



IAS 2019



10TH IAS CONFERENCE ON HIV SCIENCE

Mexico City, Mexico  21-24 July 2019



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Sexual Violence and Overdose among Women at-risk for HIV in Kazakhstan

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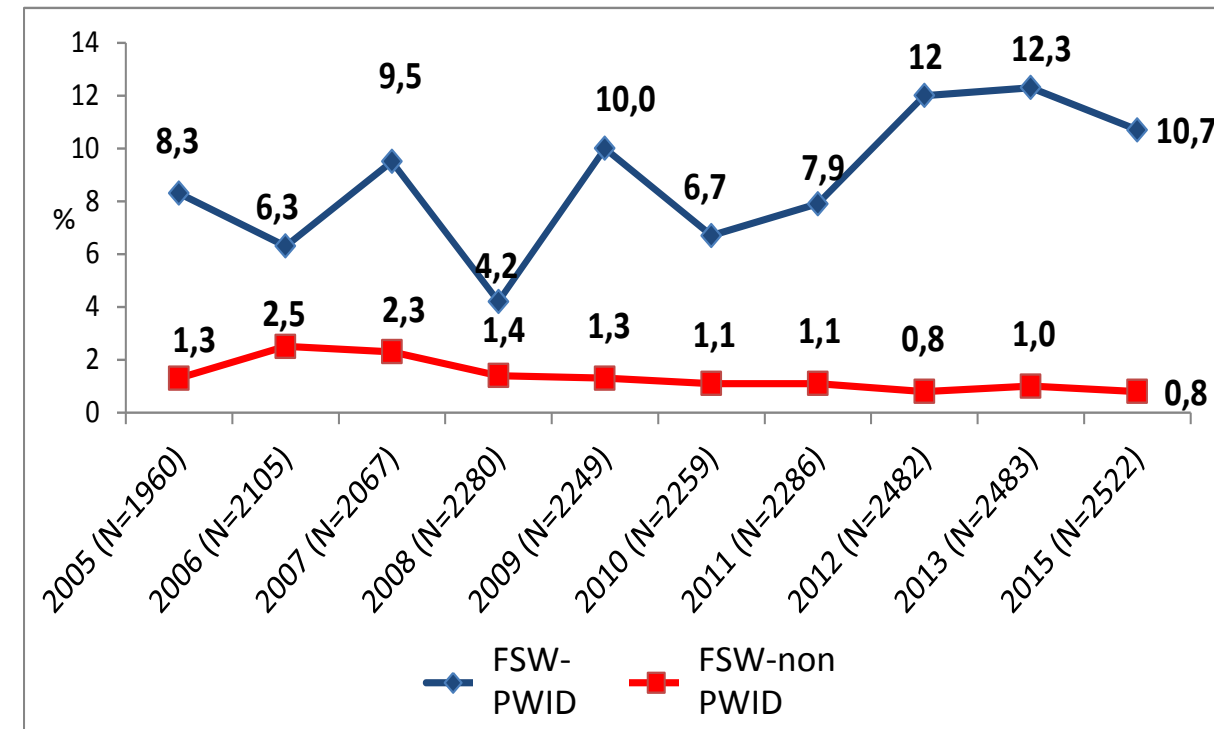
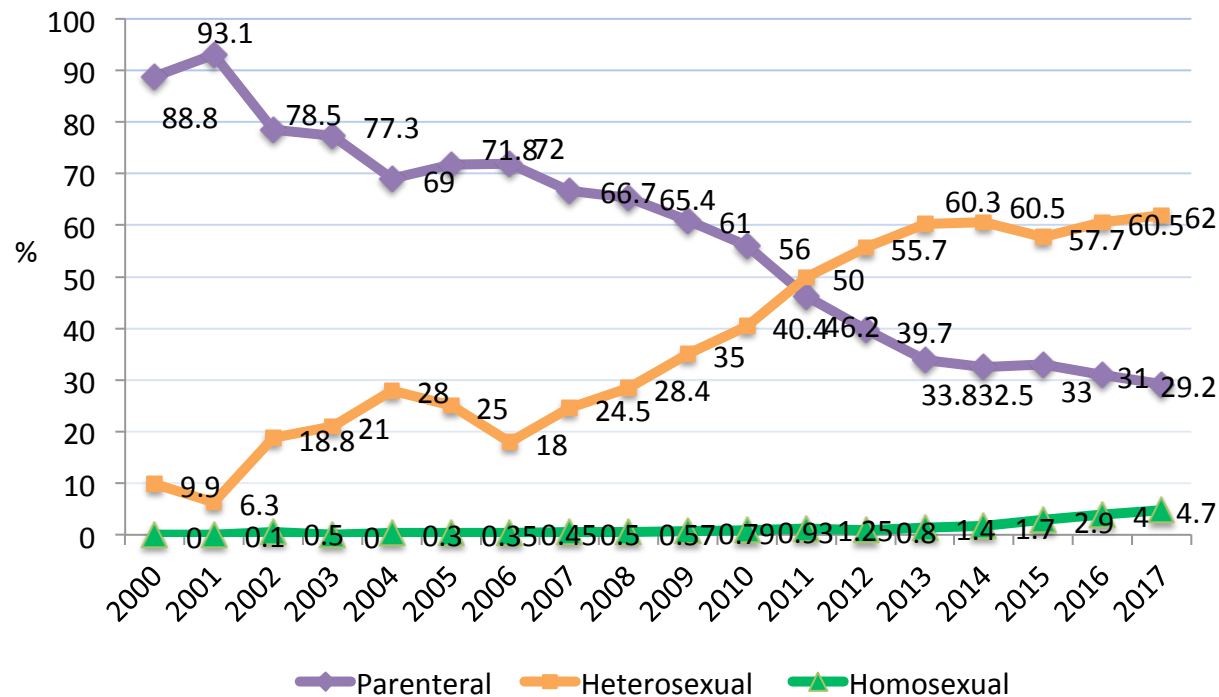
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- The authors have no conflicts of interest to disclose



Why focus on FSW to address the HIV epidemic in Kazakhstan?

