

SYNDEMIC FACTORS ASSOCIATED WITH DEPRESSION AMONG MEN WHO HAVE SEX WITH MEN IN BRAZIL, 2016

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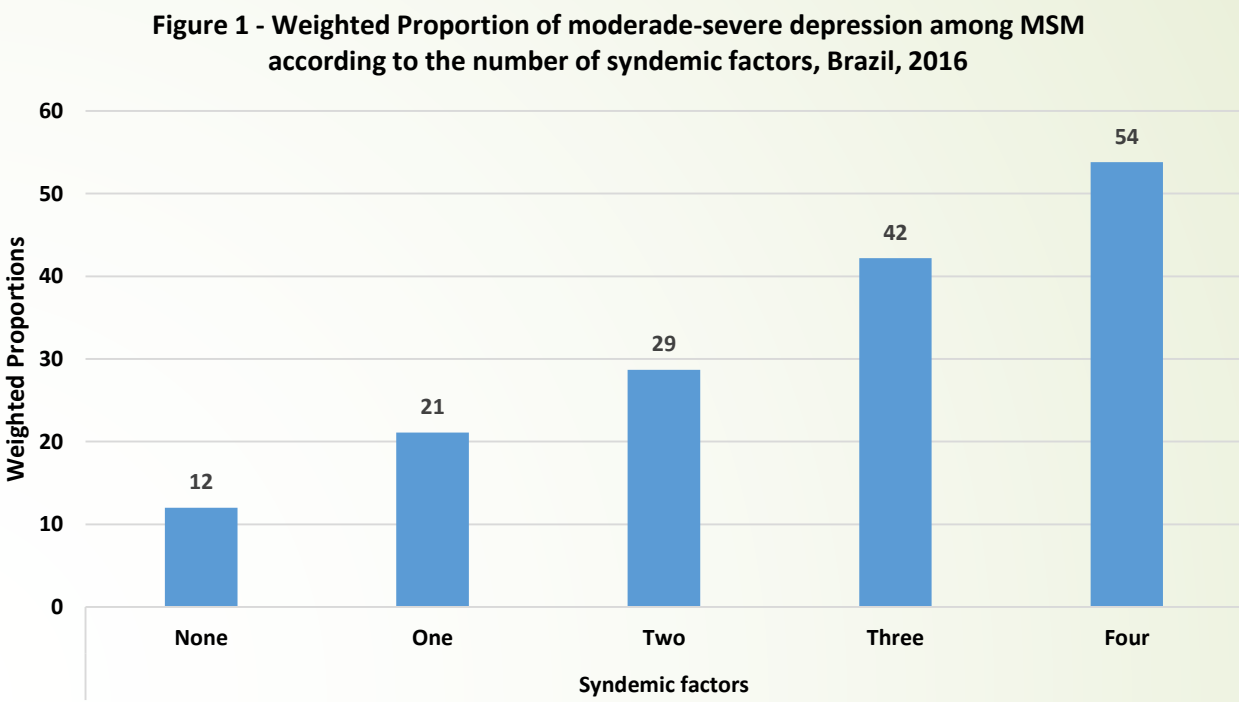
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BACKGROUND: Globally, depression rates are high among men who have sex with men (MSM). Multiple factors may interact to synergistically increase this risk. This analysis assessed the prevalence and factors associated with depression among MSM in Brazil in 2016.

METHODS: Respondent Driven Sampling (RDS) cross-sectional study in 12 Brazilian cities among 4176 MSM. Sociodemographic and behavioral characteristics were collected while depression was screened by PHQ-9. Estimates were weighted by RDS Gile’s estimator with 95% confidence intervals (95% CI). Moderate-severe depression (PHQ-9≥10) was compared to none-mild (PHQ-9<10). The magnitude of associations was estimated by Odds Ratio (OR) using multiple logistic regression. Syndemic factors were a combination of four variables: unprotected receptive anal sex, alcohol or illicit drug use, physical violence and sexual violence. Those with one to four of these factors were compared to those with none, adjusting for age, education, race, socioeconomic status.

RESULTS: The overall prevalence of moderate-severe depression was 25.0% (95% CI=21.8-28.1) and 12.0%, 21.1%, 28.7%, 42.2% and 53.8% for none, one, two, three, and four syndemic factors, respectively (Figure 1). There was a dose-response effect whether unadjusted or adjusted for age, education, race, socioeconomic status, and other variables (Table 1). Perception of HIV risk, high level of HIV knowledge, known HIV positive, and poor/very poor self-rated health were also independently associated with depression.

CONCLUSIONS: Depression among MSM is higher than in the general Brazilian population. The accumulation of factors associated with depression highlights the need for integrative public health actions targeting MSM in Brazil, addressing risk behavior, substance use and violence prevention



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Table 1 – Adjusted and Unadjusted Odds ratios of moderat/severe depression, MSM, Brazil, 2016

Characteristics:	OR ¹ (95% CI)	AdjOR ² (95% CI)	AdjOR ³ (95% CI)
Syndemic factors: ⁴			
One	1.96 (1.13-3.31)	1.94 (1.12-3.35)	1.92 (1.14-3.23)
Two	2.96 (1.70-5.17)	3.00 (1.73-5.23)	2.59 (1.51- 4.44)
Three	5.35 (2.74-10.47)	5.40 (2.79-10.43)	5.89 (2.99-11.59)
Four	8.56 (1.74-42.08)	8.14 (1.73-38.29)	8.79 (1.89-40.92)
High HIV/AIDS Knowledge			2.18 (1.30-3.66)
High chance of acquiring HIV			2.24 (1.52-3.30)
Known HIV positive			2.78 (1.51-5.11)
Poor/Very poor self-rated health			2.18 (1.39-3.42)

¹ Unadjusted

² Adjusted for age, schooling, race and socioeconomic status

³ Adjusted for age, schooling, race, socioeconomic status and other co-variables.

⁴ Unprotected receptive anal sex, alcohol or illicit drug use, physical violence and sexual violence