



HPTN

HIV Prevention
Trials Network

The Impact of Syndemic Problems on Sexual and Medical Health Behaviors in HIV-positive Patients in Care in Brazil, Thailand, and Zambia

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Introduction

- Treatment as Prevention works
- However, not for everyone:
 - Depression
 - Substance use
 - Additional psychosocial problems
- Compared to primary HIV prevention, there is limited data on the additive effects of these syndemics within HIV care

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- A multi-site longitudinal observational cohort study of high risk HIV-infected individuals ($n = 749$) in HIV care

1. Benin (n=268) Potential epidemic indicators

- Polydrug use
 - 100 MSM
 - 99 heterosexual women

2. Thailand (n=300)

- Depressive symptoms
 - 100 heterosexual men
 - 100 MSM

- Alcohol use
 - 100 heterosexual women

3. Zambia (n=186)

- Fear of discrimination or social consequences
 - 86 heterosexual men
 - 100 heterosexual women

Aim and Analysis

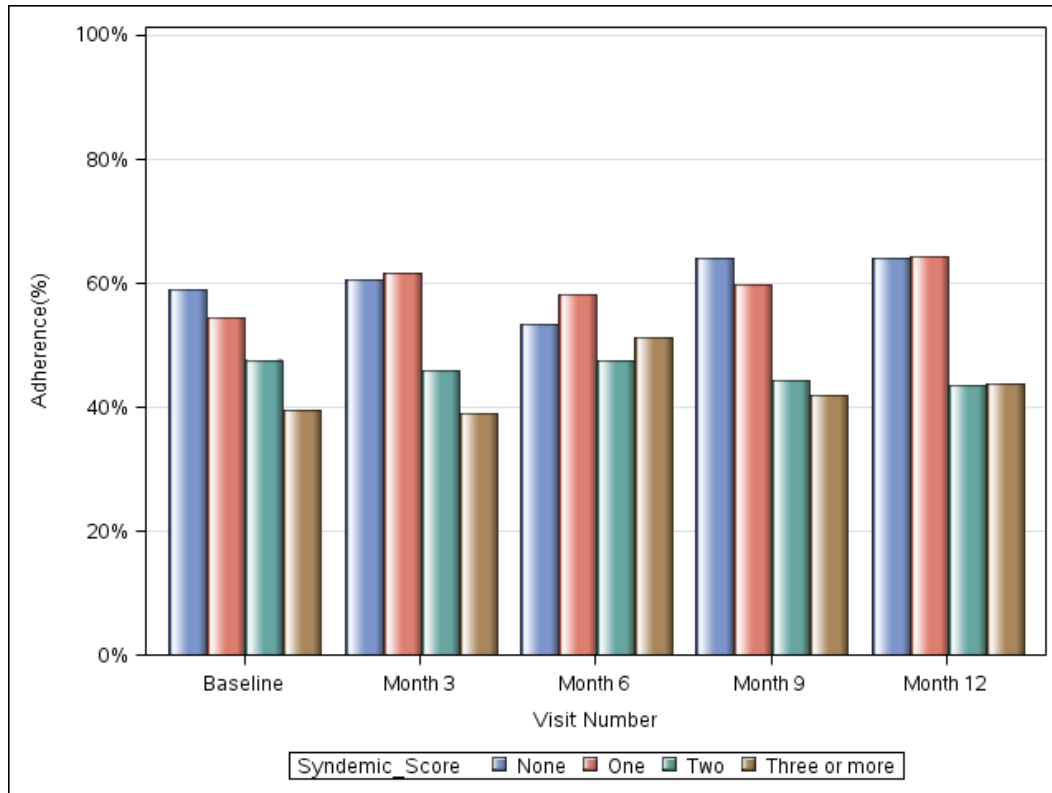
Aim

- Examine the degree to which syndemic problems are related to:
 1. **Nonadherence to ART**
 2. Condomless sex (both any condomless sex and serodiscordant condomless sex)
 3. Serodiscordant condomless sex in individuals who are either not on ART or report ART nonadherence

Analysis

- Syndemic score reflecting the summative count of assessed psychosocial problems – Representing syndemic scores of 0, 1, 2, and 3 or more
- A logistic regression model, fitted via generalized estimating equations (GEE) was used to study the association between self-reported adherence and the syndemic score while adjusting for other covariates

