

GLOBAL SOCIOSEXUALITY MEDIATES THE RELATIONSHIP BETWEEN PREP KNOWLEDGE AND RISKY SEXUAL BEHAVIOR

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INTRODUCTION

- Human immunodeficiency virus (HIV) is most prevalent among young men who have sex with men (1)
- Pre-exposure prophylaxis (PrEP) is a preventative drug that offers 95% risk reduction of acquiring HIV (2)
- PrEP's release has corresponded with a rise in STI rates (3)
- Some research has characterized PrEP as a conduit for people engaging in risky sexual behavior, citing the theory of risk compensation (3, 4)
- Others cite PrEP as an effective protective mechanism and a boon to the communities at risk for HIV (5)
- Given this paucity of evidence for either side of the argument, further research is needed to determine how PrEP has affected sexual behavior in the MSM community, and what may be affecting the relationship between PrEP and risky sex

AIM

- To assess the effects of PrEP knowledge on intentions to engage in risky sexual behavior and how sociosexual orientation, sexual compulsivity, and contraceptive attitudes could mediate this relationship
- We predicted that higher PrEP scores would lead to a higher likelihood of risky sex, which could be mediated by global sociosexual orientation, sexual compulsivity, and contraceptive attitudes

METHODS

PARTICIPANTS

- 246 men, aged 18-72 (see Table 1)
- Ethnic breakdown: 66.3% Caucasian, 3.7% African-American, 16.7% Hispanic/Latino, 9.3% Asian American, and 4.1% marked other or missing
- Sexual identity breakdown: 65% different-sex attraction only, 20% same sex attraction only, and 15% both sex attraction

MEASURES

- PrEP knowledge** was calculated by participant's responses to factual questions about PrEP (e.g., What year did the FDA approve this drug?) resulting in a continuous score from 0 to 15
- Sociosexual Orientation** was assessed with the Revised Sociosexual Orientation scale (SOI-R), which assesses one's openness to uncommitted sex (6)
- Sexual Compulsivity** was assessed with the Sexual Compulsivity Scale (SCS), which measures a tendency toward sexual behaviors that interfere with everyday life (7)
- Contraceptive Attitudes** were assessed with the Contraceptive Attitudes Scale (CAS), which measures one's favorability toward the use of contraceptives (e.g., condoms, birth control) (8)
- Presentation of Vignette

RESULTS

To interpret the data obtained, a logistic regression analysis was conducted, where we utilized a mediation model (See Figure 3)

PrEP Knowledge on Risky Sex

A logistic regression analysis revealed that PrEP knowledge significantly mediated the relationship when accounting for the mediators

Global sociosexual orientation on risky sex

The same mediation analysis using logistic regression revealed global sociosexual orientation (SOI-R) to be the only statistically significant mediator of the relationship between PrEP and risky sex

Answering yes to the vignette and also indicating no condom use predicts higher sociosexuality score

i.e., answering "yes" to the vignette and going through with the encounter without a condom is associated with higher global sociosexual orientation

Total Indirect Effects of Mediation Analysis

Predictor	Estimate	SE	Est./S.E.	P-Value
CAS	0.003	0.006	0.434	0.664
SCS	0.003	0.005	0.502	0.615
SOI-R	-0.072*	0.025	-2.842	0.004*
DV on IV	-0.0236*	0.075	-3.154	0.002*

*denotes significant results

VIGNETTE

"You are attending a party with some coworkers who you have not spent much time with before. You decide to go to the bathroom, where you meet someone you find attractive. You two begin talking, and find that you get along very well. After talking for a few minutes, s/he asks if you'd like to come home with her/him. S/he lives next door, and as you walk, s/he reveals that s/he is taking a drug that is 95% effective in preventing HIV infection. Once you get to her/his apartment, s/he begins to kiss you, and you must decide what to do next, as you know that sex will be the likely outcome. Do you choose to have sex with her/him, or do you choose to leave the apartment? *
If participant answers no, Do you use a condom?
If participant answers yes, Please explain your reasoning for deciding not to have sex with this person.

* Answering yes qualified as "risky sex" for the purposes of this study.

Figure 1: As PrEP score increases, the proportion of "yes" responses to the vignette increases

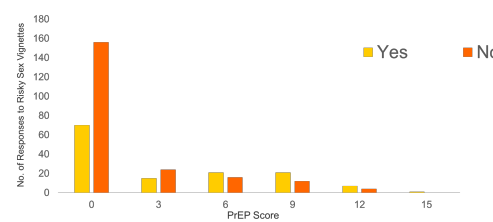
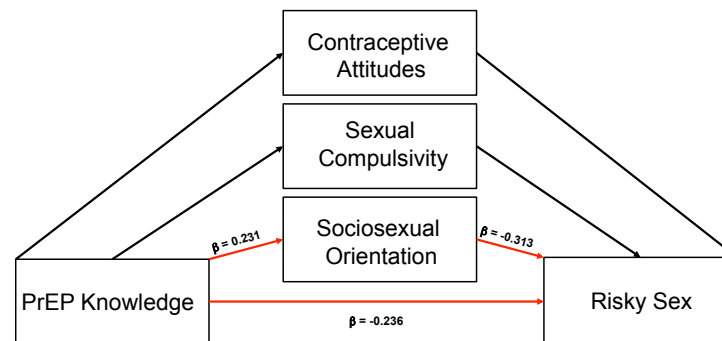


Figure 3: Sociosexual orientation mediates the relationship between PrEP knowledge and risky sex



CONCLUSIONS

Based on the results of this study, the relationship between PrEP knowledge and risky sex appears to be mediated by sociosexual orientation

This offers a potential entry point for treatment and understanding the behaviors of groups at risk for HIV infection

However, it is important to recognize the problematic nature of characterizing PrEP as a conduit for risky behavior – the majority of respondents who were somewhat PrEP knowledgeable indicated they would use protection in the risky sexual encounter with a stranger

Note the importance of pairing PrEP with safe sex practices

More studies need to be conducted concerning real life scenarios, as the vignette in this study may not be reflective of a real world sexual encounter

Figure 2: PrEP score increases as global sociosexual orientation increases

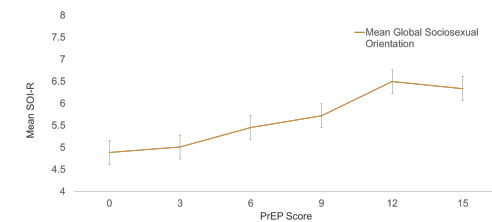
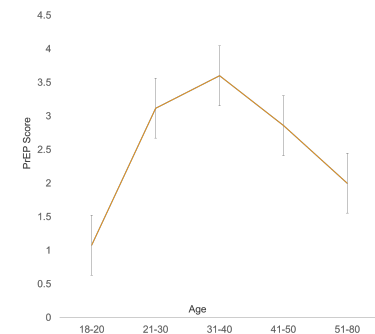


Figure 4: PrEP scores highest among 31-40 year old men



Demographics of the Participant Sample

	M	SD
Age (years)	28.7	11.6
PrEP Knowledge (total score)	2.5	3.7
Global Sociosexual Orientation	5.1	1.7
	n	%
Race		
Caucasian	163	66.3
African American	9	3.7
Hispanic/Latino	41	16.7
Asian American	23	9.3
Other/missing	10	4.1
Sexual Identity		
Attracted to women only	160	65
Attracted to men only	49	20
Attracted to both men and women	37	15

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