

The Knowledge of STIs including HIV /AIDS and Its Contraction and Prevention among Students of Selected Universities in Dhaka, Bangladesh

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Objectives of the Study

The main objective of the study is to understand the knowledge and risk perception of selected university students on STIs and HIV / AIDS *and its contraction and prevention*. This study was tried in particular to answer the following research questions:

Research Question 1: How much are the university students aware about STIs including HIV/AIDS?

Research Question 2: What is the risk perception of university students on STIs including HIV/AIDS?



Hypothesis of the Study

1

- Students of private universities have higher knowledge than public university students about STIs and HIV/AIDS.

2

- Male students are likely to be more aware of STIs including HIV / AIDS than female students.

3

- The higher the level of education, the higher the knowledge about STIs including HIV / AIDS.

4

- Students from urban areas might be more knowledgeable on STIs and HIV / AIDS than students from rural areas.

5

- The risk perception on STI and mY/AIDS among students who live with other students is likely to be higher compared to students who live with families.



Expected Outcomes of the Study

In this study I have tried to understand the knowledge level of university students regarding STIs and HIV / AIDS and their health perception associated with this.

The students in this study are selected from two public and two private universities located in Dhaka, the capital city.

The knowledge of students on STIs and HIV/AIDS and its contraction and prevention are expected to vary by public/private, male/female, rural/urban and junior/senior level of students.



Limitations of the Study

Small sample

The study is based on small sample of students from four universities of Dhaka. However this is only a representative of a small group, the finding of the present study cannot be taken as a generalized or total community of university students from Dhaka at large.

Descriptive analysis

Data was analyzed by only bivariate relationship between independent and dependent variables. The effect of other interviewing variables which could influence dependent or independent variables was not taken into consideration. Therefore, the vast relationship between independent and dependent variable could not be asserted.

Despite these limitations, the thesis will shed light on the level of knowledge and perception of students on STIs including HIV / AIDS and its mode of transmission and prevention.



HIV and AIDS

The origin of Human Immunodeficiency Virus (HIV) is a non-human primate simian virus, probably passed from chimpanzees to human via bush hunters. HIV develops a number of mechanisms to escape immune control and has thereby prevented effective control of the epidemic. The Acquired Immune Deficiency Syndrome (AIDS) was first recognized in 1981.

HIV is present in blood, semen and other body fluids such as breast milk and saliva. Exposure to infected fluid leads to a risk of contracting infection, which is dependent on the integrity of exposed site, the type and volume of body fluid, and the viral load. HIV can enter either as free virus or within cells.

The modes of contamination are sexual (man to man, heterosexual and oral) and parenteral (blood or blood product recipients, injection drug user and those experiencing occupation injury). The transmission risk after exposure is over 90% for blood or blood products, 15-40% for vertical route, 0.5-1.0% for injection drug use, 0.2-0.5% for genital mucous membrane spread.

For prevention of HIV, access to HIV testing needs to be widened and strategies are required to protect the HIV non-infected person (e.g. promoting consistent condom use, improved STIs management, circumcision), for effective prevention of mother-to-child transmission and for scaling up of antiretroviral drug access.



Definition of Sexually Transmitted Infections

Sexually transmitted infections (STIs) are a group of contagious conditions whose principle mode of transmission is by intimate sexual activity involving the moist mucous membranes of the 'penis, vulva, vagina, cervix, anus, rectum, mouth and pharynx, along with their adjacent skin surfaces. The most relevant STIs syndromes are urethral discharge, genital ulcer, vaginal discharge and lower abdominal pain.



Types of Sexually Transmitted Infection

The term STIs includes 4 types of infection which affects the reproductive tract: Infections of the female reproductive tract which are not transmitted sexually, but are the result of an overgrowth of organisms normally present in the vagina (e.g., bacterial vaginosis and yeast infections).

- Infections which are transmitted sexually to areas beyond the reproductive tract, such as syphilis and HIV infection.
- Infections of the female reproductive tract due to complications of reproductive events or procedures performed on the reproductive tract (e.g., childbirth, miscarriage or abortion, insertion of an IUD and gynaecological or obstetric surgery).
- Individuals may have symptoms, but they do not identify them as an infection. Many women lack intonation about normal vaginal discharge. Some women may have had an infection for so long that they have come to think their symptoms are nonnal.



