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Condom Use and Duration of Concurrent Partnerships among Men in the United States

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Abstract

This analysis of male respondents in the 2002 National Survey of Family Growth describes features of concurrent sexual partnerships including duration, patterns, and condom use.

Objectives—Concurrent partnerships accelerate dissemination of STIs. Most investigations of the features of concurrent partnerships have focused on higher risk subpopulations.

Goal—To assess condom use and the duration of concurrent sexual partnerships among men in the United States.

Study Design—Analysis of concurrent sexual partnerships among males in the 2002 National Survey of Family Growth. We classified pairs of concurrent partnerships into three types: *transitional*, *contained*, and *experimental* concurrency, and assessed the duration of overlap. We also report the distribution of condom use at the last sexual intercourse with neither, one, or both concurrent partners of each pair and characteristics of men more likely to have used condoms with neither sex partner.

Results—The duration of overlap was <1 month in 32%, 1–3 months in 19%, and >12 months in 25% of concurrency pairs. Half (55%) of the pairs (whites, 64%; Blacks, 41%) involved unprotected sex at the last sexual intercourse with at least one partner. The 35% of men who were more likely to use condoms with neither sex partner at the last sexual intercourse were older, white (48%), married/cohabitating (55%), and during the previous 12 months were incarcerated (49%), or used crack/cocaine (51%).

Conclusions—Although Blacks generally experience higher rates of STIs and HIV, in this representative sample of men in the US, Blacks in concurrent partnerships appeared to use the only available protection (condoms) against infection (apart from abstinence) more than other racial/ethnic groups. Continued investigation of features of sexual partnership patterns is critical for curbing STI and HIV transmission.

Keywords

concurrency; condom use; partnerships; overlap; sexually transmitted infections

INTRODUCTION

Structural characteristics of sexual networks, including the timing of sexual partnerships, influence the incidence rate of sexually transmitted infections (STIs) in a population. Concurrent sexual partnerships (partnerships that overlap in time) accelerate population dissemination of STIs, including HIV.(1,2) A number of characteristics of concurrent partnerships that influence their effect on transmission rates have been described quantitatively (3–5) and qualitatively.(6,7) Multiple concurrent partnerships and frequent sexual contact (8, 9) over extended periods expedite transmission, whereas consistent condom use with all partners impedes transmission.

Men are more likely than women to have concurrent partnerships (10–14), but most investigations of the features of concurrent partnerships among men have focused on higher risk subpopulations.(3,15,16)

In this article, we extend our previous analysis of concurrent sexual partnerships among male respondents in the 2002 National Survey of Family Growth, a nationally representative survey of men from the general population in the United States.(11) We estimated that approximately 11% of men in the US had concurrent sex partners during the 12 months preceding the interview and estimated crude and adjusted prevalence odds ratios of factors associated with concurrency. This report describes the types and duration of concurrent partnerships and condom use in those partnerships among the 430 male respondents with one or more concurrent partnerships. We also identify correlates of using condoms with *neither* concurrent partner.

MATERIALS AND METHODS

The National Center for Health Statistics conducted the sixth cycle of the National Survey of Family Growth (NSFG) during 2001–2002 to assess marriage, cohabitation, sexual activity, contraception, and childbearing trends.(17) The survey comprises a multistage household probability sample, representative of men and women aged 15–44 in the United States. Non-Hispanic Blacks, Hispanic/Latinos, and adolescents were over-sampled. The face-to-face portion of the survey was administered in respondents' homes by trained female interviewers using computer-assisted personal interviewing technology. Sensitive questions were self-administered via audio computer-assisted self-interviewing software (ACASI) to increase reporting of proscribed behaviors. The survey includes 4,928 male respondents.

