

# Synergy among Multiple Stigmas in Predicting Psychosocial Conditions and Condomless Anal Use among Transgender Women in India: Findings from a Longitudinal S3 (Stigma, Syndemics and Sex) Cohort Study

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## Background

- Limited research in India has assessed the potential synergy among multiple stigmas faced by TGW in contributing to psychosocial conditions and condomless anal sex (CAS).
- We explored these associations, informed by syndemic theory and intersectionality framework.

## Methods

- We used three-wave data (November 2020 to March 2022: ~ every 6 months) from a cohort study of 500 TGW recruited through community-based organizations implementing HIV prevention interventions in Chennai and Mumbai.
- CAS was defined as “never” using condoms during anal sex with male non-primary partners during the past 2 months.
- Using generalized linear modelling approaches (Stata-16), we modeled CAS (wave-3) and psychosocial binary outcomes (wave-2 depression [PHQ-9], anxiety [GAD-2], internalized transprejudice, and heavy alcohol use [AUDIT-C]) as a function of interactions between 3 types of stigma scores (wave-1): perceived HIV stigma, sex work stigma and transgender identity stigma.

## Results

- Participants’ mean age at baseline was 27.5 (SD=5.6) years and 4.9% self-reported as HIV positive.
- We estimated a high prevalence of outcome and mediators: CAS (81.2%), internalized transprejudice (46.2%), anxiety (37.9%), problematic alcohol use (15.3%), and depression (14.8%).

### Synergy in the production of CAS:

- All three stigmas significantly predicted CAS:
- HIV stigma (OR=1.67, 95% CI 1.36 to 2.05,  $p<.001$ )
- Sex work stigma (OR=1.18, 95% CI 1.11 to 1.24,  $p<.001$ ), and
- Internalized transprejudice (3.13, 95% CI 1.15 to 8.52,  $p=.02$ )
- There was a significant interaction between sex work stigma and HIV stigma (OR=1.02, 95% CI 1.01 to 1.04,  $p=.005$ ) (Figure-1).

### Synergy in the production of psychosocial conditions:

- Transgender identity stigma (OR=1.11, 95% CI 1.06 to 1.16,  $p<.001$ ) and sex work stigma (OR = 1.03, 95% CI 1.001 to 1.07,  $p=.04$ ) and their interaction term (OR=1.006, 95% CI 1.001 to 1.01,  $p=.03$ ) significantly predicted anxiety.
- Sex work stigma significantly predicted internalized transprejudice (OR=1.02, 95% CI 1.001 to 1.04,  $p=.03$ ), and there was a significant interaction between sex work stigma and transgender identity stigma in predicting internalized transprejudice (OR=1.003, 95% CI 1.01 to 1.006,  $p=.04$ ).

## Conclusion

- Synergistic interactions between stigmas were identified in their associations with psychosocial conditions (anxiety, internalized transprejudice) and CAS.
- Multi-level and syndemic theory-based interventions to eliminate intersecting/multiple stigmas and promote mental health and safer sex.

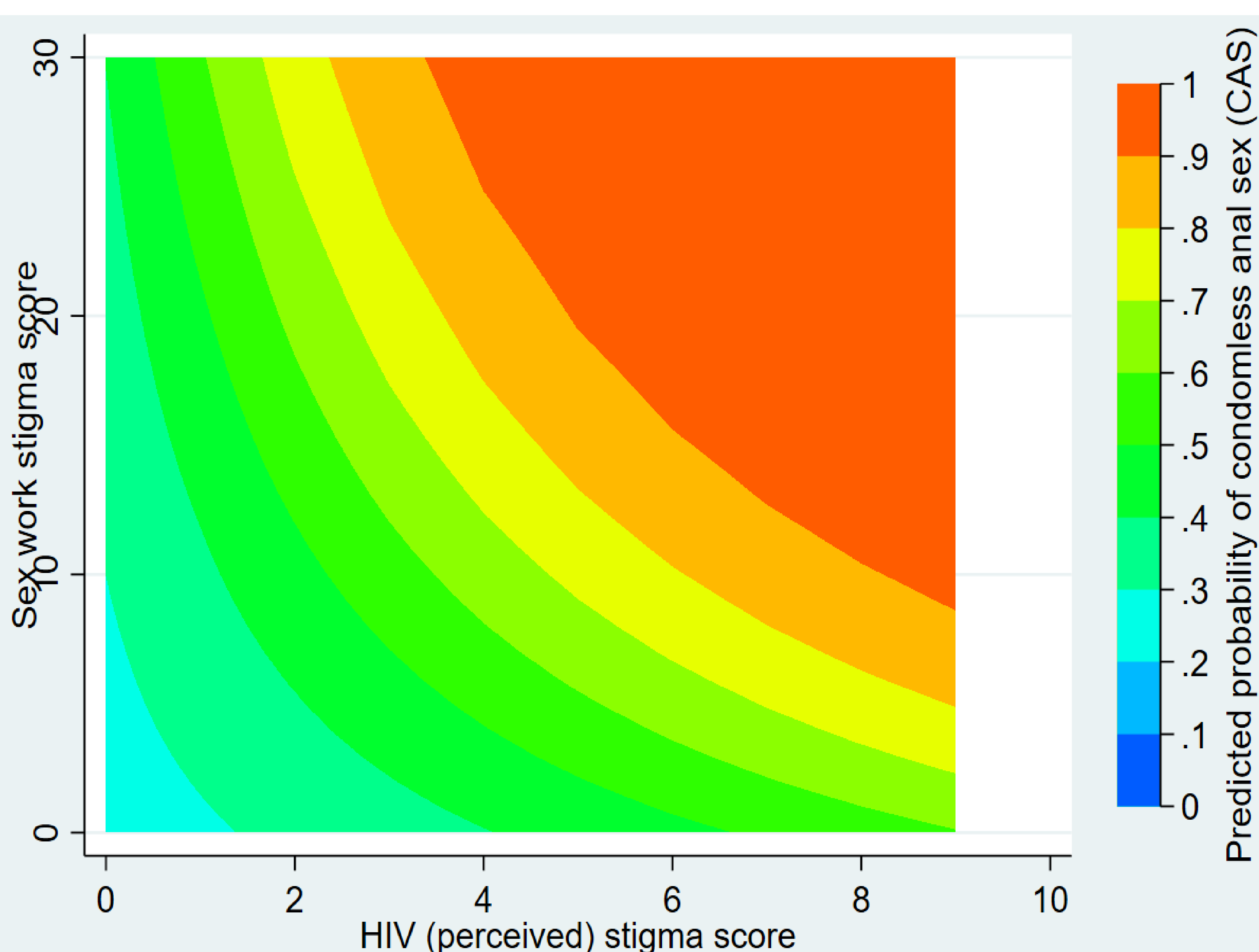


Fig 1. Predicted probability of CAS by sex work stigma & HIV stigma