

Correlates of Non-Adherence among Current HIV PrEP Users in Brazil, Mexico and Peru: Results from a 2024 On-Line Survey

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Background

- While oral HIV PrEP is now being scaled-up in Latin America, suboptimal adherence continues to reduce program effectiveness and should be addressed
- We assessed frequency, distribution and correlates of PrEP non-adherence among sexual and gender minorities (SGM) in Brazil, Mexico and Peru

Methods

- We conducted an online, cross-sectional survey (Aug-Nov 2024) among SGM aged 18+ years in Brazil, Mexico and Peru
- Individuals not living with HIV were asked about current PrEP use; current PrEP users were asked to estimate their adherence in the last 30 days using a visual analogue scale
- Factors explored for association with non-adherence (adherence <95%) using multivariate Poisson regression included: age, country, education, income, race/ethnicity, depression (*Patient Health Questionnaire* [PHQ-9]), homonegativity (*Reactions to Homosexuality Scale*), number of sex partners, recent chemsex, and sex with partners with HIV (PWHIV)

Results

Table 1: Characteristics of SGM currently using PrEP in Brazil, Mexico and Peru, 2024

Characteristics	Brazil 1,797 (75.5%)	Mexico 402 (16.9%)	Peru 181 (7.6%)
Age (years) (≥ 25)	1,739 (96.8)	380 (94.5)	160 (88.4)
Race			
White	1,092 (60.8)	71 (17.7)	29 (16.0)
Mixed	471 (26.2)	269 (66.9)	127 (70.2)
Black/Asian/Indigenous/Other	234 (13.0)	62 (15.4)	25 (13.8)
Education (More than secondary)	1,538 (85.6)	396 (98.5)	164 (90.6)
Monthly income			
> 1 to 2 minimum wage	242 (13.5)	66 (17.4)	44 (26.4)
> 2 to 6 minimum wage	802 (44.6)	183 (48.2)	59 (35.3)
> 6 minimum wage	546 (30.4)	78 (20.5)	36 (21.6)
PHQ-9			
Mild depression	583 (32.5)	108 (26.9)	55 (31.3)
Moderate depression	284 (15.8)	88 (22.0)	47 (26.7)
Moderately severe depression	168 (9.4)	57 (14.2)	24 (13.6)
Severe depression	137 (7.6)	37 (9.2)	8 (4.5)
Homonegativity*	6 (2 - 12)	7 (3 - 12)	12 (6 - 18)
Perceived HIV risk*	24 (21 - 27)	26 (23 - 30)	25 (22 - 28)
Number of sex partners			
0-1	95 (5.3)	24 (6.0)	22 (12.2)
2 - 5	546 (30.6)	89 (22.3)	59 (32.6)
6 or more	1,145 (64.1)	286 (71.7)	100 (55.2)
Sex with PWHIV			
Yes	449 (25.4)	112 (28.5)	51 (28.7)
I don't know	410 (23.2)	187 (47.6)	67 (37.6)
Recent chemsex (Yes)	602 (36.0)	227 (56.5)	70 (38.7)
Adherence to PrEP (No: <95%)	434 (25.0)	218 (54.2)	52 (28.7)

*Median (p25 – p75), PWHIV: People with HIV, PHQ: Patient Health Questionnaire

Results, cont.

- Among 9257 participants not living with HIV (Brazil: 6063; Mexico: 2277; Peru: 917), 2380 (25.7%) were currently using PrEP (Brazil 1797, 30.0%; Mexico 402, 17.7%, Peru 181,19.7%)
- PrEP non-adherence was reported by 704 (30.3%) and varied considerably by country (Brazil: 25.0%; México: 54.2%; Peru: 28.7%)
- PrEP non-adherence was significantly associated with being from Mexico, having secondary education or less, lower income, higher self-perceived HIV risk, and recent chemsex

Table 2: Sociodemographic and behavioral factors associated with PrEP non-adherence among SGM currently using PrEP in Brazil, Mexico and Peru, 2024

Characteristics	PrEP non-adherence aPR [95% CI]*
Country (Ref: Brazil)	
Mexico	1.90 [1.55-2.35]
Peru	0.99 [0.71-1.38]
Education (Ref: Secondary or less)	
More than secondary	0.76 [0.59-0.98]
Monthly income (Ref: ≤ minimum wage)	
> 1 to 2 minimum wage	0.89 [0.68-1.17]
> 2 to 6 minimum wages	0.76 [0.59-0.97]
> 6 minimum wages	0.81 [0.62-1.17]
Perceived HIV risk	1.05 [1.03-1.06]
Recent chemsex	1.27 [1.07-1.49]

*Multivariate prevalence ratios were also adjusted for age, race, depression, homonegativity, number of sex partners, and sex with people living with HIV

Conclusions

- Non-adherence was reported by nearly 1/3 of current PrEP users in Brazil, Mexico and Peru
- Non-adherence fundamentally undermines the individual level efficacy and population level effectiveness of PrEP implementation and needs to be addressed
- PrEP scale-up should monitor non-adherence (self-report, discontinuation, etc) and implement activities to support users maintain/improve adherence
- Users facing context-specific barriers and members of more marginalized groups, such as those with lower income and/or education or involved in chemsex, may require additional intervention

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