BLACK MALES WHO ALWAYS USE CONDOMS: THEIR ATTITUDES, KNOWLEDGE ABOUT AIDS, AND SEXUAL BEHAVIOR

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One hundred six black males completed a questionnaire concerning attitudes and knowledge about the use of condoms and acquired immunodeficiency syndrome (AIDS). Of the 106 males in the study, 27 (26%) reported that they "always" used condoms, 31 (29%) did not use condoms and had low intentions of using them, and 48 (45%) reported high intentions to use condoms. Results indicated that knowledge about AIDS was exceptionally high for black males in all three groups. Black males with low intentions to use condoms reported significantly more negative attitudes about the use of condoms (eg, using condoms is disgusting) and reacted with more intense anger when their partners asked about previous sexual contacts, when a partner refused sex without a condom, or when they perceived condoms as interfering with foreplay and sexual pleasure. A significantly larger percentage of low intenders were treated for gonorrhea, syphilis, herpes, and genital warts than males in the other groups. Drug use did not differentiate the three groups, although marijuana was used more often by males in the low-intender group. Finally, a larger percentage of black males in the low-intender group reported experiences with anal intercourse and sex with a prostitute, but considered themselves at lower risk for

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AIDS than did their high-intender or steadyuser counterparts. (*J Natl Med Assoc.* 1992;84:341-352.)

Key words • black males • AIDS • risky sexual behavior • condom use

Numerous studies have shown that condoms are not consistently used among individuals at risk for acquired immunodeficiency syndrome (AIDS),¹⁻⁴ but very little research has focused on the variability of condom use within the black male population. The major aim of most investigations of attitudes about the use of condoms has been the comparisons of black and other ethnic groups with white samples.^{3,5,6} There is a strong need to know the extent to which similar beliefs and attitudes about condoms are shared by different ethnic groups. Information about the variability of condom use within a given ethnic group will provide the most relevant information for developing effective strategies for modifying negative attitudes about the use of condoms.

The task of understanding the behaviors and attitudes related to condom use among black males is extremely important because of the high incidence of sexually transmitted diseases (STDs) among members of this ethnic group.^{2,7} Therefore, this study had three objectives. The first was to determine the attitudes and knowledge about condom use among a subgroup of young black adult males who reported that they "always use condoms with their partner(s)." The second objective of the study was to determine whether attitudes and knowledge about condoms differed among two groups of black males who did not use condoms but varied in their intentions (low versus high)

to use condoms. The third objective was to determine whether knowledge about AIDS, drug use, angry reactions related to condom use, STDs, and risky sexual behavior (eg, anal intercourse and sex with prostitutes) varied with the steady use of condoms.

The rationale for testing these relationships was guided by our previous research, which showed that roughly one third of our sample of 150 black males reported that they always used condoms with their partner.8 Interestingly, this relationship held constant for black males who were sexually involved with multiple partners as well as those involved with single partners. The present study was also guided by our previous research, which showed that black males with multiple partners experienced more intensely angry reactions when condoms interfered with foreplay and sexual pleasure. Alternately, black males with single partners reacted angrily when their partners "ioked" about the use of condoms or when the partners insisted on not using condoms during sexual intercourse.8 The overall pattern of our findings from previous research clearly suggests that negative emotional reactions, particularly anger, may play an important role in the negotiation of safe sex practices.

METHODS

These data were collected as part of a larger study of the inter-relationships between drug use, attitudes and knowledge about AIDS, and condom use among young black adults. The participants for this inquiry were 150 black men attending college in the southern United States. The subjects were administered the self-report questionnaires in small groups. Confidentiality of responses were guarded by eliciting no demographic information that could be used to identify the subjects. After the questionnaires were completed, the forms were sealed in a large envelope and a subject number was assigned at the time the date was entered into the computer—usually within two days of data collection.

The average age of the men in the sample was 23.5 years. Most men were within the first 3 years of college (58%). The majority of the men were single and never married (88%); 8% were married; and 6% were separated, divorced, or widowed.

For the purposes of this study, a subject was classified as a steady user of condoms if they responded "true" to the following question: "Over the past 12 months, my partner and I always used condoms when we had sexual intercourse." Subjects who indicated that they didn't use condoms were further divided into two groups based on their response to a question about

their intentions to use condoms ("I intend to try condoms"). Subjects who indicated that they "agree" or "strongly agree" with the question were considered to have high intentions to use condoms, while subjects who indicated "strongly disagree" or "disagree" were considered to have low intentions to use condoms. Black males who reported that they were undecided (N = 44) were not considered in any analyses.

Of the 106 men, 27 (26%) were classified as steady users of condoms, 31 (29%) were classified as low intenders, and 48 (45%) were classified as high intenders. The chi-square analyses comparing the demographic variables of age, education, and marital status across all three groups were not significant.

Measurement Instruments

The following self-report instruments were employed in the study. The individual items and response formats comprising each scale can be obtained from the authors.