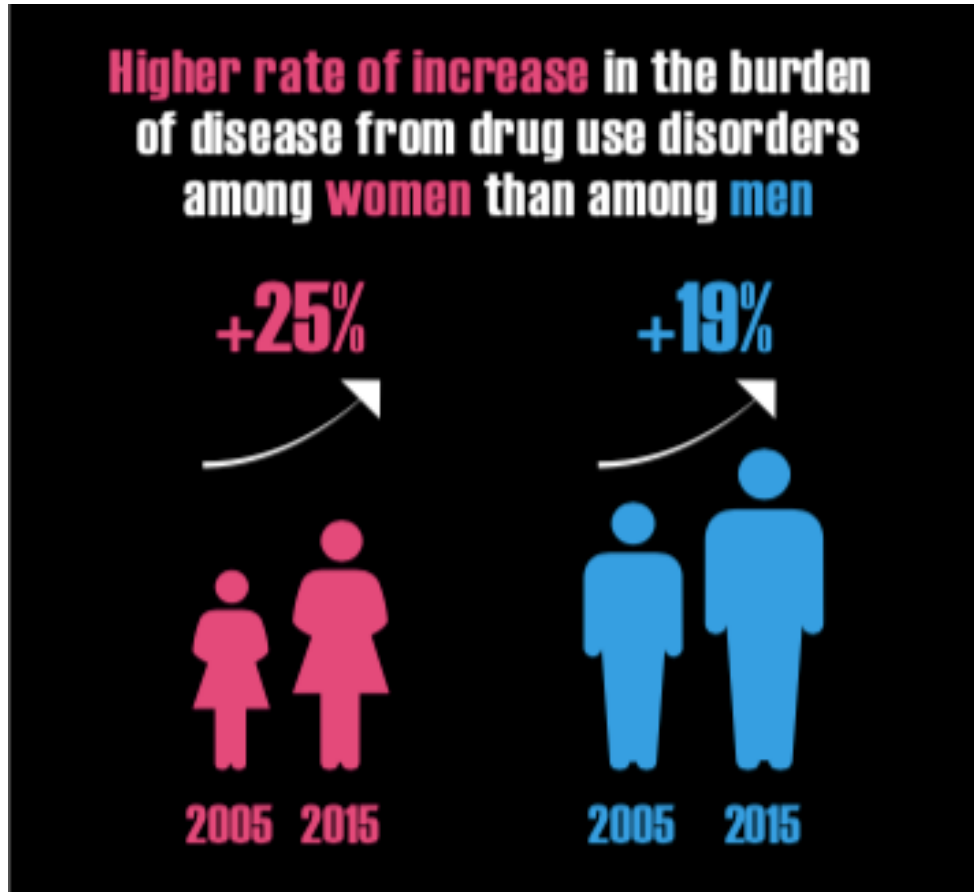
- Sexual transmission makes up 62% of detected cases in 2017
- Female sex workers (FSWs) have been identified as a key population in the global fight against HIV



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Republican AIDS Center, 2017

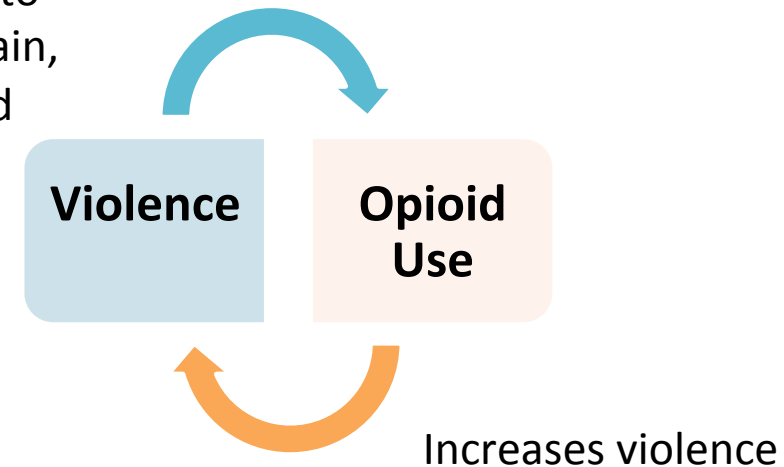
Why focus on violence against women and overdose?



UNODC. *World Drug Report*. 2017

- Bi-directional relationship between violence and opioid use

Increases opioid use to cope with physical pain, PTSD, depression and anxiety



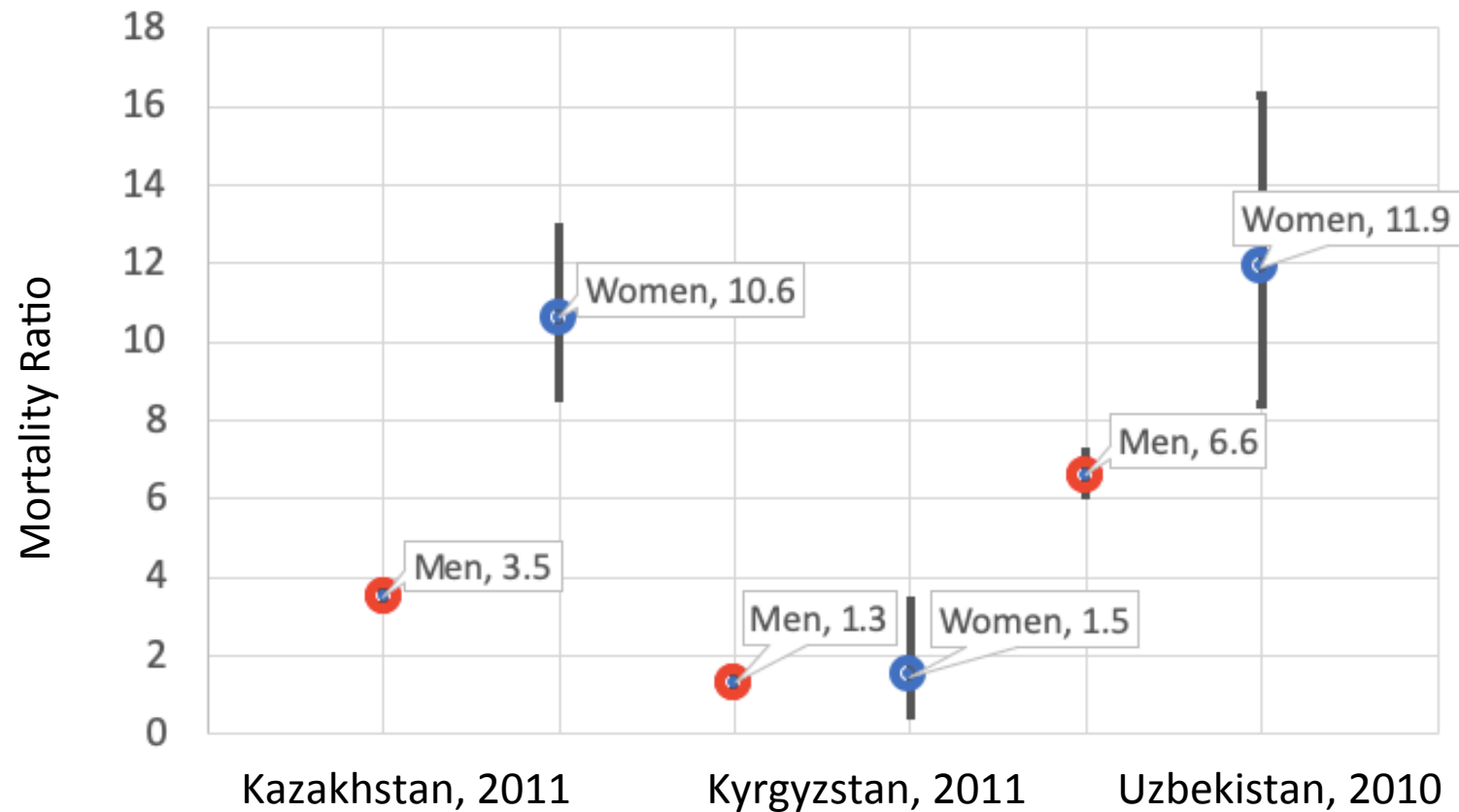
Meyer, J. P., Springer, S. A., & Altice, F. L. (2011).



