



UvA

GGD
Amsterdam

When does chemsex become problematic?

- A qualitative and quantitative perspective -



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International Chemsex Conference
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Public Health Service Amsterdam

- Nothing to disclose

When do we consider chemsex a problem?

Problematic chemsex

“When there is a negative impact on one’s relationships, work and mental health, and the (in)ability to adopt a healthier lifestyle”

VS

Non-problematisch chemsex

“Someone who can enjoy and maximize the positive side effect of chemsex and control or minimize the negative side-effects by harm-reduction”

Platteau T. et al., 2019; Dennermalm N. et al., 2021.

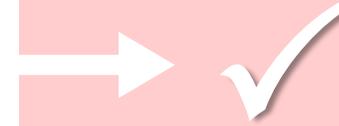
Project - Aim

To examine the factors contributing to the emergence of problematic chemsex among men who have sex with men who engage in chemsex

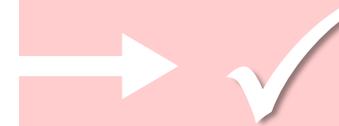
Methods
HOW?

Project - plan

1 Interview study



2 Questionnaire



3 (online) cohort study



4 Screening tool



Interview study

- ❑ *What was considered problematic chemsex?*
- ❑ *What contributed towards problematic chemsex?*
- ❑ *What protected against problematic chemsex?*

Semi-structured interviews

Inclusion criteria:

- MSM
- >2 times in past 6 months
- Problems or not
- Use of:

Crystal meth

GHB/GBL

3-MMC

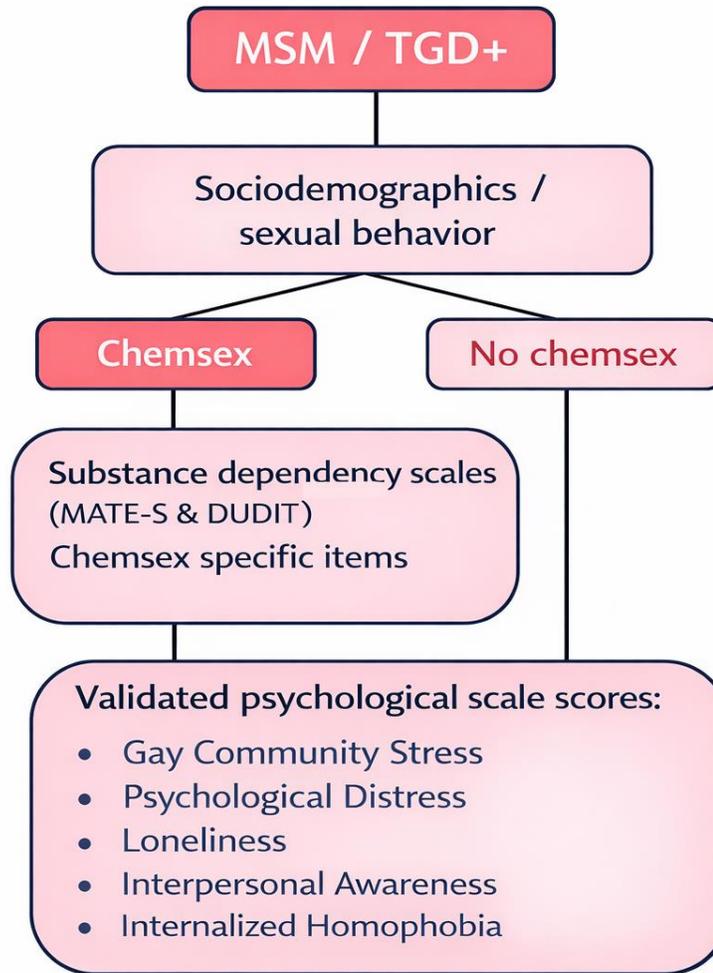
Amphetamine

Ketamine

Cocaine

New psychoactive substances

Questionnaire Flowchart



Cross-sectional survey

Among MSM and TGD+

Recruited via:

