

## Gay, bisexual, and other men who have sex with men in five Asian countries report low awareness and use of Undetectable=Untransmittable (U=U): Results of the Asia Pacific MSM Internet Survey

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**Background:** The global Undetectable=Untransmittable (U=U) campaign informs people that a person living with HIV who is on antiretroviral therapy (ART) with undetectable viral load (UVL) cannot sexually transmit HIV. However, the extent of U=U awareness among gay, bisexual, and other men who have sex with men (GBM) in many Asian countries is unclear.

**Methods:** An online cross-sectional survey targeting GBM in Indonesia, Japan, Malaysia, Thailand, and Vietnam was conducted from May 2020–January 2021. Factors independently associated with U=U awareness were determined by multivariable logistic regression, stratified by HIV status.

**Results:** We recruited 15,872 participants (Indonesia=1,342; Japan=7,452; Malaysia=849; Thailand=1,566; Vietnam=4,663). 6.8% were HIV-positive, 46.2% HIV-negative, and 47.0% of unknown-status. Overall, only 35.9% were aware of U=U; awareness varied by country (Indonesia=27.6%; Japan=41.1%; Malaysia=39.3%; Thailand=33.4%; Vietnam=30.2%;  $p<0.001$ ) and HIV status (HIV-positive=75.5%; HIV-negative=43.8%; unknown-status=22.4%;  $p<0.001$ ). Among HIV-positive men, factors independently associated with U=U awareness included: university education ( $p=0.014$ ); any condomless anal intercourse (CLAI;  $p=0.004$ ); taking ART ( $p<0.001$ ); having UVL at last test ( $p<0.001$ ); and fewer experiences of sexuality-related stigma ( $p=0.002$ ). Among non-HIV-positive men, awareness was associated with: being older ( $p=0.002$ ); being “out” to more people ( $p<0.001$ ); university education ( $p=0.003$ ); identifying as gay ( $p=0.009$ ); sex with >10 male partners in the previous year ( $p=0.001$ ); having an HIV test in the previous year ( $p<0.001$ ); and taking PrEP ( $p<0.001$ ). Among 1,797 men reporting CLAI with casual partners, 22.8% reported using UVL to prevent transmission (HIV-positive men=70.2%; HIV-negative men=17.2%;  $p<0.001$ ).

**Conclusion:** Two-thirds of GBM were not aware that U=U and one-quarter of HIV-positive men lacked this awareness. While a large proportion of HIV-positive men used UVL to prevent transmission when having CLAI, this was uncommon among non-HIV-positive men. Such a situation significantly challenges the ability of GBM to utilise proven HIV prevention options and diminishes opportunities to disrupt pervasive stigma experienced by people living with HIV.

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