Attitudes Toward Condom Usage Questionnaire. The Attitudes Toward Condom Usage Questionnaire (ATCUQ) was developed by Brown⁹ to measure opinions about the use of condoms as contraceptive devices. The questionnaire consists of 40 questions (statements) that require the respondent to indicate whether they 1) strongly disagree, 2) disagree, 3) are undecided, 4) agree, or 5) strongly agree with the statements. The psychometric properties of the ATCUQ have been investigated by Brown,⁹ who reported an internal consistency reliability of 0.93 with an average item-total correlation of 0.24. Item total correlations for subjects in the present study ranged from 0.31 to 0.71 with the average being 0.41, and accepted alpha reliabilities have been reported.

The factor analysis of the ATCUQ by Brown revealed the scale to be comprised of five distinct factors. Our examination of the factor structure revealed that five subscales, comprised of only 21 of the original items, could be formed. The items retained for the subscales had factor loadings of 0.35 or greater and did not load more than 0.25 on the other factors. Using these criteria, five distinct subscales were formed. Factor one measured attitudes about condoms as contraceptive devices. This subscale has five items (numbers 2, 12, 34, 35, and 38 of the questionnaire) with an average factor loading of 0.68. Four items (numbers 14, 18, 19, and 23) loaded on factor two, with an average factor loading of 0.55. The items on this subscale measure attitudes about the extent to which condoms are viewed as being uncomfortable and interrupting sexual intercourse. Factor three was comprised of five items (numbers 7, 8, 15, 24, and 36) with an average factor loading of 0.52. This subscale measures attitudes about the acceptability of condoms. Factor four was comprised of four items (numbers 5, 11, 17, and 40) with an average factor loading of 0.61. This subscale taps into attitudes about how condoms add sexual excitement. Finally, factor five was comprised of three items (numbers 15, 29, and 33) with an average factor loading of 0.50. The items on this subscale appear to measure attitudes about whether condoms are inconvenient and interrupt foreplay.

Condoms Emotional Reaction Scale. The Condoms Emotional Reaction Scale (CERS) is a 13-item self-report questionnaire that was developed to measure the intensity of anger experienced in relationship to condom usage. Item total correlations for subjects ranged from 0.43 to 0.71 with an average of 0.62. The CERS is modeled after the State Anger Scales developed by Spielberger et al^{10,11} and the State Anger Reaction Scale that was developed by Johnson. ^{12,13} Both instruments measure the intensity of angry reactions experienced in stressful social situations. However, neither of the instruments included items that assessed angry reactions associated with the use (or lack of use) of condoms or other relevant behaviors during sexual intercourse.

AIDS Knowledge and Attitude Survey. This questionnaire was developed by Thomas, Gilliam, and Iwrey¹¹ and consists of 101 questions regarding knowledge and attitudes about AIDS. The questions in the knowledge section addressed the following broad domains:

- the nature of AIDS.
- transmission of human immunodeficiency virus (HIV),
- risk reduction, and
- knowledge of risk groups.

The behavior section addressed known risk factors for HIV infection and simply asked if the respondents had ever engaged in certain risk behaviors, regardless of frequency or immediacy. Other items assessed the prevalence of STDs, and questions were added to measure the frequency of drug use (ie, alcohol, cigarettes, marijuana, crack, and cocaine). Questions were presented in a forced-choice style, with response choices of "true," "false," and "do not know." A knowledge scale score was derived by summing the "correct responses" (1 point each) for the 29 AIDS knowledge items. This yielded a summary score that ranged between 0 and 29. The internal consistency of the 29-item AIDS-knowledge questionnaire, using

Cronbach's alpha to measure the internal consistency, was 0.81 for the sample of black college students used to create the questionnaire.¹¹

Drug Use. Individual items were used to measure the frequency with which well-known drugs (eg, alcohol, cigarettes, marijuana, crack, and cocaine) were used. The questions required respondents to indicate whether they 1) never used, 2) used, but quit, 3) used rarely, 4) used sometimes, but not daily, 5) used once a day, 6) used twice a day, 7) used five times a day, or 8) used more than five times a day. For analysis purposes, a scale was created to assess the extent of drug use (none, low use, and high use) for each variable. With this method of assessment, low-scale scores indicated low usage while high-scale scores indicated greater usage of the drug.

RESULTS Attitudes Toward Condom Usage Questionnaire

The individual items of the ATCUQ for the steadyuser, low-intender, and high-intender groups were compared using three-way analyses of variance (ANO-VAs) and subsequent t tests. Table 1 presents means, standard deviations, F values, and subsequent t values for the ATCUQ items. Analyses of the data revealed significant main group effects for 34 (85%) of the 40 ATCUQ items. Results of the analysis presented in Table 1 show that black men in the steady-user group consistently reported more positive attitudes toward condom use than black males with either high or low intentions to use condoms. The steady users, more often than the other two groups, stated that condoms were not too much trouble (F = 10.46, P < .001), were less unreliable (F=11.95, P<.001), less inconvenient (F=12.04, P<.001), and were less uncomfortable for both partners (F = 5.27, P < .01). The low-intender group disagreed more than their counterparts regarding their views that condoms did not enhance sexual pleasure (F=10.86, P<.001), were disgusting (F=21.92, P<.001), interrupted pleasure (F=4.96,P < .01), and believed condoms to be a highly unsatisfactory form of contraception (F=31.00,P < .001).

