Original Article

What puts them at risk? A cross-sectional case–control survey of demographic profile and sexual behavior of patients with sexually transmitted infections at a tertiary care center in North India

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Abstract

Background: Sexually transmitted infections (STIs) are a major public health problem in developing nations. Identification of risk factors can help in formulating effective strategies against them. The present study was conducted in a tertiary care hospital in North India over 1 year to identify the risk factors associated with STIs. **Materials and Methods:** A questionnaire-based cross-sectional case–control survey was conducted where participants answered questions on demographic details, sexual behavior, and awareness of STIs. Cases were patients with STIs whereas controls were randomly selected from healthy individuals accompanying patients with nonvenereal complaints attending our hospital. **Results:** There were 106 cases and 64 controls. STI patients had sexual debut 2 years before controls. A higher proportion of STI cases had lower education, multiple sexual partners, lived separately from their partner, had nonregular partners, had protected sex in the last month, had sex under influence of alcohol/illicit drugs, sex in unstructured settings, and engaged in transactional sex, in comparison to controls ($P < 0.05$). More cases were aware of the symptoms/preventive measures of STIs ($P < 0.001$). On multivariate analysis, multiple sexual partners, sex under influence of alcohol/illicit drugs with nonregular partner, protected sex in the last month, and knowledge of preventive measures were found to be statistically associated with STIs ($P < 0.05$). **Conclusions:** Our study identifies risk-behavior patterns in patients with STIs, which should be modified to reduce the burden of these diseases. Increasing the knowledge about STIs in these patients can translate into more common condom usage that lends support for strengthening sexual health programs at grass-root levels. **Limitations:** The small size of the study population could have led to decreased power of the study to detect differences between cases and controls. The external validity of our results needs to be tested in different population groups involving larger sample sizes.

Key words: Case–control study, India, risk factors, sexually transmitted infections

INTRODUCTION

Sexually transmitted infections (STIs) continue to remain a major public health problem in developing nations, despite studies showing a gradually declining trend in the number of new cases attending hospitals.[1,2] Patients with STIs are known to exhibit certain behavioral characteristics, which put them at an increased risk of these infections. Identification of these risk factors can help in formulating effective intervention strategies to control their transmission in the community. Like the epidemiology of STIs which varies from country to country, these risk factors may also differ between different population groups.[3] In the absence of good quality data on the risk profiles for STIs in the Indian population, we undertook this study to find the factors associated with STI in patients from North India.

MATERIALS AND METHODS

This was a cross-sectional, case–control study conducted at the Department of Dermatology and Venereology, All India Institute of Medical Sciences, New Delhi, India. The study was conducted prospectively over a period of 1 year (January–December 2012) after approval from the Institutional Ethics Committee (IEC/NP/350-2011). Cases were patients with confirmed STI attending the STI clinic for the first time as well as those on their follow-up visit. Controls were randomly selected from individuals who accompanied patients with nonvenereal complaints, attending the outpatient dermatology department. All the participants were asked to fill a structured questionnaire after an informed consent with the help of a trained female STI counselor, wherever required. The questionnaire consisted of items related to demography, sexual behavior, and STI awareness.

Statistical analysis

Data for all the controls were analyzed for demographic details and STI awareness, while analysis for sexual behavior was restricted to only sexually active controls. Univariate comparison of cases and controls was done using Chi-square test for dichotomous variables and two-sample *t*-test for continuous variables. The odds of a variable being associated with a STI were estimated using logistic regression models. Those variables found to have a statistically significant association with STI ($P < 0.05$) on univariate analysis were selected for multivariate logistic regression analysis. The statistical analysis was performed using Stata 12 software (Stata Statistical Software, Stata Corp., 2011: Release 12, College Station, StataCorp LP, TX, USA).

