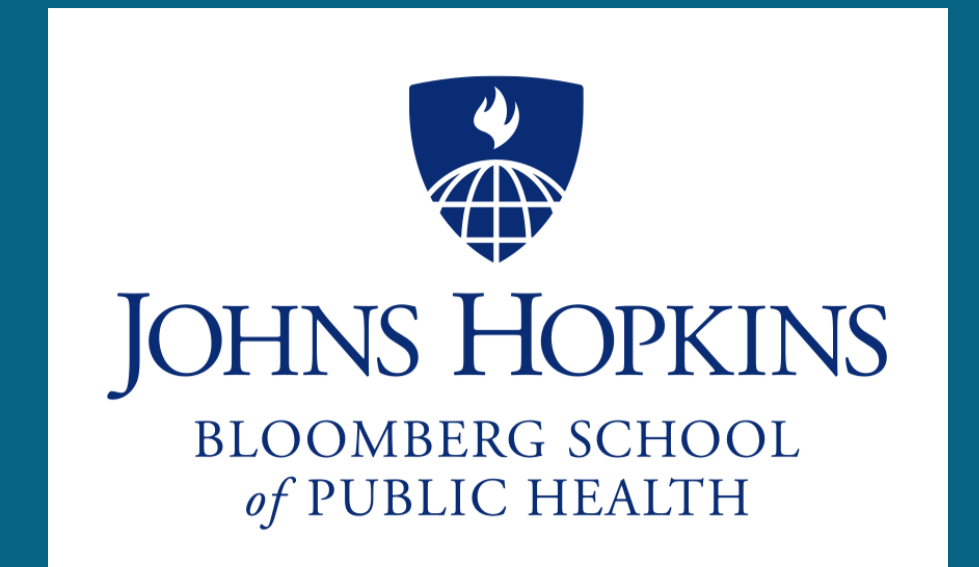


# Association between intersectional stigma and HIV care engagement among women who inject drugs in Kyiv, Ukraine



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## Background

Stigma continues to be a major barrier to care for people living with HIV.<sup>1-3</sup>

Stigma is experienced through two primary mechanisms:

- **Internalized stigma:** the degree to which a person endorses negative attitudes about their possession of a certain trait
- **Enacted stigma:** experiences of perceived discrimination or mistreatment based on a stigmatized characteristic

**Intersectional stigma** refers to the compounding impacts of stigma related to multiple characteristics such as drug use and HIV status.

## Ukraine

People who use drugs are a key population in Ukraine, yet few studies have focused on women living with HIV (WLWH) who inject drugs.

New HIV infections among women in Ukraine more than doubled in seven years, from 1,814 in 2005 to 5,057 in 2012.<sup>4</sup>

Among women who inject drugs in Ukraine:<sup>5</sup>

- 66% know their HIV status
- 61% are registered in HIV care
- 41% are on ART

WLWH who use drugs may experience additional stigma due to gender norms, and few programs are tailored to their needs.

This study aimed to understand how layered stigma correlates with HIV care engagement among WLWH who inject drugs in Ukraine.

## Methods

### Study design & analysis

- Surveys conducted in Kyiv between November 2019-2020 with 306 WLWH.
- Surveys lasted 1.5-2 hours, part interviewer-led and self-administered.
- Participants recruited through combination of direct outreach and participant referral.
- Univariable and multivariable logistic regression analyses examined associations between intersectional stigmas and HIV care engagement

### Inclusion criteria

- Identifying as female
- Living in Kyiv City
- Being age 18 years or older
- Reporting injection drug use in the previous 3 months
- Being HIV-positive (confirmed with a rapid test at the time of study consent)

### Measures

**Enacted and internalized stigma:** Based on validated scales.<sup>2</sup> Questions for enacted stigma were asked about each social network member (i.e., alter) a participant identified.

- Internalized stigma scores were dichotomized using a median cut-point.
- Enacted stigma defined as any experience of enacted stigma from any alter identified

### Intersectional drug use & HIV stigma:

Categorical variable with 3 options to reflect overlapping stigmas: 1) neither drug nor HIV stigma, 2) either and 3) both. Created for both enacted and internalized stigma mechanisms.

**Care engagement:** defined as having  $\geq 2$  HIV care visits  $\geq 3$  months apart in past year.

Age and years since diagnosis dichotomized at the median reported values.

## Results

### Overall participant characteristics

- 55% engaged in HIV care
- Median age 34 years
- Median time of 5 years since HIV diagnosis

Experiences of *internalized* stigma:

- 43% of participants reported high internalized stigma related to both HIV and drug use
- 22% high in either
- 35% low in both

Experiences of *enacted* stigma:

- 40% of participants high related to HIV status and drug use
- 39% high in either
- 21% low in both

See Table 1 for additional characteristics.