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Overdose in Central Asia

Mortality Ratios of Drug-related Fatalities in Central Asia



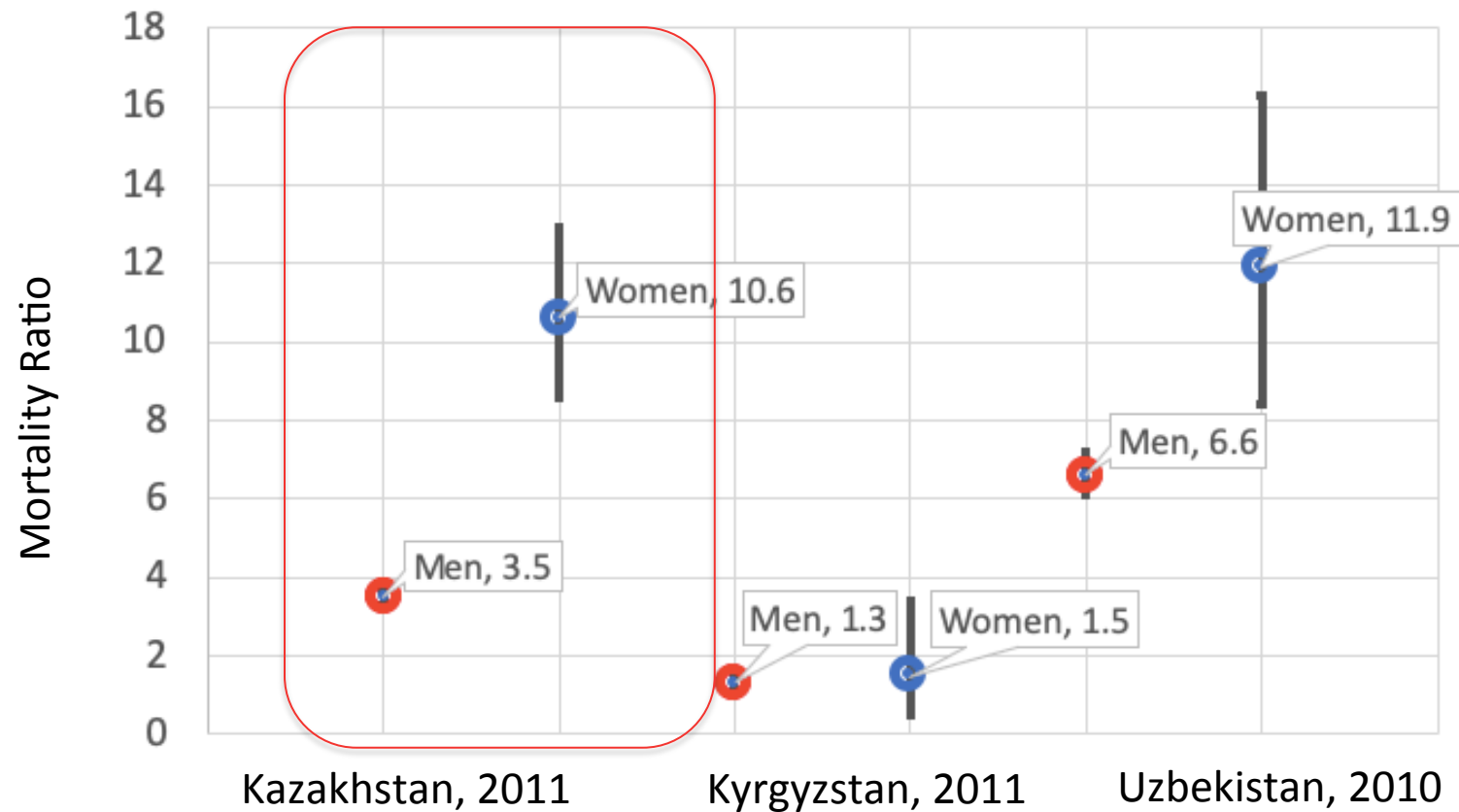
CADAP. 2013 Regional Report on
Drug Situation in Central Asia 2013



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Women who engage in sex work and use drugs

- Economic instability in Kazakhstan has forced many women to engage in street-based sex work
- Female sex workers are at an increased risk of sexual violence
- Risk environment of substance use, incarceration, street-based venues, homelessness, being in debt, and low educational attainment increases odds of violence
- Violence and substance use are inter-related, but not much is known about the relationship between violence and overdose