- Health clinics
- Social media
- Dating apps
- Community outreach

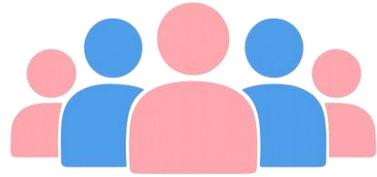
Chemsex criteria:

- Methamphetamine
- Mephedrone
- GHB/GBL
- Ketamine
- Cocaine
- Amphetamine
- 3-MMC
- New psychoactive substances in sexual settings

Results
WHAT?

Interview study

Median age: 37 yo (IQR: 20-62)



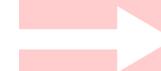
27 interviews among MSM



15 reported a problem with chemsex



16 reported to live with HIV



8 reported slamming

Interview study

"It's very difficult for me to have sex without drugs now"

"it happens a lot more than I would like"

"I could have died"

Definition
problematic
chemsex

Loss of control

"Crystal meth and 3-MMC are like antidepressants—you don't feel anything anymore"

Factors leading
towards
problematic
chemsex

Chemsex as an escape

"Everything was shit; the HIV, the loneliness, being unhappy, So it was a nice escape"

"I just don't have a lot of friends here"

"my relationship is a protective factor"

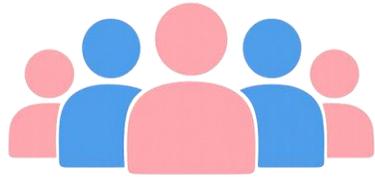
Protecting factors

Protecting boundaries

"You can have fun, but know your limits"

Questionnaire study

Median age: 39 yo (IQR = 31-52)



