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Risky Sexual Behavior, Substance Abuse and Sexually Transmitted Infections among Street Adolescents in India

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Introduction: In the HIV era, street adolescents have attracted the attention of public health advocates because of their high rate of sexual risk-taking behavior. This problem is more prominent in India, which is having the highest number of street adolescents in the world. Reliable data on risk behavior of these adolescents are scarce. Most of the risk behavior surveys on adolescents collect data from adolescents who are living in a household or attending school/college. However, representative data on street adolescents are more difficult to obtain because their lifestyle excludes them from sampling frames usually used to obtain probability samples (Anderson, 1994). Surveys conducted of this population are usually drawn from homeless shelters or clinic (Yates et al, 1988; Rotheram-Borus and Koopman, 1991), which does not ensure representativeness. Only a few studies on this issue have collected random data for this target population. A random sample of street youth in Russia shows that every third street youth (37.4%) were infected by HIV (Kissin, et.al., 2007). We did not find any literature in Indian context where sexual behavior of street adolescents has been studied taking a random sample of the target population. Studies on street adolescents conducted in different countries have discussed almost same pattern of risk behavior among this vulnerable group and found that street adolescents are almost uniformly sexually active (Anderson, 1994; Goodwin et.al, 2004; Olley, 2006). In addition, they have early sexual debuts, multiple and high risk partners, and high rates of unprotected intercourse and survival sex (Towe et.al., 2009; Mehta, 2002; Pagare et.al 2004). This article aims to examine the prevalence sexual risk behavior, symptoms of RTI/STI and correlates of condom use in this population. It also explores the efficacy of different forms of communication for educating street adolescents on HIV/AIDS. The data may be used in planning interventions to provide more effective support services and reduce risky behavior among street adolescents.

Methodology

The survey was conducted in Kolkata Metropolitan Development Authority (KMDA) area (India), during January 2007 to April 2007. A total number of 408 street adolescents (311 males and 97 females) aged between 13-19 years were interviewed from 43 Time Location Clusters (TLCs), using quantitative and qualitative techniques. Eligibility criteria included, out of school adolescents aged between 13 -19 years being found at a street venue and one of the following:

1. Living alone / with friends in street, or in shelters of street children/adolescents run by NGOs
2. A member of street families (adolescent who are living on street with one or both of their parents).

Exclusion criteria were previous participation in the same study, unable to get consent from the caregivers (for minors) and assent from the respondent. The response rate was 96%. Ethical clearance for this study was taken from the appropriate authority. The interviewers read the consent statement to the adolescent and explained the study procedures. Respondents were informed that they could refuse their participation, refuse single questions or stop participating in

the interview at any time. Local NGOs who are working with street children / adolescents have been found to be a great help to develop the sampling frame and to reach out the target group. Relevant information on socio-demographic characteristics, substance abuse, sexual behavior, symptoms of RTI/STI, knowledge of different route of transmission of HIV and ways of prevention, sources of knowledge of HIV/AIDS etc. was collected in a pre-designed and pre tested interview schedule. Data analysis was performed using SPSS 15 version. Bi-variate frequency distribution, Chi-square test for measuring the level of significance has been used. In this article, we present the estimated proportions of survey respondents who engaged in risky behaviors. Bivariate statistical significance was determined using chi-square test of significance. We conducted a multivariate analysis of condom use among respondents by using multiple logistic regression analysis with stepwise methods to reduce the models; only variables significant at the $p<.05$ level are included in the final models.

Measures

Few composite indices have been developed in this analysis to bring the clarity in interpretation. These indices are as follows;

Substance use was measured using 6 items in which adolescents were asked about frequency of use of chewing tobacco, smoking tobacco, consumption of alcoholic beverage, smoking of cannabis, sniffing/inhaling of glue or paint thinner and consumption of medicinal drugs like sleeping pills etc. No injected drug users have been found in this survey. The variables were given a scores ranging between '0' to '6' according to the intensity in a seven-point scale and then are summed up to get the total value of the index. Adolescents obtaining '0' have been considered as non use of substances, while a higher score indicates higher use of substance. After that, the composite index has been divided into three sub-groups according to the intensity of substance abuse as, 'low', 'medium' and 'high'. Cronbach's alpha for substance abuse was 0.63 in this sample.