Complications of Sexually Transmitted Infection

The consequences of untreated STIs can be devastating to the health of men, women and their children. These conditions can lead to infertility, chronic ill health, sexual dysfunction, disseminated disease and death. In women, it can also lead to chronic pelvic pain and pregnancy complications such as ectopic pregnancy. Any untreated STI in a pregnant woman can affect the unborn or newly born child. Problems include low birth weight, premature delivery and neonatal infection. Both gonococcal and Chlamydia infection can be transmitted directly into the neonate's eye and cause blindness.



Prevention of Sexually Transmitted Infection

Prevention by case finding and changing behavior are the most important strategies for the control of STIs, including HIV infection. This can be mainly executed through appropriate education. The spread of STIs is influenced by several factors, including sexual behavior and attitudes, and the availability of facilities for diagnosis and treatment at early stage.

It is important that these factors be borne in mind so that effective programmes aimed at preventing the spread of STIs can be designed and implemented. SRHI family planning programmes are well placed to disseminate information on the risks and complications of STIs and to promote low-risk behavior. The use of condoms should be encouraged, not only for the prevention of pregnancy but also for the prevention of STIs.



Global, Regional and Bangladesh Pattern of Knowledge on STIs and HIV/AIDS

UNAIDS fact sheet (2012) revealed that, in low and middle income countries, only 24% of young women and 36% of young men responded correctly about HIV / AIDS, its transmission and prevention which suggest that its knowledge among the young is poor.

According to The World's Youth Data Sheet, only a small minority of young people worldwide have comprehensive knowledge of HIV / AIDS and STIs.



Global, Regional and Bangladesh Pattern of Knowledge on STIs and HIV/AIDS

A Baseline survey named 'Prevention of HIV/AIDS among Young People in Bangladesh' was conducted in 2002 collaborated between National AIDS/STD programme and Save the Children-USA among adolescents aged 13-19. This study found relatively higher proportion of respondents has knowledge on HIV / AIDS but poor proportion of respondents has knowledge on its preventions. Only one fourth of respondents had correct knowledge of at least two routes of HIV / AIDS transmission. More than half of the boys and three fourths of girls have never heard about STIs. The prevalence of reported STIs symptoms was found high among the youths.



Global, Regional and Bangladesh Pattern of Knowledge on STIs and HIV/AIDS

A research conducted on knowledge attitude and practice on reproductive health and rights of urban and rural women by Shahin Akhter found that the respondents have acquaintance about RTI and AIDS, cause and how to prevent these diseases. Eighty two percent of urban and 88% of rural women have no clear idea about STD/RTIs. But this study also revealed that the knowledge on contraction and prevention of STD/RTIs among urban and rural people are very poor. But, a higher percentage of respondents have heard the term HIV / AIDS.



Research Methodology

Study Design

This study was conducted based on quantitative research design. A cross sectional survey was conducted in 4 (four) predetermined universities. A well-designed, structured self-administered questionnaire was used for data collection. The respondent ratio between male and female was 1: 1. University ratio of private and public was 1: 1. From each university campus 80 students were selected to serve the purpose of the study.



Research Methodology

Study Area

Two public and two private universities have been selected from Dhaka for sampling.

The public universities were

Dhaka University & Jogonnath University

while private universities were

East West University & United International University.

Sample Size and Sampling Technique

The sample size was 320 (160 males and 160 females).

The student identification card was the main criterion to include valid students in the study



Research Methodology

Collection and Management of Data

During February and March, 2013 eight data enumerators were used for data

Data was entered and processed using SPSS (version 17) software.

Ethical Considerations

Students were informed about the purpose and objectives of the study in the front page of the self-administered questionnaire. All though the study, students were assured of confidentiality for their volunteered information.



Research Methodology

Data Analysis

Data were coded and analyzed by Statistical Package for Social Sciences (SPSS) . Differences on knowledge of STIs among various groups 'categorized by university, gender, education level, educational background, place of living were analyzed

Report Writing

After classifying, tabulating, processing and analyzing all the collected data, I have tried to answer the research questions and hypothesis in my thesis.