While the high-intender and steady-user groups responded consistently more positive than the low-intender group, interesting differences were noted between the high intenders and steady users. Results of the analyses presented in Table 1 show that black men in the steady-user group reported condoms to be less trouble (t=22.41, P<.05), less embarrassing to use

TABLE 1. ATTITUDES TOWARD CONDOM USE: MEANS AND STANDARD DEVIATIONS (SD) FOR BLACK MEN WHO VARY IN THEIR INTENTIONS TO USE CONDOMS

	C		Grp 1: Grp 2:			C	٥.		Subsequent t Tests		
Questic	onnaire umber	Alwa (n=) Mean	ays	Lo (n = Mean	w	Grp Hig (n = 6 Mean	jh	ANOVA F	Grp 1 vs Grp 2	Grp 2 vs Grp 3	Grp 1 vs Grp 3
	ndoms are too uch trouble.	1.8	1.4	3.5	1.7	2.6	1.2	10.46*	−4.19*	2.66†	-2.41‡
2. Co	ndoms are reliable.	2.3	1.4	0.9	1.4	2.8	1.2	11.95*	-4.29*	3.77*	-1.47
3. Co	easant to use.	2.6	1.4	2.0	0.8	2.7	1.2	3.18‡	1.77§	-2.85†	26
	wet spots make em attractive.	3.0	1.6	0.6	8.0	2.7	1.1	11.73*	4.01*	−4.86 *	0.89
	e of condom ds to excitement.	2.6	1.4	0.4	8.0	2.3	0.9	10.27*	3.57*	-4.44 *	0.88
pa	emale can rticipate in	3.8	1.3	3.0	1.3	3.3	0.9	3.62‡	2.34‡	-1.18	1.73§
7. The	tting it on. ere is no reason ny a woman ould be	4.3	1.2	2.0	1.4	3.8	0.9	32.98*	6.54*	− 6.26 *	1.84§
sug 8. Wo wh	nbarrassed to ggest a condom. omen think men no use condoms ow concern.	4.2	1.2	2.8	0.7	3.6	0.9	18.21*	5.51*	−4.68 *	2.31‡
9. I in	ntend to use	4.6	1.2	0.8	0.4	3.8	0.4	129.68*	11.36*	-20.27*	3.37†
10. Pro	ndoms. oper use can hance sex.	3.3	1.6	0	0.7	2.9	0.9	10.86*	3.72*	-5.08*	0.96
an	ople use them as erotic part of eplay.	2.8	1.4	2.7	0.5	3.0	0.9	0.98	0.09	- 1.69§	-0.84
12. Co sat	eplay. Indoms are fer than other ethods.	4.1	1.3	3.9	1.3	3.3	1.2	4.33†	0.70	2.03‡	2.69†
13. Do	n't like the idea using condoms.	2.4	1.4	3.5	1.4	2.7	1.2	6.23†	-3.06†	2.80†	-0.91
14. The		2.3	1.5	5.3	1.1	2.7	0.9	5.27†	-2.77†	2.35‡	-1.25
15. The		2.5	1.5	0.9	1.1	2.9	1.1	12.04*	−4.32 *	3.94*	- 1.57
em the	reason to be barrassed by use of	3.9	1.5	0	0.9	3.6	0.8	6.11†	2.72†	-3.14†	0.89
17. Put on car	ndoms. tting a condom an erect penis n be a real sexual	2.8	1.3	0.5	0.9	2.7	1.0	5.24†	-2.21‡	3.36*	0.39
18. Co	n-on. ndoms are comfortable.	2.8	1.4	0.4	1.1	3.1	1.1	2.20	-1.92§	1.37	-0.95
19. Co	ndoms make sex enjoyable.	2.4	1.2	3.6	0.9	2.8	0.9	10.28*	-4.00 *	3.65*	- 1.38
20. Wo	ould avoid ndoms if possible	2.4	1.7	4.3	1.1	3.2	1.0	16.47*	-4.88 *	4.34*	-2.15‡

^{*}*P*<.001.

[†]*P*<.01.

[‡]*P*<.05.

[§]*P*<.10.

