomized to receive either a combination HIVRR + MF intervention, or that same intervention plus 30 additional sessions of financial asset-building through a matched-savings programme. Repeated behavioural and biological primary outcomes were assessed at baseline, 3-, 6- and 12-months post-intervention. Biological and behavioural primary outcomes included HIV risk behaviours and drug use risk behaviours, evaluated over the 12-month period.  
**Results:** Over the 12-month follow-up period, few differences in study outcomes were observed between the two groups. There was one newly-detected HIV case, and study arms did not significantly differ on any outcomes compared to baseline, both HIVRR and HIVRR + MF participants showed significant improvements in financial outcomes, condom use attitudes and medical care. In addition, HIVRR + MF participants showed a 72% greater reduction in paying partners at the six-month assessment (IRR = IRR = 0.28, 95% CI = 0.05-0.51) compared to HIVRR alone. The proportion of income from sex work at the three-month assessment ( $b = -0.03$ ) was significantly lower for HIVRR + MF participants than HIVRR alone. HIVRR + MF participants also showed significantly improved performance on HIVRR over the 12-month follow-up period.  
**Conclusions:** Compared to a combination HIVRR + MF intervention, a robust HIVRR + MF intervention may reduce sexual and drug risk behaviours among FSW who use drugs. There may be additional benefits to microfinance for HIV risk reduction among this population.  
**Keywords:** structural interventions; sex workers; drug use; HIV prevention; clinical trial

*AIDS and Behavior* (2023) 27:4084–4093  
<https://doi.org/10.1007/s10461-023-04122-z>

ORIGINAL PAPER

## Reducing Partner Violence Against Women who Exchange Sex and use Drugs through a Combination Microfinance and HIV Risk Reduction Intervention: A Cluster Randomized Trial

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Accepted: 19 June 2023 / Published online: 30 June 2023  
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**Abstract**  
Women who exchange sex and use drugs (WESUD) are at high risk for HIV infection and partner violence. The few tested interventions at the intersection of HIV and IPV show mixed results. This analysis examined the impact of a combination HIV risk reduction (HIVRR) and microfinance (MF) intervention on reported paying and intimate partner violence against WESUD in Kazakhstan. This cluster randomized controlled trial enrolled 354 women from 2015 to 2018 and randomized them to either a combination of HIVRR and MF intervention or HIVRR alone. Outcomes were assessed at four time points over 15 months. Logistic regression within a Bayesian approach assessed change in odds ratio (OR) of recent physical, psychological, or sexual violence perpetrated by current or past intimate partners; and paying partners/clients by study arm over time. Compared to the control arm, the combination intervention decreased the odds of participants experiencing physical violence from past intimate partners by 14% (OR=0.861, p=0.049). Women in the intervention group reported significantly lower rates of sexual violence from paying partners (HIVRR+MF - HIVRR: 25.9%; OR=0.741, p=0.019) at 12-month follow-up. No significant differences in rates from current intimate partners were found. A combination HIVRR and microfinance intervention may reduce gender-based violence from paying and intimate partners among WESUD above and beyond HIVRR interventions alone. Future research should examine how microfinance reduces partner violence and how to implement combination interventions in diverse settings.

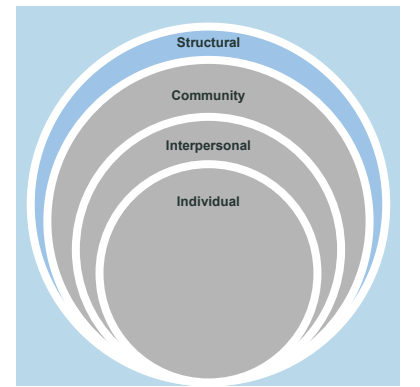
## Core Components

- HIV risk reduction
- Financial literacy
- Vocational training
- Microfinance to increase skilled worker employment and economic opportunities
- Matched savings to promote asset building

# Structural-level intervention: NOVA



**NOVA**



## Financial Literacy Training

*6 Sessions, 2 hours each*

Building familiarity with banking services, opening an account, budgeting, financial negotiations, saving, paying debts, prioritizing expenses (drugs, alcohol, etc.)