RESULTS

One hundred and thirty-two patients with STIs and 116 controls were approached for the study, out of which 106 (80.3%) patients and 64 (55.17%) controls agreed to fill the questionnaire. There was no significant difference in age, gender, and employment status between cases and controls. Statistically, more controls had received higher education than STI patients ($P = 0.023$), while a higher proportion of cases (78/106, 73.6%) were married as compared to controls (38/64, 59.4%), which almost reached statistical significance ($P = 0.054$). All the cases and 70% (45/64) of the controls admitted to having sex at least once in their lifetime ($P < 0.001$). STI patients had their sexual debut about 2 years earlier than controls (19.10 ± 2.93 vs. 21.08 ± 3.78 years). The risk for STI decreased by 17% for every year delay in sexual debut (odds ratio 0.83, 95% confidence interval: 0.74–0.93, $P = 0.001$). A significantly higher proportion of cases (17/106, 16% cases vs. 3/64, 4.7% controls, $P = 0.031$) was either homosexual (all were men having sex with men: nine cases and three controls) or bisexual (eight cases and no controls). In both men and women, the number of sexual partners was significantly higher in cases as compared to controls ($P < 0.001$). Around 65% ($n = 69/106$) of the STI patients and 18% ($n = 8/45$) of the controls reported having multiple lifetime sexual partners. Compared to 26.7% ($n = 12/45$) of the controls, about 65% ($n = 69/106$) of the cases had nonregular sexual partners, and a higher proportion of STI cases (61/106, 57.5% vs. 14/45, 31.1%) did not live with their partner ($P < 0.001$). Regarding condom usage, no significant difference was observed between cases and controls when compared for the first (31/106, 29.2% cases vs. 14/45, 31.1% controls) and last (59/106, 55.7% cases vs. 20/45, 44.4% controls) sex. Surprisingly, more controls (41/45, 91.1%) had unprotected sex in comparison to cases (77/106, 72.3%) in the last month ($P < 0.001$). There were statistically significant differences for reasons of using and not using condom between the two groups. The most common reason for using condom was contraception in both the groups (47/106, 44.3% cases and 28/45, 62.2% controls), while a higher proportion of STI patients (19/106, 17.9% cases as compared to 1/45, 2.2% controls) reported condom use to prevent sexually transmitted diseases. More than half the cases (47/92, 51.1%) who did not use condom did so due to dislike as compared to 8 (14.8%) controls. Less than 10% of the participants in both the groups (6/92, 6.5% cases and 5/54, 9.3% controls) reported desire for pregnancy as the reason for not using condom. A significantly higher proportion of cases liked to take alcohol/illicit drugs while having sex (46/106, 43.4% cases vs. 6/45, 13.3%

controls, $P < 0.001$). About 55% ($n = 58/106$) of the cases had sex in an unstructured setting (brothels, travel/vacations, etc.) as opposed to 20% of the ($n = 9/45$) controls ($P < 0.001$). A higher proportion of cases had sex in exchange for money or gift (52/106, 49% cases vs 4/45, 8.9% controls, $P < 0.001$). Although more cases (76.9%, 40 of 52 cases who had transactional sex, vs 50%, 2/4 controls) used condom while engaging in transactional sex, the difference between the two groups was not statistically significant ($P = 0.231$). Significantly, more STI patients were knowledgeable regarding the STI symptoms (genital ulcer, discharge, itching, swelling, dyspareunia, and painful micturition) and preventive measures (sexual abstinence, protected sex, and partner notification) as compared to controls ($P < 0.001$). Around 80% of the cases were aware of the symptoms ($n = 85/106$) and knew at least one method to prevent STIs ($n = 83/106$) in contrast to only 50% ($n = 32/64$) and 19% ($n = 12/64$) controls, respectively [Table 1].

Step-wise multivariate logistic regression analysis revealed the following variables to be significantly associated with STIs: multiple lifetime sexual partners, use of alcohol/illicit drugs while having sex with a nonregular partner, use of condom in the last 30 days, and knowledge of methods of STI prevention [Table 2].

DISCUSSION

Multiple sexual partners and sex under the influence of alcohol/illicit drugs are well-established risk factors for STIs.[4-12] Our finding of earlier age of sexual debut being associated with a higher risk of STIs is also consistent with the previous results.[7,13] We found the STI risk to decrease by about 17% for every year by which the sexual debut was delayed. In addition, variables such as lower education status, homosexual/bisexual orientation, having a nonregular sexual partner, staying away from partner, engaging in transactional sex, and having sex in unstructured settings were associated with STIs on univariate analysis but not in multivariate analysis in our study, probably due to the small number of controls. Instead of dismissing these factors, they may be better viewed as showing a trend for STI risk.