TABLE 1. ATTITUDES TOWARD CONDOM USE: MEANS AND STANDARD DEVIATIONS (SD) FOR BLACK MEN WHO VARY IN THEIR INTENTIONS TO USE CONDOMS (CONTINUED)

		_	4.		0.	<u> </u>	2.		Subse	equent <i>t</i> Te	sts
	estionnaire n Number	Grp Alwa (n = Mean	ays	Grp Lo (n = Mean	w	Grp Hig (n = - Mean	ıh	ANOVA F	Grp 1 vs Grp 2	Grp 2 vs Grp 3	Grp 1 vs Grp 3
21.	I would be comfortable suggesting that my partner and I use condoms.	4.0	1.3	2.9	0.9	3.3	1.0	8.35*	3.76*	- 1.91‡	2.45†
	Condoms ruin the sex act.	2.5	1.5	3.5	1.2	3.0	1.0	4.47†	-2.63†	1.82§	-1.47
	Discomfort for both partners. Females think men	2.5 2.0	1.2	2.9 2.3	0.7	3.1 2.6	1.0 0.9	2.94‡ 2.89§	- 1.45 - 0.91	- 0.99 - 1.71§	-2.11‡ -1.93§
	who use condoms are jerks. Idea of using condoms does not appeal to me.	2.3	1.5	2.1	1.5	3.0	1.1	5.00†	0.54	- 2.89†	-2.09‡
	Interrupts foreplay. What to do with condom after use is a problem.	3.1 2.3	1.5 1.5	3.3 3.4	1.2 1.1	3.1 2.9	1.1 1.2	0.42 6.23†	-0.57 -3.26†	0.96 2.12‡	0.15 1.79§
28.	Use of condom is disgusting.	1.7	1.2	3.8	1.4	2.4	1.1	21.92*	-5.95*	4.62*	-2.38‡
29.	Condoms take out romance.	2.9	1.5	3.8	1.7	2.9	1.2	3.92‡	-1.91§	2.50†	0.19
30.	Don't like partners to use.	2.4	1.4	2.9	0.9	2.9	1.1	1.88	– 1.59	0.17	- 1.51
31.	I don't think condoms interfere with enjoyment of sex.	3.1	1.3	2.4	0.9	2.8	1.1	2.95‡	2.32‡	- 1.89§	0.92
32.	No way they can be pleasant.	2.2	1.2	3.3	1.1	2.8	1.1	6.30†	-3.42*	1.74§	-2.19‡
33.	Takes time out of foreplay.	3.0	1.4	3.9	1.5	3.1	1.1	4.96†	-2.44†	2.69†	-0.32
34.	I think condoms are excellent means of contraception.	3.8	1.3	2.7	1.1	3.3	1.1	5.96†	3.34*	-2.13‡	1.75§
35.	Condoms are unreliable.	2.5	1.2	2.7	1.1	2.7	1.2	0.31	-0.67	-0.03	-0.73
36.	There is no reason why a man should be embarrassed to suggest using condoms.	4.3	1.1	3.4	1.3	3.7	1.0	3.96†	2.59†	- 0.97	2.18‡
37.	Men who use condoms are sexier.	2.8	1.2	2.5	0.9	3.0	1.1	2.06	0.94	-2.17‡	-0.83
38.	Condoms are a highly satisfactory form of contraception.	3.9	1.3	1.7	1.2	3.5	1.0	31.0*	6.49*	-6.62*	1.40

^{*}*P*<.001.

[†]*P*<.01. ‡*P*<.05.

[§]P<.10.

TABLE 1. ATTITUDES TOWARD CONDOM USE: THE MEANS AND STANDARD DEVIATIONS (SD) FOR BLACK MEN WHO VARY IN THEIR INTENTIONS TO USE CONDOMS (CONTINUED)

	0	. 4.		. 0-	C 2.			Subs	Subsequent t Tests		
Questionnaire Item Number	Grp 1: Always (n=27) Mean SD		Grp 2: Low (n=31) Mean SD		Grp 3: High (n = 48) Mean SD		ANOVA F	Grp 1 vs Grp 2	Grp 2 vs Grp 3	Grp 1 vs Grp 3	
 39. I would have no objection if my partner suggested that we use condoms. 40. A skillful woman can make using a condom a highly erotic experience. 	4.3	1.3	3.8	1.5	3.4	1.1	30.12* 5.77†	7.59* 0.96	-6.02* 2.07‡	2.96† 3.34*	
Total Scale Score	68.6	19.1	71.2	15.8	69.8	10.5	0.22	-0.55	0.44	-0.29	

^{*}P<.001.