Results of the Analysis

Demographic Characteristics among Private and Public University Students of Dhaka

It is found that 98% students of private university are more than 22 years of age compared to 78% of public university.

There is no difference in marital status of the students of two types of university.

Eighty seven percent of private university students are unmarried while 89% of public university students have similar marital status.

Seventy six percent of private and 64% of public university students were Muslims. Consequently, students of others religious faith were fewer among private universities (24%) compared to public universities (36%).

More private university students (79%) were living with families compared to public university students (38%).



Results of the Analysis

Communication and Media Exposure among Private and Public University Students of Dhaka

Data shows that there is a slight difference among private and public university students about reading regular newspaper (56% of private and 61 % of public) but a similar trend in regular internet browsing (42% for both private and public university) as their source of knowledge. There was comparatively high proportion of private university students (47%) reported to have regularly watching television compared to public university students (38%). However, regular practice of listening to radio is almost twice as much higher among public university (29%) students compared to private university (16%).



Results of the Analysis: Knowledge on AIDS among Students of Dhaka by Private and Public University

Knowledge of HIV/AIDS	Private University		Public University		Total	
	Number (N=160)	Percent	Number (N=160)	Percent	Number (N=320)	Percent
Heard about AIDS						
Yes	154	96.3	158	98.8	312	97.5
No	6	3.7	2	1.2	8	2.5
Contraction and prevention of AIDS	154	-	158	-	312	-
Know	151	98.1	143	90.5	294	94.2
Don't know	3	1.9	15	9.5	18	5.8
Knowledge on contraction and prevention of AIDS*	151	-	143	-	294	-
Having sex with prostitute	48	31.8	64	44.7	112	38.1
Having sex with drug user	41	27.1	67	46.8	108	36.7
Using condom	90	59.6	79	55.2	169	57.5
Safe blood transfusion	46	30.5	62	43.3	108	36.7
Limiting sex with one trusted partner	45	29.8	61	42.6	106	36.0
Using sterilized needle/syringe	35	23.2	55	38.5	90	30.6
Misconception on contraction and prevention of AIDS*						
Sharing razors/blades	35	23.2	52	36.4	87	29.6
Limiting sex in marriage	23	15.2	27	18.9	50	17.0
Treatment of AIDS	154	-	158	-	312	-
Antiretroviral therapy	31	20.1	26	16.5	57	18.3
Antibiotics	8	5.2	16	10.1	24	7.7
Not possible	115	74.7	116	73.4	231	74.0

Results of the Analysis: Distribution of Knowledge on STIs among Students of Dhaka by Private and Public University

STIs knowledge	Private University		Public University		Total	
	Number (N=160)	Percent	Number (N=160)	Percent	Number (N=320)	Percent
Heard about other STIs						
Yes	102	63.8	139	86.9	241	75.3
No	58	36.2	21	13.1	79	24.7
Causes of STIs*						
At least one possible cause	81	79.4	77	55.4	158	65.6
Causative organism						
Bacteria	49	48.0	23	16.5	72	29.9
Virus	45	44.1	21	15.1	66	27.4
Fungus	45	44.1	21	15.1	66	27.4
Influencing factors						
Having sex during menstruation	29	28.5	27	19.4	42	17.4
Having sex soon after delivery	26	25.5	26	18.7	39	16.2
Blood transfusion	25	24.5	14	10.0	28	11.6
Bad hygiene practice	23	22.5	19	13.7	56	23.2
Being unfaithful	15	14.7	13	9.3	52	21.6
Signs and symptoms of STIs*						
At least one sign and symptom	70	68.6	32	23.0	102	42.3
Lower abdominal pain	31	30.4	11	7.9	42	17.4
Foul smelling discharge	26	25.5	3	2.1	28	11.6
Genital sores/ulcers	23	22.5	5	3.6	29	12.0
Blood in urine	21	20.6	14	10.1	35	14.5
Swelling of genital area	14	13.7	7	5.0	21	8.7

