925

Stigma and Openness about Sexual Identity among Men Who Have Sex with Men (MSM): A Latent Class Analysis

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ABSTRACT

- Sexual behavior stigma is associated with risk behaviors among MSM in Swaziland
- These associations vary by level openness about sexual behaviors/identity
- Comprehensive HIV interventions should aim to reduce stigma and encourage community-level support

BACKGROUND

- MSM in Sub-Saharan Africa are subjected to high levels of sexual behavior stigma
- This may affect mental health and sexual risk behaviors
- MSM who are open about their sexual identity appear to be most affected by stigma
- Characterizing the mechanism of action of stigma in potentiating HIV-risks among MSM is important to support the development of interventions

METHODS

- In October-December 2014, MSM were recruited across 5 cities/towns in Swaziland through snowball sampling
- Participants (N=532) completed a survey that included questions about demographics, stigma, and mental and sexual health
- Latent class analysis (LCA) was used to identify classes based on self-reported measures of sexual behavior stigma and whether the sexual behaviors of the participant was known to his family or healthcare workers
- Logistic regression was used to identify demographic characteristics, sexual risk behaviors, and mental health characteristics (i.e., depression – PHQ9) associated with latent class membership
- All analyses were performed using SAS PROC LCA

RESULTS

Identification of Latent Classes

- A three-latent-class model was selected based on theoretical and practically meaningful patterns as well as model fit criteria (G2, AIC, BIC, and entropy) (Table 1)
- The first class consistent of MSM who demonstrated overall low probabilities of sexual behavior stigma (55%; 276/502) (Table 2)
- MSM in the second class exhibited high probabilities of physical violence and fear/avoidance of healthcare, and were less likely to have their sexual behaviors known (11%; 54/502)
- Members of the third class demonstrated high probabilities of verbal harassment, stigma from family and friends, and were more likely to have their sexual behaviors known (34%; 172/502)

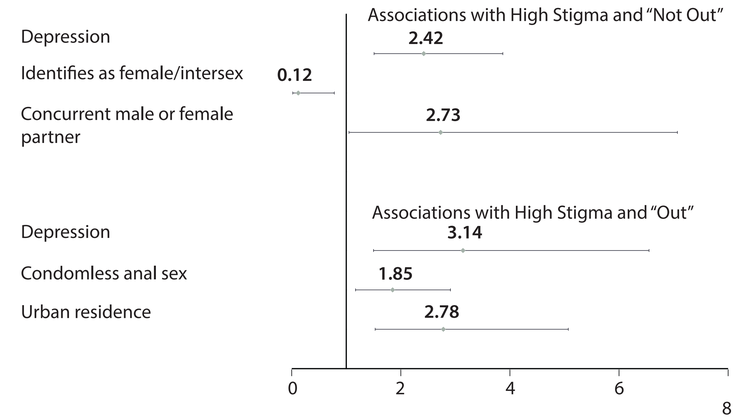
Table 1. Goodness-of-Fit Indices Comparing Class Models of Stigma and Being "Out" among MSM in Swaziland, 2014

Class	G^2 (df)	AIC	BIC	CAIC	Entropy
2	2608 (32736)	2670	2803	2833	0.87
3	2155 (32720)	2249	2450	2497	0.90
4	1890 (32704)	2016	2285	2348	0.90
5	1757 (32688)	1915	2253	2332	0.88
6	1680 (32672)	1870	2277	2372	0.90

Table 2. Item-response probabilities conditional on latent class membership, among MSM in Swaziland (N=502)

Item	Low Stigma	High stigma, not "out"	High stigma, "out"
Stigma			
Felt excluded at family gatherings	0.06	0.02	**0.62**
Felt that family members made discriminatory remarks or gossiped	0.16	0.00	**0.70**
Felt rejected by friends	0.09	0.00	**0.48**
Felt police refused to protect you	0.05	0.00	**0.28**
Felt scared to walk around in public places	0.24	0.15	**0.73**
Verbally harassed	0.25	0.00	**0.87**
Blackmailed	0.12	0.04	**0.44**
Physically hurt	0.03	**0.62**	0.33
Tortured	0.03	**0.67**	0.25
Felt not treated well in a health center	0.00	**0.51**	0.15
Heard healthcare providers gossiping	0.02	**0.55**	0.21
Felt afraid to go to healthcare services	0.07	**0.85**	0.72
Avoided going to healthcare services	0.05	**0.79**	0.72
Openness about sexual behaviors/ identity			
Told any family member or any family member knows he has sex with men	0.38	0.11	**0.63**
Told any healthcare provider or any healthcare provider knows he has sex with men	0.15	0.05	**0.34**

Figure 1. Adjusted* odds ratios for factors associated with stigma and disclosure among MSM in Swaziland (n=502)



*Adjusts for age, education, and employment status

Adjusted Associations with Latent Class Membership

- Relative to the "low stigma" class, participants who were sampled from an urban area (Adjusted Odds Ratio [aOR]=2.78, 95% Confidence Interval [CI]=1.53, 5.07) and who engaged in condomless anal sex (aOR=1.85, 95% CI=1.17, 2.91) were more likely to belong to the "high stigma, 'out'" class
- In contrast, participants who had a concurrent male or female partner were more likely to belong to the "high stigma, not 'out'" class (aOR=2.73, 95% CI=1.05, 7.07)
- Depression was associated with membership in both high-stigma classes (aOR=2.42, 95% CI=1.51, 3.87 "out" and aOR=3.14, 95% CI=1.50, 6.55 not "out")
- Those who identified as female/intersex were least likely to belong to the high stigma and "not out" class (aOR=0.12, 95% CI=0.02, 0.78)

CONCLUSIONS

- In the context of combination HIV intervention strategies, reduction of sexual risk behavior remains crucial for prevention of HIV acquisition and transmission
- In these analyses, stigma appeared to increase sexual risk behaviors and risk for depression
- Evidence-based stigma interventions may ultimately be the key to ovecoming the barriers to HIV prevention and treatment programs for gay men and other MSM

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