Changes in Sexual Behaviors Due to Mpox: A Cross-Sectional Study of SGM in Illinois

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INTRODUCTION

- The spread of mpox in 2022 primarily within the sexual networks of men who have sex with men (MSM) triggered a potentially stigmatizing public health response in the US
- Despite mpox primarily spreading through skin-to-skin contact, most messaging has promoted abstinence and/or reduction in sexual risk behaviors
- In this study we investigated whether decreases in sexual risk behaviors continue among sexual and gender minority (SGM) youth and young adults (YYA), and what factors are associated with persistence of risk reduction behaviors

SAMPLE & METHODOLOGY

- The parent study, Keeping it LITE, examined HIV risk factors in young adults who reported sexual activity between 2017 and 2019 (n=3,444)
- An mpox substudy was conducted between September 10th and 20th, 2022 for all participants with Illinois residency (n = 469)
- Survey questions included demographic data and sexual risk reduction behaviors

Age
Mean: 29.9 years old (range: 19-39)

Sexual Identity
Most were gay/lesbian (71.3%), bisexual/pansexual (13.6%), or queer (11.6%)

Gender Identity
One-fifth said they were either transgender (14.7%) or not sure if they were transgender (3.1%); more than three-quarters reported a current gender identity of man/boy (81.3%)

Race/Ethnicity
Our sample was 48.1% non-Hispanic white individuals, followed by 19.7% Hispanic/Latinx, 15.3% non-Hispanic Black, 9.7% multiracial, and 6.3% Non-Hispanic Asian

- Responses were aggregated, and an exploratory factor analysis (EFA) was utilized to investigate potential behavioral clustering using MPlus
- Bivariate analyses were conducted with three outcome variables related to sexual risk-taking. Odds ratios (ORs) and 95% confidence intervals (CIs) were calculated for the dichotomous outcome of reporting sexual contact since June 1st
- Generalized linear models (GLMs) with corresponding F-statistics were generated for both sexual risk reduction factors

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KEY FINDINGS

Table 1. Demographic Characteristics and Bivariate Associations with Sexual Contact (n=317)

	N (%)	Sexual Contact since 06/01/22		No Sexual Contact since 06/01/22		OR (95% CI)
		N	%	N	%	
Race/ethnicity						
Non-Hispanic White	153 (48.3)	137	89.5	16	10.5	1.00 (--)
Non-Hispanic Black	48 (15.1)	33	68.8	15	31.3	***0.26 (0.12, 0.57)***
Non-Hispanic Asian	20 (6.3)	17	85.0	3	15.0	0.66 (0.18, 2.51)
Multiracial	31 (9.8)	26	83.9	5	16.1	0.61 (0.21, 1.80)
Hispanic/Latinx	62 (19.6)	48	77.4	14	22.6	***0.40 (0.18, 0.88)***
Other	3 (1.0)	1	33.3	2	66.7	***0.06 (0.01, 0.68)***
Age, Years (mean, SD)	29.9 (4.8)	30.2	4.7	28.4	4.8	***1.08 (1.02, 1.15)***
Transgender Identity						
No	260 (82.0)	218	83.2	42	76.4	1.00 (--)
Yes	47 (14.8)	36	13.7	11	20.0	0.63 (0.30, 1.34)
Not Sure	10 (3.2)	8	3.1	2	3.6	0.77 (0.16, 3.76)
Gender						
Man/Boy	257 (81.1)	214	83.3	43	16.7	1.00 (--)
Woman/Girl	10 (3.2)	8	80.0	2	20.0	0.80 (0.17, 3.92)
Genderqueer	11 (3.5)	10	90.9	1	9.1	2.01 (0.25, 16.1)
Non-binary	30 (9.5)	23	76.7	7	23.3	0.66 (0.26, 1.64)
Other	9 (2.8)	7	77.8	2	22.2	0.70 (0.14, 3.50)
Sexual Orientation						
Gay/Lesbian	226 (71.3)	193	85.4	33	14.6	1.00 (--)
Bisexual/Pansexual	43 (13.6)	30	69.8	13	30.2	***0.40 (0.19, 0.83)***
Queer	37 (11.7)	33	12.6	4	10.8	1.41 (0.47, 4.24)
Other	11 (3.5)	6	54.6	5	45.5	***0.21 (0.06, 0.71)***
Relationship Status: Single	163 (51.4)	120	45.8	43	78.2	***0.24 (0.12, 0.47)***
MPV Vaccine						
No	142 (44.8)	106	40.5	36	65.5	1.00 (--)
Yes, Partial	88 (27.8)	78	29.8	10	18.2	***2.65 (1.24, 5.66)***
Yes, Fully	77 (24.3)	71	27.1	6	10.9	***4.02 (1.62, 10.0)***
Not Sure	10 (3.2)	7	2.7	3	5.5	0.79 (0.20, 3.23)

