Patterns of Sexual Experience Among an Urban Sample of Latino and African-American 9th Grade Students

Robin A. Jeffries DrPH[1], Christine J. De Rosa PhD[1,2], Bret Moulton MPH[1], Emily Q. Chung[2] MPH MCHES

[1]University of Southern California, Institute for Health Promotion and Disease Prevention Research, [2]Los Angeles County Department of Public Health, Division of HIV and STD Programs

PURPOSE

Oral, vaginal and anal sex are discrete behaviors that pose varying degrees of STD and/or pregnancy risk. Considering these behaviors separately has resulted in a splintered picture of adolescents' sexual risk. It is important to understand the co-occurrence of these behaviors to better inform prevention efforts. We sought to identify patterns of sexual experience among 9th grade students, the order in which behaviors were initiated, and to explore associated factors.

SAMPLE

Ninth grade students from 10 public high schools in Southern California who reported any sexual experience on an in-class ACASI survey during 2012-2013.

Characteristic	Reporting Sample N=3144 (99%)	Sexually Experienced N = 721 (25%)
Female	1562 (50%)	259 (36%)
Latino	2699 (87%)	574 (80%)
African-American	280 (9%)	120 (17%)
Sexual Minority	265 (9%)	88 (12%)
Female	*210(88%)*	*70(80%)*
Average Age Mean(±SD)	15.2 (±.49)	15.2 (±.55)

VARIABLES

Demographics: Age, gender, ethnicity

Sexual behavior: Oral, vaginal, anal sex ever and in last 3 months; condom use; number of partners; age at onset

Sexual minority: Any same-sex attraction, non-heterosexual self-label, or same sex sexual activity

Condom/STD knowledge: % correct, 11/6 questions

Self-efficacy to get and use condoms: average of 7 items (Cronbach's α = .91); range 0-*Strongly disagree* to 3-*Strongly agree*

Self-efficacy to avoid sex: average of 6 items (Cronbach's α = .75); range 0-*I definitely could not* to 3-*I definitely could*.

STATISTICAL METHODS

ANOVA, Kruskal-Wallis and χ^2 tests were used to examine differences in knowledge and efficacy measures, and drug and alcohol prevalence across sexual behavior patterns.

LIMITATIONS

- Self-reported data
- Results may not generalize to other samples
- Survey did not ask about motivations for behaviors

RESULTS

Self-reported sexual activity, by behavior type	Vaginal n (%)	Oral n (%)	Anal n (%)
Ever had	593 (19%)	501 (16%)	197 (6%)
Had more than 1 partner*	317 (54%)	238 (48%)	74 (38%)
Had in last 3 months*	323 (55%)	241 (48%)	74 (38%)
Any unprotected in last 3 months*	162 (51%)	N/A^	39 (53%)
Age at onset* Mean(±SD)	13.5 (±1.2)	13.6 (±1.2)	13.6 (±1.3)

*Among those reporting behavior

^Survey did not ask about protected oral sex

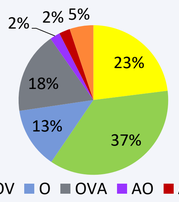
Knowledge / Efficacy measures		Behavior Pattern None	O	V	OV	OVA
Condom Knowledge [A]	Med	67%	83%	83%	83%	83%
	Mean	60%	73%	72%	74%	71%
STD Knowledge	Med	73%	73%	73%	73%	73%
	Mean	62%	70%	68%	66%	67%
Self Efficacy to get and use condoms [A]	Med	1.9	2.0	2.1	2.0	2.1
	Mean	1.9	2.1	2.1	2.1	2.2
Self Efficacy to avoid sex [B]	Med	2.5	2.0	2.0	1.8	1.7
	Mean	2.2	1.8	1.9	1.7	1.5

[A]: *None is significantly different from O, V, OV and OVA (KW p<.05 each)*
[B]: *Among sexually experienced; O (ANOVA p=.04) and V (ANOVA p=.002) are significantly different from OVA.*

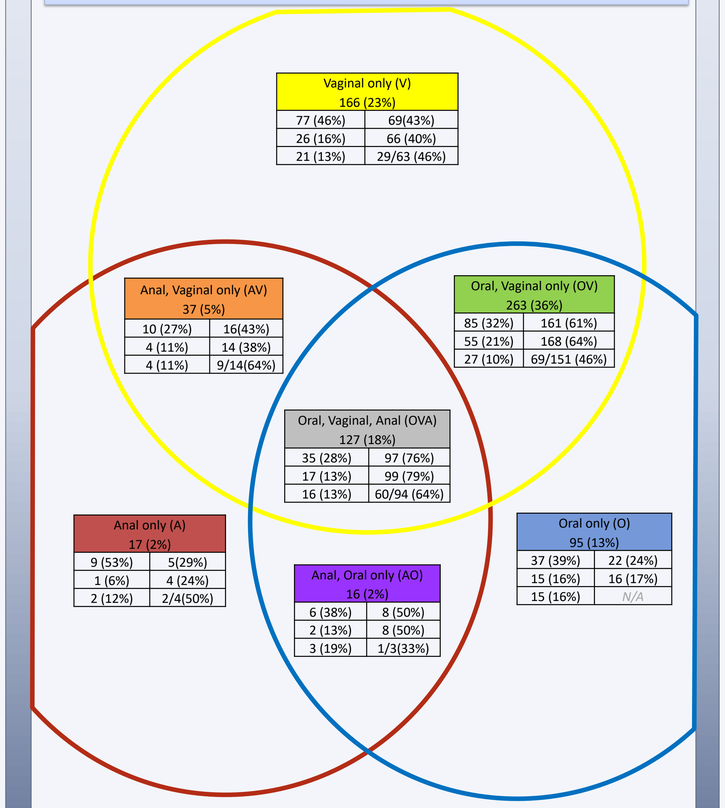
Alcohol & Drug Use	Behavior Pattern n(%) None	O	V	OV	OVA
Ever drank alcohol [A]	1231 (52%)	71 (76%)	127 (79%)	205 (80%)	102 (85%)
Drank alcohol in the past 30d [B]	660 (55%)	42 (59%)	84 (67%)	134 (66%)	78 (77%)
Ever used marijuana [A,C]	727 (32%)	52 (57%)	119 (74%)	190 (75%)	101 (84%)