Definition of concurrency

For each of up to four female sex partners, respondents reported the month and year of the first and last sexual intercourse and whether they used condoms during the most recent sexual intercourse. We identified concurrent partnerships as partnerships from the 12 months preceding the interview where the first sexual intercourse with one partner occurred in a calendar month preceding the calendar month of last intercourse with an earlier partner.(10, 11)

Features of concurrency

We classified pairs of concurrent partnerships into three types (Figure 1). In *transitional* concurrency (described qualitatively by Gorbach et. al)(6), the second partnership begins before an earlier one ends and continues after the first relationship ends. In *contained* concurrency, a partnership lasts for at least one month, beginning and ending during the course of another partnership. *Experimental* concurrency is defined as overlapping concurrent partnership pairs in which the dates of first and last (or only) sex with one partner occurred

within the same month during the course of a second partnership (our definition of experimental concurrency is more restrictive than the one used by Gorbach et. al.(6))

Our method of calculating the duration of concurrency depended upon its type (Figure 1). Because respondents reported only the month and year that each sexual partnership began and ended, the durations are expressed in month-long increments. The duration of a transitional concurrent partnership pair was the period from the month in which the later partnership began to the month in which the earlier partnership ended. The duration of a contained concurrent partnership pair was the duration of the contained/shorter partnership. The duration of experimental concurrency was zero months. Based on the distribution, durations were categorized as follows: < 1 month, three- month intervals for durations between 1 to 18 months, 19–24 months, 25–36 months, and ≥ 37 months.

For each partnership pair we coded condom use at last sexual intercourse as use with: *both* partners, *one* partner, or *neither* partner.

Other measures

Demographic variables, including age, race/ethnicity, and marital status were collected during the face-to-face portion of the interview. The age categories presented here match those from our previous analysis of this dataset.(11) Responses for the following variables (all with respect to the 12 months before the interview) were obtained during the ACASI portion of the interview: binge drinking (consumption of ≥ 5 alcoholic beverages in one day, at least once a month), marijuana use at least once a month, any use of crack or cocaine, being intoxicated on alcohol or drugs at least once during sex, reporting that at least one female sex partner had other partners during the partnership with the respondent, incarceration, and treatment for an STI. ACASI variables were also used for ever being diagnosed with herpes simplex virus, human papillomavirus, or syphilis.

Analysis

We conducted all analyses using Stata version 9.0 (College Station, TX). Analyses were weighted with the FINALWGT variable included in the NSFG dataset and accounted for the sampling design.(17) Some analyses were carried out at the respondent level; these analyses include only the subset of respondents identified in our previous analysis (11) as having had at least one pair of concurrent partnerships. The present analysis excluded 12 men who reported race/ethnicities other than white, non-Hispanic Black, or Hispanic. Respondents with three or four sex partners could have more than one pair of concurrent partnerships. We assessed each concurrent pair for each respondent, to identify men who had at least one concurrent pair in which he used condoms at the last intercourse with *neither* partner. We then used generalized linear models to identify correlates of this behavior. Because lack of condom use was not a rare outcome (prevalence >10%), odds ratios (e.g., from logistic regression) cannot be interpreted as estimates of risk ratios.(18,19) Therefore the model was specified with a Poisson distribution and the log link function (weighted by the probability weight provided in the NSFG dataset [FINALWGT]). We examined risk characteristics and behaviors that were either correlated with having concurrent partnerships in our previous analyses(11) or hypothesized *a priori* as related to unprotected sex or STIs. All factors associated with using condoms with neither partner in bivariate analyses were initially included in the multivariable model. We checked for near collinearity. We also assessed if race/ethnicity modified the effect of incarceration on condom use. African Americans have disproportionate incarceration rates (20) and in the full sample, the prevalence of recent incarceration among Blacks (12.5%) was more than twice that among whites (5.0%) (Table 2, ref (11)). Because other studies of condom use in the context of concurrent sex partners have been conducted among adolescents and

young adults (e.g., (3,15,16)), we performed stratified analyses by age groups 15–17, 18–30, and 31–44 years.

Other analyses were carried out with the pair of concurrent partnerships as the unit of analysis. We conducted weighted tabular analysis to describe the types and duration of concurrent partnership pairs, and condom use patterns within these pairs.

RESULTS

A total of 430 respondents had 668 concurrent partnership pairs. Most of these respondents (71%) had one pair of concurrent partnerships; 15% had two; and 14% had three pairs of concurrent partnerships (Table 1). As noted in our previous analysis (11), the demographic and behavioral characteristics of the male respondents with concurrent partnerships differ significantly from the complete sample of respondents (n=4654, excluding respondents who were not white, Black, or Hispanic) Of the 430 men who had concurrent partnerships, 52%, 27%, and 21% were white, Black, and Hispanic, respectively. The vast majority (83%) were neither married nor cohabitating, as compared to 48% of the complete sample. More than half (54%) believed that one or more of their female sex partners was not monogamous during the previous 12 months, compared to 11% of the full sample. In the previous 12 months, 66% had been intoxicated on alcohol or drugs during sexual intercourse, 46% engaged in binge alcohol consumption (defined as consuming ≥ 5 alcoholic beverages in one day) at least once a month, 28% smoked marijuana at least once a month, and 20% had used crack or cocaine.

