

# Associations between Sexual Stigma, COVID-19 Economic Stressors, Psychosocial Syndemic Conditions, and Condom Use among Men Who Have Sex With Men in India

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## Introduction

- Men who have sex with men (MSM) are at an elevated risk for HIV.
- Limited data from India show that sexual stigma and psychosocial problems are associated with HIV-related sexual risk behaviors among MSM.
- Minority stress and syndemic theories are emerging as important theoretical frameworks to understand how stigmas influence the prevalence of psychosocial conditions with implications for HIV risk among MSM.
- Amid COVID-19 pandemic, we hypothesized that COVID-19 economic stressors could influence HIV risk as well.

## Aim

- We aimed to explore whether sexual and sex work stigmas, and COVID-19 economic stressors are associated with condomless anal sex (CAS) via psychosocial syndemics and internalised homonegativity (IHN).

## Methods

- Cross-sectional study (September-December 2022)
- Survey: Online (self-administered); Offline (in-person; interviewer-administered)
- n=250 MSM
- Data analysis:** Mediation analysis in Mplus8
  - The binary outcome measure was CAS (past 2 months) with male partners.
  - Standardized scales were used to measure psychosocial conditions such as depression (PHQ-2), anxiety (GAD-2), and problematic alcohol use (AUDIT-C), and sexual and sex work stigmas.
  - Covariates included were education, marital status, and sexual identity.

## Results

- Mean age: 29 years (SD 6.8).
- Education (Completed a college degree): 62%
- Engagement in sex work: 29%
- Condomless Anal Sex (CAS): 49%
- The prevalences of depression (past 2-week), anxiety (past 2-week), problematic alcohol use (past 3-month), and psychosocial syndemics (co-occurrence of two or more psychosocial conditions) were 19%, 55%, 12% and 22%, respectively.

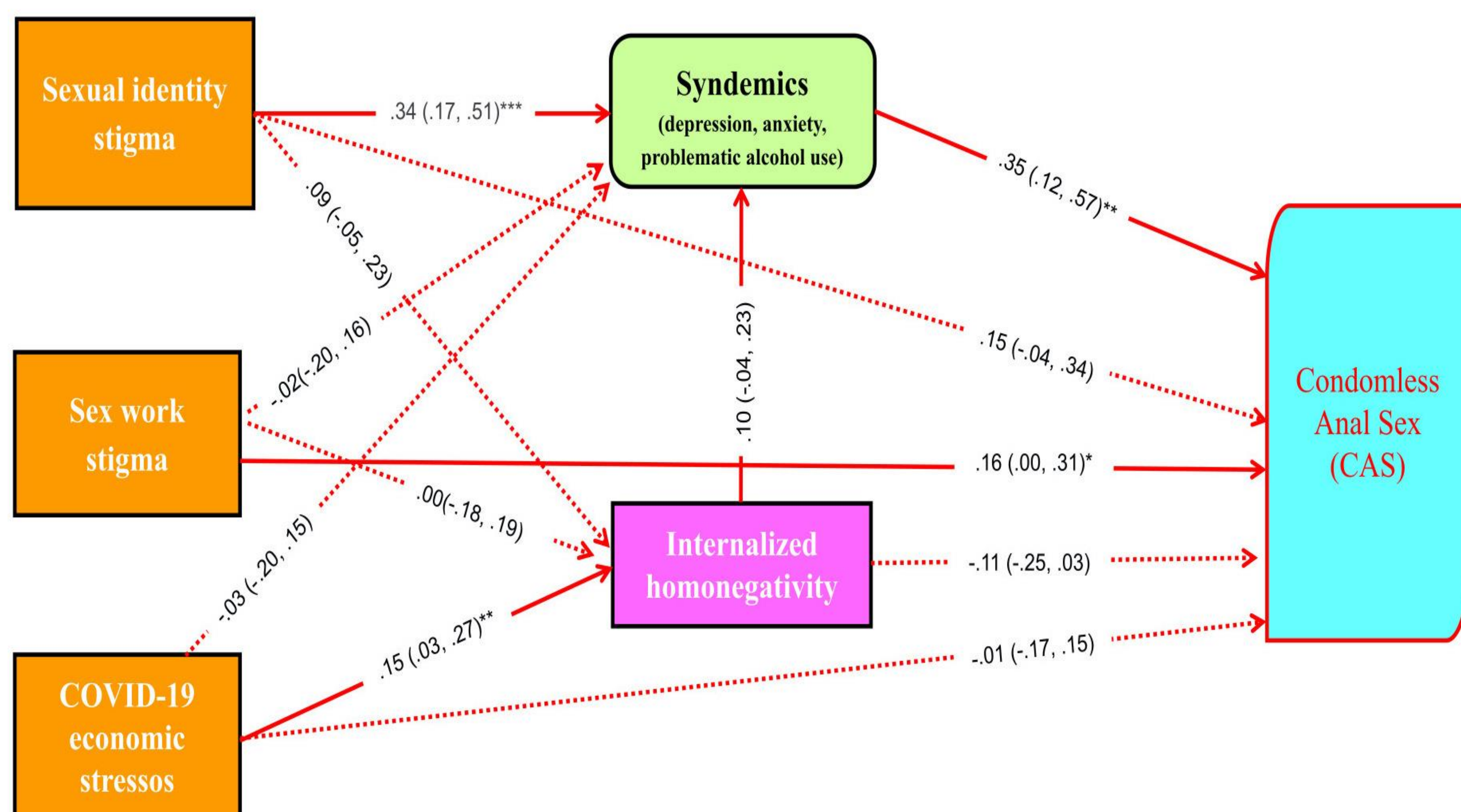
## Analysis

- Significant direct effects were observed from sexual stigma to syndemics, syndemics to CAS, and COVID-19 economic stressors to IHN (Figure 1).
- The total effect of sexual stigma on CAS was significant ( $\beta=.25$ ; 95% CI .08, .42;  $p=.004$ ), with syndemics being the significant mediator ( $\beta=.12$ ; 95% CI .02, .21;  $p=.02$ ).

## Conclusion

- Sexual stigma indirectly contribute to HIV risk through psychosocial syndemics.
- Strategies to reduce sexual stigma and address psychosocial syndemic conditions could reduce HIV risk among MSM.
- The role of economic stressors on mental health needs to be further explored.

**Figure 1. Associations between multiple stigmas, psychosocial syndemic conditions, and condomless anal sex (with male partners) among MSM**  
Effects are standardized estimates (95% CI). Bold red arrows indicate significant effects; \* $p<.05$ , \*\* $p<.01$ , \*\*\* $p<.001$ .



## References

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