TABLE 2. AVERAGE CONDOM ATTITUDE SCALE SCORES FOR FACTOR-DERIVED SUBSCALES FOR BLACK MEN WHO VARY IN THEIR INTENTIONS TO USE CONDOMS

	0	4.	0	0	-	0-		Subs	equent t Te	ests
Questionnaire Item Number	Grp Alwa (n = Mean	ays 27)	Grp Lo (n = Mean	w	Grp Hiç (n = Mean	gh	ANOVA F	Grp 1 vs Grp 2	Grp 2 vs Grp 3	Grp 1 vs Grp 3
Factor 1: Contraceptive Factor 2: Uncomfortable/ Interrupts Sex	16.3 14.7	4.5 6.2	14.4 20.7	4.3 5.2	15.4 17.4	2.9 4.8	1.75 9.44*	1.60 3.95*	- 1.09 2.84†	0.93 1.98‡
Factor 3: Acceptability Factor 4: Adds Excitement to Sex	18.3 12.2	4.8 3.9	13.4 11.3	2.7 2.6	17.2 11.1	2.1 2.6	20.59* 1.07	4.61* 0.93	- 6.69* 0.36	1.05 1.23
Factor 5: Inconvenient/ Interrupts Foreplay	7.2	3.5	11.4	3.9	8.6	2.5	12.52*	-4.21*	3.46*	- 1.82§
Total Scale Score (21 items)	32.5	9.6	24.6	6.7	31.5	5.3	11.93*	3.54*	-4.84*	.49

^{*}P<.001.

(t=2.18, P<.05), and safer to use than any other form of contraception except abstinence (t=2.69, P<.01) than did their high-intender counterparts. Additionally, steady users felt more comfortable in suggesting the use of condoms to a partner (t=2.45, P<.01), had less

objection if a partner suggested the use of a condom (t=2.96, P<.01), and felt that a skillful woman could make placing a condom (on the penis) a highly erotic experience (t=3.34, P<.001).

The means for the five subscales are presented in Table

[†]*P*<.01.

[‡]*P*<.05.

[§]*P*<.10.

[†]*P*<.01.

[‡]*P*<.05.

[§]P<.10.

2. Results of the analysis show significant main effects for the three groups on three of the five subscales (interruption, F = 9.44, P < .001; inconvenience, F = 12.52, P < .001; and acceptance, F = 20.59, P < .001). The three groups did not differ in their attitudes toward using condoms as a contraceptive or the belief that condoms add to the excitement of sex. Subsequent pair-wise comparisons of the steady users and high intenders revealed that the two groups did not differ from each other in their acceptance of condoms. However, both groups differed significantly from low intenders (t = 4.61, t = -6.69; P < .001). Further, steady users and high intenders differed significantly in their views that condoms are uncomfortable and interrupt sex; high intenders were more likely to present negative attitudes on this issue than steady users (t = -1.98, P < .05). Steady users and high intenders differed marginally in their view that condoms were inconvenient, with high intenders being more negative than steady users (t = -1.82, P < .10). However, both groups differed significantly from low intenders in perceiving condoms as less inconvenient (t = -4.21, 3.46; P < .001).

A total scale score was computed by summing the 40 individual items of the ATCUQ. The results of the analysis comparing the scores for the three groups did not reveal any significant differences. However, the comparison of the average scores derived by summing the 21 items that loaded on the five subscales revealed a significant main effect for groups (F=11.93, P<.001). Subsequent analyses showed that low intenders had significantly less positive attitudes than high intenders and steady users (t=3.54 and t=4.84, respectively, P<.001).

Condom Emotional Reaction Scale

The individual items of the CERS for the three groups were compared using three-way ANOVAs with subsequent pair-wise t tests. Results of these analyses presented in Table 3 revealed significant effects for groups on eight of the 13 items. Black males with low intentions to use condoms experienced a greater intensity of anger regarding the perception that condoms will interrupt foreplay (F=7.11, P<.001) or interfere with sexual pleasure (F=3.29, P<.05), or regarding partner rejection if he or she is asked about previous sexual contacts (F=8.99, P<.001). Steady users reacted with more intense anger than the other two groups when the partner insists on not wearing a condom (F=9.29, P<.001) or "jokes" about the use of a condom (F=2.60, P<.01).

No significant main effects across groups were

detected for angry reactions regarding condom discomfort or for a partner not reaching orgasm while wearing a condom, reading or hearing about AIDS as a "more serious problem for blacks than whites," or hearing that black intravenous (IV) drug users are responsible for the transmission of AIDS. While steady users and high intenders responded to the CERS items in a consistent pattern, the angry reactions of steady users were more intense than high intenders when partners "joked" about the use of condoms (t = 2.04, P < .01). Analyses examining the total CERS scores of the three groups did not reveal a significant group main effect.

AIDS Knowledge, STDs, High-Risk Sexual Behaviors, and Drug Use

A comparison of total scale score of the three groups, derived by summing the correct responses for each of the 29 items, indicated no significant difference (F=0.16) in the average number of correct responses for the three groups. The average number of correct items for the steady-user group was 22.3 (standard deviation [SD] = 6.9), and the number of correct items for the low-intender group was 22.3 (SD = 5.3). High intenders correctly scored an average of 21.6 (SD = 6.6) items. Subsequent pair-wise t tests yielded no significant interaction effects. The majority of men in all three groups correctly responded to the basic facts about AIDS (eg, what AIDS is and how it is transmitted), and the great majority of black males in the steady-user (92%), low-intender (81%), and high-intender (95%) groups knew that using condoms was an effective means of reducing the chances of being exposed to HIV infection.

