

# Influence of Multiple Stigmas on Psychosocial Problems and Condom Use among MSM and Transgender Women in India: Findings from a Longitudinal S3 (Stigma, Syndemics And Sex) Cohort Study

Venkatesan Chakrapani <sup>1</sup>, Jasvir Kaur <sup>2</sup>, Aleena Sebastian <sup>3</sup>, S. Rawat <sup>4</sup>, R. Nelson <sup>1</sup>, D. Baruah <sup>4</sup>, M. Shunmugam <sup>1</sup>, A. Jaya <sup>5</sup>, P.A. Newman <sup>6</sup>

<sup>1</sup>Centre for Sexuality and Health Research and Policy (C-SHaRP), Chennai, India, <sup>2</sup>Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India,

<sup>3</sup>National Institute of Advanced Sciences (NIAS), Bangalore, India, <sup>4</sup>Humsafar Trust, Mumbai, India, <sup>5</sup>Sahodaran, Chennai, India, <sup>6</sup>University of Toronto, Toronto, Canada. **Poster Number: A-AIDS-2022-07682**

## BACKGROUND

The disproportionate HIV burden among MSM and transgender women in India persists along with multiple forms of stigma and psychosocial problems such as depression and problematic alcohol use [1-3].

Amid limited research in India on the associations between multiple stigmas, psychosocial problems and condomless anal sex (CAS), we explored these associations, informed by minority stress and syndemic theories.

## METHODS

We used three-wave data (August 2021 to June 2022) from an observational cohort study with 500 MSM and 500 transgender women recruited through community-based organisations that conduct HIV preventive interventions in Chennai and Mumbai. Data were collected using SmartPads by trained community interviewers.

Standardized scales were used for measuring different types of stigmas (sexual stigma, transgender identity-related stigma, sex work stigma) and psychosocial variables (depression, anxiety, alcohol use, internalised homonegativity, internalised transprejudice). For measuring consistency in condom use with male non-primary partners, this question was asked: "How often have you used condoms when you had anal sex with male non-regular partners in the past 2 months?" Response options included: always, more than half of the time, about half of the time, less than half of the time, never. For this analysis, we converted it into a binary outcome (CAS – yes or no. i.e., 'always used condoms' = '0'; otherwise '1'=Yes).

Path analyses were conducted (Mplus-8) to predict CAS with male non-primary partners (wave-3) from stigma scores (wave-1 sexual stigma, transgender identity stigma, sex work stigma) and psychosocial variables (wave-2 depression, anxiety, internalized homonegativity, internalized transprejudice and alcohol use).

## RESULTS

Among MSM (mean age=28.2 years; HIV=4.2%) and transgender women (mean age=27.6 years; HIV=4.8%), wave-3 CAS was 28.5% (wave-2: 23.2%) and 81.2% (wave-2: 72.3%), respectively. The very high prevalence of condomless anal sex among transgender women could be due to survival sex work (70.3% of those who reported condomless anal sex were in sex work during wave-3) and lack of employment opportunities during the COVID-19 pandemic when data collection for the second and third waves were conducted. Further, it could also be due to decreased access to HIV prevention services, including access to condoms, and increased psychological distress. These potential explanations are supported by the information gathered in qualitative data from this study as well as from other publications [4, 5].

**Transgender women:** At wave-2, compared to MSM, transgender women had higher prevalence of moderate depression (MSM - 4.3%; transgender women - 21.1%) and anxiety (MSM - 16.2%; transgender women - 45.9%), but similar prevalence of problematic alcohol use (MSM -13.4%; transgender women - 12.1%). Sex work stigma, internalized transprejudice, depression and anxiety had significant direct effects on CAS (Figure-1). Transgender identity stigma had significant direct effects on depression and anxiety, and significant indirect effects (IDE) on CAS through depression (IDE=0.06, 95% CI 0.02 to 0.10, p=.009) and anxiety (IDE=0.04, 95% CI 0.007 to 0.07, p=.01). Sex work stigma had significant indirect effect on CAS through internalised transprejudice (IDE=0.04, 95% CI 0.017 to 0.07, p=.002) and depression (IDE=0.04, 95% CI 0.004 to 0.07, p=.02).

