

Meta-analysis shows the massive global burden of HIV among transgender women

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Almost a fifth of transgender women worldwide are infected with HIV, results of a meta-analysis published in *The Lancet Infectious Diseases* shows. A total of 39 studies involving over 11,000 transgender women in 15 different countries were included in the study, which also found that prevalence of HIV among transgender women was massively higher than that seen in the general population.

“Our findings suggest that transgender women are a very high burden population for HIV and are in urgent need of prevention, treatment, and care services,” comment the authors.

For the purposes of the study, transgender women were defined as individuals who were born as biological males but who identified as women. A meta-analysis conducted in 2008 showed a very high prevalence of HIV among transgender women in the United States, and a separate meta-analysis found that transgender women engaged in sex work were significantly more likely to be infected with HIV compared to male and other female sex workers.

Little, however, is known about the overall worldwide burden of HIV among transsexual women. A team of investigators therefore conducted a systematic review and meta-analysis. They included all studies conducted between 2000 and 2011 that reported on HIV prevalence among transgender women compared to the general adult population.

A total of ten studies conducted in low- and middle-income countries and five studies carried out in richer countries were identified by the authors.

The pooled HIV prevalence for transgender women was 19.1%. Among transgender women sampled in low- and middle-income countries, the prevalence was 18%, compared to a prevalence of 22% in richer countries.

Overall, transgender women were 49 times more likely to be infected with HIV compared to adults in the general population. This risk differed little between low- and middle-income countries (OR = 50) and resource-rich countries (OR = 46).

All 15 countries contributing studies have predominately male HIV epidemics.

The investigators established that, overall, transgender women were 36 times more likely to have HIV compared to males in the general populations of these countries. In addition, transgender women were some 78 times more likely to be infected with HIV compared to other women in the general population. The magnitude of these risks were similar regardless of settings.

“The findings of the meta-analysis of HIV infection rates are remarkable for the severity and consistency of disease burdens across these populations,” write the investigators.

But why do transgender women have such a high burden of HIV? The investigators believe that many of the infections will have been acquired via unprotected anal sex; that transgender women are likely to be involved in sexual networks where there is a high HIV prevalence; and also that a significant proportion of transgender women engage in sex work. The authors also note there “remains a dearth of research on HIV acquisition risks from neovaginal intercourse after vaginoplasty”.

Stigma, discrimination and exclusion from prevention, treatment and care services are also offered as possible explanation. The authors emphasise that: “Few health-care workers, from HIV counselors to nurses and physicians, have received any training on addressing the specific health needs of transgender women.”

Data from the United States are also highlighted by the authors showing an elevated HIV prevalence among transgender males.

They conclude, “present HIV surveillance and prevention interventions for transgender women are clearly inadequate...the findings of this meta-analysis make clear that urgency is needed to address this severe and widespread component of worldwide HIV.”

The authors of an editorial in the same edition of *The Lancet Infectious Diseases* believe the research provides “a timely and important scientific reference and responsible advocacy tool to promote the physical and mental health of transgender women through appropriate services founded on scientific research”.

Reference

Baral SD et al. *Worldwide burden of HIV in transgender women: a systematic review and meta-analysis*. *Lancet Infect Dis*, 13: 214-22, 2013.

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