Table 2. Risk Reduction Behaviors among Sexually Active Participants (n = 260)

	N	%	Factor 1	Factor 2
Having sex less frequently	139	53.5	X	
Taking a temporary break from sexual activities until after you are vaccinated	118	45.4	X	
Having group sex less frequently	152	58.5	X	
Reducing your number of sex partners	166	63.9	X	
Avoiding spaces like saunas, bath houses, sex clubs, or private and public sex parties	192	73.9	X	
Using condoms to protect yourself from exposure to monkeypox	81	31.2		X
Wearing gloves to reduce exposure to monkeypox if inserting fingers into the vagina or anus	30	11.5		X
Avoiding kissing or exchanging spit with others	62	23.9		X
Masturbating together at a distance without touching each other	53	20.4		X
Having virtual sex (webcam, phone sex, sexting, etc.) instead of in-person sex	54	20.8		X
Having sex with your clothes on or covering areas where a rash is present, reducing as much skin-to-skin contact as possible	29	11.2		X
Washing your hands, fetish gear, sex toys, and any fabrics (bedding, towels, clothes) after having sex	131	50.4		
Not providing in-person sex services which included skin-to-skin contact with a client	57	21.9		X
Number of behaviors endorsed (mean, SD)	4.86	3.59		

DISCUSSION

- Study participants in Illinois overwhelmingly reported reducing sexual contact due to the mpox outbreak
- Two risk reduction factors were identified through the EFA – Factor 1 (decreasing sexual activity) and Factor 2 (use of protection methods)
- Both factor scores were associated with mpox vaccination – those who were fully or partially vaccinated were less likely to decrease sexual activity and those who were not vaccinated were less likely to use protection methods – demonstrating complex associations
- Compared to the AMIS study, participants in our survey were substantially more likely to report reducing the number of sex partners (64% vs. 48%)
- Similar approaches focused on mpox vaccination or prevention of other infectious disease outbreaks in sexual networks might be equally as effective among SGM individuals
- This would run in contrast to much of the current messaging that advocates for sexual abstinence (Health, 2022; Prevention, 2022a, 2022b) or pauses in sexual activity, but would also acknowledge the reality that abstinence-only interventions are ineffective and difficult to maintain (Stanger-Hall & Hall, 2011)
- We emphasize that a healthy, pleasurable sex life is not incompatible with public health goals

CONCLUSIONS AND IMPLICATIONS

- SGM communities in Illinois have made significant adjustments to sexual behavior in response to the mpox outbreak, but it is unclear if this behavioral change can be sustained
- Results lend strong support to the importance of sex-positive, harm reduction messaging, similar to approaches used in campaigns such as PrEP4Love in Chicago
- New approaches are needed to ensure that risk reduction messaging is effective, realistic, and tailored to populations most impacted
- We suggest that sex-positive messaging which takes care to avoid stigmatizing marginalized groups should be a key priority for public health prevention work moving forward

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