1880 of 2984 completed survey



1624 (87%) identified as gay
95% as cis men, 5% as TDG+



1182 (63%) were Dutch



1706 (91%) had a high education level

Questionnaire study



202 (11%) reported living with HIV

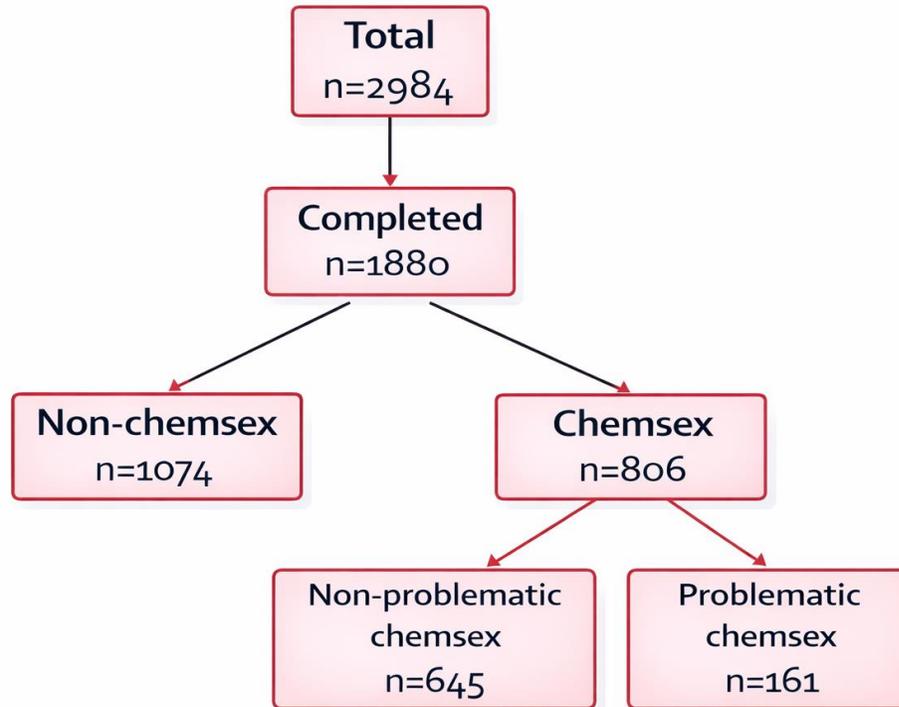


64% (of HIV-) used PrEP



81 (4%) engaged in sexwork

Questionnaire study

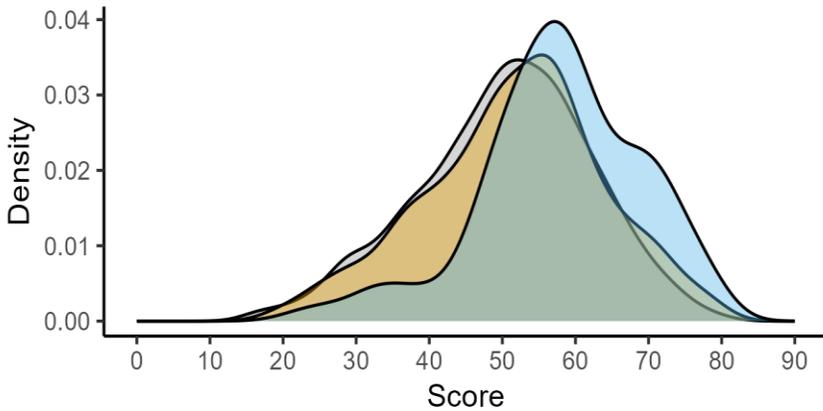


Chemsex group =
chemsex criteria in <6 mnth

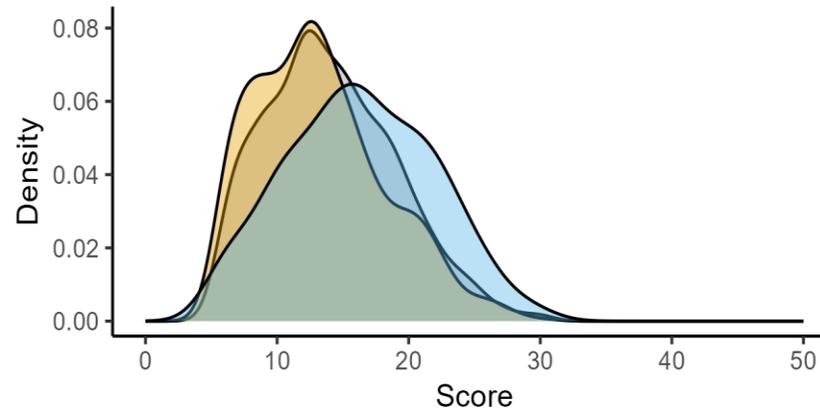
Problematic chemsex
based on self-reports