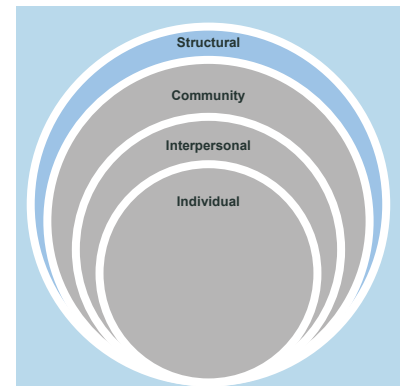
## Matched Savings

Participants given the option to save the incentive received for each session attended:

- Deposited in official bank account or held at program's "Nova" account
- Nova matched funds saved at a 1:1 ratio
- Participants used matched money to purchase equipment for future professional activity

# Structural-level intervention: NOVA

NOVA



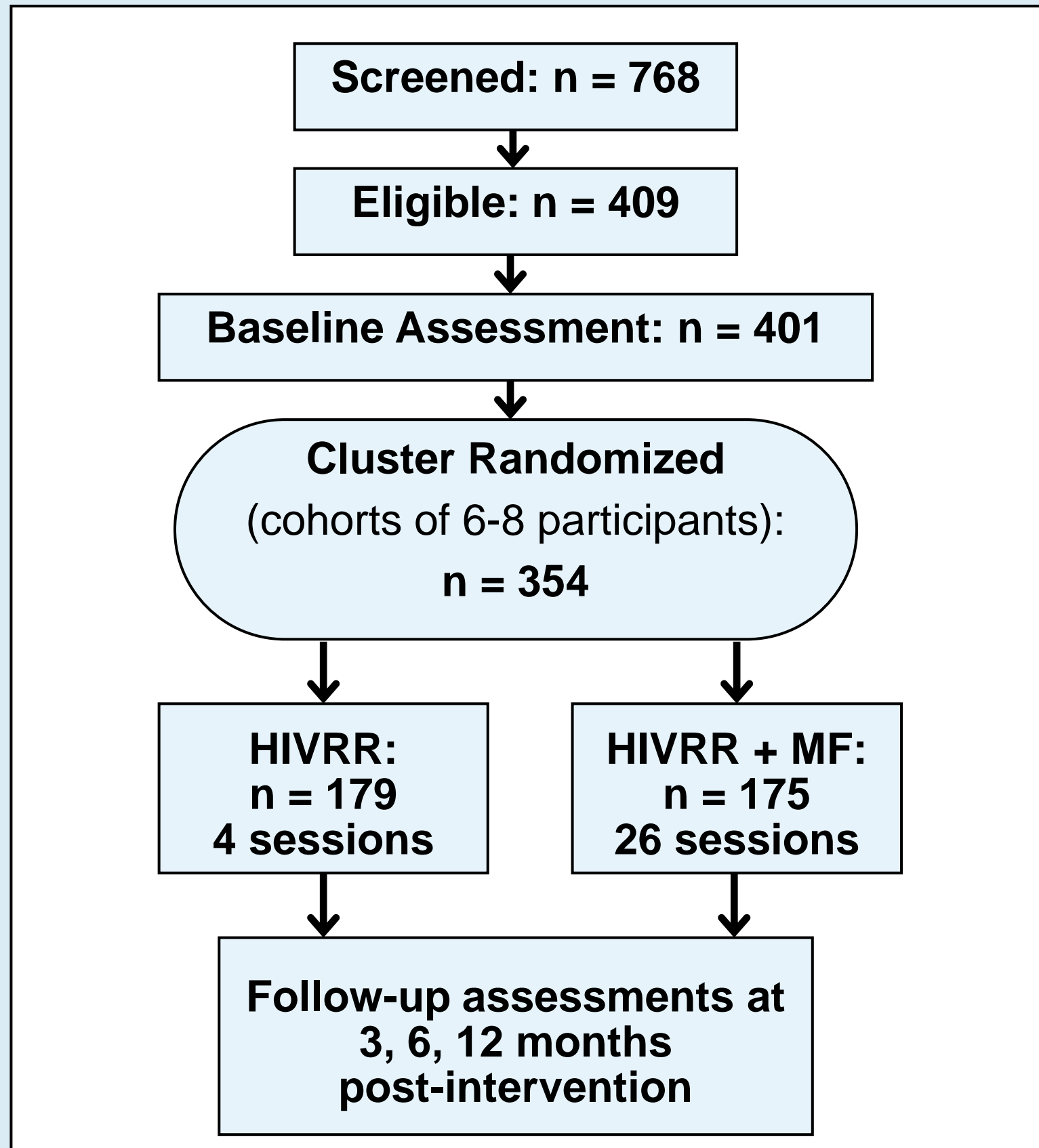
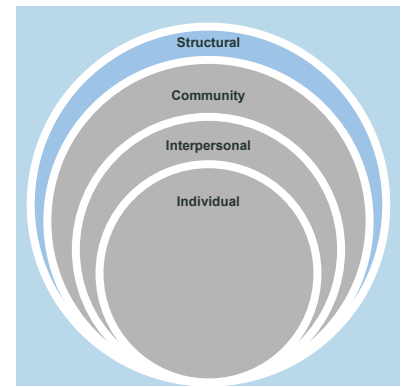
## Vocational Training