The Peer-Pressure Index (PPI) on adolescents behavior has been constructed by considering responses to five questions viz. 'do your friends pressurize you for doing any activity with them?'; 'do friends group pressurize you for doing such activities which you don't like?'; 'do your friends laugh to you if you deny doing something with them?'; 'how frequently your friends insist you to take alcohol/ Ganja/Cannabis with them?' and 'how frequently your friends insist you to watch blue film with them?' The responses were: Never/Sometimes/Always. Based on responses each variable are given scores ranging between '0' to '2' according to the intensity in a three-point scale and then are summed up to get the total value of the index. Cronbach's alpha coefficient for these items was 0.69. The variable PPI was obtained by summing of all 5 responses, which yielded a lowest possible score of '0' and a highest possible score of '10'. After obtaining the composite score it has been divided into three equal quarters and named as, 'less risk', 'moderate risk' and 'high risk'.

The overall *knowledge of HIV/AIDS* among adolescents is measured based on 11 questions on knowledge about ways of transmission and methods of prevention of HIV/AIDS. The responses were Yes/No/Don't know. For each positive answer were assign '1', each negative answer were assigned '-1' whereas for each response of 'Don't say' were assigned '0'. So, overall knowledge was obtained by summing of all responses. A higher score indicates higher level of knowledge. The overall score was divided into three equal quarters to obtained three categories namely poor,

moderate and good knowledge. Cronbach's alpha coefficient for these items was 0.62 for overall knowledge.

Results

As Table 1 shows, 76% of respondents interviewed were male. Girls tended to be younger than boys: About three-quarters (73.2%) of the girls and little more than half (52%) of the boys were aged between 13-15 years. The median age for males and females were 15 and 14 years respectively with an overall median of 15 years. Educational attainment among adolescents was very poor, only a quarter have completed grade 4-6. On average, the boys had been living in street longer than had the girls; 33% of boys and 21% of girls had been living in street (in the widest sense of the word, including unoccupied dwellings, footpath, railway platform, under flyover, wasteland, etc.) for more than four years prior to the survey. Majority of the respondents (85%) were living in street with their parents, friends or alone. Only 15 percent of the respondents were living in NGO run night shelters. In the present survey it is seen that street adolescents were engaged in as many as 24 different occupations. Median income of the sample population was Rs. 25/ day and this was same both for males and females. Majority of the adolescents (40%) were in the higher peer risk category. Boys had higher level of knowledge about HIV than girls. As seen in table 1, higher proportion of boys (42%) was in the 'high level of knowledge' category than their girl counterpart (12%).

The reported frequency of risk factors for HIV and other STDs was high. As Table 2 shows, nearly half of the boys and two-fifth of the girls had had sex. The mean age of heterosexual intercourse for boys and girls were 15 and 13.2 years respectively. Boys who reported experiencing homosexual intercourse all of them have become victim of anal. Similarly, among girls who reported to have heterosexual intercourse 85% of them were raped. In most of the cases the perpetrators of sexual abuse (both for boys and girls) were the persons known to them. Drug use was common among respondents. Use of chewing tobacco was almost universal among respondents. Nearly all (97%) boys and three-quarter of girls reported having use chewing tobacco product. Smoking tobacco product was common among boys (92%) but it was not that much prevalent among girls (21%). Sixty four percent of the boys and 56% of the girls reported sniffed/inhaled glue/paint thinner; 36% of boys and 4% of girls reported having alcoholic beverage; and 34% of boys and 4% of girls had used a cannabis product at some time in their life. Use of medicinal drugs like sleeping pills has also been reported by 12% of boys and 26% of girls.

