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Women Bar Drinkers' Discussions about Birth Control and Risky Sexual Behavior

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Abstract

This study evaluated how birth control discussions prior to sexual activity affected condom use in a sample of 225 young women bar drinkers. The use of alcohol and other drugs (AOD) and partner type also were assessed. Data were collected through daily reports and qualitative interviews over 12 weeks. A total of 1671 sexual events were reported ($M = 7.4$ events per participant), of which 64.7% ($n = 1081$) did not involve condom use. Discussions of birth control occurred prior to 10.9% ($n = 183$) of all sexual events. These discussions were more likely to be initiated by the woman and to occur when AOD had been used. Thematic analysis revealed four common themes: confirmation of the need to use condoms, confirmation of oral/hormonal contraceptive use, use of sufficient birth control, and discrepant condom use. The discussions reduced rates of risky sex when the sexual partner was more intimate (i.e., boyfriend/dating partner), regardless of AOD use and when the sexual partner was a friend or ex-partner and no AOD were used. The thematic analysis suggested that pregnancy prevention was a stronger motivation for discussing condom use, rather than risk of contracting an STI. Given the substantial rate of high risk partners, history of STIs, and limited amount of time women reported knowing "regular" partners, we suggest that interventions designed to reduce risky sex should be tailored to increase women's awareness of STI and pregnancy risk when under the influence of AOD, and promote condom use regardless of partner type.

Keywords

birth control; alcohol use; partner type; risky sex; condom use

INTRODUCTION

To date, the use of the male latex condom is considered to be the most effective way to prevent sexually transmitted infections (STIs), including HIV/AIDS. New HIV/AIDS diagnoses have been steadily increasing among women in the U.S since 1985 (Centers for Disease Control and Prevention [CDC], 2009). The primary mode of HIV transmission for women in general ($> 70\%$), with young women (15–39 years) at greatest risk (80–85%), is through high risk heterosexual contact (CDC, 2008). While latex condoms are known to be the best HIV prevention strategy, it has been estimated that only 27% of adolescent girls in the U.S. use condoms as their primary method of contraception. Furthermore, condom use has been found to decline as women grow older (Guttmacher Institute, 2008).

Several factors have been found to influence condom use. Among those most commonly cited in the research literature are partner type and alcohol use (Cooper & Orcutt, 2000; Leigh et al., 2008; Parks, Hsieh, Collins, Levonyan-Radloff, & King, 2009). Research

findings suggest that condom use rates vary by partner type. Several studies have found higher rates of condom use with casual partners (Cooper & Orcutt, 2000; Lescano, Vazquez, Brown, Litvin, & Pugatch, 2006). Macaluso, Demand, Artz, and Hook (2000) found that, with a regular partner, condom use decreased as the length of the relationship increased. In a study of college students (67% female; Brown & Venable, 2007) alcohol use was associated with a decrease in condom use with non-steady or non-primary partners. However, in a study of women only, Cooper and Orcutt (2000) found that drinking and condom use were more common with casual partners. Wiemann et al. (2009) assessed rates of STIs among women with main partners they had known for less than 6 months (new) and those they had known for more than 6 months (old) and found substantial rates of STIs (20–24%), regardless of the duration of the relationship. They concluded that females were at risk for STIs with both new and old main partners. Thus, findings of condom use based on partner type remain equivocal.

The relationship between alcohol and risky sexual behavior (i.e., unprotected sex or failure to use a condom) has been studied for the past several decades. While many global association studies conclude that heavy drinkers are more likely to be sexually active, have more sexual partners, and are more likely to have unprotected sex (Graves & Leigh, 1995; Leigh & Schafer, 1993; Leigh, Temple, & Trocki, 1994), event level studies have not succeeded in establishing a causal link between alcohol use and unprotected sex. Kiene, Barta, Tennen, and Armeli (2009) found that, among a sample of college age women, greater alcohol consumption was associated with increased likelihood of sex with both casual and regular partners, but was only associated with increased likelihood of unprotected sex with casual partners. Other studies have found no effect of alcohol consumption on condom use (Leigh et al., 2008; Morrison et al., 2003; Testa & Collins, 1997). Indeed, Leigh et al. found that women who reported drinking before sex were more likely to have protected sex with casual partners. Thus, while alcohol has been found to disinhibit psychological sexual arousal (Crowe & George, 1989), which increases the possibility of a sexual encounter, the findings regarding alcohol's influence on condom use are mixed.