Two interesting findings have emerged from our study. First, the awareness regarding STI prevention was higher among STI patients, and second, more frequent condom use was reported by STI patients as compared to controls. These findings appear to be contrary to conventional belief: knowledge of preventive measures should exert

Table 1: Comparison of demographic details, sexual behavior characteristics, and awareness regarding sexually transmitted diseases between cases and controls

Variable	Cases (*n*=106)	Controls (*n*=64)	*P*
Number of males (%)	70 (66)	44 (68.8)	0.715
Mean age (±SD), (years)	32.02 (±9.2)	31.06 (±10.14)	0.632
Married (%)	78 (73.6)	38 (59.4)	0.054
Employed (%)	64 (60.4)	37 (57.8)	0.467
Education status (%)			
No formal education	12 (11.32)	1 (1.57)	0.023
Up to senior secondary education	57 (53.77)	30 (46.88)	
Graduation	33 (31.13)	22 (34.37)	
Postgraduation or higher	4 (3.77)	11 (17.18)	
Ever had sex (%)			
Yes	106 (100)	45 (70)	<0.001
No	0	19 (30)	
Sexual orientation (%)			
Heterosexual	89 (83.96)	59 (92.18)	0.031
Homosexual/bisexual	17 (16.03)	3 (4.68)	
No reply‡	0	2 (3.12)	
Mean age of sexual debut (±SD), in years*	19.10 (±2.89)	21.56 (±3.93)	<0.001
Males	19.10 (±0.34)	21.56 (±0.67)	<0.001
Females	19.11 (±0.51)	19.63 (±0.90)	0.621
Total partners* (%)			
Lifetime			
1	37 (34.9)	37 (82.22)	<0.001
2 or more	69 (65.09)	8 (17.78)	
Last 12 months			
1	51 (48.11)	41 (91.11)	<0.001
2 or more	55 (51.88)	4 (8.89)	
Last 30 days			
0	6 (5.66)	1 (2.22)	0.005
1	65 (61.32)	43 (95.55)	
2 or more	35 (33.01)	1 (2.22)	
Number of male partners (female participants, n=56)* (%)			
Lifetime			
1	28 (77.7)	11 (100)	<0.001
2 or more	8 (22.22)	0	
Last 12 months			
1	33 (91.7)	11 (100)	<0.001
2 or more	3 (8.3)	0	
No. of female partners (male participants, n=104)* (%)			
Lifetime			
0	1 (1.42)	3 (8.82)	<0.001
1	9 (12.85)	26 (76.47)	
2-5	38 (54.28)	7 (20.58)	
6-10	14 (20)	0	
>10	6 (8.57)	0	

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Table 1: Contd...