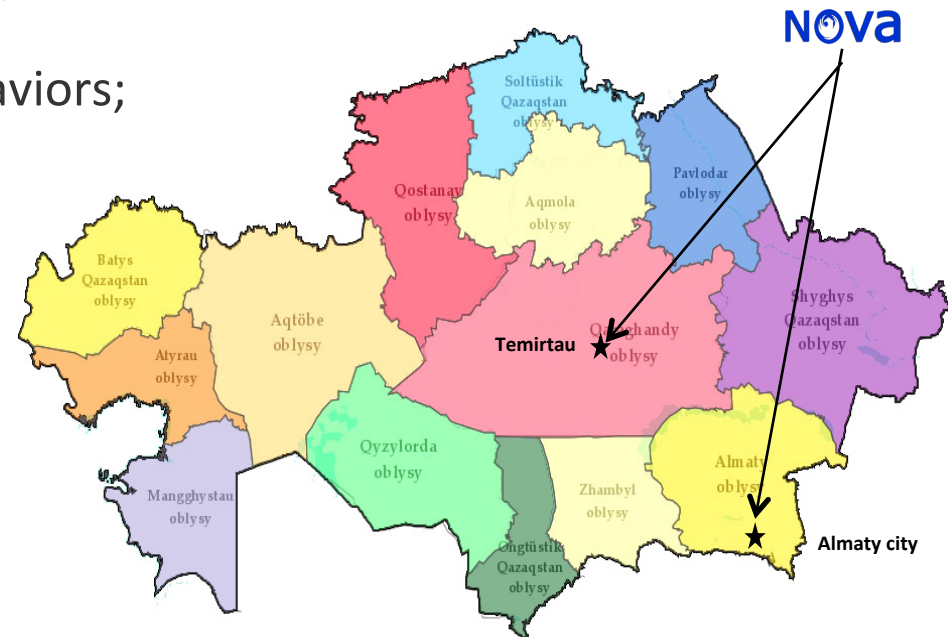
Aims & methods

To examine the efficacy of a combined HIV and economic strengthening program for FSW who use drugs in decreasing:

- Cumulative incidence of biologically confirmed STIs and new incidence of HIV and HCV;
- Reported sexual and drug risk behaviors;
- Monthly income from sex work

Project sites (RAC, 2017):

- **Almaty** (estimated # of FSW 6200; prevalence of HIV among FSW -1.1%)
- **Temirtau** (estimated # of FSW 200; prevalence of HIV among FSW -3.0%)

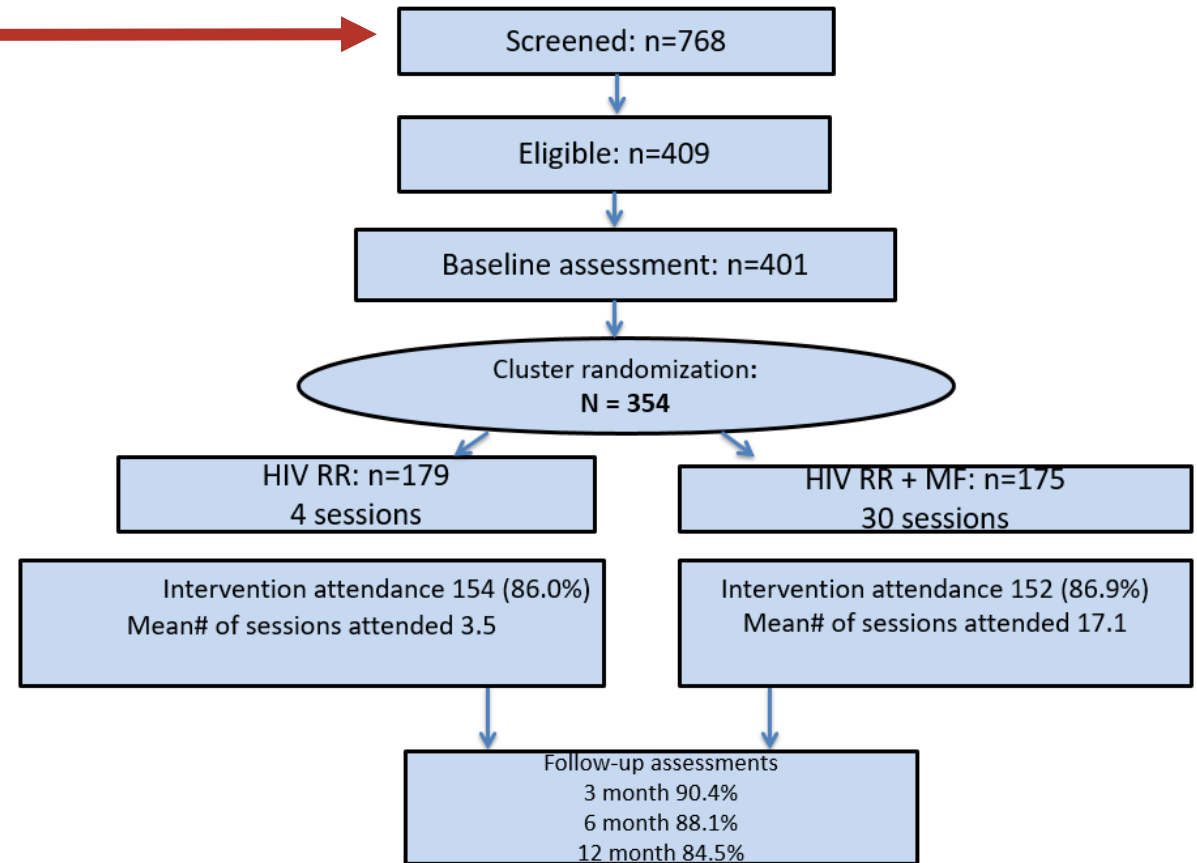


Study design

Eligibility criteria:

- Traded sex in past 90 days
- Drug use in past year
- Unprotected sex (any partner) in past 90 days
- Speak Russian
- Not planning to move for one year

