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**Factors Associated with High Sexual Risk Behavior in Single Women**

**THOMAS B.M. LEECOST,MD**

## ABSTRACT

**Objective:** This study was to identify factors associated with High Sexual Risk Behavior (HSRB) in single Afro American women seen in an Epidemiology/ Sexual transmitted disease (EPID/STD) Clinic in Richmond, Virginia from January 2006 through April 2006.

**Method:** Participants were 154 single women (no history of marriage) between the ages of 18-30 visiting the EPID/STD clinic for the first time.

Demographic information was obtained from their records. A volunteer interview was given that contained 101 variables to evaluate for High Sexual Risk Behavior (HSRB). HSRB was defined to response 'yes' to the question, "During the past 3 months did you have sex with some one you just met (i.e., within the past week or so)." We evaluated the association of HSRB and the pre-disposing factors that affect risk behavior using univariate and multivariate logistic regression.

**Results:** There were 154 women interviewed of which 16% responded yes to the HSRB question. Eight percent reported a first sexual encounter prior to the age of 13, 69% reported 6 or more lifetime sexual partners, 39% reported > than one pregnancy, 53% said they had heard information on the risk of STDs often or a lot. Girls who initiated sex from 13 to 15 were protected against HSRB as an adult according to our data. There was an association between HSRB and number of lifetime sexual partners as well as the number of lifetime pregnancies. In logistic regression, predictors for HSRB were found to include number of lifetime sexual partners as well as the number of lifetime pregnancies, with the highest adjusted POR for 16 or more lifetime sexual partners 13.69 (95%CI 2.03, 92.23). In addition, women who had more than one pregnancy had an adjusted POR for HSRB of 5.13 (95% CI 1.14, 23.15).

**Conclusion:** The results indicated that there was an association for HSRB, as measured by the report of sex with someone you just met in the past three months, with having 16 or more lifetime sexual partners and with one or more pregnancies. Also, in this study group, girls who initiated sex between the ages of 13-15 were protected against HSRB as adults. We need to target these at risk individuals to educate them and increase their awareness of negative outcomes linked to this type of behavior.

## INTRODUCTION

According to Smith, sexual behavior is not only of basic biologic importance, but of central social importance in society (1). Single women exhibit sexual risk behaviors when they do not use protection in sexual encounters, have multiple sex partners and have sexual encounters with individuals they just met. This high-risk sexual behavior puts these young women at risk for sexually transmitted diseases (STDs), Human Immunodeficiency Virus (HIV) and unintended pregnancy. It is believed that these behaviors are carryovers from adolescent behavior where studies have shown that these females tended to engage in sexual activities in the context of serial multiple relationships of short duration, and had multiple partners with whom they experienced negative consequences associated with this risky sexual behavior (2). It is also believed that lack of self-esteem influences subsequent unprotected sex and emotional distress influences subsequent multiple partners (3). Roberts theorizes that these behaviors are related to developmental issues such as supposed invincibility, low perceived risk, and substance use, including alcohol and methamphetamines(4). It has been found that women who use methamphetamines engage in high levels of sexual risk behavior, including multiple partners, risky partner types (including partners they just met) and unprotected vaginal and oral sex (4,5,6). While this type of risky behavior is still the exception more than the norm, it has been found that social acceptance and trends, social pressures, sexual beliefs, and lack of sexual risk education contributes largely to sexual risk behavior (7). In the UK risky behavior in women was reported in 2003, that "society is finally ready to allow women to satisfy their sexual needs without guilt or shame"(8).

With the change in some societies' norms it has also been found that women's personalities play a large part in their sexual feelings based on the" Freud's Psychoanalytical Theory of Personality. "This pleasure principle is the driving force of the id that seeks immediate gratification of all needs wants and urges.

These primitive urges include hunger, thirst, anger and sex. When these needs are not met, the result is a state of anxiety or tension”(9).

Of public health interest are the consequences of this sexual risk behavior, which may result in unintended pregnancy, HIV and/or multiple STD's (syphilis, gonorrhea, chlamydia, trichomonas, herpes, genital warts, chancroid). "For example, women with an unintended pregnancy may delay prenatal care, which may affect the health of the infant. The Impact of unintended pregnancy on women and children unintended pregnancy is of national importance because it may influence a woman's behavior and experiences during pregnancy. Women of all ages may have unintended pregnancies, but some groups, such as teens, are at a higher risk" (13). Unintended pregnancies may also be associated with an increased occurrence of low birth weight infants and other problems (11).

