

# Depression and Suicide Risk Among Sexual and Gender Minorities: Insights From the ImPrEP CAB Brasil

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## BACKGROUND

- Mental health plays an important role in the effectiveness of HIV prevention strategies, as poor mental health can lead to decreased adherence and increased vulnerability to HIV infection.<sup>1</sup>
- Long-acting PrEP modalities can help overcome barriers related to PrEP persistence and adherence, and should be considered for those with mental health challenges.
- We explored the association between sociodemographic factors, depression and suicide risk among young sexual and gender minorities (SGMs) participating in the ImPrEP CAB study.
- This is the first study to evaluate CAB-LA PrEP implementation in Latin America, a region where scaling up PrEP is urgently needed.<sup>2</sup>

## METHODS

- ImPrEP CAB Brasil is an implementation study to assess PrEP choice, feasibility, acceptability, and effectiveness of CAB-LA for SGMs (18-30 years) in public health PrEP services in 6 Brazilian cities.
- Depression was assessed at baseline, prior to the first CAB-LA injection, using the PHQ-9 (no/mild: [0-9] vs. moderate/severe: [10-27]).
- Suicide risk was also assessed at baseline, using the C-SSRS (no risk vs. suicide risk).
- Participants were continuously monitored throughout the study, and those with positive screenings were referred for on-site psychiatric evaluation.
- Sociodemographic factors were analyzed using Chi-square or Fisher's exact tests.
- Bonferroni corrections were applied for multiple comparisons.

Among 1,200 young sexual and gender minorities (18–30 years) in the ImPrEP CAB-LA Brasil study, 11% had moderate/severe depression and 9.6% reported suicide risk at baseline, with transgender and nonbinary people, younger participants, and those with lower education levels experiencing the greatest burden. These findings underscore the urgent need to integrate mental health interventions into PrEP programs.

**Table 1. Sociodemographic Factors by Depression and Suicide Risk Among Sexual and Gender Minorities Receiving Injectable Cabotegravir PrEP in Brazil, ImPrEP-CAB Brasil, 2023-2024.**

| Sociodemographic Factors            | No/Mild Depression (n=1068) | Moderate/ Severe Depression (n=132) | No Suicide Risk (n=1085) | Suicide Risk (n=115) |
|-------------------------------------|-----------------------------|-------------------------------------|--------------------------|----------------------|
| Age 18-20                           | 84 (83.2%)                  | 17 (16.8%)                          | 79 (78.2%)               | 22 (21.8%)           |
| Age 21-24                           | 308 (87.5%)                 | 44 (12.5%)                          | 315 (89.5%)              | 37 (10.5%)           |
| Age 25-30                           | 676 (90.5%)                 | 71 (9.5%)                           | 691 (92.5%)              | 56 (7.5%)            |
| Cisgender Men Who Have Sex with Men | 981 (90.1%)                 | 108 (9.9%)                          | 993 (91.1%)              | 96 (8.9%)            |
| Transgender Women/Travestis         | 50 (75.8%)                  | 16 (24.2%)                          | 55 (83.3%)               | 11 (16.7%)           |
| Transgender Men                     | 9 (69.2%)                   | 4 (30.8%)                           | 9 (69.2%)                | 4 (30.8%)            |
| Nonbinary/Queer                     | 26 (86.7%)                  | 4 (13.3%)                           | 26 (86.7%)               | 4 (13.3%)            |
| White Race/Ethnicity                | 421 (88.8%)                 | 53 (11.2%)                          | 423 (89.2%)              | 51 (10.8%)           |
| Non-White Race/Ethnicity            | 647 (89.1%)                 | 79 (10.9%)                          | 662 (91.2%)              | 64 (8.8%)            |
| ≤12 years Education                 | 282 (83.9%)                 | 54 (16.1%)                          | 294 (87.5%)              | 42 (12.5%)           |
| >12 years Education                 | 786 (91.0%)                 | 78 (9.0%)                           | 791 (91.6%)              | 73 (8.4%)            |

Data are presented as frequency and percentage. p-values for depression and suicide risk, respectively: age (0.049; <0.001); gender (0.001; 0.010); race/ethnicity (0.871; 0.263); education (<0.001; 0.032). No significant post-hoc results for age and depression. Significant differences in suicide risk between ages 18-20 and 21-24 (p=0.003), and 18-20 and 25-30 (p<0.001). Significant differences in depression between cisgender men and transgender women/travestis (p=0.001). Significant differences in suicide risk across all gender groups (p≤0.001), except between transgender women/travestis and nonbinary/queer.

## RESULTS

- Between October 2023 and September 2024, 1,200 participants were enrolled and received the first CAB-LA injection.
- Most participants were cisgender men who have sex with men (MSM) (91%), aged 25-30 (62%), non-White (61%), and had >12 years of education (72%).
- Overall, 11% had moderate/severe depression and 9.6% suicide risk.
- Transgender women/travestis had higher rates of depression (24.2%) and suicide risk (16.7%) compared to cisgender MSM (9.9%; 8.9%, respectively).
- Transgender men had the highest rates of depression and suicide risk (30.8%), while nonbinary/queer participants had 13.3% for each outcome.
- Depression and suicide risk were greater in those with ≤12 years of education (16.1% and 12.5%, respectively) compared to >12 years (9% and 8.4%, respectively).
- Suicide risk was highest among ages 18-20 (21.8%), compared to 21-24 (10.5%) and 25-30 (7.5%) (Table 1).

## CONCLUSIONS

- Our findings reveal high rates of moderate to severe depression and suicide risk among young SGMs enrolled in ImPrEP CAB-LA, especially among transgender and nonbinary people, younger participants, and those with lower education levels, underscoring the critical need to integrate mental health interventions into PrEP programs.

## REFERENCES

- Rooks-Peck CR, Adegbite AH, Wichser ME, et al. *Mental health and retention in HIV care: A systematic review and meta-analysis*. Health Psychol. 2018;37(6):574-585. doi:10.1037/hea0000606
- Grinsztejn B, Torres TS, Hoagland B, et al. *Long-Acting Injectable Cabotegravir for HIV Preexposure Prophylaxis Among Sexual and Gender Minorities: Protocol for an Implementation Study*. JMIR Public Health Surveill. 2023;9:e44961. Published 2023 Apr 19. doi:10.2196/44961