Variable	Cases (*n*=106)	Controls (*n*=64)	*P*
Last 12 months			
0	1 (1.42)	3 (8.82)	<0.001
1	19 (27.14)	30 (88.23)	
2-5	41 (58.57)	3 (8.82)	
6-10	6 (8.57)	0	
>10	1 (1.42)	0	
Lifetime number of same sex partners (sexually active males only, n=104)a,* (%)			
0	61 (87.1)	31 (91.18)	0.07
1	2 (2.85)	3 (8.82)	
2 or more	7 (10)	0	
Staying with partner* (%)			
Yes	43 (40.56)	31 (68.88)	0.002
No	61 (57.54)	14 (31.11)	
No reply‡	2 (1.88)	0	
Sexual partners* (%)			
Spouse/regular partner	37 (34.9)	33 (73.33)	<0.001
CSW	13 (12.26)	1 (2.22)	
Casual friend	32 (30.18)	9 (20)	
Paid non-CSW	24 (22.64)	2 (4.44)	
Condom use during the 1st sexual intercourse* (%)			
Yes	31 (29.24)	14 (31.11)	0.777
No	67 (63.21)	29 (69.44)	
No reply‡	8 (7.54)	2 (4.44)	
During the last sexual intercourse* (%)			
Yes	59 (55.66)	20 (44.44)	0.402
No	46 (43.4)	24 (53.33)	
No reply‡	1 (0.94)	1 (2.22)	
Number of times sex without condom in the last 30 days* (%)			
0	29 (27.35)	4 (8.88)	0.007
1	8 (7.54)	2 (4.44)	
2-5	35 (33.01)	20 (44.44)	
6-10	17 (16.03)	9 (20)	
>10	17 (16.03)	10 (22.22)	
Condom use in paid sex in the last 12 months* (%)			
Yes	40 (37.73)	2 (4.44)	0.231
No	12 (11.32)	2 (4.44)	
Not applicable/no reply‡	54 (50.94)	41 (91.11)	
Why was condom used* (%)			
Means of contraception	47 (44.33)	28 (62.22)	0.003
Prevent HIV infection	28 (26.41)	11 (24.44)	
Prevent STI	19 (17.92)	1 (2.22)	
More than one of the above reasons	12 (11.32)	5 (11.11)	
Why was condom not used* (%)			
Wanted child	6 (6.5)	5 (9.3)	<0.001
Patient/partner did not like to use	47 (51.1)	8 (14.8)	
Other reasons (not necessary, not available, costly, not useful)	39 (42.4)	41 (75.9)	
Alcohol/illicit drugs during the last sexual intercourse* (%)			
Yes	46 (43.39)	6 (13.33)	<0.001
No	52 (49.05)	37 (82.22)	
No reply‡	8 (7.54)	2 (4.44)	
How often alcohol/illicit drugs during sex* (%)			
Frequently	14 (13.2)	0	<0.001
Rarely	56 (52.83)	10 (22.22)	
Never	36 (33.96)	35 (77.77)	
Meeting place for sex* (%)			
Residence	44 (41.5)	36 (80)	<0.001
Brothel	31 (29.24)	6 (13.33)	
Vacation	27 (25.47)	3 (6.67)	
No reply‡	4 (3.77)	0 (0)	
Sex in exchange for money/gift in the last 12 months* (%)			
Yes	52 (49.05)	4 (8.88)	<0.001
No	53 (50)	39 (86.6)	
No reply‡	1 (0.95)	2 (4.44)	
Heard of STI (%)			
Yes	57 (53.77)	30 (46.87)	0.880
No	46 (43.39)	23 (35.93)	
No reply‡	3 (2.83)	11 (17.18)	
Aware of STD symptoms (%)			
Genital ulcer	21 (19.81)	9 (14)	0.001
Genital discharge	13 (12.26)	8 (12.5)	
Genital itching	8 (7.54)	4 (6.25)	
Genital swelling	7 (6.6)	1 (1.56)	
Pain during sex	2 (1.88)	0	
Pain related to urination	5 (4.71)	1 (1.56)	
More than one of the above symptoms	29 (27.35)	19 (29.68)	
Do not know	21 (19.81)	32 (50)	
What would you do on noticing genital ulcer/discharge (%)			
Sexual abstinence	32 (30.19)	6 (9.38)	<0.001
Use condom	11 (10.38)	1 (1.56)	
Inform partner	40 (37.74)	5 (11.11)	
Nothing	23 (21.7)	52 (81.25)	

*Statistical analysis done only for sexually active controls; aNo female had same sex partner; ‡Statistical analysis done after excluding missing variables. CSW=Commercial sex worker; STD=Sexually transmitted disease; STI=Sexually transmitted infection; SD=Standard deviation

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Table 2: Univariate and multivariate logistic regression analysis of variables associated with sexually transmitted diseases

Variable	Univariate analysis		Multivariate analysis	
	OR (95% CI)	*P*	OR (95% CI)	*P*
Gender			-	
Males	1	0.716		
Females	1.13 (0.58-2.19)			
Marital status			-	
Married	1	0.055		
Unmarried	0.52 (0.27-1.01)			
Employed			-	
Yes	1	0.741		
No	0.89 (0.47-1.68)			
Education			-	
No formal education	1			
Up to 12th standard	0.15 (0.019-1.27)	0.084		
Graduation or higher	0.09 (0.011-0.75)	0.026		
Sexual orientation			-	
Heterosexual	1	0.041		
Homo/bisexual	3.75 (1.05-13.38)			
Total number of partners*				
Lifetime				
0-1	1	<0.001	1	
2 or more	8.27 (3.49-19.58)		7.33 (2.17-24.80)	0.001
Last 12 months				
0-1	1	<0.001		
2 or more	10.64 (3.56-31.81)			
Last 30 days				
0-1	1	0.003		
2 or more	21.05 (2.86-164.00)			
Number of female sexual partners, (males participants only)*			-	
Lifetime				
0-1	1	<0.001		
2 or more	6.55 (2.68-16.01)			
Last 12 months				
0-1	1	<0.001		
2 or more	11.58 (3.37-39.72)			
Staying with partner*			-	
Yes	1	0.003		
No	3.14 (1.49-6.59)			
Sexual partner*			-	
Spouse/regular partner	1	0.001		
Casual friend/CSW/paid	8.14 (2.36-28.04)			
Alcohol/illicit drugs during the last sex*			-	
No	1	<0.001		
Yes	5.45 (2.11-14.09)			
Alcohol/illicit drugs during sex, irrespective of the nature of partner*			-	
Never	1	<0.001		
Rarely/frequently	5.54 (2.48-12.40)			
Alcohol/illicit drugs if sex with spouse/regular partner*			-	
Never	1			
Rarely/frequently	6.80 (3.02-15.29)	<0.001		

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Table 2: Contd...