One factor found to influence condom use has been the discussion of condom use or safe sex negotiation prior to sexual activity (DeVisser & Smith, 2001; Schroder, Johnson, & Wiebe, 2009). Stoner et al. (2008) found that women who were more sexually assertive were more likely to insist on condom use, regardless of their alcohol use, prior to sexual activity. While investigating rates and correlates of condom use with different partner types among heterosexual young adults, De Visser and Smith (2001) concluded that the discussion of condom use during sexual encounters doubled the likelihood of safe sex with regular partners and increased the likelihood of safe sex by five-fold with casual partners. Schroder et al. (2009), in a study of daily diary reports, found that, among single, Hispanic college students, safe sex negotiations were the strongest predictor of condom use after controlling for mood (positive and negative) and alcohol use.

The purpose of the current study was to evaluate how discussions of birth control prior to sexual activity affected negotiations of safe sex (i.e., condom use) in a sample of young women bar drinkers. We attempted to account for other contextual characteristics of the sexual event, such as alcohol and other drug (AOD) use and partner type, in these discussions. We defined risky or unprotected sex (i.e., unsafe sex) as any vaginal or anal intercourse without the use of a latex condom.

METHOD

Participants

A total of 225 young women bar drinkers were recruited for the study through newspaper advertisements, flyers placed in local coffee shops and universities, and by word of mouth in western New York State. Advertisements indicated that “Women bar drinkers needed for a study of alcohol use and social interactions. Must be 18–30 years old to participate.” The advertisements provided women with a telephone number to call the study if interested. Upon calling, women were provided with a description of the project as a “confidential study of women who drink in bars, their alcohol and other substance use and sexual activity.” Women were eligible to participate in the study if they were: (1) between the ages of 18–30 years; (2) reported drinking in bars on a weekly basis; (3) not married or living with a romantic partner; (4) heterosexual; (5) not abstaining from alcohol; (6) not pregnant or trying to become pregnant; and (7) reported being in good physical and mental health. All study protocols were approved by the Institutional Review Board.

A total of 1256 women called the project. Of those women, 130 (10.4%) were not interested in participating in the study. Among those women interested in participating in the study, 524 (46.5%) met all eligibility criteria. Women were most likely to be ineligible for the study because they did not frequent bars one or more times each week (20.2%). Of the 524 women eligible to participate in the study, we included 225 (42.9%) in the current analyses. These were women who completed the initial baseline interview and remained in the study for at least four weeks and completed the first monthly qualitative interview.

The average age of the women was 22.13 years ($SD = 2.37$). The majority of women were Caucasian/European Americans (77%), while 11.6% were African-American, 5.8% reported their ethnicity as other, and small percentages were Hispanic, Asian, and or Indian or Alaskan. Just over half (51%) of the sample indicated having some college education and 30% had graduated college. Eleven percent had high school diplomas, 3% held postgraduate degrees, 2.7 had less than a high school education, and 1.8% had vocational training.

Procedure

The current study focused on the descriptive quantitative and qualitative data provided in the monthly interviews that were conducted as part of a larger 12-week prospective study (Parks, Hsieh, Collins, Levonyan-Radloff, & King, 2009). Participation in the larger study consisted of three forms of data collection: an initial comprehensive background interview, daily reports provided through a computer-based interactive voice response (IVR) system via telephone, and the monthly semi-qualitative, in-person interviews. Informed consent was provided by participants prior to the initial background interview. Participants were remunerated for the initial interview and daily reports (see Parks et al., 2009) and received \$25 for each monthly interview.

Information from the initial background interview relevant to the participants’ histories of sexual activity was analyzed and was included to provide a context for the qualitative findings. For example, women’s histories of STIs, use of oral contraceptives at the start of the study, number of sexual partners and histories of risky sexual partners in the six months prior to beginning the study, and average length of time they had known a sexual partner they considered to be “regular” were provided as background information.