According to the Annual STD report to the CDC by states in 2004, there were 33,401 cases of syphilis, 929,462 cases of chlamydia, 330,132 cases of gonorrhea and 30 cases of chancroid reported that year (12). The annual number of cases of HIV reported to the CDC by states from 7/2004-6/2005 was 42,692. Eight hundred and nine of these cases were in Virginia (13). The Virginia Department of Health Reportable Disease Surveillance Data in December 2005 indicates Richmond City received reports of 56 cases of AIDS, 90 cases HIV, 2,221 cases of chlamydia, 1,303 cases of gonorrhea, and 24 cases of early syphilis. These are the highest local number of cases in the state (14).

One type of high sexual risk behavior is exhibited when women do not use protection in sexual encounters. One of the proven protective devices used by the public to protect against STDs, HIV/AIDS and unintended pregnancies are condoms, yet many do not use this form of protection. Public opinion is important in determining condom usage and condom education policies. In the Midwestern state telephone survey conducted by the Kinsey Institute on education regarding

condom use for HIV and STD prevention, results indicated that respondents believed education should be provided in public high schools (77%), classroom instruction should include condoms (71%), only medically accurate information about condoms should be given (94%) and the federal government should promote condom use (70%) (15). Fewer than half (48%) strongly or somewhat agreed that condoms should be made available to teenagers in public high schools without parental permission. Nearly all (92%) considered condoms at least somewhat effective in preventing HIV and other STDs (15). Griffin states that HIV-prevention programs for adolescent mothers should be designed to include these theoretical constructs and to address contextual factors influencing their lives (16). Condom use increased significantly throughout 1991-2003, from an estimated 46.2% in 1991 to 63.0% in 2003, and the percentage reporting use of either withdrawal or no method steadily declined (17,18). In one study conducted by Filipp et al, adolescent females infected by chlamydia-trichomonas (ChT) reported the use of condoms less frequently and more often did not use any contraception in comparison with the girls without ChT (19). This indicates there is a protective effect of condom use for chlamydia-trichomonas infections (20).

Weavers article on human papillomavirus infection reports that the level of awareness for STDs, including AIDS and its main clinical signs, and of the protective value of condoms was 90% in 2000 and 96% in 2004 (11). Human papillomavirus infection (HPV) is most common among young, sexually active individuals, and it is so prevalent that approximately 75% to 80% of sexually active individuals will become infected in their lifetime(21). Currently, options are limited for both prevention of infection of patients with HPV-associated disease: infection can only be prevented with complete abstinence from all forms of sexual activity because condoms do not offer complete protection from HPV and HPV can be transmitted by non-intercourse permissive sexual activities (21).

It has been shown that often female adolescents stop using condoms when they begin using oral contraceptives (22). Female adolescents stated on their first counseling visit, the lack of or inadequate use of condoms which seemed related to other STD risk behaviors. These results should encourage clinicians to revise their counseling approach with adolescents and promote dual protection in the context of protection even in a monogamous relationship (22).

Another type of high sexual risk behavior is exhibited when women have multiple sex partners. This behavior becomes a greater high sexual risk if protection is not consistently used with these multiple sex partners. Women of unmarried status with multiple sex partners continue risky sexual behavior according to Kajaia, having the highest incidence of monoinfection with mixed chlamydial infection and trichomoniasis(23).

A recent study revealed that women in all age groups and racial or ethnic groups seem equally likely to have multiple sex partners while unmarried (24). A study suggest that young female students are prone to have sexual intercourse with non-steady, casual partners (25). In women that have multiple sex partners, STD rates may be determined more by the risk of the partner than the risk of the individual (26). It is also known that over one-third of a cohort of HIV positive individuals revealed that women had engaged in unprotected sex with a partner who was HIV-negative (27).

Another type of sexual risk behavior is exhibited when women have sexual encounters with individuals they just met. We are using this type of sexual risk behavior as a marker because it has been evaluated for professionals (prostitutes) but not for individuals outside of the sex industry. This risk behavior is considered low sexual risk if it is truly a one night stand (only occurs once and at least one partner is looking for a long term relationship) (28). However, if this sexual activity increases in this relationship or if an individual participates in casual sexual encounters, uncomplicated sex with different individuals they just



meet, this is considered high sexual risk behavior. This sexual behavior is similar to the high-risk group of professional sex workers. Those in this category that have sex for entertainment, philosophic reasons or for recreation are not studied often, but they will be looked at in this study (29). The professionals in this category will not be addressed in this study.

