

Sexual Sensation Seeking, Unprotected Sex, and Transactional Sex Among Rural African American Cocaine Users

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Acknowledgements

- Funded by National Institute on Drug Abuse (NIDA) grant number R01DA024575 to Dr. Katharine Stewart; also supported in part by the Arkansas Center for Minority Health Disparities (award number P20MD002329 from the National Institute on Minority Health and Health Disparities), the Arkansas Prevention Research Center (award number 1U48DP001943 from the Centers for Disease Control and Prevention) and by the UAMS Translational Research Institute (award number 1UL1RR029884 from the National Center for Advancing Translational Science).

Background: Rural African Americans & Cocaine Use

- Disproportionately affected by HIV and STIs
- Characterized by high rates of cocaine use and other illegal drugs
- Small & closely related sexual networks
- Networks characterized by high risk behaviors including multiple sexual partners, lack of condom use, & transactional sex.

Purpose

- To explore the association of sexual sensation seeking (SSS), drug use, and high-risk behaviors among a sample of rural African American cocaine users and
- To test the psychometric properties of the SSS in this population.

Hypotheses

- SSS scores would be positively associated with age, male gender, high rates of self-reported unprotected sex and multiple sexual partners.
- SSS scores would be associated with self-reports of engaging in transactional sex.

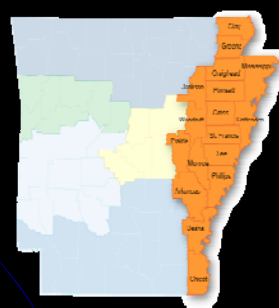
Study Design

- A behavioral clinical trial to test the effectiveness of a sexual risk reduction intervention for rural African American cocaine users as compared to an active control intervention.
- Baseline data were obtained before participants were exposed to any intervention materials.

Sample

- Respondent driven sampling (RDS)
- RDS-a variant of snowball sampling
- N = 251 AA cocaine users recruited from two contiguous rural counties in the Delta region of Arkansas between February 2009 to February 2011

Delta Region of Arkansas



Delta Region of Arkansas

- Predominately African American
- High poverty rates
- Higher rates of HIV and STIs than other counties in the State

Respondent Driven Sampling

- Initial recruits known as “seeds”
- Referral coupons- “people like you”
- “Seed” received \$10.00 for a referral if the individual met inclusion criteria
- Each “seed” was given three coupons

Inclusion Criteria

- 18 years of age or older
- Self-identified as African American, Black, or mixed race of African American ancestry
- Reported using powder or crack cocaine at least once in previous 30 days
- Currently not participating in drug rehab
- Currently living in one of the two counties in the study

Exclusion Criteria

- Currently incarcerated
- Provided no contact information
- Not a resident of either study county
- Other wise did not met inclusion criteria

Sample Screened

- 324 persons were screened
- 73 did not meet inclusion criteria
- N=251 total sample size

Measures

- Demographic Data
- Addiction Severity Index (ASI)
- NIDA Risk Behavior Assessment (RBA) of Sexual Activity Scale
- Transtheoretical Model of Condom Use Questionnaire (TTM)
- Sexual Sensation Seeking Scale (SSS)

Risk Behavior Assessment (RBA) Sexual Activity Scale

- Structured interview that identifies sexual behavior the participant self-identifies engaging in last 30 days
- Sexual behaviors-number, gender of sexual partners, types of sexual behavior, condom use and
- Transactional sex-defined as trading sex for drugs, money, food or other commodities in the past 30 days.

Sexual Sensation Seeking (SSS)

- Developed by Kalichman & Rompa (1995)
- 11 Likert-type items on 4-point scale
- 1= "not at all like me" to
- 4 = "very much like me"
- Internal consistency of 0.81
- Test-retest reliability of 0.73

Procedure and Data Collection

- IRB approval-UAMS
- Assessment instruments administered by trained interviewer using computer-assisted personal interviewing
- Participants received \$20 for completed interview, referral coupon, and condoms

Data Analysis

- Cronbach's alpha-internal consistency of SSS
- Pairwise Spearman's correlation between pairs of independent continuous variable
- T-test for dichotomous variables with SSS
- Multiple regression models to identify significant correlates of SSS & theoretically associated with HIV risk

Characteristics of Sample

	N	%
Mean Age 38.0 yrs		
Males	130	51.8
Females	121	48.2

Characteristics of Sample

● Annual Income	< \$5,000	73.0%
● High School, GED		49.8%
● Not employed		77.3%
● Not Partnered		82.5%

Summary of Correlations, Means, and Standard Deviations for Scores on SSS and Demographic Variables