Results of the Analysis: Distribution of Knowledge on STIs

among Students of Dhaka by Private and Public University

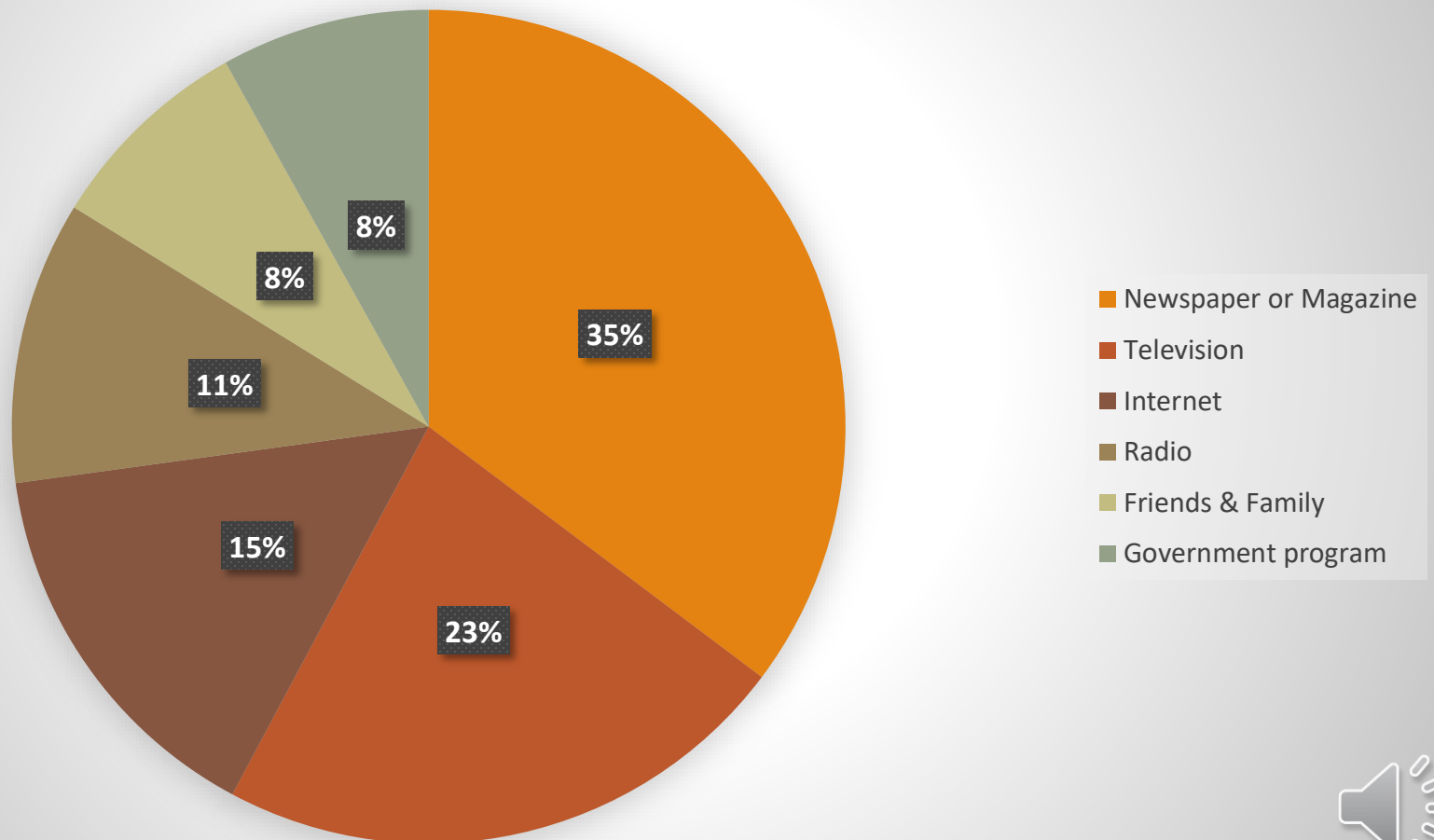
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Blood in urine	21	20.6	14	10.1	35	14.5
Swelling of genital area	14	13.7	7	5.0	21	8.7
Complication of STIs symptoms*						
Knows at least one complication	36	35.3	23	16.5	59	24.4
Still birth/miscarriage	20	19.6	3	2.1	23	9.5
Infertility	17	16.7	6	4.3	25	10.4
Ectopic pregnancy	17	16.7	8	5.7	23	9.5
Cervical cancer	16	15.9	7	5.0	23	9.5
Premature birth	13	12.7	2	1.4	15	6.2
STIs testing place in the town	18	17.6	11	7.9	29	12.0
STI is curable	95	93.1	135	97.1	230	95.4
STI is preventable	57	55.9	24	17.2	81	33.6