Most individuals in the low risk category are those which at least one partner is looking for a long term relationship and is only had sex once to please their would-be mate. One night stands where one sex partner is having sex for other reasons fall into the high risk category because they are not truly a one night stands.

Forty eight percent of males and 21% females engage in casual sex with individuals they just met before the age of nineteen (30). This study evaluates HSRB exhibited when women have sexual encounters with individuals they just met in the past three months.

The purpose of this study is to try to identify pre-disposing factors associated with high sexual risk behavior in single women seen in an EPID/STD Clinic in Richmond, Virginia during the spring 2006. It is possible that predictors such as age, education, sex at an early age, pregnancy, or others contribute to the sexual risk behaviors in women. Understanding which predictors contribute more can be useful to public health officials in designing interventions to improve health practices in the future. The analysis reported in the study should give a better indication as to the relationship of a predictor of influence and a sexual risk behavior.

## ***METHODS***

This cross sectional study was designed to study the association of factors (exposure variables) to high sexual risk behavior among young women attending a Richmond City Health Department Clinic. HSRB was all women who answered 'yes' to the following question: During the past 3 months, did you ever have sex with someone you had just met (i.e., within the past week or so)? A volunteer interview (10<sup>th</sup> Street Clinic Collaboration) was given at the EPID/STD clinic from January-April of 2006. The participants in this study met the criteria set by the interviewer. Women were eligible for the study if they were African-American, were between the ages of 18-30, single (no previous marriage), and this was their first visit to the EPID/STD clinic

The exposure variables considered in this study were: residence, age of female participant, educational level, individual income per year, age of sexual onset, number of lifetime sexual partners, number of lifetime pregnancies, information on (STDs), information on the risk of acquiring STDs, and information on HIV/AIDS.

This final data set consisted of responses from 154 women with 200 variables/data fields. These data fields were recorded and kept in the Department of Psychology of Virginia Commonwealth University.

Descriptive statistics and frequency distribution were examined for each variable. Chi square was used to determine the p-values between high and low sexual risk behaviors. Univariate logistic regression to calculate the (crude OR) and their 95% confidence intervals for HSRB in the women studied. Multiple logistic regression to calculate the adjusted OR for all variables found to be important factors for high sexual risk behavior.

SPSS version 14 and the Confidence Interval Calculator were used to assist in these calculations.

## RESULTS

Interview results were received from 154 single women seen in the EPID/STD clinic of the Richmond City Health Department. These women were divided into two groups HSRB and LSRB based on the response to the question "During the past 3 months did you have sex with someone you just met (i.e., within the past week or so)." The exposure variables considered for this study were: residence, age of female participant, educational level, individual income per year, age of first sexual encounter, number of lifetime sexual partners, number of lifetime pregnancies, and information variables for STDs, STDs information, the risk of acquiring an STD, and information on HIV/AIDS.

Table 1 represents descriptive statistics and frequencies for all respondents and differences between the risk groups.

Twenty-five women were classified as having high sexual risk behavior. Of the 25, 68% resided in Richmond City and 32% resided in other counties in Virginia. Women with low sexual risk behavior had a similar residency distribution of 67% and 33% respectively (Table 1b, p-value =0.937).

When HSRB was examined by age, it was found that women 20-21 had the highest prevalence of HSRB of (36%) with only 16% of the younger group, women 18-19 reporting HSRB (Table 1b).

Education was examined in relationship to HSRB, and showed that 68% of women who had less than a high school education reported HSRB more than twice as often (32%) as women that had a high school education or greater, although this was not statistically significant (Table 1b).

The income level per year of the women was grouped as follows: those making <\$10,000 had a frequency HSRB of 33%, those making \$10,000-\$15,000 had a frequency HSRB of 46%, those making \$15,000-\$25,000 had a frequency HSRB of 17% and those making >\$25,000 had a frequency HSRB of 4%. Seventy nine percent of the HSRB group reported incomes below the poverty level, with 46% of them having an income of \$10,000-\$15,000 (Table 1b).

The age of sexual onset for the participants in this study was grouped as follows: 20% of the HSRB women reported the age of sexual onset was < 13, 32% of the HSRB women reported the age of sexual onset was 13-15, 48% of the HSRB women reported the age of sexual onset was 16-19, and no HSRB women were reported for women >19. Interestingly over half of the LSRB group (54%) reported an age of onset of 13-15, younger than the HSRB group (Table 1b p-value=0.019).