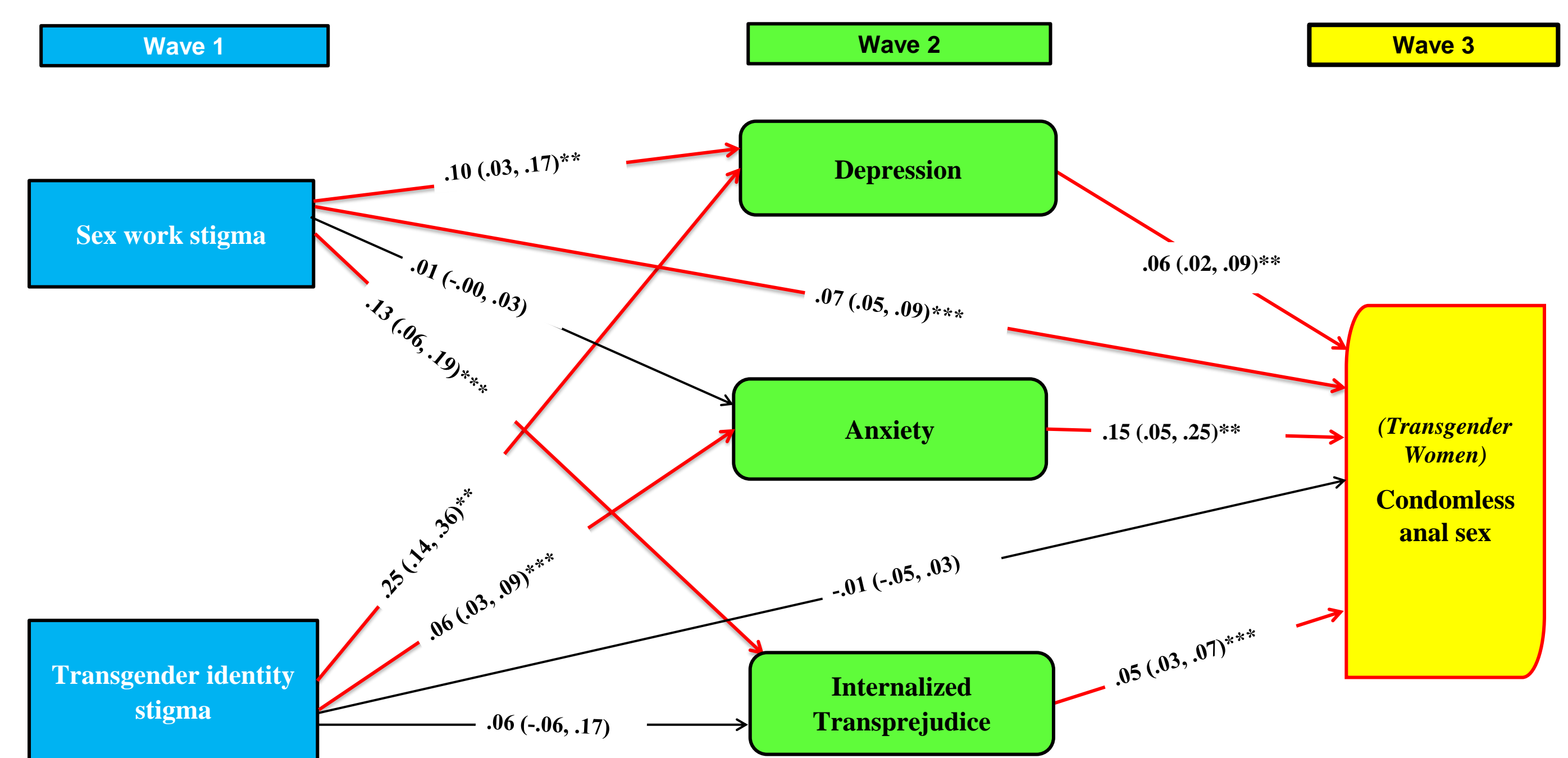
**MSM:** Sexual stigma had significant direct effects on depression and anxiety, and perceived HIV stigma had significant direct effects on internalized homonegativity (Figure-2).