Features of concurrent partnerships

About one fourth (23%) of the concurrent partnership pairs were *transitional*, 46% were *contained* and 31% were *experimental* (Table 2). Half of the concurrency pairs (51%) (including experimental pairs) overlapped for a period of three months or less. Respondents used condoms during the last sexual intercourse with *both* partners in 45% of concurrency pairs, with only *one* partner in 27%, and with *neither* partner in 28% (Table 2).

In 43%, 44%, and 48% of experimental, contained, and transitional partnership pairs, respectively, condoms were used during the last sexual intercourse with *both* partners (Figure 2a). In contrast, condom use during the last sexual intercourse with *neither* partner was less likely for experimental partnership pairs (19%) than contained (32%) and transitional (30%) pairs (p-value <0.04, not shown). Condom use with *neither* partner was more prevalent in long-term concurrent partnership pairs (Figure 2b). For example, condoms were used with *neither* partner in 28% of the partnership pairs that overlapped for 1–3 months, compared to 55% that overlapped for 25–36 months. Use of condoms with *both* partners was also less prevalent in long overlapping partnership pairs (Figure 2b). For example, 64% of concurrent partnership pairs of 10–12 months duration involved condom use with both partners, compared to 30% of those that overlapped for 25–36 months.

Correlates of respondents who used condoms with neither concurrent partner

About one third (35%) of respondents had a pair of concurrent partnerships in which *neither* partner used a condom during the last sexual intercourse with the respondent (Table 3). Older men, including 50% of men aged 40–44 years, were more likely to use condoms at last sex with neither partner. The prevalence ratio of using condoms with neither partner was 1.19 (95% confidence interval (CI) [1.08, 1.32]) for each 5-year increase in age. For example, condom use with neither partner was 1.19 times as likely among 30 year-olds as 25 year-olds. Compared to white men (48%), Black (17%) (PR=0.35 [0.21, 0.59]) and Hispanic (24%) (PR=0.50 [0.31, 0.82]) men were significantly less likely to use condoms with neither partner. Condom use with neither partner was more likely among men who were married or cohabitating (PR 1.81

[1.21, 2.70]), had been incarcerated during the previous 12 months (PR 1.58 [1.07,2.32]), or used crack or cocaine (PR 1.66 [1.13, 2.46]). Condom use was not associated with drug or alcohol intoxication during sexual intercourse, frequent binge alcohol consumption, frequent marijuana use, or the respondent's belief that at least one of his female sex partners had other partners. Having a history of STI diagnosis and receiving treatment for STIs in the past 12 months were not associated with condom use, which may be due in part to the low prevalence of these factors.

In the multivariable model, the 95% CI for the associations between condom use with neither partner and crack or cocaine use (PR 1.46, [0.96, 2.22]) fell slightly below statistical significance, but the crude associations persisted for age, race/ethnicity, marital status, and recent incarceration.

There was no association between race/ethnicity and incarceration among men with concurrent partnerships who used condoms with neither partner. The interaction terms involving these two variables were not significant in the multivariable model, and the prevalence of incarceration in the past 12 months was 18% for all three racial/ethnic groups (data not shown).

Stratified analyses by age groups did not substantially deviate from the results using the full sample (not shown).

Concurrent partnerships, condom use, and race/ethnicity

Because the prevalence of condom use with neither partner at the last sexual intercourse was substantially higher among white *respondents*, we examined the distribution of condom use patterns in *concurrent partnership pairs* stratified by respondents' race/ethnicity (Table 4). Condoms were used with *neither* partner in 43% of white men's concurrency pairs, compared to 11% of Black and 19% of Hispanic men's concurrency pairs (p-value < 0.0001). Furthermore, the proportion of concurrent partnership pairs that involved condom use with *both* partners was markedly lower among white men's partnerships (36%) than among those of Black men (60%).