The number of lifetime sexual partners for women was grouped as follows: 8.3% of the HSRB women reported having <6 lifetime sexual partners, 37.5% of the HSRB women reported having 6-10 lifetime sexual partners, 8.3% of the HSRB women reported having 11-15 lifetime sexual partners, and 45.8% of the HSRB women reported having >16 lifetime sexual partners. This compared to only 18% of the LSRB group (Table 1b, p-value =0.005).

The number of lifetime pregnancies for women were grouped as follows: 16% of women engaging in HSRB had no pregnancy, 20% of women engaging in HSRB had one pregnancy, and 64% of women engaging in HSRB had more than one pregnancy. There was an increase in HSRB with an increase in pregnancies with the greatest HSRB in women having more than one pregnancy. In the LSRB group over one third (37%) reported no pregnancies (Table 1b, p-value =0.021).

Women that were given information on the risk of acquiring STDs were grouped as follows: 12% of women engaging in HSRB had no information, 4% of women engaging in HSRB rarely received information, 32% of women engaging in HSRB had received information a few times, and 52% of women engaging in HSRB had received information often or a lot. This was a similar distribution as seen among LSRB women.

Women that were given information on STDs were grouped as follows: 12% of women engaging in HSRB had no information, 4% of women engaging in HSRB rarely received information, 44% of women engaging in HSRB had received information a few times, and 40% of women engaging in HSRB had received information often or a lot. Among the LSRB women, a higher proportion (32%) had never received information on STDs (Table 1b, p-value =0.014).

Women were also provided information on HIV/AIDS, they were grouped as follows: 12% of women engaging in HSRB had no information, 4% of women engaging in HSRB rarely received information, 40% of women engaging in HSRB had received information a few times, and 44% of women engaging in HSRB had received information often or a lot. Although a higher proportion of LSRB women had received information on HIV often (50%), 22% reported never hearing about it (Table 1b, p-value =0.017).

Table 2 gives the prevalence of high sexual risk behavior in women attending RPH/EPID/STD Clinic in 2006 with the CI for each variable. The prevalence of HSRB was almost equal for women residing in Richmond (16.5%) as compared to Non-Richmond women (16%). The highest prevalence of HSRB was in the 20-21 age group, 21%. Women with less than a High School education had a higher prevalence, 20%, than those with H.S. education or greater. Regarding age of sexual onset, those who initiated sex prior to thirteen y/o had a prevalence of 42%. Women with greater than 16 lifetime sexual partners had a prevalence of

32%. Those women with greater than one pregnancy had a higher prevalence of HSRB 27% than women with no pregnancies. Those receiving information about the risk of acquiring STDs, general STD information, and HIV/AIDS information only a few times had the higher prevalence of HSRB than those who never or rarely received information or often or a lot at 34.8%, 34.4%, 35.7%, respectively.

Table 3 compares the crude POR with CI to the adjusted POR for variable groups. The adjusted POR for all variables group was determined using multiple logistic regression. When controlled for significant variables, the receipt of information for either STDs or HIV/AIDS was no longer significant. Women who initiated sex between ages of 13-15 were 76% less likely to report HSRB compared to those who were 16 and older. For number of lifetime sexual partners, <6 was used as reference. The adjusted POR was 13.68, (95%CI 2.03, 92.23) among women who had 16 or more lifetime sexual partners. Women with two or more pregnancies were 5 times more likely to report HSRB 5.13, (95%CI 1.14, 23.15)

## DISCUSSION/CONCLUSIONS

In this study, we found girls who initiated sex between 13-15 years old compared to those 16-19 were protected against HSRB as young adults, also an association was found between HSRB (sex with someone you just met in the past three months) and the number of lifetime sex partners as well as HSRB and the number of pregnancies. Table 3 shows that women with 16 or more sexual partners had an adjusted POR of 13.68, (95%CI 2.03, 92.23) compared to women with less than 6 lifetime sex partners. Similarly women with greater than one pregnancy had an adjusted POR of 5.13 (95%CI 1.14, 23.15) compared to nulliparous women.