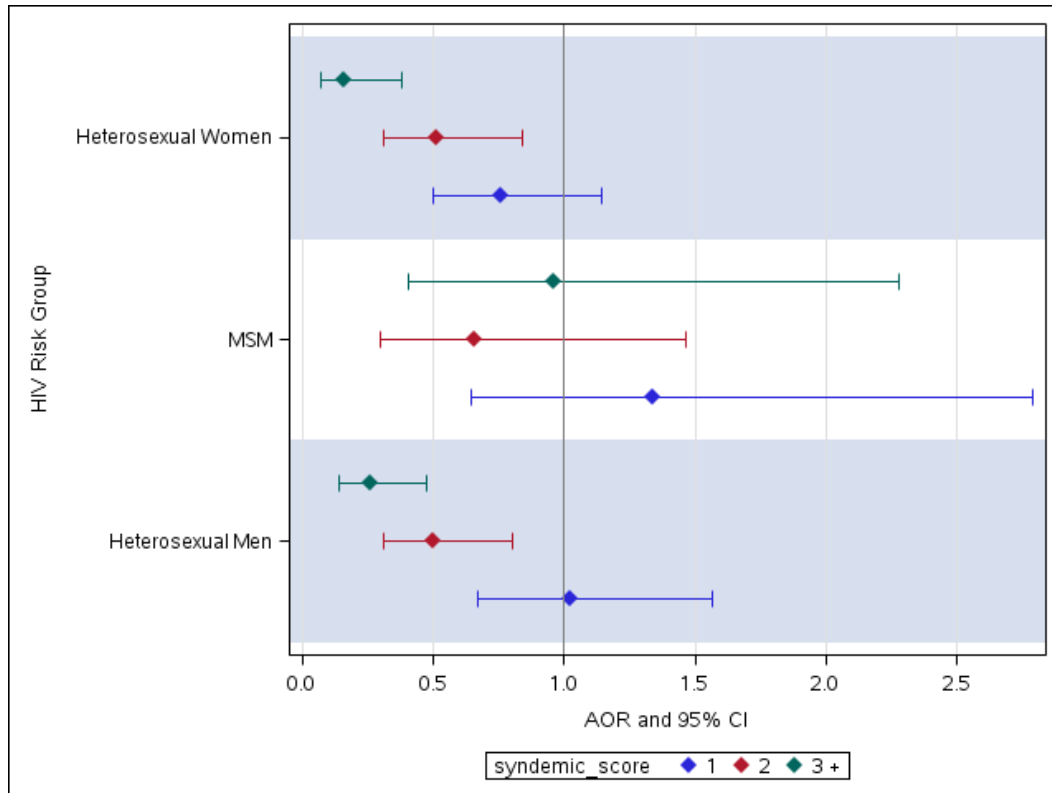
Distribution of ART adherence



- High syndemic scores coincide with lower proportion of adherence regardless of the visit number

Adjusted odds ratio for ART adherence by study groups

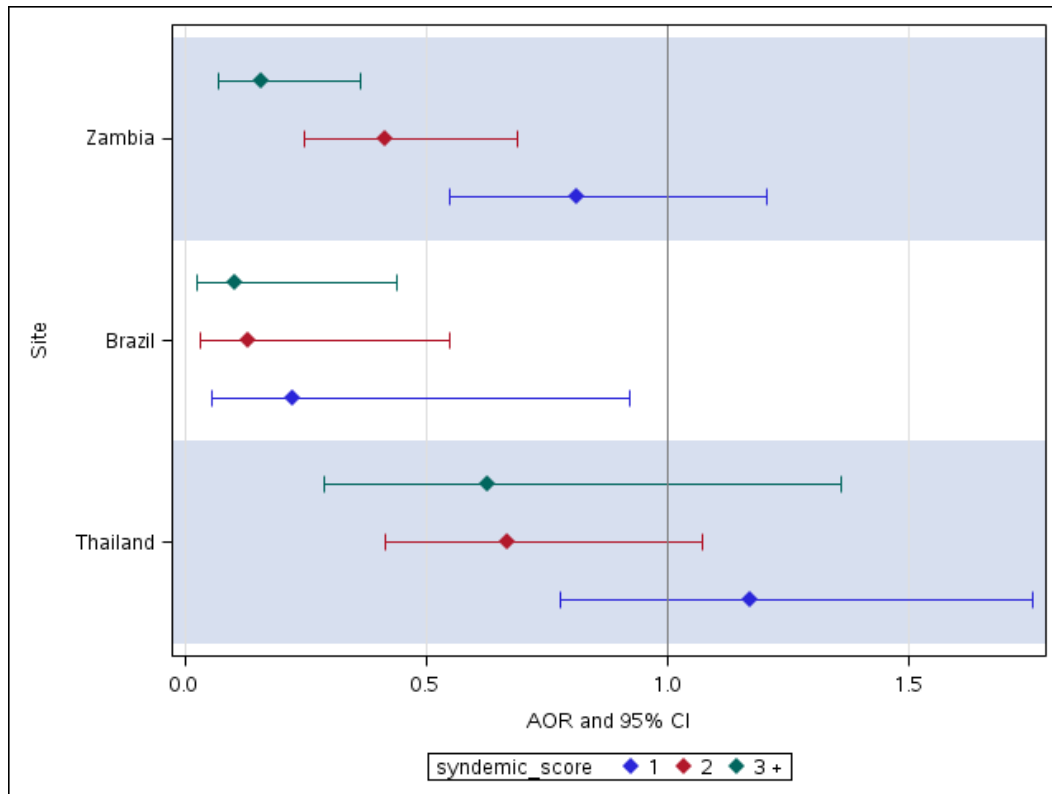
Results from logistic regression model



- Among heterosexual men and women, adherence is lower for individuals in groups with higher syndemic scores
 - This pattern is not evident in MSM

Adjusted odds ratio for ART adherence by site

Results from logistic regression model



- Adherence is lower for individuals in groups with higher syndemic scores

Summary

- Findings suggest that increased co-occurrence of syndemic problems are associated with reduced ART adherence in people with HIV, but may be different across risk groups and country.
- Understanding syndemics among people with HIV by risk group will better inform culturally-relevant integrated models of HIV care.
- More research is needed to examine the degree to which syndemic problems are related to condomless sex in these groups.

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