

Background

- The COVID-19 pandemic and control measures have likely impacted Latin-American MSM and trans women's lives,¹ although impact may vary according to country responses (e.g. Brazil had no lockdowns and provided telemedicine, while Peru had strict lockdowns).
- ImPrEP is an ongoing PrEP demonstration study for MSM and transwomen in Brazil, Peru and Mexico.²
- We report results from a cross-sectional assessment among ImPrEP participants during the COVID-19 crisis.

Methods

- ImPrEP participants were invited to complete a questionnaire on impact of the pandemic and control measures on personal life, mental health, sexual behavior and PrEP use.
- Participant characteristics were compared across countries using chi-square tests. Logistic regression models adjusted by age, gender and education were used to assess factors associated with stopping PrEP use during the initial pandemic period.

Results

- From August 2020 to January 2021, 3211 individuals completed the questionnaire.
- Median age was 31 years (IQR:26-37). The majority were MSM (95%), non-white (71%) and had greater than secondary education (79%) (Table 1).
- The impact of the COVID-19 crisis was differential by country, considering personal life, mental health, sexual behavior and PrEP use (Table 2).
- Peruvian participants reported higher impact of COVID-19 pandemic on personal life, including economics, access to food, and challenges in accessing health care.
- Brazilians had higher reports of mental health issues, including increased substance use.
- More Mexicans reported decreasing in sex, although their number of casual partners and condomless receptive anal sex remained higher than Brazil and Peru.
- A total of 1070 (33.3%) stopped PrEP in that period.
- Being from Peru (aOR:9.25[95%CI:7.48-11.47]) or Mexico (aOR:5.15[95%CI:4.10-6.49]), not having an HIV+ steady partner (aOR:1.34[95%CI:1.07-1.67]) and not having sex during that period (aOR:1.72[95%CI:1.30-2.28]) all increased the odds of stopping PrEP use.

Conclusions

- MSM and transwomen in a PrEP cohort from Latin America were highly affected by the COVID-19 pandemic, but differences were observed across countries, likely resulting from both baseline characteristics and country-specific COVID-19 control measures.

References

- Torres TS, et al. Impact of COVID-19 Pandemic on Sexual Minority Populations in Brazil: An Analysis of Social/Racial Disparities in Maintaining Social Distancing and a Description of Sexual Behavior. *AIDS Behav.* 2021 Jan;25(1):73-84.
- Torres TS, et al. Factors Associated With Willingness to Use Pre-Exposure Prophylaxis in Brazil, Mexico, and Peru: Web-Based Survey Among Men Who Have Sex With Men. *JMIR Public Health Surveill.* 2019 Jun 17;5(2):e13771.

Table 1. Characteristics of participants in Brazil, Mexico and Peru, ImPrEP Study

	Brazil 1712 (53.3)	Peru 901 (28.1%)	Mexico 598 (18.6%)	Total 3211	P value
Total					
Age (years)					
Median(IQR)	32.1 (27.1,38.4)	29.2 (25,35.6)	31.6 (27.2,36.9)	31.2 (26.5,37.5)	< 0.001
18-24	163 (9.5)	176 (19.5)	58 (9.7)	397 (12.4)	< 0.001
25-35	899 (52.5)	477 (52.9)	351 (58.7)	1727 (53.8)	
>35	650 (38)	248 (27.5)	189 (31.6)	1087 (33.9)	
Gender					< 0.001
Trans women	53 (3.1)	79 (8.8)	12 (2)	144 (4.5)	
Cis men	1659 (96.9)	822 (91.2)	586 (98)	3067 (95.5)	
Sexual orientation					< 0.001
Gay	1500 (87.6)	740 (82.1)	541 (90.5)	2781 (86.6)	
Other	212 (12.4)	161 (17.9)	57 (9.5)	430 (13.4)	
Race					< 0.001
Non-white	938 (54.8)	814 (90.3)	525 (87.8)	2277 (70.9)	
White	774 (45.2)	87 (9.7)	73 (12.2)	934 (29.1)	
Education					< 0.001
<=Secondary	293 (17.1)	246 (27.3)	125 (20.9)	664 (20.7)	
> Secondary	1419 (82.9)	655 (72.7)	473 (79.1)	2547 (79.3)	

Table 2. Impact of COVID-19 pandemic and pandemic response on personal life and mental health among ImPrEP participants in Brazil, Peru and Mexico.