Variable	Univariate analysis		Multivariate analysis	
	OR (95% CI)	*P*	OR (95% CI)	*P*
Alcohol/illicit drugs if sex with nonregular partner*				
Never	1	<0.001	1	0.025
Rarely/frequently	6.26 (2.66-14.75)		4.74 (1.21-18.49)	
Meeting place for sex			-	
Residence	1	<0.001		
Vacation/brothel	7.90 (3.06-20.42)			
Sex in exchange for money/gift, last 12 months			-	
No	1	<0.001		
Yes	9.56 (3.19-28.67)			
Had unprotected sex, last 30 days*				
Yes	1	0.017	1	0.009
No	3.86 (1.26-11.73)		8.58 (1.71-43.08)	
Condom use in the first sex*			-	
Yes	1	0.914		
No	1.04 (0.48-2.24)			
Condom use in the last sex*			-	
Yes	1	0.232		
No	0.64 (0.32-1.31)			
Condom use in paid sex*			-	
Yes	1	0.423		
No	0.76 (0.17-0.33)			
Why was condom used?*			-	
Means of contraception	1			
Prevent HIV infection	1.41 (0.60-3.28)	0.428		
Prevent STI	2.62 (0.80-8.55)	0.109		
More than one of the above reasons	1.65 (0.48-5.67)	0.419		
Why was condom not used?*			-	
Wished pregnancy	1			
Dislike for condom	4.89 (1.20-19.92)	0.027		
Other reasons	1.39 (0.39-4.96)	0.604		
Heard about STD			-	
Yes	1	0.880		
No	1.05 (0.53-2.05)			
Aware of symptoms of STD			-	
Yes	1	<0.001		
No	0.29 (0.15-0.57)			
What would you do on noticing genital ulcer/discharge				
Do nothing	1		1	
Use condom	11.68 (4.28-31.83)	<0.001	7.27 (2.14-24.62)	0.001
Inform partner	22.61 (2.73-187.11)	0.004	15.15 (1.44-158.98)	0.023
Sexual abstinence	18.08 (6.32-51.75)	<0.001	27.20 (8.12-91.04)	<0.001

*Statistical analysis done only for sexually active controls. CSW=Commercial sex worker; STD=Sexually transmitted disease; STI=Sexually transmitted infection; CI=Confidence interval; OR=Odds ratio

a protective effect against STIs, and condom use has been demonstrated to be associated with a lower risk of infection in many studies.[5-8,14] However, the increased awareness among STI cases in our study could be attributed to the counseling imparted to them regarding safe sexual practices during their visits to the clinic. Since no efforts were made in our study to recruit only the first-time attendees, many of our cases were on their follow-up visits at the time of study participation and had already been counseled at our STI clinic (which is a tertiary-care center) or other centers. The more consistent condom use among the STI patients probably reflects the effect of this counseling, and it is encouraging to see it being translated into a safer sexual practice. More than half of the STI cases used condom in their last sex, an increase from roughly 30% who used it at their first sex. Diclemente *et al.*[8] also noted that a past STI diagnosis was associated with an increased knowledge of STI prevention among the African-American female adolescents,

however that was not associated with higher rates of condom use. Of course, the other explanation for our finding could be that the risk due to unprotected sex in the controls is offset by a higher proportion of monogamous relationships, lack of transactional sex, and use of contraceptive measures other than condom in a relationship with a trusted partner. It seems that the health education being imparted to patients with STIs is focused predominantly on condom promotion, as other high-risk behaviors (such as polygamy, having sex under the influence of alcohol/illicit drugs or in unstructured settings, and engaging in transactional sex) were still more prevalent in these patients as compared to controls. One worrisome finding was the lack of STI-related knowledge in our study participants: about 45% of the study population was not aware of precautions to prevent transmission of the infection, and about one-third was not aware of STI symptoms. The fact that these knowledge gaps were more apparent in the controls as compared to cases suggests that health education is being imparted only to the patients, instead of general population. Thus, our observations lend support for sexual health education, long considered a "taboo" in our country, to be made a part of school curricula.

