

Factors Influencing Doxy-PEP Awareness Among Sexual/Gender Minorities: a web-based survey in Brazil

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BACKGROUND

- Sexual and gender minorities (SGM) face a disproportionate burden of sexually transmitted infections (STIs) worldwide, particularly in Latin America.
- While doxycycline post-exposure prophylaxis (doxy-PEP) is recommended in some countries to prevent bacterial STIs, no official guidelines or implementation studies have been conducted in any country of the Global South.
- This study aims to identify factors associated with awareness of doxy-PEP among SGM in Brazil.

METHODS

- A cross-sectional online survey was conducted among adults (18+ years) living in Brazil, recruited via advertisements on dating apps (Scruff and Grindr) and social media (Instagram and Facebook) from August-December 2024.
- Doxy-PEP awareness was defined as having ever heard of it, and logistical regression analysis was used to identify factors associated with this awareness.

RESULTS

- We enrolled 8,217 respondents, with median age 40 years (IQR:33-48), predominantly cisgender men (92.2%) residing in capital cities (77.3%), self-identified as white (56.1%) and having post-secondary education (74.7%).
- Although there was significant interest in STI prophylaxis (n=7017; 85.4%), only 33.3% (n=2738) reported prior doxy-PEP awareness.
- Doxy-PEP awareness was positively associated with having higher education, higher HIV knowledge, more sex partners, engagement in condomless anal sex, chemsex, and having an STI diagnosis in the past 6 months. Conversely, doxy-PEP awareness was negatively associated to unknown HIV status and higher internalized LGBTQIAPN+.
- Among those reporting HIV negative/unknown status, doxy-PEP awareness was higher among those who ever used PrEP vs. never (58.0% vs. 26.3%; p<0.001). Only 6.0% (n=489) reported previous doxy-PEP use, with the majority (60.5%) having received it through a healthcare professional.

Awareness of Doxy-PEP among Brazilian SGM appears limited, potentially influenced by the scarcity of studies and guidelines. Targeted efforts are needed to enhance knowledge, particularly among those with restricted access to health information and services. Strengthening campaigns and integrating Doxy-PEP into sexual health programs could help reduce STIs and address health inequities.

Table. Factors associated with prior doxy-PEP awareness among sexual and gender minorities residing in Brazil, N=8,217

	Doxy-PEP awareness, N=2738 (n, %)	No doxy-PEP awareness, N=5479 (n, %)	aOR (95% CI)
Educational level:			
secondary or lower	539 (19.7)	1543 (28.2)	Ref.
post-secondary	2199 (80.3)	3936 (71.8)	1.30 (1.12-1.51)
HIV Knowledge Score (Median, IQR) (score range 0-12)	12 (11, 12)	11 (10, 12)	1.19 (1.13-1.26)
Internalized LGBTQIAPN+ Score (Median, IQR) (score range 0-42)	7 (3, 14)	10 (4, 18)	0.98 (0.97-0.99)
Number of sex partners¹:			
5 or less	1362 (49.7)	3632 (66.3)	Ref.
More than 5	1376 (50.3)	1847 (33.7)	1.45 (1.29-1.64)
Condomless anal sex¹ (ref=no)	2156 (78.7)	3541 (64.6)	1.29 (1.12-1.49)
Chemsex¹ (ref=no)	784 (39.1)	1078 (25.9)	1.26 (1.11-1.43)
At least one STI¹ (ref=no)	533 (19.7)	672 (12.4)	1.32 (1.14-1.54)
HIV status:			
Negative	1893 (69.4)	3797 (69.7)	Ref.
Positive	765 (28.0)	1215 (22.3)	1.08 (0.95-1.23)
Unknown	71 (2.6)	439 (8.1)	0.57 (0.42-0.77)

¹ In the last 6 months; models adjusted for age, gender, race, income and living in capital cities.

CONCLUSIONS

- Doxy-PEP awareness among SGM in Brazil remains limited, reflecting the absence of implementation studies and official guidelines in the country.
- Tailored efforts are crucial to raise awareness, especially among populations with lower education levels, limited HIV knowledge, and those less engaged with existing prevention services.
- Strengthening awareness campaigns and integrating doxy-PEP into broader sexual health programs will be key to ensuring equitable access, reducing bacterial STI incidence and addressing the underlying social determinants of health.