### Results from adjusted model

Intersectional drug use and HIV stigma was significantly associated with reduced odds of HIV care engagement for both stigma mechanisms:

- Participants reporting *internalized stigma* related to both drug use were approximately 50% less likely to be engaged in HIV care (aOR: 0.52, 95% CI: 0.30, 0.92)
- *Enacted stigma* related to both drug use and HIV status was similarly associated with approximately 50% reduced odds of care engagement (aOR: 0.47, 95% CI: 0.23, 0.95)

Additionally, women who knew their HIV-positive status for more than 5 years were more likely to be engaged in HIV care (aOR: 2.29, 95% CI: 1.35, 3.87) after adjusting for stigma, demographic characteristics, and injection drug use frequency.

Depression (assessed by the CES-D) was not significantly associated with HIV care engagement and therefore was not included in the adjusted model.

See Table 2 for adjusted model results.

## Conclusion

This study adds to the growing body of evidence that intersectional stigma is a significant factor in HIV care engagement.

Enacted intersectional stigma had a greater effect on HIV care engagement than internalized stigma.

- This finding shows that interpersonal acts of discrimination, rather than feelings of shame alone, are associated with lower care engagement

### Limitations

- WLWH engaged in HIV care were overrepresented in the study.
- This study was conducted prior to the Russian attack in 2022, which has since disrupted access to care.<sup>6</sup>

Further research and targeted programs are needed to address the multiple mechanisms and layers of stigma among WLWH who inject drugs.

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This study was reviewed and approved by the Institutional Review Boards at the Johns Hopkins Bloomberg School of Public Health and the Ukrainian Institute for Public Health Policy. All participants provided oral consent.

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**Table 1.** Participant characteristics by HIV care engagement status for 306 HIV-positive women who inject drugs, Kyiv, Ukraine, November 2019-November 2020

	Not in HIV Care	In HIV Care	p-value
N	138	168	
<b>Demographic Characteristics</b>			
Age 34 years or older	66 (47.8%)	97 (57.7%)	0.08
Some higher education or more	87 (63.0%)	109 (64.9%)	0.74
In long-term relationship	77 (55.8%)	99 (59.3%)	0.54
Has enough money to live	15 (10.9%)	13 (7.7%)	0.43
Employment status			
Regular/not looking	52 (38.8%)	55 (33.5%)	
Part-time/unemployed	70 (52.2%)	79 (48.2%)	0.07
Unemployed/not looking	12 (9.0%)	30 (18.3%)	
Has any children	41 (29.7%)	69 (41.1%)	0.04
Has children under age 18	36 (26.1%)	56 (33.3%)	0.17
<b>HIV Health-Related</b>			
Known HIV positive status at least 5 years	57 (41.3%)	103 (61.3%)	<0.01
<b>Substance Use</b>			
Drug used most frequently			
Opioids	3 (2.2%)	8 (4.8%)	0.05
Stimulants	38 (27.7%)	31 (18.5%)	
Injects drugs almost daily or more	72 (52.9%)	73 (43.5%)	0.04
<b>Stigma</b>			
Type of internal stigma experienced			
Neither drug use nor HIV status	34 (24.6%)	74 (44.1%)	<0.01
Either drug use or HIV status	33 (23.9%)	35 (20.8%)	
Both drug use and HIV status	71 (51.5%)	59 (35.1%)	
Type of enacted stigma experienced			
Neither drug use nor HIV status	22 (15.9%)	43 (25.6%)	0.10
Either drug use or HIV status	55 (39.9%)	64 (38.1%)	
Both drug use and HIV status	61 (44.2%)	61 (36.3%)	

Data are presented as n (%) or mean (SD)

**Table 2.** Association between stigma and engagement in HIV care among 306 HIV-positive women who inject drugs participants, Kyiv, Ukraine, November 2019-November 2020

	OR (95% CI)	aOR (95% CI)
<b>Internalized Stigma</b>		
Neither stigma in both categories	reference	reference
Either drug use or HIV status	0.49 (0.26, 0.91)	0.53 (0.28, 1.03)
Both drug use and HIV status	0.38 (0.22, 0.65)	0.52 (0.30, 0.92)
<b>Enacted Stigma</b>		
Neither stigma in both categories	reference	reference
Either drug use or HIV status	0.60 (0.32, 1.12)	0.55 (0.28, 1.08)
Both drug use and HIV status	0.51 (0.27, 0.96)	0.47 (0.23, 0.95)
<b>Age</b>		
Less than 34 years	reference	reference
34 years or older	1.49 (0.95, 2.34)	1.15 (0.69, 1.92)
<b>Has any children</b>		
No	reference	reference
Yes	1.65 (1.02, 2.66)	1.51 (0.91, 2.52)
<b>Time since HIV diagnosis</b>		
Less than 5 years	reference	reference
5 years or more	2.25 (1.42, 3.57)	2.29 (1.35, 3.87)
<b>Injects drugs almost daily or more</b>		
No	reference	reference
Yes	0.68 (0.43, 1.08)	0.69 (0.42, 1.13)