The monthly interviews were conducted by trained female interviewers at the Research Institute at the end of the first, second, and third months of daily reporting. Interviews focused on up to five consensual and five non-consensual sexual events that a woman had reported via the IVR system over the preceding 4 week period. Interviews were designed to

confirm information provided in the IVR reports (e.g., type of sexual activity, use of condom or not, type of partner, use of alcohol and/or drugs, intoxication [1 = “not at all” to 4 = “extremely”]) and to generate descriptive data about occurrences before, during, and following each sexual event. Women were asked to provide descriptions about the activities they and their partner were involved in, and where they first encountered that partner prior to the sexual event (e.g., What were you doing? Where did you go? With whom were you interacting?). In addition, they were asked who initiated the sexual activity, where the sexual activity took place, what type of birth control discussion, if any, preceded the activity, and what decisions were made about the use of condoms or other birth control. Each qualitative interview lasted approximately 45 minutes. Data collection began in April 2004 and was completed during June 2008. Only analyses of consensual sexual events are included in this study.

Data Analyses

Data were available for 1671 consensual sexual events, reported by 225 participants, an average of 7.4 events per participant. Interviews were recorded, transcribed, and then subjected to qualitative data coding using the Atlas.ti qualitative analysis software program. For the current analyses, we focused on specific questions in the interview that asked participants to describe discussions they had with their sexual partner about sexual activity and birth control prior to engaging in sexual activity and what, if any, impact those discussions had on the use of condoms during the sexual activity that followed.

Four staff members independently coded the qualitative data. They were provided with a standardized list of code words/phrases that could be applied to the text, as well as an ability to add new codes as needed. Each interview was coded by at least two raters, and results of initial coding were checked for consistency across raters. Any discrepancies in data coding were discussed until consensus was reached. Thematic analysis followed, in which individual codes were grouped to form common themes. Specific quotes from individual interviews were selected to illustrate the themes that emerged. We also have provided descriptive quantitative data from the interviews in an effort to place the qualitative data in context and to improve understanding of the qualitative findings.

RESULTS

Background Information

Women were asked to describe the typical length of time that they knew a partner before considering him a “regular” boyfriend, as well as the average length of time they had known a sexual partner prior to engaging in sex with him. Women reported regular boyfriends as men they had known an average of 8.1 weeks ($SD = 9.3$) and engaging in sex with a partner after 4 to 5 weeks of beginning to date him. Women reported an average of 2.0 ($SD = 1.3$) sexual partners during the past six months and nearly half (49.3%) of the women reported the regular use of oral contraceptives. Nearly one-third (30.7%) of the women reported ever having a sexually transmitted infection (STI) and 38.2% reported having a sexual partner that was high risk (i.e., not monogamous, had an STI or HIV, was an IV drug user) over the past six months. The majority (88%) of women reported engaging in sex with a regular partner, while 30.7% reported engaging in sex with a new partner in the six months prior to entering the study. Frequency of unprotected sex was significantly higher with regular partners ($M = 7.25$, $SD = 4.91$) compared with new partners ($M = 1.34$, $SD = 2.40$, range = 1–10), $t(224) = 17.11$, $p < .001$.

Descriptions of Sexual Events

The majority of the sexual events ($n = 1081$; 64.7%) involved at least one type of risky sexual behavior (i.e., vaginal or anal sex without the use of a latex condom). The majority of sexual events involved vaginal intercourse (98.9%, $n = 1653$), while a small percentage involved anal intercourse (1.6%, $n = 27$). Failure to use a condom was reported for 64.2% ($n = 1061$) of events involving vaginal intercourse. Failure to use a condom was reported for 92.5% ($n = 25$) of events involving anal intercourse. Slightly more than half (56.7%, $n = 948$) of all sexual events involved the use of AOD and, in nearly half of those events (49.5%, $n = 470$), women reported being moderately or extremely intoxicated at the time of the sexual activity. Thus, women bar drinkers reported high rates of sexual risk taking and intoxication associated with sexual activity. Discussions of birth control were initiated prior to 10.9% ($n = 183$) of all sexual events. These discussions were initiated by 86 (38.2%) of the women in the study. These women did not differ from women who did not initiate discussions in demographic characteristics or sexual history (e.g., oral contraceptive use, history of STIs or high risk partners). These discussions were initiated by women (60.1%, $n = 110$) more often than by their male partners. The majority of discussions (60.7%, $n = 111$) were initiated during events in which women reported having used AOD compared with events in which women were not using AOD. The initiation of birth control discussions differed based on partner type. Table 1 provides the rates of birth control discussions based on partner type regardless of AOD use and actual condom use. Based on Table 1, it appears that women were more likely to discuss birth control, including condom use with sexual partners categorized as strangers, just met or acquaintances than with more well-known partners, such as boyfriends, ex-romantic partners, and friends.