Study duration: July 2014 – May, 2019

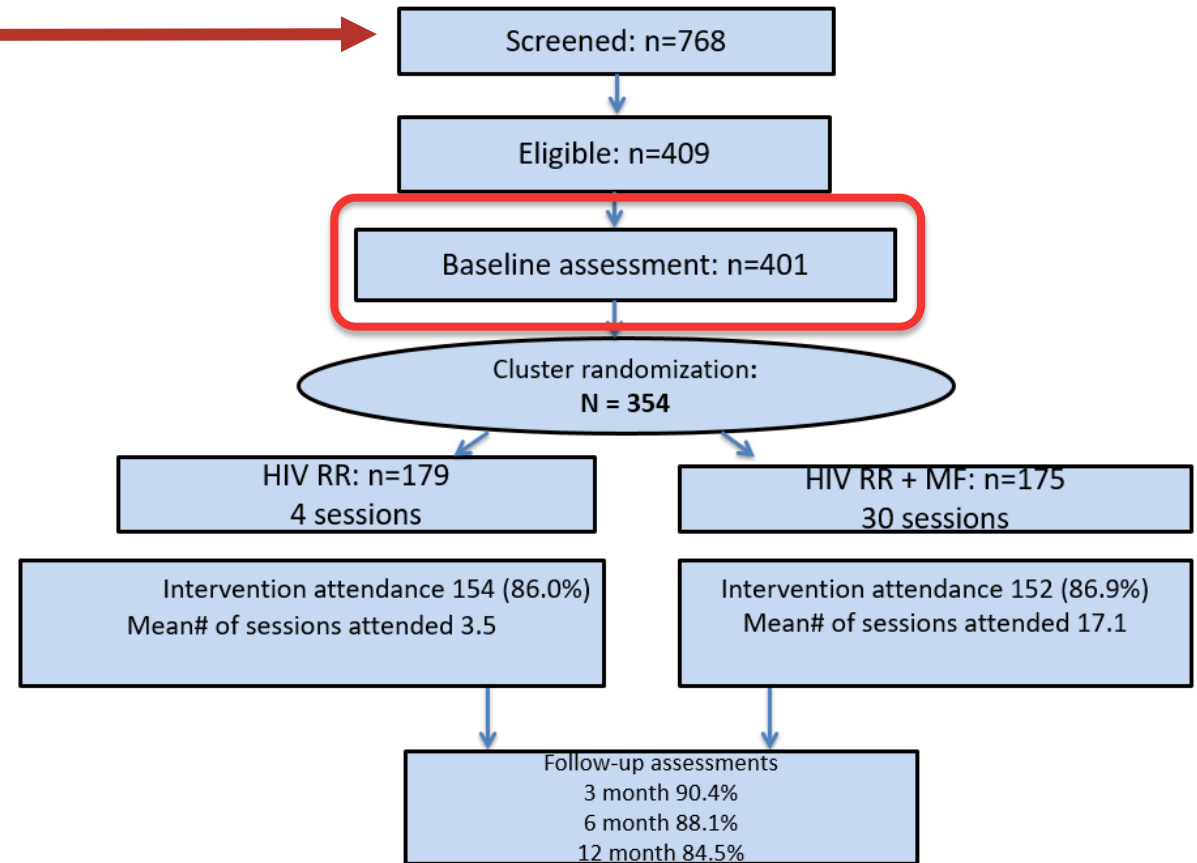


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Data Analysis

- To examine the relationship between experiencing multiple forms of economic abuse and/or sexual violence, and:
 - HIV-risk related outcomes:
 - Low frequency of condom use with commercial partners
 - Number of condomless sex acts with a commercial partner in the past 90 days
 - Needle sharing within the past 90 days
 - Lifetime incidence of overdose
- Logistic for binary outcomes; Poisson regression for count outcomes
 - Covariates: age, homelessness in past 90 days, incarceration history, hazardous alcohol use, injection drug use, street-based sex work, and being managed by a boss/pimp/madam



Sociodemographic characteristics of participants

Characteristic	Overall sample (N=400)
Age, mean (SD)	34.1 (8.4)
History of incarceration, n (%)	130 (32.5)
Homeless in past 90 days, n (%)	232 (58.0)
Currently owe money, n (%)	332 (83.0)

SD: Standard Deviation



Sex Work Characteristics

Characteristic	Overall sample (N=400)
Number of condomless sex acts with a commercial partner in past 90 days, median (min-max)	9 (0-180)
Always used a condom with commercial partners in past 90 days, n(%)	343 (85.8)
Offered more money to have sex without a condom in past 90 days, n(%)	265 (66.3)
Street-based, n(%)	118 (29.5)
Managed by boss/pimp/madam, n(%)	41 (10.3)