Nearly half of the adolescent interviewed reported to suffer from any symptoms of RTI/STI during last three months preceding the survey. Table 3 shows, among different symptoms, 'scrotal swelling' and 'burning sensation during urination' was found to be the most common symptom among boys (20% both), followed by, 'involuntary passing of semen' (17%) and 'genital ulcer' (11%). The most commonly reported symptom by girls was 'vaginal discharge' (36%). It was followed by 'involuntary urination while sneezing or others' (14%), 'lower abdominal pain' (13%) and 'genital ulcer' (7%).

All street adolescents were asked whether they had ever heard of HIV/AIDS. If they had heard about it, they were further questioned about different modes of transmission and methods of prevention of HIV. Eighty-two percent of boys and 92% of girls reported to heard about HIV/AIDS. Table 4 shows that among adolescents who reported to heard about HIV/AIDS, almost cent percent (96% boys and 100% girls) of them said 'unsafe hetero sexual intercourse' as one of the principle mode of transmission of HIV/AIDS followed by 'unsafe needle

exchange' (79% and 49%) and 'sex with multiple partners' (68% and 55%). Knowledge of HIV/AIDS transmission from 'HIV infected mother to child' was considerable low particularly among adolescent boys (9%) than their female counterpart (32%). On the other hand lesser proportion of girls (37%) reported to know unprotected homosexual intercourse as one of the mode of transmission of HIV/AIDS than their male counterparts (62%). When asked about the methods of prevention, a higher proportion of them said 'using condoms correctly during each sexual intercourse' (97%), followed by, 'using sterilize syringe and needle before injecting' (68%), 'sex with only one partner' (66%) and 'checking blood prior to transfusion' (44%). Only 16% of adolescents reported that the pregnancy should be avoided if the couple is infected by HIV/AIDS.

Although most of the respondents (96% boys and 100% girls) knew that use of a condom during each sexual intercourse can protect a person from the transmission of HIV but, only half of boys and two-fifth of girls reported using a condom at the last time they had had sex. This was because there was a high rate of misconception about the modes of transmission and methods of prevention of HIV. As one of the boys who knew that use of a condom during each sexual intercourse can protect a person from the transmission of HIV have told,

> *"If you don't like to use a condom while having sex, then soon after having sex you should wash your penis with Dettol (antiseptic solution). Dettol will save you from any infection and you wouldn't have AIDS".*

The factors related to condom use differ for boys and girls. Table 5 shows that boys who had higher level of accuracy of knowledge of HIV/AIDS and comparatively more educated were significantly more likely than other boys to report using condoms in their last sex. A negative relationship has been found between substance abuse and safer sex. Among boys who were in the 'low' category in the substance abuse scale a higher proportion of them (57%) reported using a condom the last time they had had sex, compared to 47% of boys who were in the 'high' category. Young boys (aged 13-15 years) were less likely (40%) to use condoms than boys in the age group 16-19 years (52%). However, among girls the picture was just opposite. The younger girls (aged 13-15) were more likely (43%) to use condoms than their older counter part (33%).

Out of 10 girls who reported to having sex during last 30 days prior to the survey only 4 of them had used a condom. Because of less sample size among female the multivariate analysis was carried out among boys only. Eighty four boys reported to having sex during last 30 days and half of them reported to use condom. Results of the multiple logistic regression analysis (step wise), presented in Table 6 indicates which variables remained significantly related to condom use when all other factors were controlled. All variables listed are significant at the $p<.05$ level. It is seen that among the covariates, accuracy of knowledge about the transmission and prevention of HIV/AIDS and the educational attainment led to an increased odds of using condoms at last sex. For example boys who had moderate and high level of knowledge about HIV/AIDS they were 3.75 and 4.56 times more likely to use condom than who had poor knowledge. Similarly, even a little improvement in educational status among street boys were associated with greater condom use odds ratios. It is obvious from table 6 that adolescent boys who had studies 'grade 2-3' and 'grade 4 or more' were 3.3 and 6.7 times more likely to use condom than who were illiterate or studies up to grade one.