*24 Sessions over 2 Months*

- Hair dressing/styling
- Sewing Machine Operator



# NOVA Study & Outcomes



## Outcomes of HIVRR+MF participants Vs. HIVRR participants, at 6 months

**72% greater reduction** in the number of unprotected paid sex acts  
(IRR = IRR = 0.28, 95% CI = 0.08, 0.92)

**10% greater reduction** in the proportion of income from sex work  
(b = -0.10, 95% CI = -0.17, -0.02)

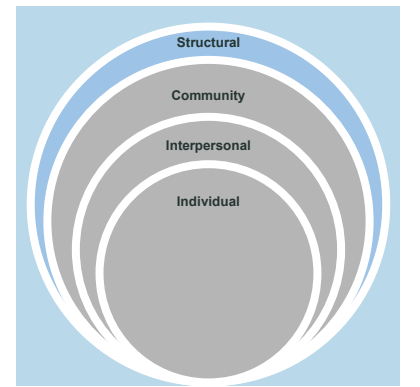
**14% decrease** in physical violence from intimate sexual partners  
(OR = 0.86, p = 0.049)

**26% decrease** in sexual violence from paying partners  
(OR = 0.741, p = 0.019)

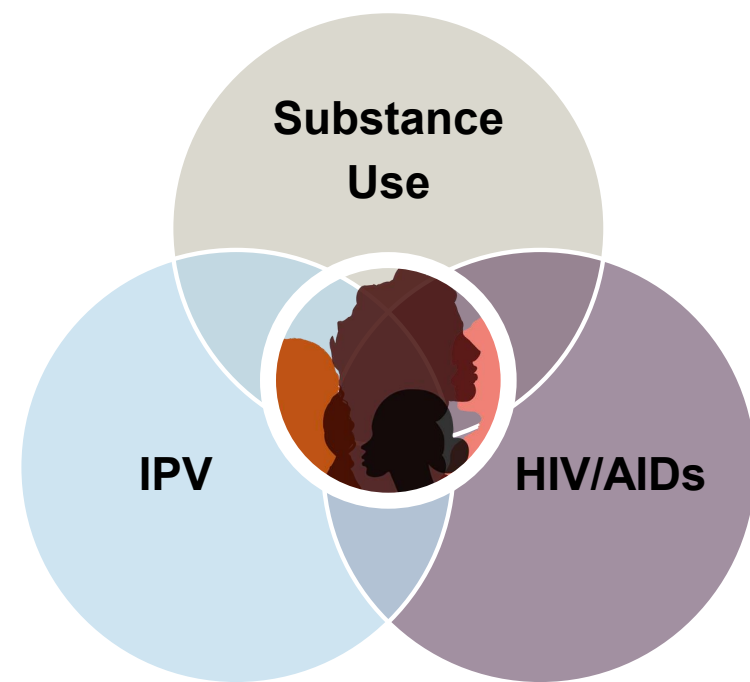


# Structural-level intervention: NOVA

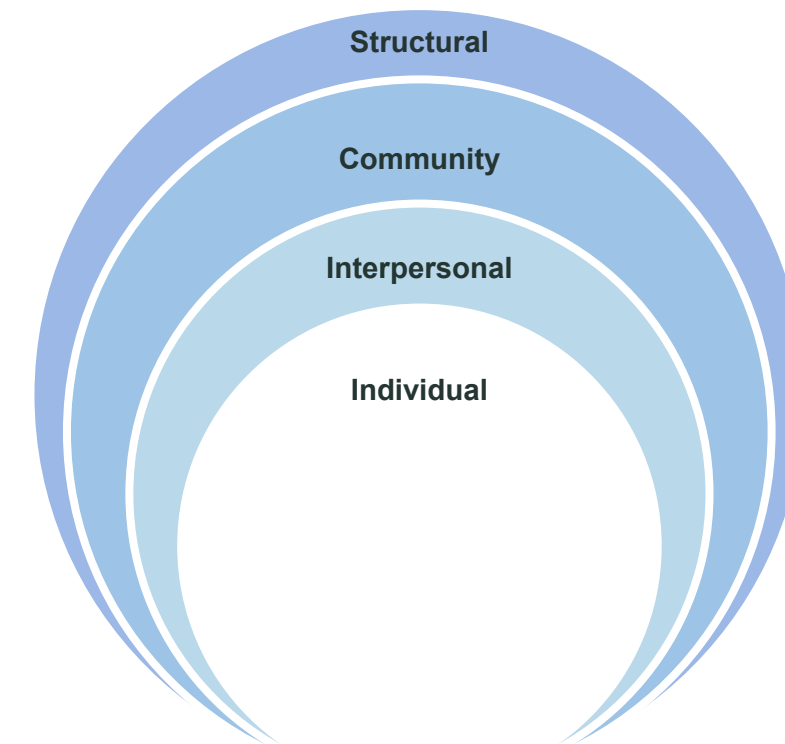
NOVA



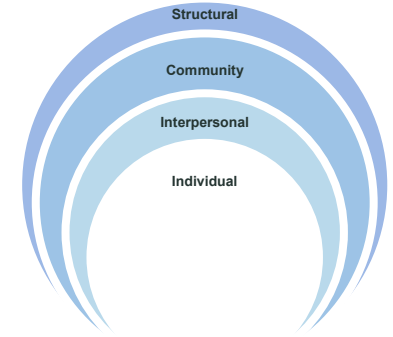
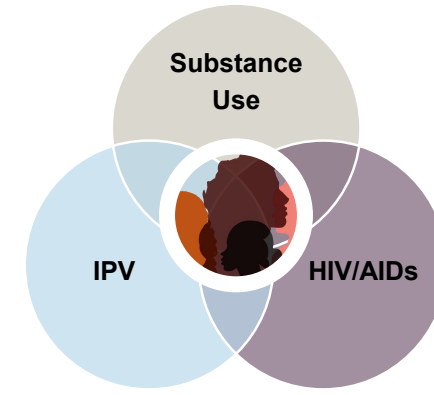
- At 3 months, HIVRR + MF participants reported:
- A **significantly lower average proportion of income from sex work** (0.15 vs. 0.23) than HIVRR
  - **Greater average scores on financial safety** (17.1 vs. 16.4) than HIVRR participants
  - Intervention components were Not sufficient to overcome barriers to successful transition to alternative employment.
  - Environmental barriers such as employment or job availability
  - Stigma or drug use, impeding perceived or real access to employment



# Conclusions



# Multi-level community-driven interventions that address SAVA



More interventions need to be done on couple-based and structural level