Psychological scale scores

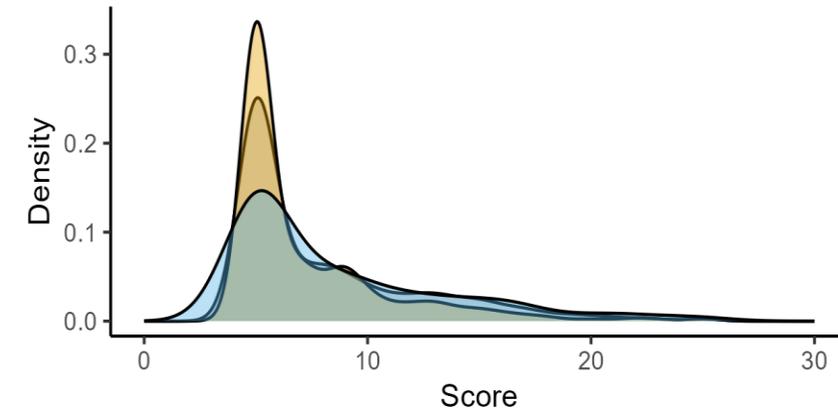
Gay community stress



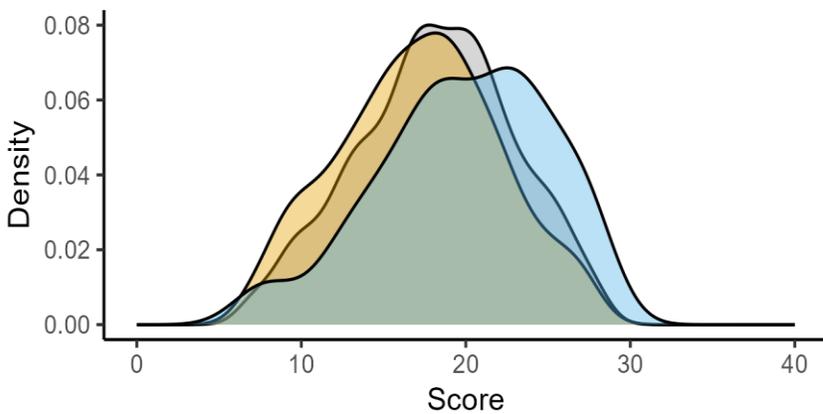
Loneliness



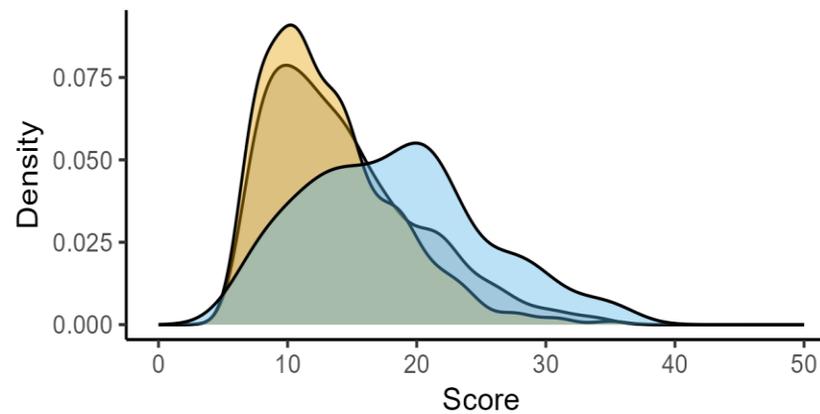
Internalized homophobia



Interpersonal awareness



Psychological distress



Legend:
■ No chemsex (grey)
■ Non-problematic chemsex (yellow)
■ Problematic chemsex (blue)