As accuracy of knowledge about transmission and prevention of HIV/AIDS is found to be a significant determinant of safer sex, so from the program point of view it is very essential to

know the sources of knowledge about HIV/AIDS among this high risk population. Adolescents were asked about their sources of information on HIV/AIDS. Table 7 presents the distribution of sources of knowledge about HIV/AIDS by sex. It is seen that street adolescents have gathered knowledge from multiple sources. It is evident from the same table that broadcasting media like T.V. and Radio were the highest source of acquiring knowledge among adolescents. Forty five percent of adolescents have reported awareness campaigns by NGOs as their source of knowledge regarding HIV/AIDS. Another large chunk (48%) of adolescents has reported that they have gathered knowledge about HIV/AIDS from their friends. Comparatively lesser proportion of adolescents has reported print media like poster/banner/bill boards as a source of knowledge about HIV/AIDS (33%). The contribution of leaflets and books were also very less, only 10% of adolescents have viewed them as a source of knowledge.

In the analysis an attempt was made to understand the efficacy of different communication approaches in dispersing correct knowledge of transmission and prevention of HIV/AIDS among this high risk population. Table 8 shows the relationship between the source and the accuracy of knowledge about HIV/AIDS. As in most of the cases street adolescents have received knowledge from various sources, so the figure presented in table 8 does not necessarily mean that a particular source have its sole effect on determining the level of knowledge of HIV/AIDS among street adolescents. However, it is seen adolescents who have reported awareness campaigns of NGOs as their source of knowledge a higher proportion of them (57%) had high accuracy of knowledge about HIV/AIDS than who reported other sources.

Discussion

The principal findings of this study showed that a higher proportion of adolescents (49% of the boys and 40% of the girls) interviewed in this survey had had sex. The level of sexual experience reported by the respondents in this survey is much higher than the reporting of adolescents in the household based survey. In the recent household-based survey (NFHS-3, 2005-06) among unmarried Indian adolescents (15-19 year old) only 0.4% of girls and 5.1% of boys had sexual intercourse in the past 12 months. In the current study nearly all adolescent reported some substance use, though injecting drugs was not found in this study. Another important finding of this study is that nearly half of the adolescents reported to suffer from any symptoms of RTI/STI during last three months preceding the survey. High prevalence of self reported symptoms of RTI/STI among this study population may because of their unhygienic living condition, behavior or high risk sexual behavior, which makes them vulnerable to be infected with HIV.

Based on the high proportion of adolescent engaging in risky behaviors associated with HIV/AIDS risk, such as unprotected sex and forceful sexual intercourse; early initiation of drug abuse, street adolescents of Kolkata (India) need to be educated about ways to protect themselves from STDs and HIV/AIDS. We expect the prevalence of high-risk behaviors among street adolescents to be similar across large Indian cities; therefore the national government should take up immediate measure to deal with this issue. The finding from the multivariate analysis shows, that accuracy of knowledge about the transmission and prevention of HIV/AIDS and the educational attainment increases the likelihood to use condom in sexual intercourse. Another important finding which has emerged from this study that adolescent who have reported awareness campaigns of NGOs as their source of knowledge regarding HIV/AIDS, a higher proportion of them (57.4 percent) had good accuracy of knowledge about HIV/AIDS. Therefore NGO intervention should be scaled up.

The National AIDS Control Organization (NACO) under the Ministry of Health and Family Welfare, Government of India, is implementing Targeted Intervention (TI) programs for different high risk groups (FSWs, IDUs and MSM) and bridge populations (clients of sex workers, truck drivers and migrants) through local NGOs. Similar kind of TI program for street adolescents should be formulated and implemented by NGOs focusing on encouraging adolescents to adopt healthy behavior. Such programs should also focused on addressing the underlying reasons for which street adolescents engage in risky behavior. Focus should be given on interpersonal communication so that misconception regarding transmission and prevention of HIV/AIDS can be reduced.