AIDS and Behavior (2021) 25:732–747  
<https://doi.org/10.1007/s10461-020-03029-3>

SUBSTANTIVE REVIEW



## Reducing HIV Risk Behaviors Among Black Women Living With and Without HIV/AIDS in the U.S.: A Systematic Review

Amber I. Sophus<sup>1</sup> · Jason W. Mitchell<sup>2</sup>

Accepted: 2 September 2020 / Published online: 12 September 2020  
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### Abstract

This systematic review provides an examination of the status of HIV/AIDS prevention interventions for Black, heterosexual women in the U.S. from 2012 to 2019. Using PRISMA guidelines, 28 interventions were identified. Over half of the interventions were: conducted in the southern region of the U.S.; evaluated using a randomized controlled trial; focused on adults; used a group-based intervention delivery; were behaviorally focused and theoretically driven. None included biomedical strategies of PrEP, nPEP, and TasP. Few interventions included adolescent or aging Black women; none included their sex/romantic partners. Future studies dedicated to addressing the specific needs of subpopulations of Black, heterosexual women may provide opportunities to expand and/or tailor current and future HIV/AIDS prevention interventions, including offering participants with options to choose which, and the level of involvement, of their sex/romantic partner(s) in their sexual health decision-making. While strides to improve HIV prevention efforts with Black, heterosexual women have occurred, more is needed.