	Brazil 1712 (53.3)	Peru 901 (28.1%)	Mexico 598 (18.6%)	Total 3211	P value
Impact of COVID-19 pandemic in personal life					< 0.001
Medium/Very low/Low	803 (46.9)	324 (36.0)	286 (47.8)	1413 (44.0)	
High/Very high	909 (53.1)	577 (64.0)	312 (52.2)	1798 (56.0)	
Challenges during COVID-19 pandemic					
Salary/job reduction	752 (43.9)	642 (71.3)	350 (58.5)	1744 (54.3)	< 0.001
Transportation availability	380 (22.2)	348 (38.6)	76 (12.7)	804 (25.0)	< 0.001
Access to daily medication	74 (4.3)	412 (45.7)	194 (32.4)	680 (21.2)	< 0.001
Unable to maintain social distancing	490 (28.6)	67 (7.4)	122 (20.4)	679 (21.1)	< 0.001
Access to health care	90 (5.3)	334 (37.1)	55 (9.2)	479 (14.9)	< 0.001
Access to hand sanitizer	203 (11.9)	59 (6.5)	92 (15.4)	354 (11.0)	< 0.001
Access to food	97 (5.7)	154 (17.1)	34 (5.7)	285 (8.9)	< 0.001
Access to mental health support	105 (6.1)	71 (7.9)	57 (9.5)	233 (7.3)	0.016
Mental Health during COVID-19 pandemic					
PHQ-2 ≥ 3 (likely major depressive disorder)	580 (33.9)	217 (24.1)	107 (17.9)	904 (28.2)	< 0.001
Alcohol use during COVID-19 pandemic					
Increased	363 (21.2)	29 (3.2)	77 (12.9)	469 (14.6)	< 0.001
No change	522 (30.5)	291 (32.3)	149 (24.9)	962 (30.0)	
Decreased	339 (19.8)	264 (29.3)	141 (23.6)	744 (23.2)	
No use	488 (28.5)	317 (35.2)	231 (38.6)	1036 (32.3)	
Illicit drug use during COVID-19 pandemic					< 0.001
Increased	149 (8.7)	17 (1.9)	64 (10.7)	230 (7.2)	
No change	168 (9.8)	43 (4.8)	136 (22.7)	347 (10.8)	
Decreased	152 (8.9)	26 (2.9)	76 (12.7)	254 (7.9)	
No use	1196 (69.9)	804 (89.2)	283 (47.3)	2283 (71.1)	
Started during the pandemic	75 (2.7)	11 (1.2)	39 (6.5)	97 (3.0)	
Sex during COVID-19 pandemic					< 0.001
Increased	90 (5.3)	26 (2.9)	39 (6.5)	155 (4.8)	
No change	607 (35.5)	364 (40.4)	174 (29.1)	1145 (35.7)	
Decreased	1015 (59.3)	511 (56.7)	385 (64.4)	1911 (59.5)	
Number of sexual casual partners					< 0.001
None	609 (35.6)	352 (39.1)	210 (35.1)	1171 (36.5)	
Only one	98 (5.7)	60 (6.7)	14 (2.3)	172 (5.4)	
2 to 5	468 (27.3)	259 (28.7)	84 (14)	811 (25.3)	
6+	537 (31.4)	230 (25.5)	290 (48.5)	1057 (32.9)	
Condomless receptive anal sex with casual partner	653 (38.1)	251 (27.9)	259 (43.3)	1163 (36.2)	< 0.001
Steady partner					< 0.001
No	667 (39)	435 (48.3)	209 (34.9)	1311 (40.8)	
Yes, HIV negative	565 (33)	202 (22.4)	226 (37.8)	993 (30.9)	
Yes, HIV positive undetect. VL	330 (19.3)	86 (9.5)	90 (15.1)	506 (15.8)	
Yes, HIV positive detect/unk VL	24 (1.4)	45 (5)	28 (4.7)	97 (3)	
Yes, HIV unknown	126 (7.4)	133 (14.8)	45 (7.5)	304 (9.5)	
Stopped PrEP during social distancing (BRA)/lockdown (PE/MEX)	250 (14.6)	552 (61.3)	268 (44.8)	1070 (33.3)	< 0.001

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