The data presented in Table 4 show the percentage of STDs and high-risk sexual behaviors among black men in the three groups. A chi-square analysis of percentages revealed a significantly greater percentage (P < .01) of males in the low-intenders group reporting treatment of gonorrhea (37%), syphilis (16%), herpes (16%), and genital warts (16%) than was observed in the steady-user (7%, 7%, and 4%, respectively) or high-intender (15%, 0%, and 4%, respectively) groups.

A significantly (P<.01) greater percentage of men in the low-intenders group reported anal intercourse (37%) than either high intenders (17%) or steady users (4%). A greater percentage (P<.01) of low intenders reported sex with prostitutes (42%) than the steady users (11%) or high intenders (17%). There was also a nonsignificant trend for a greater percentage of men in the low-intenders group to report sexual relations with other males (10%) than respondents in the high-

TABLE 3. EMOTIONAL REACTIONS SCALE: MEANS AND STANDARD DEVIATIONS (SD) FOR BLACK MEN WHO VARY IN THEIR INTENTIONS TO USE CONDOMS

		. 4.		٥.				Subsequent t Tests		
Questionnaire Item Number	Grp Alw (n = Mean	ays	Grp Lo (n = Mean	w	Grp Hig (n = Mean	gh	ANOVA F	Grp 1 vs Grp 2	Grp 2 vs Grp 3	Grp 1 vs Grp 3
You think a condom may be uncomfortable for	1.8	0.9	1.8	0.7	1.8	1.1	0	0.03	0.03	0.06
your partner. 2. Your partner may not reach orgasm while using a	2.4	1.2	2.6	0.9	2.2	1.1	1.12	-0.77	1.58	0.51
condom. 3. Condoms interrupt foreplay.	2.1	1.1	3.1	1.3	2.2	1.1	7.11*	-3.08†	3.22†	-0.33
4. Condoms interfere with sexual pleasure.	2.4	1.2	3.1	1.2	2.4	1.1	3.29‡	-2.09‡	2.25‡	-0.22
5. Partner refuses sex unless you use condoms.	1.8	1.3	2.4	0.9	2.2	1.1	2.39§	-2.06‡	1.49	- 0.94
6. Someone sees you purchasing condoms.	1.7	1.2	1.2	0.6	1.7	1.1	2.60§	1.94§	-2.49†	0.12
7. Partner inquires about your past sexual behavior.	2.0	1.3	1.4	8.0	1.7	0.9	2.72§	2.14‡	- 1.34	1.23
8. You think your partner will reject you if you asked about her (his) previous sexual contacts.	2.1	1.2	3.0	1.3	1.9	1.0	8.99*	-2.87†	3.99*	0.49
9. Your partner insists on not wearing a condom.	2.3	1.5	0.92	0.9	1.9	1.1	9.29*	3.92*	-3.99*	1.10
Your partner jokes about the use of a condom.	2.2	1.4	1.4	0.9	1.6	0.9	4.72†	2.58†	-0.99	2.04†
11. You read that AIDS came from Africa.	3.2	1.2	3.0	1.3	2.7	1.2	1.87	0.48	1.31	1.82§
I2. You read or hear that AIDS is a "more serious" problem for blacks than whites.	3.2	1.2	2.9	1.4	2.7	1.3	0.96	0.74	0.60	1.45
Ital Willes. You read or hear that black IV drug users are chiefly responsible for the transmission of AIDS.	3.2	1.1	3.2	1.2	2.8	1.2	1.58	0.13	1.43	1.53
Total Scale Score	30.0	10.6	29.8	8.2	26.8	9.9	1.41	0.09	1.49	1.29

^{*}*P*<.001.

[†]*P*<.01. ‡*P*<.05.

[§]P<.10.

TABLE 4. PREVIOUS TREATMENT FOR SEXUALLY TRANSMITTED DISEASES (STDs) AND RISKY SEXUAL BEHAVIOR FOR BLACK MEN WHO VARY IN THEIR INTENTIONS TO USE CONDOMS

Questionnaire Item	Always (n=27)	Low Intenders (n=31)	High Intenders (n = 48)	χ ²
I have been treated for:				
Gonorrhea	7	37	15	8.48*
Syphilis	7	16	6	7.33†
Herpes	7	16	0	7.84 [†]
Genital warts	4	16	4	4.63‡
I have tested positive for AIDS	15	6	7	1.64
Sex with males	4	10	7	0.89
Anal intercourse	4	37	17	10.21*
Sex with prostitute	11	42	17	9.42*

^{*}P<.01.