Although this study contributes to the understanding of street adolescents risk behavior related to HIV/AIDS, but several limitations must be acknowledged. First, although the overall sample size was adequate (N=408), only 42 boys and 4 girls reported to use condom in the last sex. As a result, when examining categorical variables with a few levels, cell sizes became small. For the same reason girls were excluded from the multivariate analysis. Secondly, since condom use rates are based on respondents' self reports, they are subject to reporting errors. Furthermore, asking more detailed questions would help to clarify more issues that put street adolescents at HIV risk, but due to the setting in which the interviews were conducted, longer survey was impractical.

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Table 1: Socio-Demographic characteristics of street adolescents by sex (n=408)

Background characteristics	Street Adolescents					
	Boys		Girls		Total	
	%	n	%	n	%	n
Age category						
13-15 Years	52.1	162	73.2	71	57.1	233
16-19 Years	47.9	149	26.8	26	42.9	175
Median Age (in Years)	**15**		**14**		**15**	
Number of years living in street						
Less than two and half years	34.7	108	42.3	41	36.5	149
$2^{1}/_{2}$ - 4 years	32.2	100	37.1	36	33.3	136
More than 4 years	33.1	103	20.6	20	30.1	123
Place of living during night						
NGO run night shelter	16.4	51	8.2	8	14.5	59
At home/with family	33.1	103	76.3	74	43.4	177
Street	50.5	157	15.5	15	42.2	172
Peer risk						
low risk	28.0	87	52.6	51	33.8	138
moderate risk	41.8	130	35.1	34	40.2	164
high risk	30.2	94	12.4	12	26.0	106
Educational status						
Illiterate or class one	35.4	110	48.5	47	38.5	157
class 2-3	35.4	110	39.2	38	36.3	148
class 4 or more	29.3	91	12.4	12	25.2	103
Average daily income (in Rupees)						
Rs.0-15	33.8	105	26.8	26	32.1	131
Rs.16-30	32.8	102	47.4	46	36.3	148
Rs.31& above	33.4	104	25.8	25	31.6	129
Median Income (in Rupees)	**25**		**25**		**25**	
Knowledge about HIV/AIDS						
Low level of knowledge	32.3	82	37.1	33	33.5	115
Medium knowledge	26.0	66	50.6	45	32.4	111
High level of knowledge	41.7	106	12.4	11	34.1	117
Exposure to erotic material						
Low exposure	14.8	46	69.1	67	27.7	113
Medium exposure	39.2	122	13.4	13	33.1	135
High exposure	46.0	143	17.5	17	39.2	160
Rate of substance abuse						
Low	10.0	31	72.2	70	24.8	101
Medium	55.6	173	12.4	12	45.3	185
High	34.4	107	15.5	15	29.9	122
Total	100.0	311	100.0	97	100.0	408
Grand Total	**76.2**	**311**	**23.8**	**97**	**100.0**	**408**

Percentages are taken for Column;

Table 2: Sex wise distribution of adolescents with selected behavioral characteristics (n=408)