[A]: *None is significantly different from O, V, OV and OVA (χ^2 p<.0001 each)*
[B]: *None is significantly different from V (χ^2 p=.007), OV (χ^2 p=.002) and OVA (χ^2 p<.0001)*
[C]: *O is significantly different from OV (χ^2 p=.001) and OVA (χ^2 p<.0001)*

DISTRIBUTION OF SEXUAL BEHAVIORS



PATTERNS OF SEXUAL EXPERIENCE

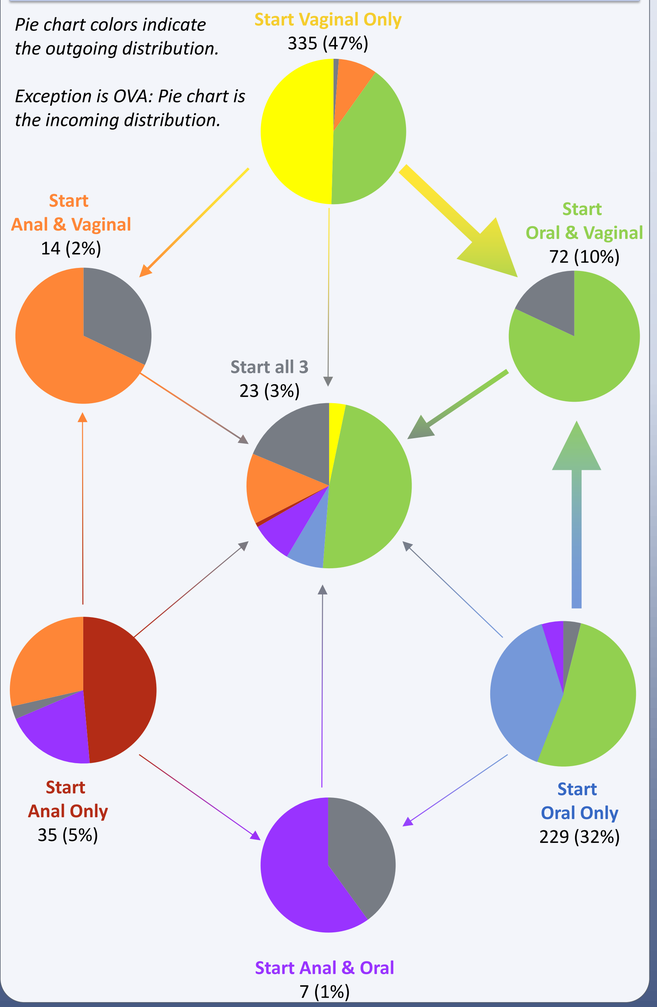


KEY	Behavior Pattern N (% of Reporting Sample)	
	n (%) Female	n (%) Multiple Partners
	n (%) African-American	n (%) Recent sexual activity (<3mo)
	n (%) Sexual Minority	n/N (%) Recent unprotected sex(<3mo)

ORDER OF ONSET

Pie chart colors indicate the outgoing distribution.

Exception is OVA: Pie chart is the incoming distribution.



CONCLUSIONS

- The most commonly reported single behavior was vaginal intercourse (23%), followed by oral sex (13%). Having engaged in both ("OV") was the most common behavioral pattern (36%).
- Half of the sexually experienced students initiated vaginal intercourse first; initiating vaginal and/or oral sex constituted 90% of students' first sexual behaviors.
- Few students without experience in vaginal sex reported oral sex; fewer still reported anal sex.
- The third most common behavioral pattern was OVA (almost 1 in 5 sexually experienced students). This group reported less confidence in their ability to refuse sex than those in the "O" and "V" groups. Compared to other groups, OVA students were most likely to report more than one lifetime partner (76%), recent sexual activity (79%), recent unprotected vaginal or anal sex (64%), and lifetime marijuana use (84%).
- With few exceptions, the 4 largest behavior groups did not differ appreciably by demographic variables, attitudes, or knowledge. Most differences in these outcomes were found in the comparison between students engaging in any sexual activity vs. none.
- Sexual minority status among males did not account for participation in anal sex.

IMPLICATIONS

- Dichotomous measures of single sexual behaviors are insufficient to fully characterize adolescent sexual risk. Identifying students with experience in multiple behaviors more clearly illustrates which group is at highest risk for STDs and pregnancy.
- The findings argue against the premise that young females engage in anal sex to preserve their virginity. Similarly, although it has been posited that young people may consider oral sex a lower-risk behavior, most who practiced it also engaged in higher-risk behaviors of vaginal and/or anal sex. The data cannot explain students' motivation for practicing one behavior versus another; however, if young people practice anal or oral sex for risk reduction reasons, it may be a relatively small group doing so.
- We questioned whether the anal sex reported was mostly YMSM behavior, but analyses indicated that much of it was heterosexual, and more than one-quarter reporting it were female. Although the data support the primacy of vaginal and oral sex in these early adolescents' practices, the sizable number who had anal sex and accompanying high rates of unprotected sex underscore the need to discuss reducing the risks of anal sex with both male and female adolescents.

Contact: robin.jeffries@usc.edu