DISCUSSION

In this analysis, we extend our previous analysis that reported the prevalence and correlates of concurrent partnerships among 15 to 44 year-old men in the 2002 National Survey of Family Growth (11), a representative sample of the United States household population. In the present investigation, we analyzed features of concurrent partnerships that further elucidate how concurrent partnerships contribute to the spread of STIs. Brief sexual partnerships that occurred during another relationship (i.e., experimental concurrency) comprised 32% of the concurrent partnership pairs. About half of the concurrent partnership pairs overlapped for less than three months, whereas 25% overlapped for more than 12 months. More than half of the pairs (55%) involved unprotected sex with at least one partner at the last sexual intercourse, with notable differences by race/ethnicity; the greatest proportion of such reports occurred among whites (64%) and the lowest among Blacks (41%). Condom use with neither partner during the last sexual intercourse occurred most often in concurrent partnership pairs that overlapped for more than 18 months.

Our analysis has several limitations. Partnership dates were limited to the month and year of first and last intercourse, so a partnership that "lasted for 12 months" could have consisted of just two episodes of sexual intercourse that were a year apart. Partnership questions, including the months of first and last intercourse, were restricted to the respondent's wife/cohabitating partner and the last three other sex partners, so men with additional partners may have had concurrent partnerships that went undetected. The respondent's belief that his female sex

partner(s) may have had other partners during their relationship is a proxy measure susceptible to inaccurate reporting, as some individuals may be unaware of their partners' behaviors.(15) Because all partnership data used for these analyses, including condom use, were collected during the face-to-face portion of the interview, responses were subject to social desirability that would likely underestimate the occurrence of concurrency and unprotected sexual intercourse. Furthermore, questions about condom use at last sexual intercourse do not provide information on consistency of use during the partnership. Nonetheless this measure of condom use is used widely because it increases accuracy of recall for people who have many partners. (21)

Compared to multiple sequential partnerships, concurrent partnerships play a pivotal role in accelerating the transmission of HIV and STIs through sexual networks.(22) Epidemiologic studies document that having concurrent partnerships is associated with individual risk of acquiring infection and transmitting disease to others.(23–27) Mathematical models demonstrate that the prevalence of concurrent partnerships is positively correlated with the incidence and prevalence of bacterial and viral infections.(28–32) Furthermore, seemingly negligible increases in the average number of concurrent partners may have profound effects on the growth of sexual networks and consequent STI or HIV transmission.(1,31)

Other than complete abstention from sexual intercourse, consistent condom use with all sex partners confers the greatest protection against sexually transmitted infections.(33) Our previous analysis of the complete sample of male NSFG respondents indicates that men who did not use condoms during the last sexual intercourse with any of their partners in the past 12 months were more than twice as likely to have concurrent partnerships as men who used condoms with all partners.(11) We show here that in 55% of these concurrent partnership pairs, respondents did not use condoms at last sex with at least one partner. Men who had been incarcerated were more likely to use condoms with neither partner, which is consistent with other findings that inmates engage in risky sexual behaviors after release.(34–36) Crack and cocaine use is associated with acquiring STIs, including HIV (e.g.,(23,37–39)). Men who used crack or cocaine within the previous 12 months were also more likely to use condoms with neither partner.

Although Black respondents were three times as likely as white respondents to have had a concurrent partnership in the previous 12 months (11), they were considerably less likely (PR 0.38 [0.23, 0.63]) than whites to have unprotected sex with both concurrent partners during the most recent sexual intercourse. Eleven percent of Black men's concurrent partnership pairs involved condom use with neither partner, compared to 43% and 19% of white and Hispanic men's partnership pairs, respectively. Even though report of condom use at the last sexual intercourse may not accurately reflect overall participation in protected sex (21), in this representative sample of men in the US, Black men appeared to use the only available protection against infection at least as often as the majority population. These results are consistent with findings from The Longitudinal Adolescent Health Study (Add Health)(40), a representative cohort of over 19,000 US youth recruited from public schools in 1994–1995 and followed through 2003. As both adolescents (Wave 1) and young adults (Wave 3), the behavioral risk profiles for HIV and STI among Blacks were similar to whites and sometimes less risky, yet their STI rates were higher.(41,42) Likewise, the prevalence of HIV infection is substantially higher among Black men who have sex with men (MSM) than among white MSM and cannot be explained by differences in the frequency of high risk sexual behaviors.(43,44) These findings underscore the need for prevention measures that supplement condom use promotion.