Characteristics	Street Adolescents					
	Boys		Girls		Total	
	%	n	%	n	%	n
Ever engaged in penetrative sex	49.2	153	40.2	39	47.1	192
Ever engaged in hetero sexual activity[#]	77.8	119	100.0	39	82.3	158
Mean	*15 Year*		*13.2 Year*		*14.5 Year*	
Median	*14 Year*		*13 Year*		*14 Year*	
Consensual	100.0	119	15.4	6	79.1	125
Non consensual	0.0	0	84.6	33	20.9	33
Ever engaged in homo sexual activity[#]	40.5	62	NA	NA	32.3	62
Mean	*11.9 Year*		-		*11.9 Year*	
Median	*12 Year*		-		*12 Year*	
Consensual	0.0	0	NA	NA	0.0	0
Non consensual	100.0	62	NA	NA	100.0	62
Risky sexual behavior						
Had sex in last 30 days prior to survey	27.2	84	10.5	10	23.3	94
Used condom at last sex	50.0	42	40.0	4	48.9	46
Substance abuse €						
Ever used chewing tobacco product	96.8	301	73.2	71	91.2	372
Ever smoked bidi/Cigarettee	91.6	285	20.6	20	74.8	305
Ever used alcohol	35.7	111	4.1	4	28.2	115
Ever smoked Ganja	34.1	106	4.1	4	26.0	106
Ever sniffed Gule	64.0	199	55.7	54	62.0	253
Ever used medicinal drug	12.2	38	25.8	25	15.4	63
Ever use any substances	97.4	303	75.3	73	92.2	376

out of respondent who ever engaged in penetrative sex (n=192); **€** Responses are not mutually exclusive

Table 3: Sex wise distribution of self-reported symptoms of RTI/STI among street adolescents during three months preceding the survey (n=408)

Symptoms	Any symptoms of RTI/STI					
	Male		Female		Total	
	%	n	%	n	%	n
Genital Ulcer	10.9	34	7.2	7	10.0	41
Lower abdominal pain	0.0	0	13.4	13	3.2	13
Scrotal Swelling	19.9	62	-	-	15.2	62
Burning sensation during urination	19.6	61	0.0	0	15.0	61
Involuntary urination while sneezing or others	0.0	0	14.4	14	3.6	14
Vaginal discharge	-	-	36.1	35	8.6	35
Involuntary passing of semen	17.0	53	-	-	13.0	53
No Problems	50.5	157	45.4	44	49.3	201
Others	1.3	4	0.0	0	1.0	4
Total	100.0	311	100.0	97	100.0	408

Percentages are taken for column. Responses are not mutually exclusive

Table 4: Sex wise distribution of street adolescents according to the knowledge of mode of transmission and methods of prevention of HIV/AIDS (n=343)

Mode of transmissions and methods of prevention	Street Adolescents					
	Boys		Girls		Total	
	%	n	%	n	%	n
Mode of transmissions						
Unprotected hetero sexual intercourse	96.1	244	100.0	89	97.1	333
Unprotected homo sexual intercourse	62.2	158	37.1	33	55.7	191
Sex with multiple partners	68.1	173	55.1	49	64.7	222
Unsafe Blood Transfusion	46.1	117	48.3	43	46.6	160
HIV mother to child	9.1	23	31.5	28	14.9	51
Unsafe Needle exchange	78.7	200	49.4	44	71.1	244
Misconceptions						
Mosquito, flea bites	15.0	38	19.1	17	16.0	55
Sharing Cloths	2.8	7	2.2	2	2.6	9
Sharing food	11.0	28	7.9	7	10.2	35
Methods of prevention						
Using condoms correctly during each sexual intercourse	96.1	244	100.0	89	97.1	333
Sex with only one partner	68.1	173	58.4	52	65.6	225
Sterilize syringe and needle	72.8	185	53.9	48	67.9	233
Checking blood prior to transfusion	43.7	111	46.1	41	44.3	152
Avoiding pregnancy when having HIV/AIDS	9.4	24	33.7	30	15.7	54
Misconceptions						
Taking Medicine	40.6	103	29.2	26	37.6	129
Total	**100.0**	**254**	**100.0**	**89**	**100.0**	**343**

Percentages are taken for column. Responses are not mutually exclusive.