Variable	N	%	M	SD	SSS
Age			38	12.7	-0.18**
Males	130	51.8			0.32**
Past 30 Days					
# of Sex Partners			2.0	2.2	0.33**
Transactional Sex	36	14			0.18**
# Unprotected Sex			12.0	15.7	0.25***
# days crack use			13.7	10.5	0.04
# days powder use			5.8	8.1	0.02
# days alcohol use			16.0	11.6	0.08
# days marijuana use			13.5	12.4	0.17*

*p<0.05, **p<0.01, *** p<0.001

Summary of Correlations, Means, and Standard Deviations for Scores on SSS and Demographic Variables (Continued)

Variable	N	%	M	SD	SSS
Self-efficacy condom use main partner			12.9	7.7	0.10
Self-efficacy condom use other partner			19.7	6.2	-0.02
SSS Total Score			25.1	7.0	

Cronbach's alpha SSS 0.74

SSS was not correlated with self-efficacy for condom use with either main or other partner

Independent Correlates of SSS, Results of Multiple Linear Regression Analysis (N=237)

Variable	b	SE	p
Age	-0.07	0.03	<0.001
Males	4.62	0.83	<0.001
# partners last 30 days	0.57	0.20	<0.01
Transactional sex	3.64	1.29	<0.01
# unprotected sex encounters	0.08	0.03	<0.01

N=237 items not responded to results in missing data thus difference in sample size.

Findings of Study

- SSS found to be reliable in this sample of AA cocaine users
- Men scored higher than women on SSS
- Age was inversely associated with SSS
- Scale demonstrated convergent validity
- Correlated with sexual risk behaviors including unprotected sex and number of sexual partners

Findings of Study

- SSS significantly associated with transactional sex- (this first time to our knowledge this link has been reported)
- SSS not correlated with self-efficacy for condom use
- SSS may be associated with a greater willingness to engage in survival sex

Limitations

- Self-report of risk behaviors
- Cross-sectional data
- New phenomenon known as “post-diction”
- “post-diction” defined as behavior acquired during acute addition that continues post addition.
- SSS well-established “trait” construct rather than “state” construct

Implications

- Relationship between SSS and transactional sex should be explored further since more detailed understanding of this link could have important implications for designing effective interventions to reduce risk associated with sexual trading

Implications

- Individuals who are high sensation seekers may benefit from interventions that emphasizes novel and interesting options for lower risk behaviors (Noar et al., 2006).

Conclusions

- Our findings suggest that cocaine users may benefit from interventions that target high sensation seekers.
- Interventions to reduce unsafe sexual behaviors among high-risk groups such as those who engage in transactional sex should incorporate approaches that integrate novelty and variety for high sensation seekers.

Questions???

Selected References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman, W. H.
- Booth, B. M., Leukefeld, C., Falck, R., Wang, J., & Carlson, R. (2006). Correlates of rural methamphetamine and cocaine users: Results from a multi-state community study. *Journal of Studies on Alcohol*, 67(4), 493-501.
- Grimley, D. M., Prochaska, G. E., Prochaska, J. O., Velicer, W. F., Galavotti, C., Cabral, R. J., & Lansky, A. (1996). Cross-validation of measures assessing decisional balance and self-efficacy for condom use. *American Journal of Health Behavior*, 20, 406-416.
- Grimley, D. M., Prochaska, G. E., & Prochaska, J. O. (1997). Condom use adoption and continuation: A transtheoretical approach. *Health Education Research*, 12(1), 61-75.
- Heckathorn, D. D. (2002). Respondent-driven sampling II: Deriving valid population estimates from chain-referral samples of hidden populations. *Social Problems*, 49(1), 11-34.
- Heckathorn, D. D. (1997). Respondent-driven sampling: A new approach to the study of hidden populations. *Social Problems*, 44(2), 174-199.

Selected References

- Wright, P. B., McSweeney, J. C., Frith, S. E., Stewart, K. E., & Booth, B. M. (2009). Losing all the pieces: A qualitative study of HIV risk perception and risk reduction among rural African American women who use cocaine. *Journal of Drug Issues*, 39(3), 577-605.
- Wright, P. B., Stewart, K. E., Fischer, E. P., Carlson, R. G., Falck, R., Wang, J., Leukefeld, C. G., & Booth, B. M. (2007). HIV risk behaviors among rural stimulant users: Variation by gender and race/ethnicity. *AIDS Education & Prevention*, 19(2), 137-150.
- Zuckerman, M. (2007). *Sensation seeking and risky behavior*. Washington, DC US: American Psychological Association.