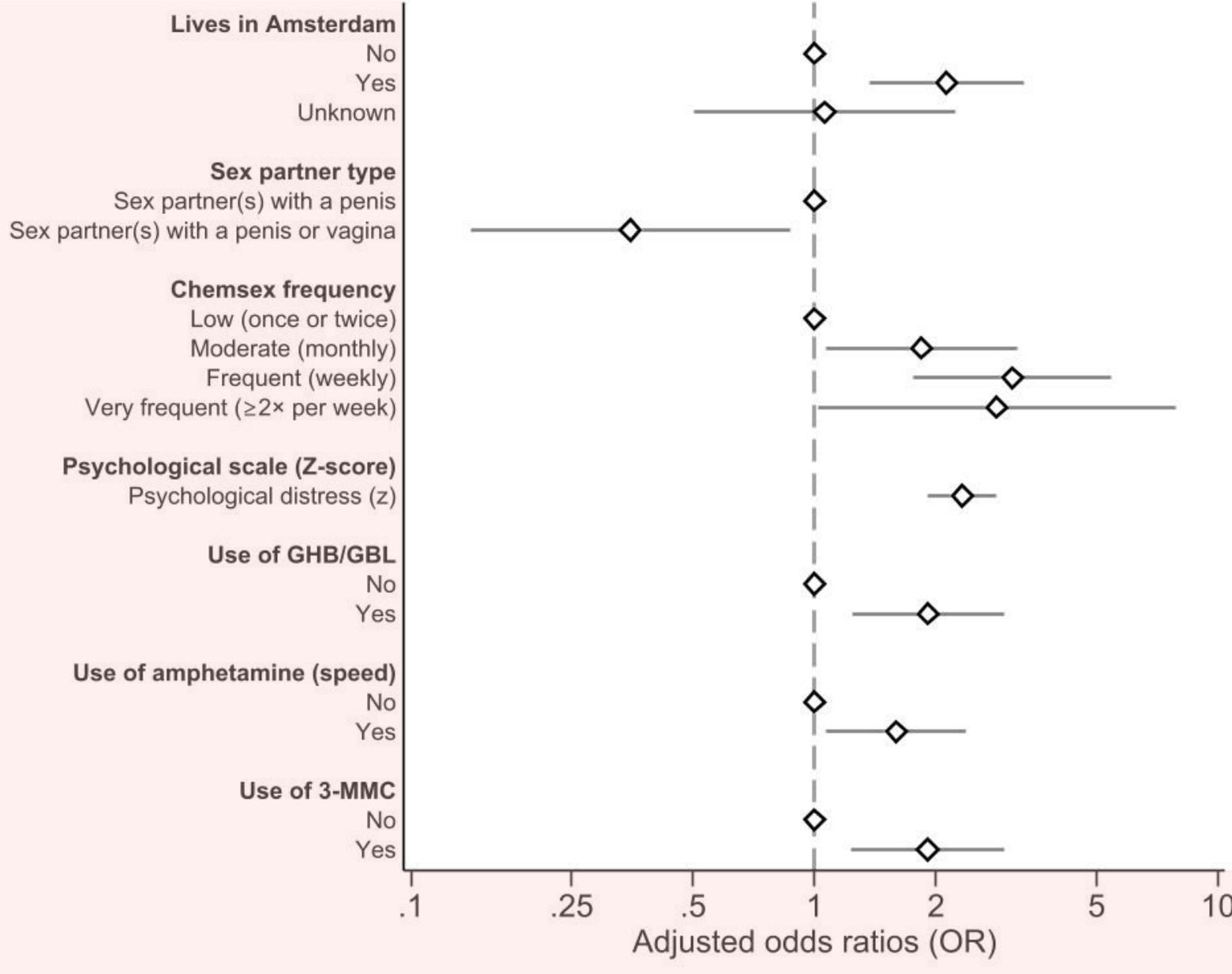
$p < 0.001$
(median = 52, IQR = 44-59)

Forest plot

Multivariable logistic
regression analysis
> likelihood-ratio tests

Forest plot

Problematic versus non-problematic chemsex



✘ GGD
✘ Amsterdam
✘

Conclusion
TAKE HOME

Conclusion

- Chemsex is considered problematic when individuals experience a perceived loss of control, with loneliness and depression as key contributing factors.
- Gay community stress scores high in both the chemsex group and non-users.
- Problematic chemsex is associated with higher psychological scale scores for loneliness, gay community stress and interpersonal awareness.
- People with higher levels of psychological distress are more than twice as likely to engage in problematic chemsex compared with those with lower levels of distress.
- Problematic chemsex was associated with higher chemsex frequency, use of GHB/GBL, speed and 3-MMC and living in Amsterdam

Take home

Problematic chemsex seems multifactorial and context-dependent.