Concurrent sexual partnerships are an aspect of sexual networks with important effects on the potential for STI dissemination. Consistent condom use by persons who engage in concurrent

partnerships could mitigate their transmission impact. Our analyses of a representative sample of US men indicate that a substantial proportion of concurrent partnership pairs are unprotected. Understanding the nature, variety, and dynamics of concurrent partnership patterns is critical for developing disease control measures to curb STI and HIV transmission.

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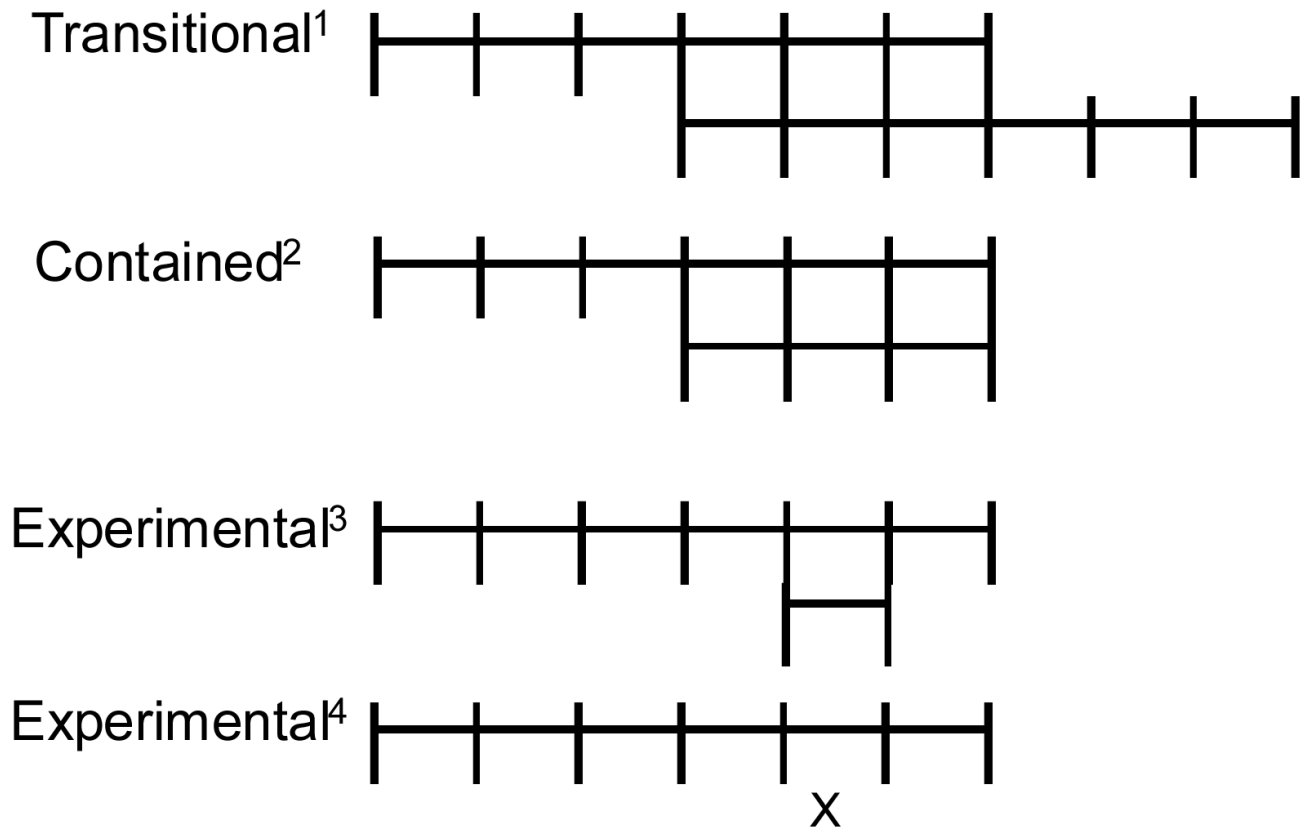


Figure 1. Schematic of types of concurrent partnerships

--- represents one month

1: The second partnership begins before an earlier one ends and continues after the first relationship ends.