The literature supports HSRB for women that have multiple sex partners by including them in the group "sexually active". It has been shown that 75%-80%

of these women are at risk for infection with the Human papillomavirous (HPV). It has also been shown that these women are victims of other STDs or a combination of STDs and HIV, as well as pelvic inflammatory diseases (PID). Women of all racial and ethnic groups with multiple sex partners who do not consistently use protection are at greater risk for having negative outcomes.

The literature also supports the finding of the association between HSRB and more than one pregnancy by stating attitudes, beliefs, education, sexual health behavior, and socio-environmental factors contribute to multiple pregnancies from HSRB. According to the Guttmacher Institute, one half of all pregnancies in the United States are unintended, accounting for 42 million legal abortions for women 19-44 from 1973-2002. These unintended pregnancies are usually related to HSRB and many of them are multiple pregnancies (11).

There are studies that emphasize specific HSRB populations (teenagers, college students, alcohol abusers, and drug users) but no city or town of significance has been identified for HSRB. This is consistent with the fact we found no association with residence and HSRB.

The participants in this study were between the ages of 18-30. No statistical significant association between age and HSRB was found in our study. Even though, the literature supports an association between age and HSRB in women between the ages of 19-45, it does not support an association in the age subset use in our study.

There were studies that show those with minimal education (grade school or less) usually participate in HSRB (3). Our study only looked at two variables, less than high school education and high school or above without looking at the subset level of minimal education and no statistical difference in the prevalence of HSRB was seen.

Communication and information about STDs, risk of acquiring STDs, and information on HIV/AIDS are documented in the literature as having significance in predicting HSRB (16). These findings are not consistent with this study. It is believed that further studies with numbers larger than our study in these variables of information may prove to be of some value in the future.

Approximately one half of the references on HSRB do not have large numbers of participants. In our study, low numbers were felt to be a weakness for some variables. This study was more of a convenience sampling of women between the ages of 18-30 in a public health clinic. This study was a limited cross-section of young women in the Richmond metropolitan area. This limited the generalizability of this study and its ability to detect major differences within the study population.

This study was important to public health benefits. It identified individuals with within a population for HSRB. This targeted population can be educated and preventive measures put in place for them regarding HIV/AIDS, STDs, and unintended pregnancies. This study can also be used as a base for more extensive studies in the future.

In conclusion, these data showed that young girls in this study population who initiated sex between the ages of 13-15 appeared to be protected from HSRB as adults. In addition we found an association between HSRB/Sex with someone you just met in the past three months and 16 or more sex partners, and an association of HSRB with women having more than one pregnancy. It appears that we need to target these individuals identified in this study with HSRB to try to prevent this type of behavior by initiating interventions in grade schools such as: involving parents in sex education for their daughters, courses in Human



Sexuality, and mentoring programs for young females. This will hopefully decrease the public health risk for sexual behavior in young consenting women.



**Table 1A Descriptive Statistics and Frequencies of Sexual Risk Behavior Among Women Attending the Richmond Public Health Clinic**

Variable	Total	
	N	%
<b>sex with someone you just met in the past three months</b>		
Yes	25	16.2
No	129	83.8
<b>Residence</b>		
Richmond	103	67.3
Non-Richmond	50	32.7
	.6% of the data	is missing
<b>Age</b>		
18-19	31	20.1
20-21	43	27.9
22-24	38	24.7
25-30	42	27.3
<b>Educational Level</b>		
< High School	84	54.5
> High School	70	45.5
<b>Income per year</b>		
< \$10,000	50	34.7
\$10,000-\$15,000	31	21.5
\$15,000-\$25,000	34	23.6
> \$25,000	29	20.1
	6.5% of the data	is missing
<b>Age of sexual onset</b>		
< 13	12	7.9
13-15	77	50
16-19	60	39
> 19	5	3.2
<b>Number of lifetime sexual partners</b>		
< 6	47	31.3
6-10	46	30.7
11-15	23	15.3
> 16	34	22.7
	2.6% of data	missing

**Number of pregnancies**

0	51	33.1
1	40	26
> 1	60	39
*	1.9% of	the data is missing

**information /communication****Risk of acquiring STDs**

	<b>info 1</b>	
never	36	24
rarely	12	8
few	23	15.3
often-a lot	79	52.7
	2.6% of	data missing

**STD information**

	<b>info 2</b>	
never	43	28.7
rarely	11	7.3
few	32	21.3
often-a lot	64	42.7
	2.6% of	data missing

**HIV / AIDS information**

	<b>info 3</b>	
never	31	20.7
rarely	18	12
few	28	18.7
often-a lot	73	48.7
	2.6% of	data missing