TABLE 5. PERCEIVED RISK OF BEING EXPOSED TO AIDS FOR BLACK MEN WHO VARY IN THEIR INTENTIONS TO USE CONDOMS

Questionnaire Item	Always (n=27)	Low Intenders (n=31)	High Intenders (n = 48)	χ²
I am afraid of getting AIDS	85	77	83	0.67
I am not worried about getting AIDS	37	60	36	4.81*
I am less likely than most people to get AIDS	43	72	49	5.48*
I would rather get any other disease than AIDS	77	81	78	0.16
I consider myself a member of the AIDS high-risk group	23	11	22	1.64

^{*}P<.10.

intenders (7%) or steady-user (4%) groups. Interestingly, 15% of the steady users reported testing positive for AIDS in contrast to only 6% of low intenders and 7% of high intenders. However, the chi-square analysis did not show that these differences were statistically significant.

Group differences also were noted for variables that assessed the perceived vulnerability of contracting HIV (Table 5). The percentage of low intenders (72%) who perceived themselves as "being less likely" to get AIDS was marginally greater (P<.10) than those in the steady-user (43%) or the high-intender (49%) groups. Similarly, a greater number of men with low intentions (60%) compared with steady users (37%) or high intenders (36%) are not worried about getting AIDS. The percentage of both high intenders and steady users perceiving themselves to be in an AIDS high-risk group was twice that of the percentage of low intenders. While interesting, this finding was not statistically significant.

Finally, a total scale score of perceived risk was computed by summing the five individual items listed in Table 5. Analyses examining the total perceived risk scores of the three groups revealed no significant group effects.

Drug use (Table 6) was not consistently different for the three groups. However, cigarette use was one factor that showed reliable differences between groups; more high intenders classified themselves as heavy smokers than either low intenders (P<.01) or steady users (P<.05). Reported marijuana use was greater among high intenders than steady users (t= -2.22, t<.05).

DISCUSSION

Undoubtedly, the use of condoms can be an effective means of preventing the spread of STDs, and they appear to offer reasonable protection against exposure to HIV. Whereas bisexual and homosexual contact between males and needle-sharing behavior of IV drug

[†]P<.05.

[‡]*P*<.10.

TARLES	REPORTED DRUG USE FOR R	I ACK MEN WHO VARY IN THEIR	INTENTIONS TO USE CONDOMS

				_		Subsequent t Tests				
Questionnaire Item	Grp Alwa (n=2 Mean	ıys	Grp Lov (n=: Mean	N	Grp Hig (n=4 Mean	h	ANOVA	Grp 1	Grp 2 vs	Grp 1
item	Mean	<u> 30</u>	mean	<u> </u>	mean	<u> </u>	Г	Grp 2	Grp 3	Grp 3
Cigarettes	1.3	1.0	1.1	0.5	1.9	1.7	4.35*	1.17	-3.23*	– 1.81†
Drinking	2.6	1.2	3.1	1.6	2.9	1.4	0.91	– 1.34	0.79	-0.70
Marijuana	1.1	0.4	1.9	1.9	1.6	1.6	2.23	-2.38‡	0.72	-2.22‡
Crack	1.0	0.3	1.5	1.7	1.2	1.1	0.88	- 1.29	0.76	-0.89
Cocaine	1.0	0.3	1.5	1.7	1.3	1.1	0.79	- 1.29	0.51	- 1.30

^{*}P<.01.

users remain the chief modes of transmission, there has been an alarming increase in the incidence of HIV and other STDs among black male heterosexuals.^{7,14-19} There appears to be a notable lack of research regarding lifestyle factors, attitudes, and sexual behaviors related to the initiation and maintenance of safe-sex practices among black males.²⁰ Given this fact, there is an obvious and long-overdue need to closely investigate these factors among various populations of black males. In this investigation, several important factors were discovered that may help to explain why such a low percentage of young adult black males use condoms with their partners. We also identified some important factors that may explain why certain black male adults "always" use condoms with their partners.

First, we discovered that there were no significant differences in knowledge about AIDS among black males as a function of the extent to which they use condoms. This finding is similar to previous reports,⁸ which revealed that there were no substantial differences in the range of AIDS knowledge among black males with and without multiple sexual partners. As with black males with multiple sexual partners, black males who do not use condoms are well aware of AIDS and how it is transmitted, and the great majority know that using condoms is an effective means of reducing the chances of being exposed to HIV infection. What remains a big puzzle is why roughly two thirds of this sample of young, well-educated, black males do not use condoms with their partners. Obviously, as with our sample of males with multiple sexual partners, knowledge about AIDS is not an important part of the answer.

Second, while our three groups did not differ significantly on AIDS knowledge, they did differ with regard to their attitudes and emotional reactions associated with the use of condoms. Attitudes about

using condoms as contraceptives were not different for males in the three groups. A striking finding was that the attitudes about the use of condoms were unpredictably similar for black males who always use condoms (steady users) and males with high intentions to use condoms (high intenders). In fact, the only area where the two groups differed significantly was on their attitudes about the extent to which condoms are uncomfortable and interrupt sex; black males with high intentions had more negative attitudes about this issue. Furthermore, the overall pattern of findings shows that black males in the steady-user and high-intender groups differed significantly from black males in the lowintentions group in their emotional reactions about condoms. In other words, black males with low intentions to use condoms were more likely to perceive condoms as inconvenient and unacceptable, would avoid using them if at all possible, and would voice strong objections if their partners suggested using condoms. It will be important for future studies to examine whether the factors that discriminate steady users from high intenders are predictive of the initiation and maintenance of condom use.