Review Article

OPEN

## A State of the Science on HIV Prevention Over 40 Years Among Black and Hispanic/Latinx Communities

S. Raquel Ramos, PhD, MBA, MSN, FNP-BC • LaRon E. Nelson, PhD, RN, FNP, FNAP, FAAN • Sandra Gracia Jones, PhD, RN, ACRN, FAAN • Zhao Ni, PhD, RN • Rodman E. Turpin, PhD • Carmen J. Portillo, PhD, RN, FAAN\*

### Abstract

We present a state of the science on HIV behavioral prevention interventions in Black and Hispanic/Latinx communities. The purpose of this article is threefold: (a) highlight the early documented underlying social and political barriers that constrained interventions to prevent new HIV infections; (b) address the structural inequities in HIV prevention and treatment; and (c) describe the need for increasing HIV multilevel prevention interventions that support greater HIV testing and pre-exposure prophylaxis uptake. To address HIV prevention, multilevel interventions that address individual, structural, and social level components have demonstrated more sustainable outcomes. Implications for research and clinical practice include (a) updating antiquated curricula in nursing, medicine, and public health that perpetuate racial, structural-level inequities and (b) increasing the pipeline for Black and Hispanic/Latinx persons to pursue research or clinical-focused doctorate degrees.

**Key words:** Behavioral interventions, HIV, racism, review, sexual and gender minorities

AIDS and Behavior (2018) 22:3244–3263  
<https://doi.org/10.1007/s10461-017-2020-2>

SUBSTANTIVE REVIEW



## Interventions that Address Intimate Partner Violence and HIV Among Women: A Systematic Review

Khiya J. Marshall<sup>1</sup> · Dawnovise N. Fowler<sup>1</sup> · Mikel L. Walters<sup>2</sup> · Amanda B. Doreson<sup>2</sup>

Published online: 8 January 2018  
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### Abstract

Recognizing the high prevalence of human immunodeficiency virus (HIV)-positive women and girls who are either at risk for or suffer from intimate partner violence (IPV) and the overlapping challenges posed by both public health issues, the White House established an Interagency Federal Working Group to address the intersection of both public health issues in 2012. We conducted this systematic review in response to the Working Group's charge to identify and describe interventions that address both IPV and HIV among women. We identified 14 studies that met our inclusion criteria, including seven studies (nine unique intervention arms) that significantly affected at least one outcome related to IPV and HIV. In this article, we examine the characteristics of these studies including core components, intervention populations, and effectiveness data. We highlight opportunities to improve the effectiveness of existing interventions, guide future research about IPV and HIV, and inform prevention programmatic delivery. This knowledge will improve the lives of populations at risk, reduce gender-related health disparities, and ultimately reduce the societal burden of both public health issues.

## Intervening on the Intersecting Issues of Intimate Partner Violence, Substance Use, and HIV: A Review of Social Intervention Group's (SIG) Syndemic-Focused Interventions for Women

Louisa Gilbert<sup>1</sup> · Claudia Stoicescu<sup>1,2</sup> · Dawn Goddard-Eckrich<sup>1</sup> · Anindita Dasgupta<sup>1</sup> · Ariel Richer<sup>1</sup> · Shoshana N. Benjamin<sup>1</sup> · Elwin Wu<sup>1</sup> · and Nabila El-Bassel<sup>1</sup>

### Abstract

Intimate partner violence (IPV), HIV, and substance use are serious intersecting public health issues. This paper aims to describe the Social Intervention Group (SIG)'s syndemic-focused interventions for women that address the co-occurrence of IPV, HIV, and substance use, referred to as the SAVA syndemic. We reviewed SIG intervention studies from 2000 to 2020 that evaluated the effectiveness of syndemic-focused interventions which addressed two or more outcomes related to reducing IPV, HIV, and substance use among different populations of women who use drugs. This review identified five interventions that co-targeted SAVA outcomes. Of the five interventions, four showed a significant reduction in risks for two or more outcomes related to IPV, substance use, and HIV. The significant effects of SIG's interventions on IPV, substance use, and HIV outcomes among different populations of women demonstrate the potential of using syndemic theory and methods in guiding effective SAVA-focused interventions.