Outcome measures are bolded



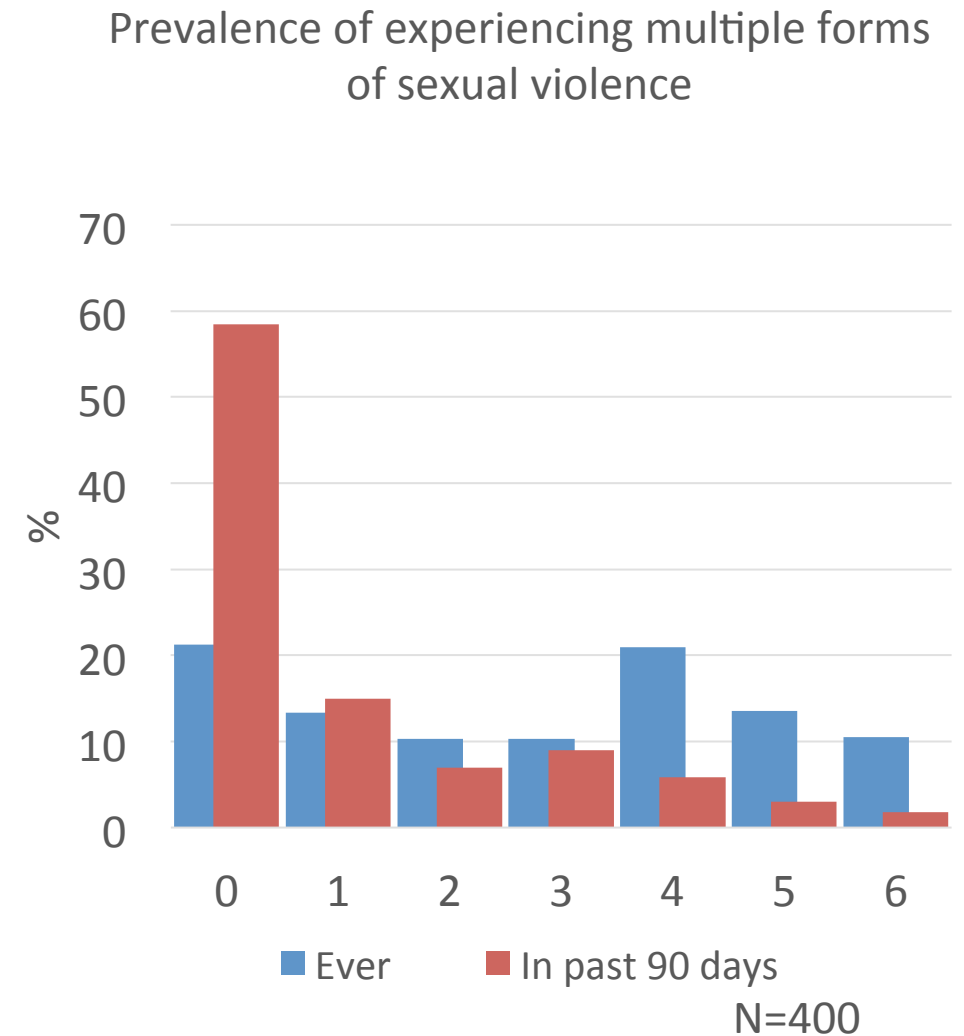
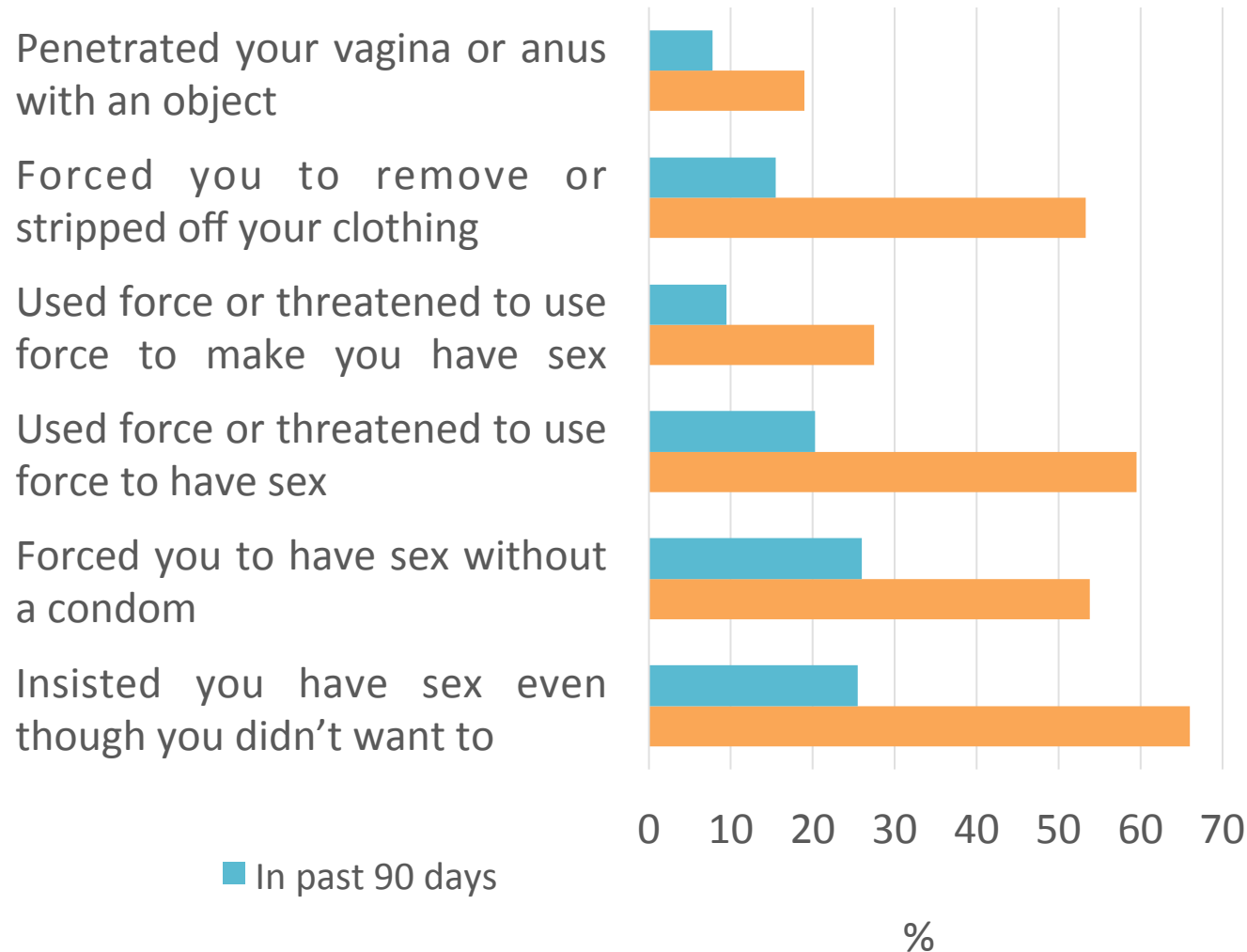
Substance Use Characteristics

Characteristic	n (%)
Shared needle/syringe in past 90 days, n (%)	36 (9.0)
Had a lifetime incidence of overdose, n (%)	150 (37.5)
Hazardous alcohol use, n (%)	272 (68.0)
History of injection drug use, n (%)	184 (46.0)