The third major finding revealed in this inquiry involved the angry reaction associated with the use of condoms. Interestingly, there were very few significant differences in the angry reactions of black males in the steady-user and high-intender groups. In fact, the only item that differentiated the two groups was the intensity of anger elicited when the partner jokes about the use of condoms; black males in the steady-user group reacted with greater anger. It was also observed that black males with low intentions to use condoms react with more intense anger to a number of important situations such as:

• when condoms interrupt foreplay,

[†]P<.10.

[‡]P<.05.

- when condoms interfere with sexual pleasure,
- when a partner refuses sex unless a condom is used, and
- when he thinks a partner will reject him if he asks about previous sexual behavior.

Our findings suggest that condoms may not be used by black males in the low-intenders group because they may be effective in using their intensely angry reactions to motivate their partner(s) to have unprotected intercourse. In other words, it is conceivable that partner(s) of black males in the low-intenders group would rather have unprotected sexual intercourse and not engage in behaviors that may intensify the angry reactions of their partners, or that may result in arguments, fights, or rejection by the partner. We also discovered that low intenders react with less intense anger to a few situations than black males in the steady-user and high-intender groups. For example, black males in the low-intenders group are less irritated when a partner insists on not using a condom or jokes about the use of condoms. Although we do not have all the explanations for these behavioral responses, it is obvious that black males in the low-intenders group could care less about using condoms, and they are very much at ease with partners who would rather have unprotected sexual intercourse. We believe that it will be important for future studies to examine more closely the role of negative emotions in the negotiation of safe-sex practices among groups who are at high risk for AIDS (eg, multiple sexual partners, individuals with previous histories of STDs, and HIV-positive individuals).

We did not observe that drug use was significantly different among the black males in the three groups. The only variable that clearly differentiated the three groups was cigarette smoking. Overall, the pattern of the findings showed that black males of the highintenders group smoke more often than black males in the steady-user and low-intender groups. Even though the analysis of the main group effect was insignificant for the other drug variables, subsequent comparisons were conducted. Our most striking finding was that marijuana was used more often by black males of the low-intenders group. However, because of the nature of our measure of marijuana use, it was not possible to determine whether marijuana use was associated with sexual intercourse or the failure to use condoms during sex. There is an obvious need for future studies to focus on these latter questions because it also pertains to the use of other drugs during sexual intercourse.

Another important finding uncovered in this study pertains to the previous treatment for STDs among black males in the three groups. Our data show that a significantly larger percentage of black males in the low-intenders group had been treated for gonorrhea, syphilis, herpes, and genital warts. These data are consistent with reports by others^{17,21-23} that show increases in the number of black males being treated for STDs. Our results also revealed that a significantly greater percentage of black males in the low-intentions group also report experiencing anal intercourse and having sex with prostitutes. There was also an interesting but nonsignificant trend for black males in the low-intenders group to report sex with males to a greater extent than the steady-use or high-intender groups.

Whereas these findings are cause enough for concern, our data also show that there was a tendency for black males in the low-intenders group to not perceive themselves as being at increased risk for being exposed to AIDS. It will be important for future research to determine what factors mediate the relationship (or lack thereof) between perceived risk and risky sexual behaviors among black males. Results from these types of studies will provide information necessary to motivate black males to adopt safe-sex practices. Given the significant negative attitudes that black males have about the use of condoms, strategies to reduce exposure to STDs and AIDS should focus on other behaviors that lower the risk of contacting AIDS. For example, very little is known about partner choice or whether black males who do not use condoms are ineffective in negotiating safe-sex practices with their partner. There is also a strong need for future research in this area to be prospective in nature so that problems of causality are minimized.

SUMMARY

The findings of the present inquiry revealed that knowledge about AIDS was exceptionally high among black males who do not use condoms. Black males in the low-intenders group perceive condoms as inconvenient and unacceptable, would avoid them if at all possible, and voice strong objections when a partner wants to use condoms. The low-intenders also react with intense anger when condoms interfere with foreplay and sexual pleasure and when a partner refuses sex without a condom. Finally, black males in the low-intenders group smoke marijuana more often, and a large percentage have been treated for STDs, experienced anal intercourse, and had sex with prostitutes. In contrast, they don't perceive themselves to be the kind of people to be exposed to AIDS. It appears

that very few factors discriminate between black males in the high-intenders group and black males in the steady-user group. High intenders have more negative attitudes regarding the discomfort of condoms and the extent to which condoms interrupt sex, and they also smoke cigarettes more often than males in the other groups. Overall, the pattern of findings suggest that different attitudes and behaviors should be targeted for intervention efforts among young adult black males who vary in the use and intentions to use condoms.

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