Table 5: Distribution of adolescents who reported to use a condom in their last hetero sexual intercourse by selected background characteristics (n=92)

Background characteristics	Used condom					
	Boys		Girls		Total	
	%	n	%	n	%	n
Age category			†			
13-15 Years	40.0	6	42.9	3	40.9	9
16-19 Years	52.2	36	33.3	1	51.4	37
Number of years living in street			†			
Less than two and half years	41.7	5	50.0	1	42.9	6
$2^1/_2$ - 4 years	53.6	15	66.7	2	54.8	17
More than 4 years	50.0	22	20.0	1	46.9	23
Place of living during night	†		†		†	
NGO run night shelter	80.0	4	100.0	1	83.3	5
At home/with family	38.9	7	33.3	1	38.1	8
Street	50.8	31	33.3	2	49.3	33
Peer risk	†		†		**	
low risk	44.4	4	50.0	1	45.5	5
moderate risk	34.4	11	40.0	2	35.1	13
high risk	62.8	27	33.3	1	60.9	28
Educational status	***		†		***	
Illiterate or class one	30.3	10	16.7	1	28.2	11
class 2-3	64.3	18	100.0	2	66.7	20
class 4 or more	60.9	14	50.0	1	60.0	15
Income category (in Rs.)	†		†		†	
Rs.0-15	33.3	1	-	-	33.3	1
Rs.16-30	50.0	8	50.0	1	50.0	9
Rs.31& above	50.8	33	37.5	3	49.3	36
Knowledge about HIV/AIDS	***		†		***	
Low level of knowledge	29.4	5	100.0	1	33.3	6
Medium knowledge	35.5	11	25.0	2	33.3	13
High level of knowledge	72.2	26	100.0	1	73.0	27
Exposure to erotic material	†		†		†	
Low exposure	0.0	0	25.0	1	20.0	1
Medium exposure	12.5	2	0.0	0	11.1	2
High exposure	59.7	40	75.0	3	60.6	43
Rate of Substance abuse	†		†		†	
Low	57.1	4	50.0	1	55.6	5
Medium	53.6	15	33.3	1	51.6	16
High	46.9	23	40.0	2	46.3	25
Total	50.0	42	40.0	4	48.9	46

Percentages are taken for row; Significant levels for χ^2 test *p<0.10; **p<0.05; ***<0.01; †Not calculated because at least one cell has expected count <5 observation

Table 6: Odds ratio of using a condom at last sex by background characteristics

Variables	Coefficient	S.E.	Significance	Odds ratio
Knowledge about HIV/AIDS				
Low level of knowledge®				
Medium knowledge	1.32	0.99	0.054	3.75
High level of knowledge	1.52	0.88	0.045	4.56
Educational status				
Illiterate or class one®				
class 2-3	1.20	0.57	0.036	3.33
class 4 or more	1.90	0.88	0.031	6.70
Intercept	-2.43	0.94	0.010	0.09

Table 7: Sex wise distribution of street adolescents according to the source of knowledge regarding HIV/AIDS (n=343)

Source of Knowledge	Street Adolescents					
	Male		Female		Total	
	%	n	%	n	%	n
T.V	46.1	117	61.8	55	50.1	172
Radio	51.6	131	51.7	46	51.6	177
Poster/Banner	29.1	74	43.8	39	32.9	113
Leaflet or Books	11.4	29	5.6	5	9.9	34
Awareness campaigns by NGOs	43.3	110	50.6	45	45.2	155
Friends	51.6	131	39.3	35	48.4	166
Others	2.0	5	3.4	3	2.3	8
Total	100.0	254	100.0	89	100.0	343
Note: Column total may exceed 100% due to multiple responses.						

Table 8: Percentage distribution of street adolescents by source and level of knowledge of HIV/AIDS (n=343)

Source of Knowledge	Level of Knowledge			
	Low	Med	High	Total
T.V	22.1	38.4	39.5	100.0
Radio	28.8	41.8	29.4	100.0
Poster/Banner	26.5	31.9	41.6	100.0
Leaflet or Books	61.8	11.8	26.5	100.0
Awareness campaigns by NGOs	12.3	37.4	50.3	100.0
Friends	40.4	33.1	26.5	100.0
Others	25.0	37.5	37.5	100.0
Percentage are taken for row; Responses are not mutually exclusive				