**Table 1B Descriptive Statistics and Frequencies of Sexual Risk Behavior Among Women Attending the Richmond Public Health Clinic**

Variable	High Risk		Low Risk		p-values
	N	%	N	%	
<b>Residence</b>					0.937
Richmond	17	68	86	67.2	
Non-Richmond	8	32	42	32.8	
.6% of					
<b>Age</b>					0.748
18-19	4	16	27	20.9	
20-21	9	36	34	26.4	
22-24	5	20	33	25.6	
25-30	7	28	35	27.1	
<b>Educational Level</b>					0.140
< High School	17	68	67	51.9	
> High School	8	32	62	48.1	
<b>Income per year</b>					0.977
< \$10,000	8	33.3	42	35	
\$10,000-\$15,000	11	45.8	54	45	
\$15,000-\$25,000	4	16.7	17	14.2	
> \$25,000	1	4.2	7	5.8	
6.5% of					
<b>Age of sexual onset</b>					0.019
< 13	5	20	7	5.4	
13-15	8	32	69	53.5	
16-19	12	48	48	37.2	
> 19	0	0	5	3.9	
<b>Number of lifetime sexual partners</b>					0.005
< 6	2	8.3	45	35.7	
6-10	9	37.5	37	29.4	
11-15	2	8.3	14.2	16.7	
> 16	11	45.8	5.8	18.3	
2.6% of					

<b>Number of pregnancies</b>					<b>0.021</b>
0	4	16	47	37.3	
1	5	20	35	27.8	
> 1	16	64	44	34.9	
*	1.9% of				

<b>information /communication</b>					<b>0.049</b>
<b>Risk of acquiring STDs</b>					
never	3	12	33	26.4	
rarely	1	4	11	8.8	
few	8	32	15	12	
often-a lot	13	52	66	52.8	
	2.6% of				

<b>STD information</b>					<b>0.014</b>
never	3	12	40	32	
rarely	1	4	10	8	
few	11	44	21	16.8	
often-a lot	10	40	54	43.2	
	2.6% of				

<b>HIV / AIDS information</b>					<b>0.017</b>
never	3	12	40	22.4	
rarely	1	4	10	13.6	
few	10	40	21	14.4	
often-a lot	11	44	54	49.6	
	2.6% of				

**TABLE 2 PREVALENCE OF HIGH RISK SEXUAL BEHAVIOR IN WOMEN  
ATTENDING RPH/STD CLINIC IN 2006**

<b>Variable</b>	<b>Total (N)</b>	<b>HSRB (N)</b>	<b>Preval %</b>	<b>95% CI LL</b>	<b>UL</b>
<b>Residence</b>					
Richmond	103	17	16.5	10	24
Non-Richmond	50	8	16	4	28
<b>Age</b>					
18-19	31	4	12.9	1	25
20-21	43	9	20.9	9	33
22-24	38	5	13.2	1	25
25-30	42	7	16.7	5	29
<b>Educational Level</b>					
< High School	84	17	20.2	10	30
> High School	70	8	11.4	5	17
<b>Income per year</b>					
< \$10,000	50	8	16	4	28
\$10,000-\$15,000	31	4	12.9	1	25
\$15,000-\$25,000	34	7	20.6	7	35
> \$25,000	29	5	17.2	3	31
<b>Age of sexual onset</b>					
< 13	12	5	41.7	34	50
13-15	77	8	10.4	4	16
16+	65	12	18.5	9	29
<b>Number of lifetime sexual partners</b>					
< 6	47	2	4.3	-2	10
6--10	46	9	19.6	8	32
11--15	23	2	8.7	-3	21
> 16	34	11	32.4	16	48

**Number of pregnancies**

0	51	4	7.8	0	16
1	40	5	12.5	3	23
>1	60	16	26.7	15	39

**Information/ communication****Risk of acquiring STDs**

never	36	3	8.3	-2	18
rarely	12	1	8.3	-8	24
a few times	23	8	34.8	15	55
often or a lot	79	13	16.5	9	25

**STD information**

never	43	3	7	-1	15
rarely	11	1	9.1	-8	26
a few times	32	11	34.4	18	50
often or a lot	64	10	15.6	6	26

**HIV / AIDS information**

31	3	9.7	0	20
18	1	5.6	-6	18
28	10	35.7	19	53
73	11	15.1	7	23





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