

TITLE

Missed HIV prevention opportunities among online sexual and gender minorities in India with low PrEP use and low perceived accuracy of U=U – results from a national cross-sectional survey

PRESENTER

Harsh Agarwal

AUTHORS

H. Agarwal¹, T.S. Torres², S. Chung¹, K. Yeatts¹, J. Harrison-Quintana³

INSTITUTIONS

¹University of North Carolina at Chapel Hill, Chapel Hill, United States, ²Instituto Nacional de Infectología Evandro Chagas, Oswaldo Cruz (INI-Fiocruz), Rio de Janeiro, Brazil, ³Grindr, West Hollywood, United States

BACKGROUND: Sexual and gender minorities (SGM) using smartphones to seek partners in India are vulnerable to HIV and are outside of the government's physical-hotspot-focused interventions. As an underreached and under-researched population, little is known about the reach of HIV-related public health messaging and services for this population. We investigated the reach of contemporary HIV prevention strategies like daily Pre-exposure Prophylaxis (PrEP) and perceived accuracy of Undetectable=Untransmittable (U=U) among to identify the gaps and lost opportunities in the HIV prevention space in India.

METHODS: We conducted online cross-sectional study (March–April 2022) of Grindr users across 33 states and union territories including individuals ≥ 18 years who reported sex with men. Cisgender women were excluded. Associations with perceived accuracy of U=U and PrEP use were estimated using adjusted prevalence odds ratios (aPORs) with 95% confidence intervals (95%CI).

RESULTS: The median age of 3126 eligible participants who completed the survey was 28 years. 70.6% (N=2206) identified as male, 82.5% (N=2581) self-identified as male, rest identifying as transwomen, *hijra*, *Kinner* and other identities. HIV prevalence in the sample was 3.1% (N=97).

7% (N=219) of participants reported ever using PrEP, which was associated with higher income ($>$ INR 62,000 aPOR 1.94 [95%CI 1.21, 3.12]), selecting English language for survey (aPOR 1.70 [95%CI 1.21, 2.40]), single relationship status (aPOR 2.35 [95%CI 1.45, 4.04]) and use of party drugs (aPOR 2.57 [95%CI 1.65, 3.93]).

After being provided with the correct definition of U=U, 25% (N=782) perceived it as completely accurate, which was associated with knowing their HIV status (HIV Negative aPOR 1.37 [95%CI 1.1, 1.71], HIV Positive aPOR 3.39 [95%CI 2.11, 5.46]), having awareness of U=U (aPOR 1.58 [95%CI 1.29, 1.92]) or have used PrEP (aPOR 1.56 [95%CI 1.15, 2.12]) along with use of party drugs (aPOR 1.51 [95%CI 1.1, 2.07]) and attending LGBTQIA+ events (aPOR 1.38 [95%CI 1.1, 1.73]).

CONCLUSIONS: With low perceived accuracy around U=U and low PrEP use, SGM using smartphones in India are missing out on novel HIV prevention strategies. We recommend incorporating PrEP and U=U in programmatic interventions and adopting digital strategies that could reduce stigma and promote HIV prevention.