2: One partnership lasts for at least one month, beginning and ending during the course of another partnership.

3: The dates of first and last sex with one partner occurred within the same month during the course of a second partnership.

4: The respondent had sex with one partner only once during the course of a second partnership.

Figure 2a

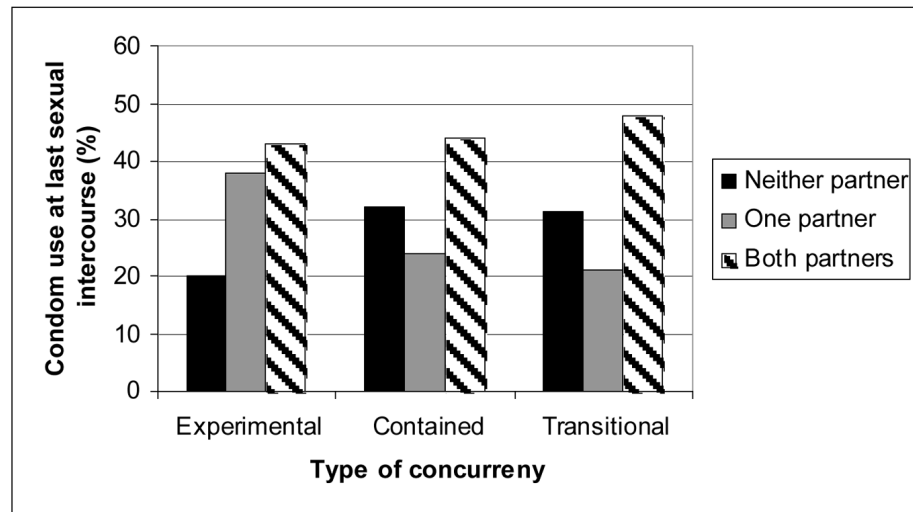


Figure 2b

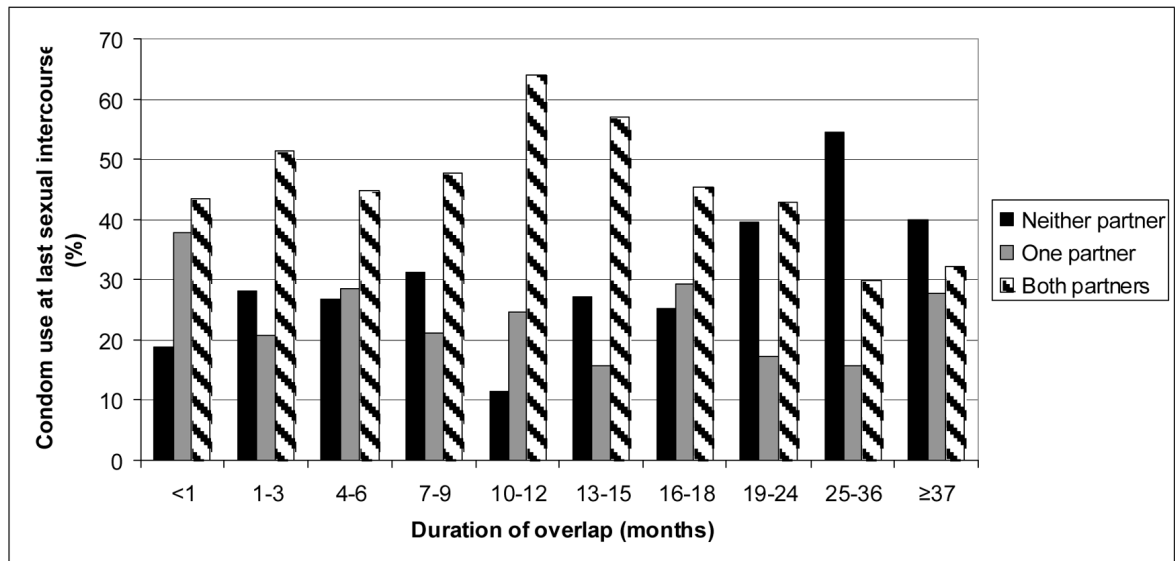


Figure 2. Distribution of condom use by type (2a) and duration of overlap (2b) in concurrent partnership pairs from the previous 12 months