### Keywords

syndemic theory, intimate partner violence, drug use, alcohol use, HIV/AIDS, SAVA, syndemic, intervention science

Research on Social Work Practice  
 2023, Vol. 33(2) 178–192  
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 DOI: 10.1177/10497315221121807  
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AIDS and Behavior (2021) 25:3355–3376  
<https://doi.org/10.1007/s10461-021-03181-4>

SUBSTANTIVE REVIEW



## Efficacy of Psychological Interventions Towards the Reduction of High-Risk Sexual Behaviors Among People Living with HIV: A Systematic Review and Meta-analysis, 2010–2020

Hanxi Zhang<sup>1</sup> · Qing Yu<sup>2</sup> · Zheng Li<sup>1</sup> · Xiangfei Xiu<sup>1</sup> · Fan Lv<sup>1</sup> · Mengjie Han<sup>1</sup> · Lu Wang<sup>1</sup>

Accepted: 30 January 2021 / Published online: 8 February 2021  
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### Abstract

People living with HIV/AIDS (PLWH) may be vulnerable to mental illness. As sexual transmission is the leading cause of HIV infection, evidence-based study for the effect of psychological interventions on the change of sexual is needed. To estimate the efficacy of psychological interventions towards reducing unprotected sex and increasing condom use among PLWH. We systematically searched PubMed, Web of Science, EMBASE (OVID), and PsycINFO (OVID) for studies reporting psychological intervention effects on the outcomes of condom use and/or unprotected sex from 2010 to 2020. This review is registered with PROSPERO, CRD42020193640. Of 949 studies, 17 studies were included in this systematic review. Overall, participants in the intervention group reduced sexual risk or condomless sex relative to control groups. The effect was higher for people living with HIV/AIDS (PLWH) than for people living without HIV/AIDS (PW). Psychological interventions were more effective for people living with HIV/AIDS (PLWH) than for people living without HIV/AIDS (PW).

Keywords H

## Review

## Intertwined epidemics: progress, gaps, and opportunities to address intimate partner violence and HIV among key populations of women

Nabila El-Bassel, Trena I Mukherjee, Claudia Stoicescu, Laura E Starbird, Jamila K Stockman, Victoria Frye, Louisa Gilbert

Lancet HIV 2022; 9: e202–13  
 Published Online  
 February 10, 2022  
[https://doi.org/10.1016/S2352-3018\(21\)00325-8](https://doi.org/10.1016/S2352-3018(21)00325-8)

School of Social Work (Prof N El-Bassel PhD, C Stoicescu PhD, Prof I Gilbert PhD) and Department of Epidemiology, Mailman School of Public Health, Columbia University, New York, NY, USA (T I Mukherjee MPH); Centre for Criminology, Oxford Law Faculty (C Stoicescu) and Centre for Evidence-Based Social Intervention, Department of Social Policy and Intervention, University of Oxford, Oxford, UK (C Stoicescu); School of Nursing, University of Pennsylvania, Philadelphia, PA, USA (L E Starbird PhD); Division of Infectious Diseases and

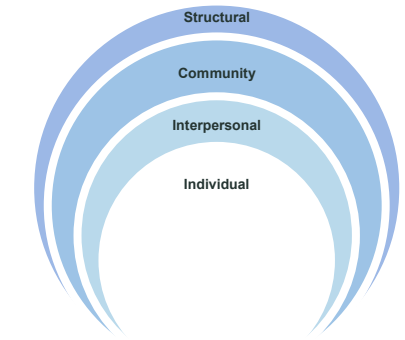
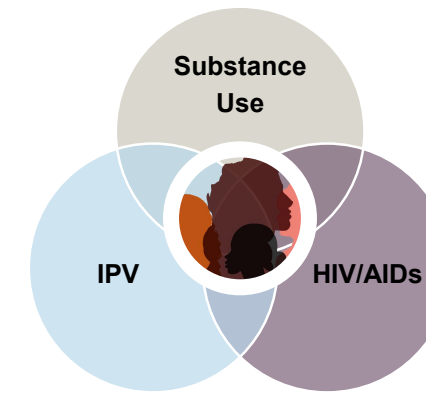
The intersection of intimate partner violence and HIV is a public health problem, particularly among key populations of women, including female sex workers, women who use drugs, and transgender women, and adolescent girls and young women (aged 15–24 years). Intimate partner violence results in greater risk of HIV acquisition and creates barriers to HIV prevention, testing, treatment, and care for key populations of women. Socioecological models can be used to explain the unique multilevel mechanisms linking intimate partner violence and HIV. Few interventions, modelling studies, and economic evaluations that concurrently address both intimate partner violence and HIV exist, with no interventions tailored for transgender populations. Most combination interventions target individual-level risk factors, and rarely consider community or structural factors, or evaluate cost-efficacy. Addressing intimate partner violence is crucial to ending the HIV epidemic; this Review highlights the gaps and opportunities for future research to address the intertwined epidemics of intimate partner violence and HIV among key populations of women

