Awareness, Willingness, Facilitators and Barriers of PrEP among Key Population: Results from a cross-sectional study in high-prevalent geographies of India

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Background: Pre-Exposure Prophylaxis (PrEP) against HIV, a biomedical tool for prevention of HIV, is recommended in Key Population (KPs) like MSM and PWID. PrEP could be an additional tool to achieve the goal of "Ending of AIDS as a Public Health Threat by 2030" in India. A survey was done to evaluate awareness, willingness to use, determine facilitators and barriers associated with acceptability of PrEP among MSM and PWID in India.

<u>Methods:</u> We used respondent-driven sampling to accrue MSM or PWID from 22 cities in India between August 2016 and May 2017. We assessed PrEP awareness and willingness to use PrEP in cross-sectional surveys. Logistic regression models were used to determine the association of demographic and behavioral factors with willingness to use PrEP. Reasons for unwillingness to use PrEP were determined. Participants who were willing to take PrEP were further questioned about their preference for oral or injectable administration.

Results: We surveyed 9,836 PWID and 8,514 MSM across 12 and 10 cities, respectively. On average, only 8.0% of MSM and 6.1% of PWID were aware of PrEP. However, following a brief description of PrEP, 67.6% of MSM and 52.4% of PWID expressed willingness to use PrEP. Willingness to use PrEP was associated with several HIV risk behaviors (sharing needles, more sex partners). Self-perceived low risk for HIV and concern about adverse reactions to PrEP were primary reasons for unwillingness to use PrEP. Similar percentages of MSM expressed preference for oral and injectable PrEP (~40% each), while PWID expressed a preference for oral over injectable PrEP (56% vs. 31%).

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Conclusion: PrEP has been shown to be cost-effective in many settings and rolled out as part of national initiative for prevention in many countries. MSM, PWID and other KPs in India could benefit from PrEP as an additional prevention strategy. IEC initiatives must be conducted to increase awareness of PrEP and address misperceptions about HIV risk and concern about adverse reactions to using PrEP. National Guidelines and roll out of PrEP through existing program is needed in India to meet UNAIDS targets.