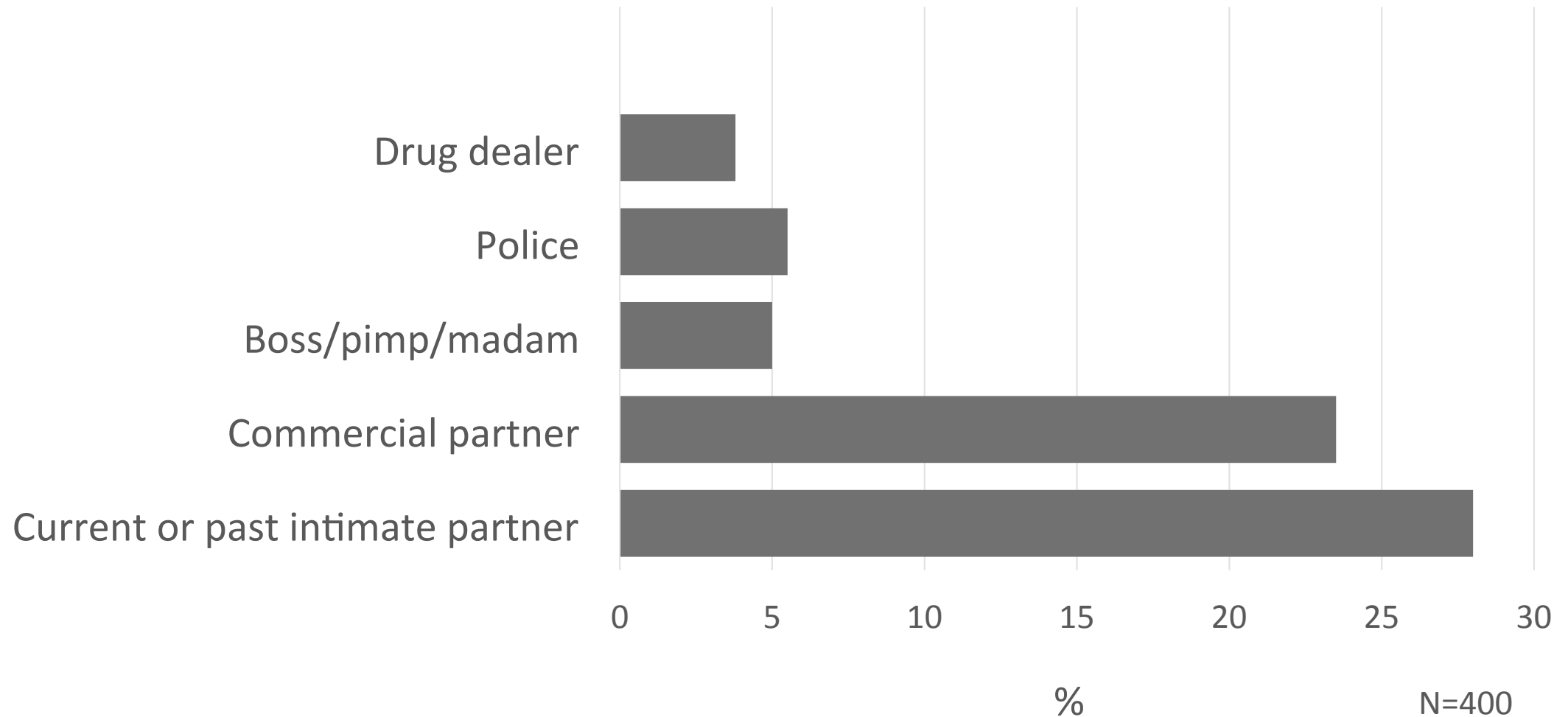
Outcome measures are bolded



Percent of Participants Who Experienced Sexual Violence

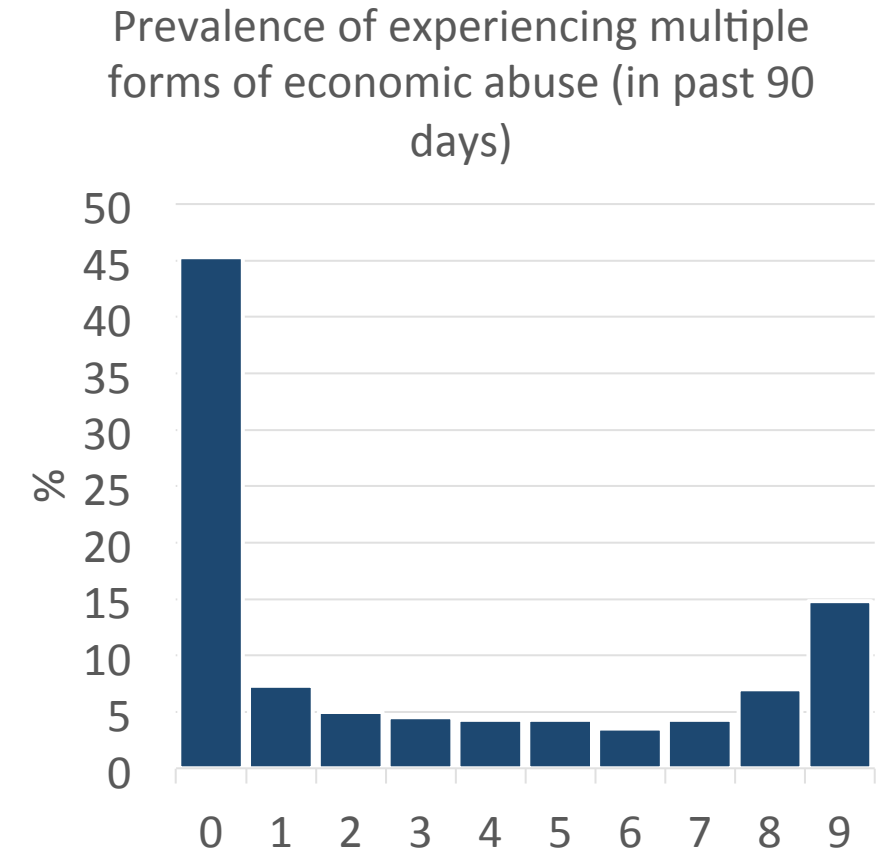
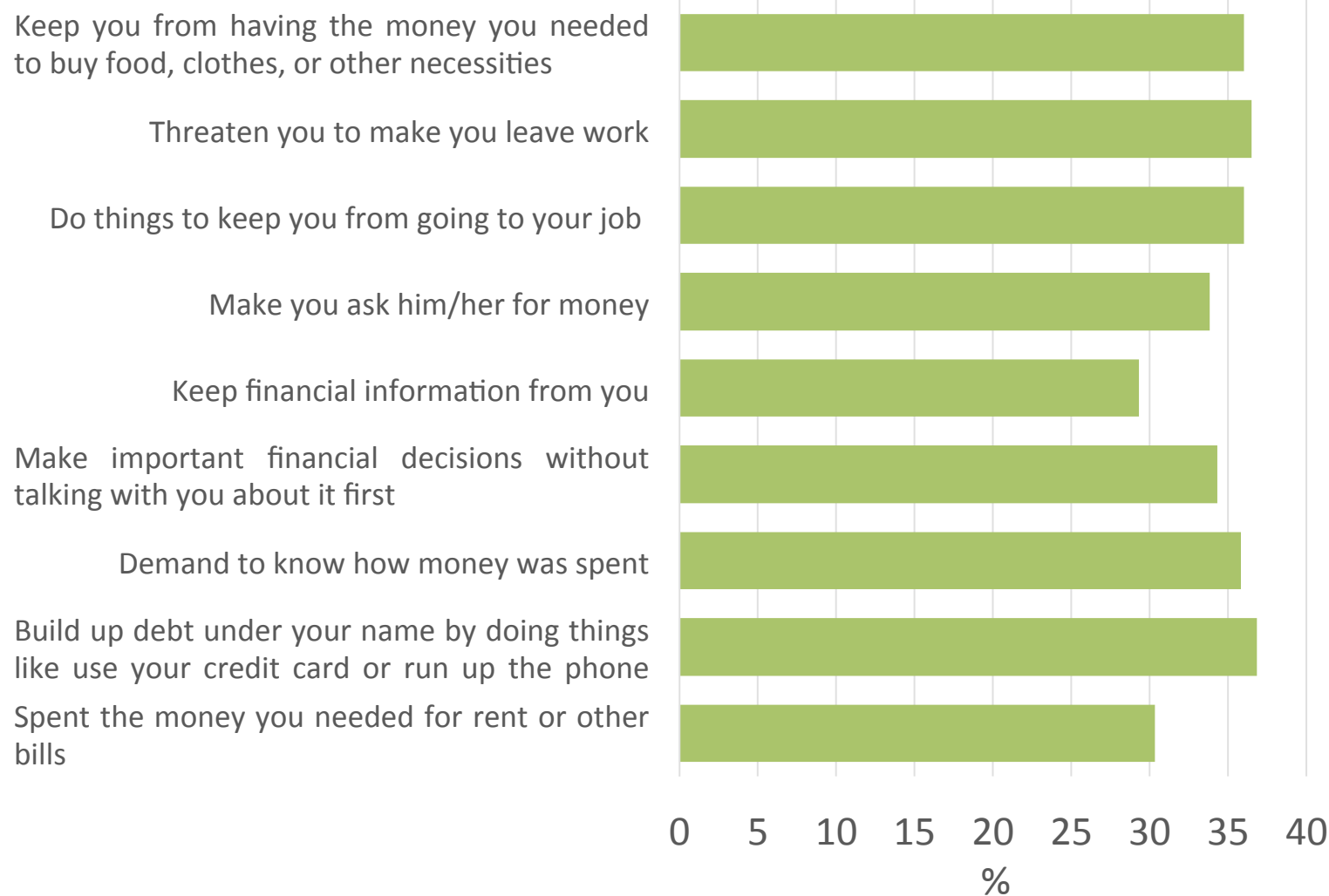