Our study has certain limitations. The sample size of our study population, especially the controls, is small, which could have led to decreased power of the study. Recruiting controls from the community, instead of hospitals, could have helped us gather data from a larger population. The low response rate could bias our results, as it is possible that only a certain type of controls, for example, those who considered their behavior "correct," may have answered the questionnaire. As the study population belonged to North India, our results cannot be generalized to the whole country.

CONCLUSION

Our study provides insight to the risk behavior profile of patients with STIs in North India. The results of this study have implications for preventing the spread of STIs in North India.

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Conflicts of interest

There are no conflicts of interest.

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QUESTIONNAIRE

सामान्य रोगी सूचना

1. रोगी संख्या नं.

2. दिनांकः

3. एस.टी.डी क्लीनिक नं.

4. नाम

5. उम्र

6. लिंगं : 1. पुरूष   2. महिला

7. धर्मः 1. हिन्दु   2. मुस्लिम   3. सिक्ख   4. ईसाई

8. पताः ....
....

9. दूरसंचार नं.ः ....

10. मोबाइल नं.ः ....

11. ई—मेलः ....

12. शहरः ....

13. स्थानः   1. शहर   2. गांव

14. वैवाहिक स्तर   15. शिक्षा   16. व्यवसाय

1. विवाहित   0. अशिक्षित   0. कोई व्यवसाय नहीं
2. अविवाहित   2. हाईस्कूल   2. आदक्ष मजदूर
3. तलाकशुदा   4. इंटर   4. चतुर्थ श्रेणी
4. विधवा / विधुर   6. स्नातक   6. तृतीय श्रेणी
5. अकेले रहना   8. स्नात्कोत्तर   8. द्वितीय श्रेणी
                            10. उच्च शिक्षा   10. प्रथम श्रेणी
                            पीएचडी / डीएम / एमडी

18. यौन साथी की संख्याः ....

19. एच आई वी की स्थितिः ....

यौन व्यवहार प्रश्नावली

यह प्रश्नावली यौन व्यवहार से संबंधित है व प्रश्नावली को सही तरीके से भरने के लिए हम चाहेंगे कि इसे पूरी तरह से सावधानीपूर्वक पढ़े। इसे आपको साक्षात्कार लेने वाले व्यक्ति के सामने अपने आप भरना है। अपने विचार के अनुसार सही लगने वाले उत्तर चुने और अपने उत्तर के सामने दिये गये नंबर पर गोला लगायें, यदि निर्देश में दिया गया है कि आप कई उत्तर चुन सकते हैं तो आप अपनी इच्छा व जरूरत के अनुसार कई उत्तर चुन सकते हैं। आपके द्वारा यौन व्यवहार प्रश्नावली में दी गई जानकारी पूरी तरह से गोपनीय रखी जायेगी अतः निःसंकोच होकर भरें।

;ड़ुपया जो भी आपका उत्तर है, उस पर गोला बनायेद्ध

1. क्या आप पिछले 12 महीनों में छुट्टी या अवकाश पर रहे हैं।
क. हाँ
ख. नहीं
ग. उत्तर देना कठिन

यदि आपसे ऐसे प्रश्न का उत्तर देने के लिये कहा गया है जिसके कई भाग है, तो आप एक से अधिक उत्तर भी दे सकते हैं, ड़ुपया एक से अधिक उत्तर को नम्बर देकर अंकित करें, जिससे आप किस उत्तर को ज्यादा मान्यता दे रहे हैं, यह समझने में आसानी हो।

उदाहरण

1. बीमार होने पर दवा या सलाह के लिये कहां सम्पर्क करते हैं?
क. एक पॉलीक्लिनिक, डिस्पेंसरी, अस्पताल, या मेडिकल केन्द्र, जहां आपको चिकित्सा बीमा के अनिवार्य कार्यक्रम में भुगतान नहीं करना है।
ख. एक बेनाम जांच के स्थान पर
ग. एक पॉलीक्लिनिक या अस्पताल जहां आपको भुगतान करना होता है।

वह समय दर्ज करें जब आप प्रश्नावली भरना शुरू करें।
.... घण्टे .... मिनट

आपके यौन व्यवहार के बारे में प्रश्नों का सेट/यहां यौन संपर्क का अर्थ योनि, मौखिक, या गुदा के यौन संपर्क से है। डुपया याद रखें कि आपके उत्तर पूरी तरह से गोपनीय है।
डुपया उत्तर दें।

1. क्या आपने कभी यौन संपर्क किया है?
क. हाँ
ख. नहीं
ग. उत्तर देना कठिन

2. पहली बार यौन संपर्क के समय आपकी उम्र कितनी थी?
क. उम्र ....
ख. पता नहीं ....
ग. उत्तर देना कठिन ....