Impact of Discussions on Rates of Condom Use

In an effort to determine whether birth control discussions had an impact on condom use, rates of condom use were compared based on the presence or absence of discussion across partner type and AOD use for each sexual event (see Table 2). Although the lowest rate of birth control discussions occurred in sexual events with boyfriends and dating partners (9.9%, $n = 120$, Table 1), these discussions appeared to have the greatest impact on reducing risky sexual behavior in comparison with discussions initiated with all other types of partners, particularly in events where AOD use was reported by the woman. When AOD were used, the rates of condom use following a birth control discussion (77.8%) were significantly higher than the rates of condom use without a birth control discussion (27.9%), $\chi^2(1) = 23.6$, $p < .001$. This was also true when AOD were not used. Rates of condom use were significantly higher for events that followed birth control discussions (59.6%) compared to events that did not follow birth control discussions (33.6%), $\chi^2(1) = 7.25$, $p < .01$.

Birth control discussions initiated with partners categorized as friends occurred at a slightly higher rate than with boyfriends and the majority of these events (64.3%, $n = 148$) involved the use of AOD. Condom use did not change as a result of discussions with friends regardless of AOD use (Table 2). However, when AOD were not used with ex-partners, condom use rates following birth control discussions (60.0%) were significantly higher compared to condom use rates for events that did not involve birth control discussions (23.6%, Table 2), $\chi^2(1) = 15.9$, $p < .001$. Paradoxically, when AOD were used, rates of condom use following birth control discussions (33.3%) were significantly lower compared with rates of condom use when no birth control discussions occurred (53.3%) with sexual partners described as strangers or just met, $\chi^2(1) = 24.11$, $p < .001$.

Themes Found in Birth Control Discussions

Using thematic coding to assess women's descriptions of discussions with their sexual partners prior to engaging in sexual activity, we found that several specific themes emerged. The most common theme that emerged was "*confirmation of the need to use a condom.*" It was found in 63.9% ($n = 117$) of birth control discussions and occurred across all partner type categories. The following quotes provide an overview of the nature of these conversations and their influence on condom use.

My partner initiated the conversation and it was decided to use a form of birth control and condoms.

It was decided that he had to get up and get a condom.

Yes, I initiated it [the discussion], and it was decided that we would use a condom.

This theme was more likely to occur in conversations initiated by women (61.2%, $n = 110$) and when AOD use was reported associated with the sexual event (62.0%, $n = 111$).

The next theme to emerge was "*confirmation of oral/hormonal contraceptive use, 'use of sufficient birth control.'*" This theme emerged in 26.8% ($n = 49$) of the events involving birth control discussions. In this theme, the discussion prior to the sexual event revolved around whether the woman was using a form of birth control already and whether that form of birth control was sufficient such that a condom was or was not needed. This theme was more commonly found in discussions with regular partners and partners described as friends.

I initiated the conversation and it was decided that we were okay without [a condom], we already had sufficient birth control. [oral contraception, regular partner]

...Decided that because I was on the pill that we did not have to use a condom, but I was still very nervous about it. Was not sure if it was working or not, so we decided to pull out and that's what ended up happening. [regular partner]

It was decided not to use a condom, [be]cause I was on birth control. [regular partner]

Yes, my partner initiated the conversation. He just wanted to make sure I still had my patch on. And I knew why he asked me that question. He wanted to know if he still had to like, withdraw. I'm like yes I'm still on it and yes you still have to. [boyfriend]

Yes, my partner initiated the conversation. [Decided] that we weren't going to use a condom and that I was on the pill... [friend]

Ultimately, most of these events contained one or more types of risky sex. The main concern apparent in these discussions was pregnancy prevention, as demonstrated in the discussion topics of oral/hormonal contraception and early withdrawal, as well as the confirmation of sufficiency of the existing birth control.

The last theme to emerge was "*discrepant condom use,*" in which a discussion was held and the decision to use a condom was made; however, the condom was ultimately not used during the sexual activity that followed. This theme emerged in 4.9% ($n = 9$) of the events involving birth control discussions. The following quotes represent this theme.