*multiple response

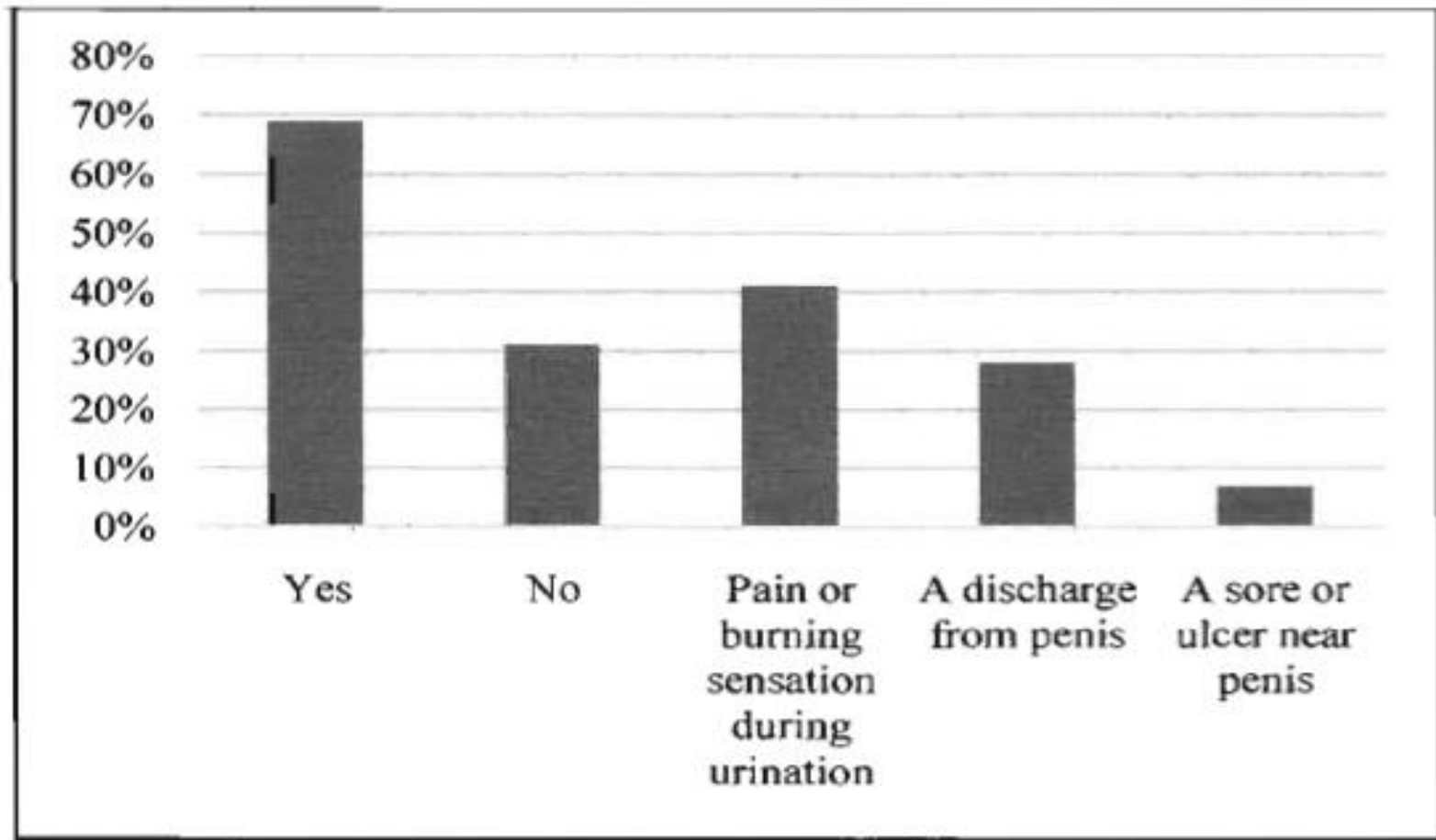


Sources of Knowledge of HIV/AIDS and STIs among University Students of Dhaka

Source of Knowledge/ Information about STIs & HIV/AIDS
(Percent)