Mental health matters

- Higher levels of psychological scale scores are associated with problematic chemsex -

Context & surrounding

- Problematic chemsex clusters with frequency, sexual network, specific substances, and urban context -

Not all chemsex is problematic

- Problematic chemsex reflects a specific user profile rather than chemsex use in general -

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DC Klinieken

MEIJT Nederland

Club Church

Bar PRIK

THANK YOU

Backward-selected multivariable logistic regression model for Chemsex vs Problematic Chemsex group

	OR	95% CI	p-value
Residential area¹			
Outside of Amsterdam (ref)	1.00	-	-
Within in Amsterdam	2.12	1.37 - 3.30	0.001
Area unknown	1.06	0.50 - 2.24	0.879
Sex partner type²			
Had sex partner(s) with a penis (ref)	1.00	-	-
Had sex partner(s) with both a penis and a vagina	0.35	0.14 - 0.87	0.024
Chemsex frequency			
Low (once or twice in <6mths) (ref)	1.00	-	-
Moderate (monthly)	1.84	1.06 - 3.19	0.029
Frequent (weekly)	3.09	1.75 - 5.45	0.000
Very frequent (>2 times/week)	2.83	1.02 - 7.58	0.046
Substance use³			
3-MMC	1.91	1.23 - 2.96	0.004
GHB	1.91	1.24 - 2.95	0.003
Amphetamine (speed)	1.59	1.07 - 2.37	0.022
Psychological distress (z-score) ⁴	2.32	1.91 - 2.82	0.000

Backward-selected multivariable logistic regression model for problematic versus non-problematic chemsex, without psychological distress.

Logistic regression

Number of obs = 806
 LR chi2(11) = 137.96
 Prob > chi2 = 0.0000
 Pseudo R2 = 0.1711

Log likelihood = -334.06594

NPCS_PCS_bin	Odds ratio	Std. err.	z	P> z	[95% conf. interval]	
livinginamsterdam						
Living in Amsterdam	2.366047	.5198559	3.92	0.000	1.538161	3.639529
Unknown	1.459271	.5341405	1.03	0.302	.7121451	2.990221
chemsex_freq_NPCS_PCS						
Moderate (monthly)	1.571517	.4283166	1.66	0.097	.9211372	2.681106
Frequent (weekly)	2.804335	.7928073	3.65	0.000	1.611345	4.880577
Very frequent (2+ times/week)	2.645442	1.355719	1.90	0.058	.9689023	7.22298
z_loneliness	1.457777	.1478157	3.72	0.000	1.195036	1.778285
z_ia	1.557179	.1621636	4.25	0.000	1.269682	1.909775
slamming_NPCS_PCS	2.273452	.6608393	2.83	0.005	1.28606	4.018927
chemsspeed	1.870722	.367392	3.19	0.001	1.273038	2.749015
chems3mmc	1.76866	.3854498	2.62	0.009	1.153824	2.711125
chemstina	1.551484	.3081061	2.21	0.027	1.051257	2.289738
_cons	.0362047	.0112751	-10.66	0.000	.0196642	.066658

Note: **_cons** estimates baseline odds.

Baseline characteristics

	Non-Chemsex (n=1,074)	Non-Problematic Chemsex (n=645)	Problematic Chemsex (n=161)	p-value
Age				
Young (18-34)	384 (35.8%)	208 (32.3%)	63 (39.1%)	<0.001
Middle (35-54)	469 (43.7%)	323 (50.1%)	73 (45.3%)	
Older (55+)	221 (20.6%)	114 (17.7%)	25 (15.5%)	
Living in Amsterdam	478 (44.5%)	298 (46.2%)	101 (62.7%)	<0.001
Non-Dutch	395 (36.8%)	229 (35.5%)	74 (46%)	0.046
Steady relationship	569 (53%)	375 (58.1%)	74 (46%)	0.011
Engaged in sex work	32 (3%)	36 (5.7%)	13 (8.18%)	0.002
> 21 sex partners	181 (16.9%)	180 (27.91%)	67 (41.61%)	<0.001
HIV / PrEP				
Lives with HIV	83 (7.7%)	94 (15%)	25 (15.5%)	<0.001
HIV- PrEP+	515 (52%)	437 (79.3%)	118 (86.8%)	
HIV- PrEP-	476 (44.3%)	114 (17.7%)	18 (11.2%)	