Percent of participants who experienced recent sexual violence by the following perpetrators in the past 90 days



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Percent of Participants Experiencing Recent Economic Abuse in past 90 days



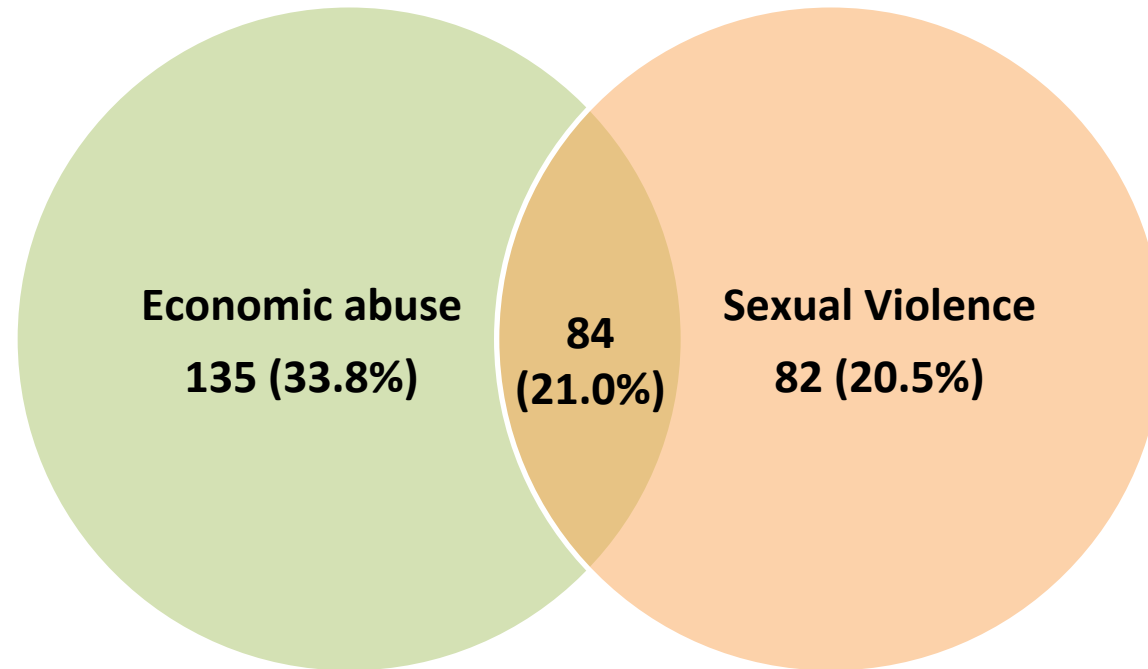
N=400



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Overlap between economic abuse and sexual violence in past 90 days, n(%)

No economic or sexual violence in the past 90 days:
183(45.8%)



Association between Multiple Forms of Violence and Condom Use (N= 400)

	# of condomless sex acts with commercial partners in past 90 days	
	aRR (95% CI)	p-value
# of forms of economic abuse in past 90 days	1.17 (1.15, 1.19)	<0.001
# of forms of SV in past 90 days	1.25 (1.21, 1.30)	0.002
# of forms of SV (ever)	1.37 (1.31, 1.43)	<0.001
Experiencing SV AND economic in past 90 days	4.34 (3.81, 4.95)	<0.001

Note: SV does not include 'forced you to have sex without a condom' item

Adjusted for age, homelessness in past 90 days, incarceration history, hazardous alcohol use, injection drug use, street-based sex work, and being managed by a boss/pimp/madam



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Violence and Substance Use

	Needle sharing in past 90 days (N= 184)		Lifetime experience of non-fatal overdose (N= 400)	
	aOR (95% CI)	p-value	aOR (95% CI)	p-value
Forms of economic abuse in past 90 days	0.95 (0.85, 1.06)	0.337	0.98 (0.92, 1.05)	0.610
Forms of SV in past 90 days	1.44 (1.08, 1.93)	0.013	1.03 (0.87, 1.03)	0.729
Forms of SV (ever)	1.18 (0.94, 1.47)	0.137	1.19 (1.04, 1.35)	0.012
Experiencing SV AND economic abuse in past 90 days	2.45 (1.00, 5.97)	0.050	1.51 (0.82, 2.78)	0.184

Adjusted for age, homelessness in past 90 days, incarceration history, hazardous alcohol use, injection drug use, street-based sex work, and being managed by a boss/pimp/madam



Conclusions

- FSW who use drugs in Kazakhstan are subjected to multiple forms of violence and abuse
- Multiple forms of economic abuse and sexual violence are associated with HIV-risk behaviors including increased number of condomless sex acts with commercial partners and needle sharing
- Sexual violence is associated with overdose



Implications

- HIV prevention programs for FSW who use drugs should consider addressing multiple forms of violence
- Overdose prevention programs should consider sexual violence
 - Trauma informed prevention programming and medication assisted treatment programs may better engage FSW who use drugs in care



Acknowledgements:

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