

# High Prevalence of Social and Structural Syndemic Conditions Associated with Poor Psychological Quality of Life Among a Large Global Sample of Gay, Bisexual and Other Men who Have sex with Men.

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## Introduction

Multiple co-occurring social and structural conditions, including sexual and physical violence and discrimination, disproportionately impact gay, bisexual and other men who have sex with men (GBMSM). Most syndemics research has focused exclusively on psychosocial conditions associated with HIV sexual risk behaviors. This study examined the role of social and structural conditions - including socioeconomic status, housing instability, sexual and physical violence and discrimination - on overall psychological quality of life among a global sample of GBMSM.

## Methodology

We analyzed data from a global sample of 2,417 GBMSM collected between 2014 and 2015 from the MSMGF (the Global Forum on MSM & HIV) third Global Men's Health and Rights Study (GMHR) survey. Participants were recruited through online convenience sampling (e.g. via organizational networks, email listservs and websites). Data were analyzed using SPSS. A linear regression was conducted using count of syndemic conditions (inability to meet basic needs, insecure housing, homophobic discrimination, and sexual and physical violence) as the independent variable to assess the additive effect of the syndemic conditions on Psychological Quality of Life as measured by the World Health Organization. Analyses were also repeated with control variables.

## Results

Table 1. Descriptive Characteristics.

	Sample
	N (%) or M (SD)
<i>Region of the World</i>	
Western Europe, Northern Europe, and North America	1,401 (58%)
Subsaharan Africa	114 (5%)
Oceania	88 (4%)
Middle East	26 (1%)
Latin America	389 (16%)
Eastern Europe and Central Asia	129 (5%)
Central Europe	58 (2%)
Caribbean	40 (2%)
Asia	167 (7%)
Other/Unknown	5 (<1%)
<i>Age</i>	38.91 (12.44)
<i>Sexuality</i>	
Gay/Homosexual	2,135 (88%)
Bisexual	208 (9%)
Other	74 (3%)
<i>Employment Status</i>	
Employed	2,294 (95%)
Unemployed	123 (5%)
<i>Education</i>	
Graduated High School and Below	407 (17%)
College or Trade Skill and Above	2,010 (83%)
<i>Health Insurance (currently insured)</i>	
	2,084 (86%)
<i>Syndemic Factors</i>	
Inability to Meet Basic Needs	807 (33%)
Insecure Housing	375 (16%)
Homophobic Discrimination	765 (32%)
Homophobic Violence	923 (38%)
<i>Syndemic Scale</i>	
0 Factors	823 (34%)
1 Factor	751 (31%)
2 Factors	513 (21%)
3 Factors	227 (9%)
4 Factors	103 (4%)
<i>Outcomes</i>	
Psychological Quality of Life (n = 2,377)	3.63 (.70)
<i>N</i>	2,417

N=(2,417) for full sample unless otherwise specified.

Among 2,417 men, prevalence of syndemic conditions was substantial with 1,594 (66%) of respondents experiencing at least one syndemic factor. In multivariable syndemic analyses, participants with one factor (b=-.22, p<.001), two factors (b=-.33, p<.001), or three or more factors (b=-.62, p<.001) each reported significantly lower levels of Psychological Quality of Life than those with zero syndemic factors. These effects persisted after the introduction of controls.

Table 2. Linear Regression of Syndemic Factor Count and Control Variables.

	Model 1		Model 2	
	b	SE	b	SE
<i>Syndemic Scale (ref: 0 factors)</i>				
1 Factor	-.22***	0.03	-.22***	0.03
2 Factors	-.33***	0.04	-.34***	0.04
3 or 4 Factors	-.62***	0.04	-.60***	0.05
<i>Health Care Coverage (ref: no insurance)</i>				
Covered			0.08	0.04
<i>Sexual Identity (ref: gay)</i>				
Bisexual			-0.07	0.05
Other			0.07	0.08
<i>Employment Status (ref: unemployed)</i>				
Employed			.26***	0.06
<i>Education (ref: less than college)</i>				
Higher Education			0.05	0.04
<i>Age</i>				
			.01***	0.001
<i>Region (ref: Western Europe, Northern Europe, and North America)</i>				
Subsaharan Africa			0.11	0.07
Oceania			-0.09	0.07
Middle East			-0.04	0.13
Latin America			.14***	0.04
Eastern Europe and Central Asia			.19***	0.07
Central Europe			0.08	0.09
Caribbean			0.19	0.11
Asia			-.12*	0.06
Other Region/Unknown			0.2	0.3
<i>F (df)</i>	70.36 (3, 2373)		17.84 (18, 2358)	
<i>Adjusted R<sup>2</sup></i>	0.08		0.12	

\*p<.05, \*\*p<.01, \*\*\*p<.001

## Conclusions

This study provides initial evidence that intertwined social and structural syndemic conditions are positively associated with poor psychological quality of life among a global sample of GBMSM. Future longitudinal research should further assess the impact of these conditions on overall quality of life and assure the inclusion of other marginalized communities, including transgender men and women. Comprehensive structural interventions that simultaneously address co-occurring social and structural syndemic conditions should be developed and tested.

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