## CONCLUSIONS

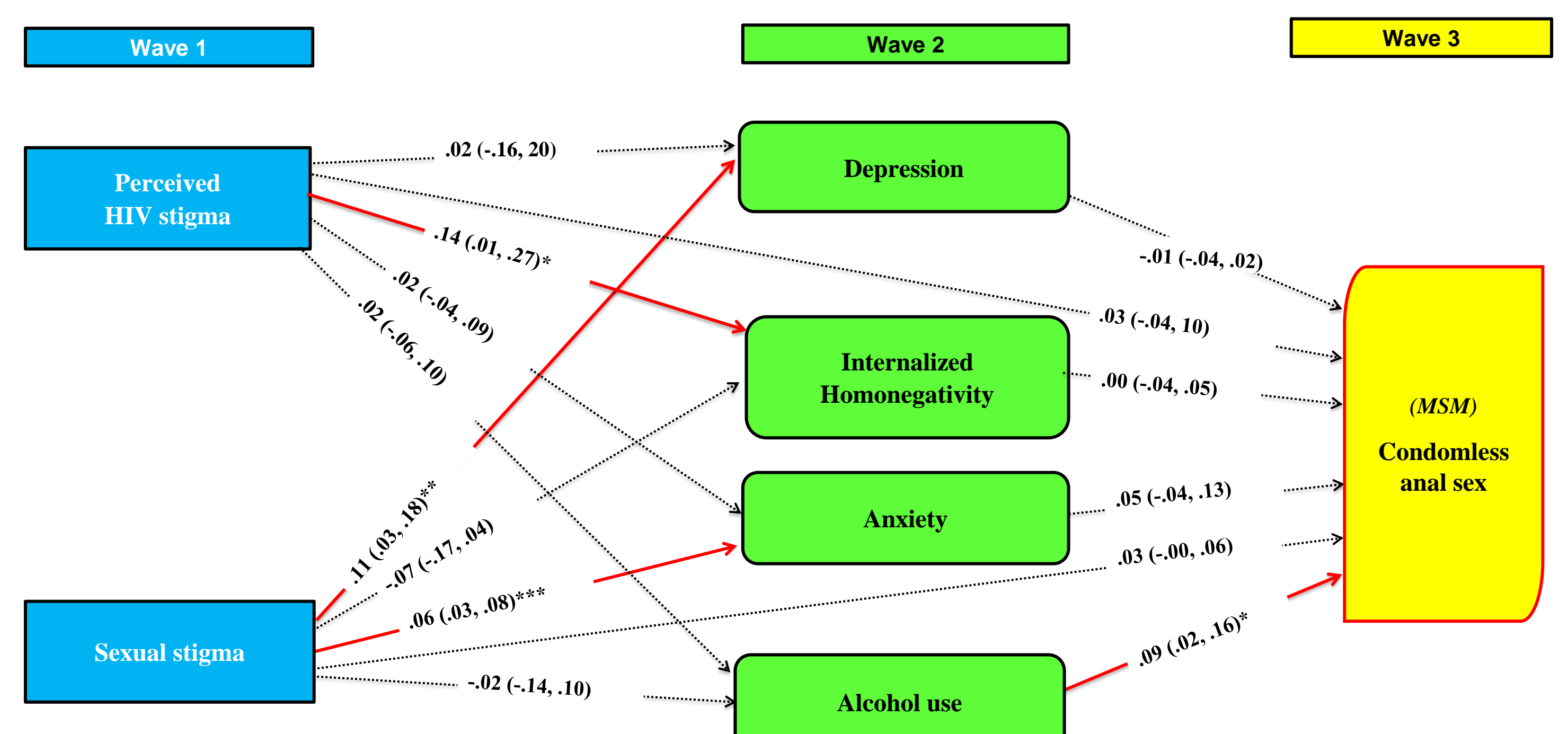
Stigmas faced by MSM (sexual, sex work) and transgender women (transgender identity) contributed directly and/or indirectly to HIV risk through multiple psychosocial problems.

Expanded efforts to reduce societal stigma against transgender people, MSM and those involved in sex work, and to address population-specific psychosocial problems, are needed to promote safer sex and mental health among transgender women and MSM in India.

**Figure 1. Associations between multiple stigmas, psychosocial problems, and condomless anal sex (with male non-regular partners) among transgender women**  
Effects are unstandardized estimates (95% CI). Bold red arrows indicate significant effects; \*p<.05, \*\*p<.01, \*\*\*p<.001.



**Figure 2. Associations between multiple stigmas, psychosocial problems, and condomless anal sex (with male non-regular partners) among MSM**  
Effects are unstandardized estimates (95% CI). Bold red arrows indicate significant effects; \*p<.05, \*\*p<.01, \*\*\*p<.001.



## REFERENCES

- Chakrapani V, Lakshmi PVM, Tsai AC, Vijin PP, Kumar P, Srinivas V. The syndemic of violence victimisation, drug use, frequent alcohol use, and HIV transmission risk behaviour among men who have sex with men: Cross-sectional, population-based study in India. *SSM Popul Health*. 2019;7:100348.
- Chakrapani V, Willie TC, Shunmugam M, Kershaw TS. Syndemic Classes, Stigma, and Sexual Risk Among Transgender Women in India. *AIDS and behavior*. 2019;23(6):1518-29.
- Tomori C, McFall AM, Solomon SS, Srikrishnan AK, Anand S, Balakrishnan P, et al. Is there synergy in syndemics? Psychosocial conditions and sexual risk among men who have sex with men in India. *Soc Sci Med*. 2018;206:110-6.
- Chakrapani V, Newman PA, Sebastian A, Rawat S, Shunmugam M, Sellamuthu P. The Impact of COVID-19 on Economic Well-Being and Health Outcomes among Transgender Women in India. *Transgender Health*. 2021;0(0).
- Pandya A, Redcay A. Impact of COVID-19 on Transgender Women and Hijra: Insights from Gujarat, India. *Journal of human rights and social work*. 2021(101730181):1-10.