3. पिछली बार यौन संपर्क के दौरान अपने या आपके साथी ने कंडोम का उपयोग किया?
क. हां ....
ख. नहीं ....
ग. उत्तर देना कठिन ....

4. अपने जीवन काल में आपने कितने पुरुषों के साथ यौन संपर्क किया था?
क. संख्या लिखें या कोई नहीं होने पर शून्य लिखें।
ख. पता नहीं ....
ग. उत्तर देना कठिन ....

5. पिछले 12 माहों में आपने कितने पुरुषों के साथ यौन संपर्क किया था?
संख्या लिखें या कोई नहीं होने पर शून्य लिखें।
क. संख्या …………………………………………
ख. पता नही …………………………………………
ग. उत्तर देना कठिन …………………………………………

6. अपने जीवन काल में आपने कितनी महिलाओं के साथ यौन संपर्क किया था?
संख्या लिखें या कोई नहीं होने पर शून्य लिखें।
क. संख्या …………………………………………
ख. पता नहीं …………………………………………
ग. उत्तर देना कठिन …………………………………………

7. पिछले 12 माहों में आपने कितनी महिलाओं के साथ यौन संपर्क किया था?
संख्या लिखें या कोई नहीं होने पर शून्य लिखें।
क. संख्या …………………………………………
ख. पता नहीं …………………………………………
ग. उत्तर देना कठिन …………………………………………

8. पिछले 30 दिनों में आपने कितने लोगों के साथ यौन संपर्क किया?
संख्या लिखें या कोई नहीं होने पर शून्य लिखें।
क. संख्या …………………………………………
ख. पता नहीं …………………………………………
ग. उत्तर देना कठिन …………………………………………

9. पिछले 30 दिनों में आपने कंडोम/निरोध के बिना कितनी बार यौन सम्पर्क किया था?
संख्या लिखें या कोई नहीं होने पर शून्य लिखें।
क. बारियो की संख्या …………………………………………
ख. पता नहीं …………………………………………
ग. उत्तर देना कठिन …………………………………………

10. क्या आप और आपका नियमित साथी एक साथ रहते हैं या अलग–अलग?
क. एक साथ रहते हैं ....
ख. अलग–अलग ....
ग. उत्तर देना कठिन ....

11. पिछली बार जब आपने यौन संभोग किया था तो जिस यौन साथी के साथ यौन संभोग किया उसके साथ आपका क्या संबंध था?
क. जीवन साथी / नियमित साथी थी ....
ख. वाणिज्यिक यौन कर्मी ....
ग. दोस्त, जो अलग रहती है ....
घ. ऐसा कोई जिसे यौन संपर्क के लिए आपने पैसा दिया, या जिसने आपको पैसा या तोहफा दिया ....
ङ. आम दोस्त ....
च. यदि अन्य कोई तो बताएं कौन ....
छ. उत्तर देना कठिन ....

12. आपने कंडोम / निरोध का उपयोग क्यों नहीं किया?
वे सभी कारण बताएं आपने उपयोग क्यों नहीं किया
क. गर्भवती होने की इच्छा ....
ख. उस समय पास नहीं था ....
ग. मिल नहीं सका ....
घ. महंगा है ....
ङ. साथी इस्तेमाल नहीं करना चाहता था ....
च. इनका इस्तेमाल मुझे पसंद नहीं है ....
छ. मुझे नहीं लगता यह जरूरी है ....
ज. इसके बारे में नहीं सोचा ....
झ. यदि अन्य कोई कारण हैं तो डुपया बताएं।
ञ. उत्तर देना कठिन ....

13. आप कंडोम / निरोध का इस्तेमाल क्यों करते हैं?
कई उत्तर चुने जा सकते हैं
क. गर्भावस्था से सुरक्षा पाने के लिए ....
ख. एड्स के संक्रमण से बचने के लिए ....