Yes, I initiated the conversation... I told him he was wearing a condom or we're not having sex pretty much... Like I know guys hate it and stuff but he just really, he'd get it up then soon as I went to put it [condom] on, he... he just could not deal with it... [Risky vaginal sex, someone just met]

Yes, I initiated it. Decided that we would use a condom, but he took it off, so we did not use one. [Ex-boyfriend]

Yes, I initiated it. I told him to wear one and then it just wasn't working out so then he took it off. Yeah, he never used a condom when we actually had sex. [Just met partner]

All of these quotes were from events that involved AOD use by both the woman and her partner.

Although the number of sexual events with partners characterized as "just met" was low, the findings are worth noting. Discussions of birth control were initiated in 30.4% ($n = 7$) of these sexual events. In addition, nearly all of these events that involved BC discussions (85.7%, $n = 6$) occurred when AOD use had occurred. However, these discussions were only effective in promoting the use of a condom in one third of the sexual events (Table 2). Thus, it appears that condom negotiations with partners that a woman had just met were ineffective in producing a safer sex outcome (i.e., condom use), particularly given that they often occurred in conjunction with AOD use.

DISCUSSION

Our findings provide evidence of high rates of sexual risk taking among young women bar drinkers and further suggest that, in the vast majority of sexual events, women and their partners did not discuss birth control, safe sex or condom use before they engaged in penetrative sexual intercourse. We found that when birth control or condom use discussions were initiated prior to sexual activity, they were more likely to be initiated by the female and during events in which AOD had been used. Perhaps this occurred because women were aware of the disinhibiting effects of AOD and, therefore, felt that the likelihood of sex without a condom was greater and thus the risk for unwanted pregnancy and STIs was higher.

The qualitative themes that emerged from interviews with women about birth control discussions prior to specific consensual sexual events included confirmation of the need to use a condom, confirmation of oral/hormonal contraception and the sufficiency of existing birth control, and discrepant condom use. These themes suggest that pregnancy prevention, rather than risk of contracting STIs, was the primary motivation for discussion of condom use prior to sexual activity among our young, sexually active women. In addition, these discussions, even when they led to a verbal decision to use condoms, often did not result in the successful use of a condom during vaginal or anal sexual intercourse. Similar findings have been reported in other studies with different samples. For example, in a study of young adults, it was found that the decision to use a condom was influenced by concerns about pregnancy, rather than by disease prevention (Cooper, Agocha, & Powers, 1999). Similarly, in a sample of college students, the single most important reason for decreasing consistent condom use as the relationship progressed was a change in birth control method (Civic, 2000).

We found that birth control discussions initiated prior to the sexual activity reduced the rate of risky sex with certain types of partners. When the sexual partner was characterized as a boyfriend or dating partner, the discussions of birth control significantly increased condom use, regardless of AOD use. This finding was somewhat similar to earlier findings by De Visser and Smith (2001), who found that discussion of condom use prior to sexual activity was the best predictor of condom use. However, De Visser and Smith did not assess AOD use at the time of the sexual encounter and they found increased condom use with both casual and regular partners. In the current study, we did not find that discussions of birth

control increased condom use with casual partners (i.e., acquaintances and just met partners). Abby, Parkhill, Buck, and Saenz (2007) found that the strongest predictor of condom use with a casual partner was prior condom use, regardless of alcohol consumption. Women in our sample reported significantly lower rates of sexual risk taking with new partners than with regular partners in general. Given that these women regularly drink in bar settings, which are known as places to meet casual sexual partners, these women may have been aware of the risks inherent to meeting sexual partners in these settings (e.g., usually both intoxicated). In exploring the qualitative data further, we found that women were more likely to first encounter “just met” sexual partners in a bar setting (47.8%, $n = 11$ of 23 events) than any other type of sexual partner (e.g., acquaintance--25.8%, $n = 8$ of 31; friend--19.6%, $n = 45$ of 230).

While it might appear that our sample was a group of women at relatively low sexual risk, several characteristics of the sample suggest that they were at greater than average sexual risk. For example, these women reported a regular partner, someone with whom they were unlikely to use a condom, as someone they had known for an average of eight weeks. In addition, 30% or more of them indicated having a history of an STI and/or a recent high risk sexual partner.