### Introduction

More than 40 years into the HIV/AIDS epidemic, more than half of all new HIV infections occur among women who fall into one or more key populations: female sex workers, women who use drugs, transgender women, and adolescent girls and young women (aged 15–25 years).<sup>1</sup> Compared with the general population of women of reproductive age, the relative risk of acquiring HIV is 30 times greater among female sex workers, 29 times

greater among people who inject drugs, and 13 times greater among transgender people, and 20% of all new HIV infections are among adolescent girls and young women.<sup>1</sup> Extensive research has shown that HIV and intimate partner violence are inexorably linked, particularly among these key populations of women.<sup>2</sup> Women who experience intimate partner violence have a greater risk of HIV acquisition and limited access to HIV prevention, testing, treatment, and care.<sup>1</sup> Common

# To fill GAPS in SAVA Syndemic Intervention Research:



- **Multi-level SAVA interventions** should be developed that target women, men, and couples
- **Structural interventions** are needed to reduce stigma through community-driven approaches
- There should be more **implementation dissemination research** of EBPs of SAVA interventions

## Review



### Intertwined epidemics: progress, gaps, and opportunities to address intimate partner violence and HIV among key populations of women

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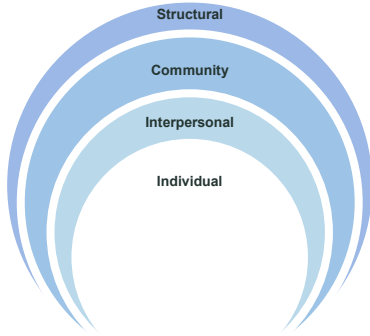
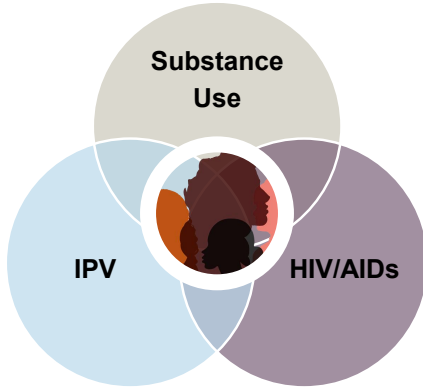
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# To fill GAPS in SAVA Syndemic Intervention Research:



- **Integrating HIV and GBV services** and addressing GBV in HIV care services
- **Funding to support SAVA training** of providers in working with dyads
- **National plans** to address GBV, and gender-specific HIV and substance use treatment for women who use drugs

**Review**

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 **Intertwined epidemics: progress, gaps, and opportunities to address intimate partner violence and HIV among key populations of women**

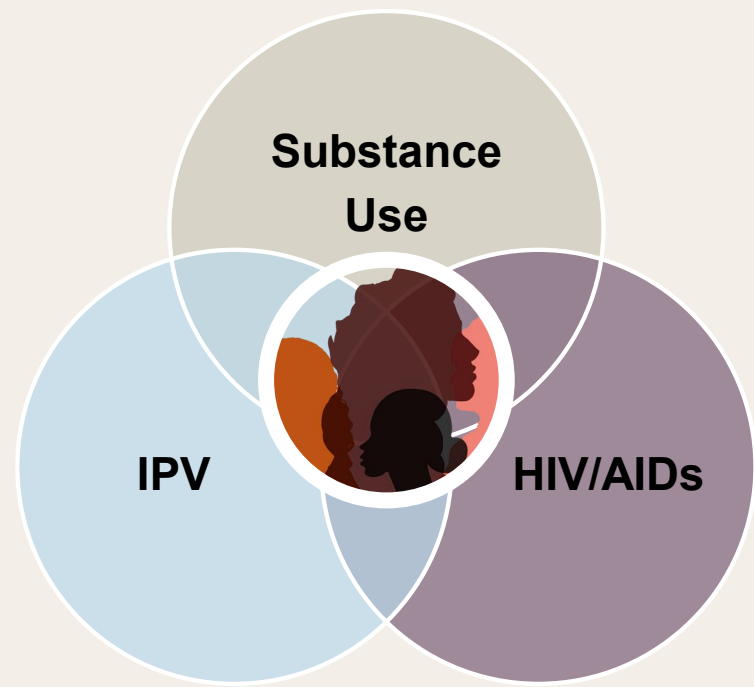
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**Questions?**