ग. यदि अन्य कोई कारण है तो डुपया बताएं

घ. उत्तर देना कठिन ....

14. जब आपने यौन साथी / के साथ पहली बार यौन सम्पर्क किया तो क्या कंडोम / निरोध का इस्तेमाल किया?

क. हां ....

ख. नहीं ....

ग. उत्तर देना कठिन ....

15. जब आपने यौन साथी के साथ पिछली बार यौन सम्पर्क किया था तो क्या आपने या उसने शराब ;बीयर भीद्ध / ड्रग्स सहित किसी प्रकार की शराब का सेवन किया था?

क. हां ....

ख. नहीं ....

ग. उत्तर देना कठिन ....

16. जब आपने अपने यौन साथी के साथ पहली बार यौन सम्पर्क किया तो क्या शराब ;बीयर भीद्ध / ड्रग्स का सेवन किया?

क. हां ....

ख. नहीं ....

ग. उत्तर देना कठिन ....

17. जब आप अपने जीवन साथी / पत्नी के साथ यौन सम्पर्क करते हैं तो क्या शराब का सेवन करते हैं?

क. हमेशा ....

ख. ज्यादातर ....

ग. कभी कभार ....

घ. कभी नहीं ....

18. जब आप अन्य साथियों ;पत्नी/जीवन साथी के अलावाद्ध के साथ यौन सम्पर्क करते हैं तो क्या शराब का सेवन करते हैं?
क. हमेशा ....
ख. ज्यादातर ....
ग. कभी कभार ....
घ. कभी नहीं ....

19. आप कहां मिलते हैं?
क. उस स्थान ;कस्बा, गांवद्ध पर, जहां आप रहते हैं? ....
ख. किसी अन्य स्थान पर जहां आप छुट्टी बिताने गए अवकाश, परीक्षा के दौरान, व्यापार कार्य में ....
ग. वैश्यालय ....
घ. उत्तर देना कठिन ....

20. पिछले एक साल में क्या आपने यौन सम्पर्क के लिए क्या कोई पैसा या तोहफा दिया या लिया?
क. हाँ ....
ख. नहीं ....
ग. उत्तर देना कठिन ....

21. क्या आपने ऐसे रोगों के बारे में सुना है जो यौन सम्पर्क से फैलते है?
क. हां ....
ख. नहीं ....
ग. उत्तर देना कठिन ....

22. क्या आप सोचेंगे कि एक व्यक्ति को यौन रोग है यदि आपको पता हो कि उसे ये लक्षण हैं ;ड्डपया प्रत्येक लाइन के लिए एक उत्तर लिखेंद्ध
प्र. क्या आपको गुप्त या यौन रोग के लक्षणों बारे में पता है?
क. हां   ख. नहीं   ग. उत्तर देना कठिन

यदि हां तो दिये गये कौन से होंगे ;द्ध लगायें
1. यौन क्रिया के दौरान दर्द ....

2. उसकी योनि में मवाद जैसा बहाव ....

3. प्रजनन अंगो ⁄जननांगो में खुजली ....

4. प्रजनन अंगों ⁄ जननांगे में घाव युक्त त्वचा या खुले घाव ....

5. प्रजनन अंगों ⁄ जननांगो में सूजन ....

6. पेशाब करने के दौरान तेज दर्द ....

यदि अन्य कोई स्पष्ट बताएं ....

23. जब मवाद जैसा बहाव या घाव दिखाई दिए तो आपने क्या किया?

1. यौन सम्पर्क के अपने सभी साथियों को इसके बारे में बताया.................

2. लगातार यौन सम्पर्क के साथी को इसके बारे में बताया ....

3. कभी—कभार यौन सम्पर्क के साथी को इसके बारे में बताया ....

4. लक्षण दिखाई देने पर यौन गतिविधियां बंद कर दीं.............................

5. कंडोम का इस्तेमाल शुरू कर दिया ....

6. यदि आपने कुछ और किया तो ड़पया इसे लिखें।

24. आप अपने को यौन सम्बन्धी व्यवहार में कहां रखते है?

क. होमो ;समान लिंगद्ध ....

ख. हेट्रो ;विपरीत लिंगद्ध ....

ग. बाई ;दोनो होमो व हेट्रोद्ध समान व विपरीत.............................