With regular and more intimate partners, patterns of sexual behavior and condom use often are well established already. In fact, De Visser and Smith (2001) described sexual events with a regular partner as a continuation of previously agreed upon behavior. Therefore, it is probably more common for individuals in an established relationship to initiate a successful discussion about condom use, which is not, in fact, a “new” conversation, but rather a continuation of a previously initiated conversation, especially if an agreement on condom use was achieved previously. Indeed, the continuation of the discussion serves as a reminder of the previously agreed upon behavior (i.e., condom use). This would explain the more successful outcome (i.e., condom use during intercourse) of birth control/condom negotiations with more intimate partners (i.e., boyfriends, friends, and even ex-partners) observed during this study.

Our findings with regard to birth control discussions initiated during sexual events where the partner was less intimate (i.e., acquaintances and just met partners) suggest that those conversations were more likely to occur under intoxicated conditions; however, we found no impact on safe sex outcome. Women were probably aware of potential risk taking with such partners, when they were under the influence of alcohol, so the discussions with these partners were initiated more often than with more intimate partners. However, the finding that these discussions had no effect on safe sex outcome, suggest that alcohol may have been interfering with women’s ability to be assertive about their condom use decision, thus reducing their ability to insist upon condom use (i.e., protect themselves from STIs) in potentially risky sexual contexts.

One of the limitations of this study was that we used a convenience sample of young women bar drinkers. In the majority of the events analyzed, women described their sexual partners as regular partners, i.e., boyfriends or dating partners. Given the small number of events where the sexual partner was characterized as a casual partner, i.e., friend, acquaintance, or just met partner, the results from this analysis should be interpreted with caution. In addition, we asked women about discussions of birth control and then probed for discussions about condom use. We did not ask specifically about condom use discussions first. We believe that probing was successful in yielding the desired information; however, some condom discussions may have been missed using this technique.

Low condom use rates, with infrequent discussions initiated about the use of birth control prior to engaging in sexual activity, confirm that young women did not take advantage of the protections afforded by condom use, especially when AOD were used. However, our findings do suggest that when discussions of birth control were initiated prior to sexual activity, the occurrence of risky sex could be reduced, particularly with a regular partner. These findings indicate that developing intervention strategies that teach and reinforce women's ability and efficacy in initiating discussions about birth control and condom use prior to engaging in sexual activity, regardless of partner type, are needed. In a recent study, van Empelen and Kok (2008) found that action specific preparatory behaviors (actually buying and carrying condoms) increased condom use behavior above intentions to use condoms among adolescents. Thus, particularly among heavy drinking women, intervention programs may be most efficacious that promote preparatory behaviors, as well as condom use education, motivational feedback, and role play components that allow women to practice condom negotiation strategies.

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Table 1
Rates of Birth Control Discussions and Alcohol and Other Drug (AOD) Use during Sexual Events by Partner Type

Partner Type	Number of Sex Events		Sex Events with Birth Control Discussion		Sex Events with AOD Use	
	N	%	N	%	N	%
Boyfriend/Dating	1213		120	9.9	644	53.1
Ex-sexual	174		18	10.3	114	65.5
Friend	230		33	14.3	148	64.3
Acquaintance	31		5	16.1	21	67.7
Stranger/Just met	23		7	30.4	21	91.3

Table 2

Condom Use Rates for Sexual Events Involving AOD Use and No AOD Use as a Function of Birth Control (BC) Discussion by Partner Type

Partner Type	AOD Use (n = 344)				No AOD Use (n = 258)			
	No Discussion		BC Discussion		No Discussion		BC Discussion	
	n	(%)	n	(%)	n	(%)	n	(%)
Boyfriend/Partner	162	27.9	49	77.8	172	33.6	34	59.6
Ex-Sex Partner	27	26.7	5	38.5	13	23.6	3	60.0
Friend	54	44.6	27	55.6	25	32.9	3	50.0
Acquaintance	9	47.4	1	50.0	5	71.4	2	66.7
Just met/Stranger	8	53.3	2	33.3	0	0	1	100

Note: % indicates n (condom events) divided by the total number of sexual events (condom and non-condom) within that category. AOD = Alcohol and/or Other Drug