Table 1
Demographic and behavioral characteristics of the full sample and males who had concurrent sex partners in the previous 12 months, 2002 National Survey of Family Growth

	Full sample [^] n=4654(%)	95% CI	Males who had concurrent partnerships n=430(%)	95% CI
Total				
Number of concurrent partnership pairs	not applicable			
1			284(71)	(64, 76)
2			72(15)	(11, 20)
3			74(14)	(10, 18)
Age at interview				
15–17	602(9)	(9, 10)	27(5)	(3, 8)
18–22	1339(24)	(22, 25)	116(27)	(22, 33)
23–24	661(15)	(13, 16)	50(13)	(9, 18)
25–29	681(17)	(15, 18)	64(14)	(10, 19)
30–34	708(17)	(16, 19)	58(15)	(11, 21)
35–39	660(18)	(16, 20)	67(11)	(8, 15)
40–44	602(9)	(9, 10)	48(14)	(9, 21)
Race/ethnicity				
White	2601(70)	(68, 71)	165(52)	(46, 59)
Black	930(13)	(12, 14)	166(27)	(22, 32)
Hispanic	1123(18)	(16, 19)	99(21)	(16, 26)
Marital status				
Not married	3123(48)	(46, 51)	374(83)	(76, 88)
Married or cohabitating	1531(52)	(49, 54)	56(17)	(12, 24)
Incarceration				
Never > 12 months ago	4293(93)	(92, 95)	360(82)	(76, 86)
Within the past 12 months	361(7)	(6, 8)	70(18)	(14, 24)
Female partners who had other partners [‡]				
No	3905(89)	(88, 90)	185(46)	(40, 53)
Yes	695(11)	(10, 12)	237(54)	(47, 60)
Drug or alcohol intoxication during sexual intercourse [‡]				
No episodes	3062(66)	(64, 68)	158(34)	(28, 41)
At least once	1592(34)	(32, 36)	272(66)	(59, 72)
Binge drinking ^{†,‡}				
Infrequent or none	3336(73)	(71, 75)	234(54)	(47, 60)
At least monthly	1318(27)	(25, 29)	196(46)	(40, 53)
Marijuana use [‡]				
Infrequent or none	3950(87)	(85, 88)	322(72)	(66, 78)
At least monthly	704(13)	(12, 15)	108(28)	(22, 34)
Crack or cocaine use [‡]				
No use	4272(93)	(92, 94)	361(80)	(74, 85)
At least once	382(7)	(6, 8)	69(20)	(15, 26)
Sexually transmitted infections (STI)				
Never Ever had STI [‡]	4310(93)	(92, 94)	377(87)	(82, 91)

	Full sample [^] n=4654(%) [*]	95% CI	Males who had concurrent partnerships n=430(%) [#]	95% CI
Total				
Had at least one STI	344(7)	(6, 8)	53(13)	(9, 18)
Recent treatment for STI [†]	4466(97)	(97, 98)	399(6)	(5, 7)
Not treated for STI	162(3)	(2, 3)	29(0.5)	(0.3, 0.9)
Treated for STI				

[^] Excludes respondents who are not white, Black, or Hispanic

^{*} Estimates are weighted percentages

[†] Consumption of ≥ 5 alcoholic beverages in one day

[#] Time frame is during the 12 months preceding the interview

^Q Includes lifetime history of herpes simplex virus, human papillomavirus, or syphilis, and within the past 12 months gonorrhea, chlamydia, or treatment for another STI

Table 2

Distribution of concurrent partnership pairs by type and duration of overlap, and condom use at last sex among US men, 2002 National Survey of Family Growth

Total	N=668	(%)*
Type of Overlap		
Transitional	159	(23)
Contained	313	(46)
Experimental	196	(31)
Duration of overlap # months		
<1	201	(31)
1-3	133	(19)
4-6	68	(11)
7-9	58	(9)
10-12	30	(4)
13-15	20	(3)
16-18	19	(2)
19-24	41	(5)
25-36	30	(5)
≥37	68	(10)
Condom use at last sexual intercourse		
Neither partner	153	(28)
One partner	180	(27)
Both partners	335	(45)

* Estimates are weighted percentages

Correlates of condom use at last sexual intercourse among men who had concurrent partnerships in the previous 12 months, 2002 National Survey of Family Growth

Table 3

	Condom used at last sexual intercourse [€]		Crude PR	(95% CI)	Adjusted PR [£]	(95% CI)
	Yes n 307	No n 123				
Total						
5 year age increase			1.19	(1.08, 1.32)	1.18	(1.07, 1.29)
15 – 17	22	5				
18 – 22	93	23				
23 – 24	40	10				
25 – 29	43	21				
30 – 34	37	21				
35 – 39	41	26				
40 – 44	31	17				
	(%) [*] (65)	(%) [*] (35)				
Race/ethnicity						
White	93	72	ref		ref	
Black	138	28	0.35	(0.21, 0.59)	0.38	(0.23, 0.63)
Hispanic	76	23	0.50	(0.31, 0.82)	0.56	(0.34, 0.90)
	(%) [*] (52)	(%) [*] (48)				
Marital status						
Not married	274	100	ref		ref	
Married or cohabitating	33	23	1.81	(1.21, 2.70)	1.44	(1.03, 2.01)
	(%) [*] (45)	(%) [*] (30)				
Incarceration						
Never > 12 months ago	265	95	ref		ref	
Within the past 12 months	42	28	1.58	(1.07, 2.32)	1.42	(1.05, 1.98)
	(%) [*] (50)	(%) [*] (49)				
Female partners who had other partners [‡]						
No	127	58	ref		ref	
Yes	174	63	0.88	(0.60, 1.28)		
	(%) [*] (63)	(%) [*] (37)				
High or drunk during sex [‡]						
No episodes	126	32	ref		ref	
At least once	181	91	1.27	(0.78, 2.05)		
	(%) [*] (63)	(%) [*] (37)				
Binge drinking ^{‡,‡}						
Infrequent or none	175	59	ref		ref	
At least monthly	132	64	0.98	(0.68, 1.43)		
	(%) [*] (66)	(%) [*] (34)				
Marijuana use [‡]						
Infrequent or none	231	91	ref		ref	
At least monthly	76	32	0.94	(0.62, 1.43)		
	(%) [*] (67)	(%) [*] (33)				
Crack or cocaine use [‡]						
No use	266	95	ref		ref	
At least once	41	28	1.66	(1.13, 2.46)	1.49	(0.97, 2.30)
	(%) [*] (49)	(%) [*] (51)				
Sexually transmitted infections (STI)						
Never Ever had STI [§]	272	104	ref		ref	
Had at least one STI	34	19	1.08	(0.66, 1.78)		
	(%) [*] (66)	(%) [*] (34)				
Recent treatment for STI [‡]						
Had at least one STI	34	19	1.08	(0.66, 1.78)		
	(%) [*] (63)	(%) [*] (37)				

	Condom used at last sexual intercourse [€]		n	%	* (65)	No n	%	* (35)	Crude PR	(95% CI)	Adjusted PR [£]	(95% CI)
	Yes	No										
Total	307	123										
Not treated for STI	286	113		(65)		113	(35)		ref			
Treated for STI	19	10		(68)		10	(32)		0.92	(0.46, 1.85)		

[€] Yes (reference) = respondent used a condom with at least one partner in all concurrency pairs; no = respondent had a concurrency pair in which he used a condom with neither partner.

* Estimates are weighted percentages

[†] Consumption of ≥ 5 alcoholic beverages in one day

[‡] Time frame is during the 12 months preceding the interview

^Ω Includes lifetime history of herpes simplex virus, human papillomavirus, or syphilis, and within the past 12 months gonorrhea, chlamydia, or treatment for another STI

[£] Adjusted for age, race/ethnicity, marital status, incarceration, and crack or cocaine use

Table 4
 Distribution of condom use in concurrent partnership pairs stratified by race/ethnicity among US men, 2002 National Survey of Family Growth

	Condom use at last sexual intercourse			Both partners N 327	(%)* (27)	(%)* (45)
	Neither partner N 149	One partner N 174	Both partners N 327			
Total						
White	90	57	84	(21)	(36)	
Black	33	69	163	(30)	(60)	
Hispanic	26	48	80	(35)	(46)	

* Estimates are weighted percentages