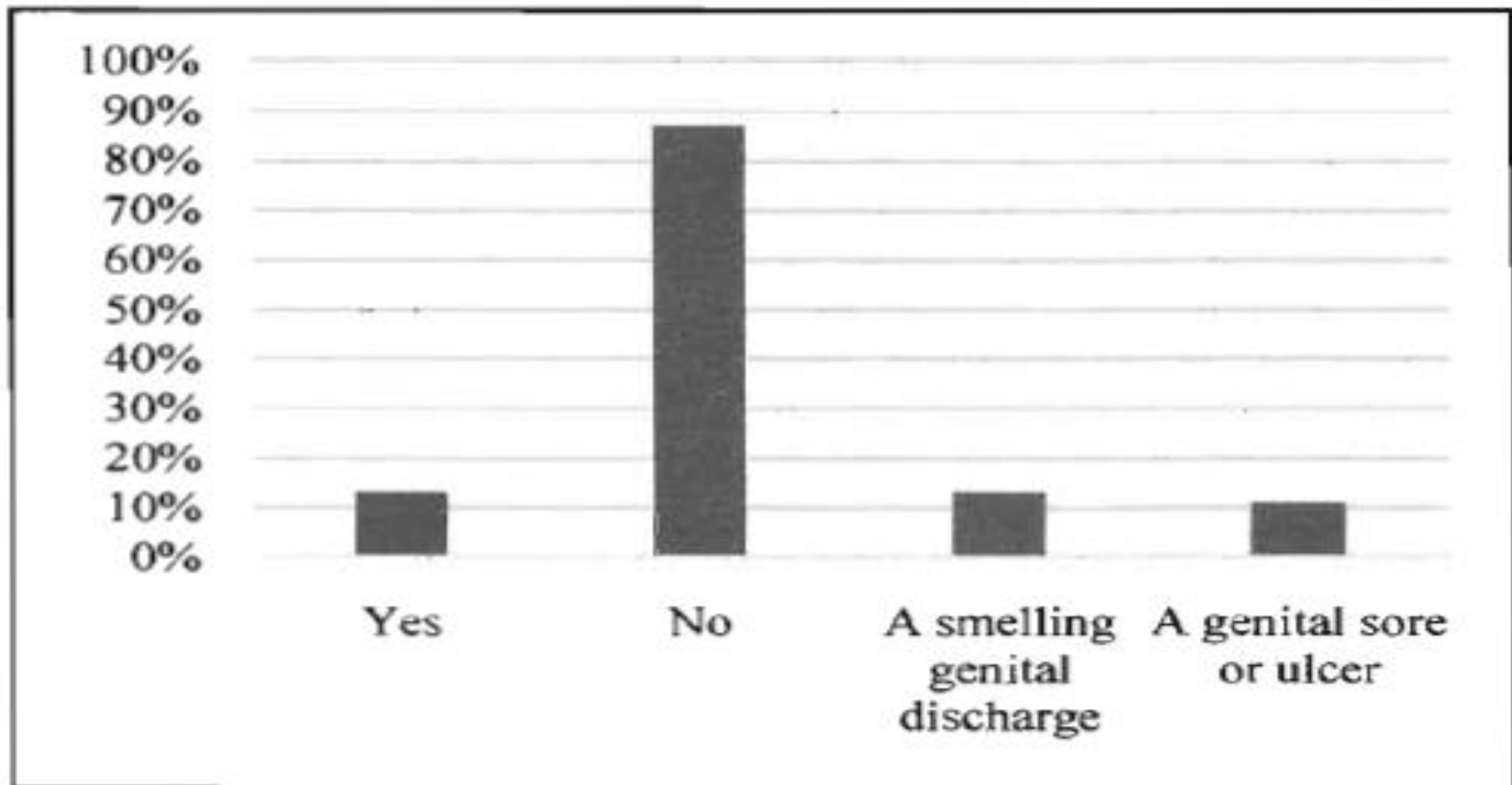
STIs Symptom and Treatment Seeking Behavior of University Students of Dhaka



STIs symptom among male student at Dhaka



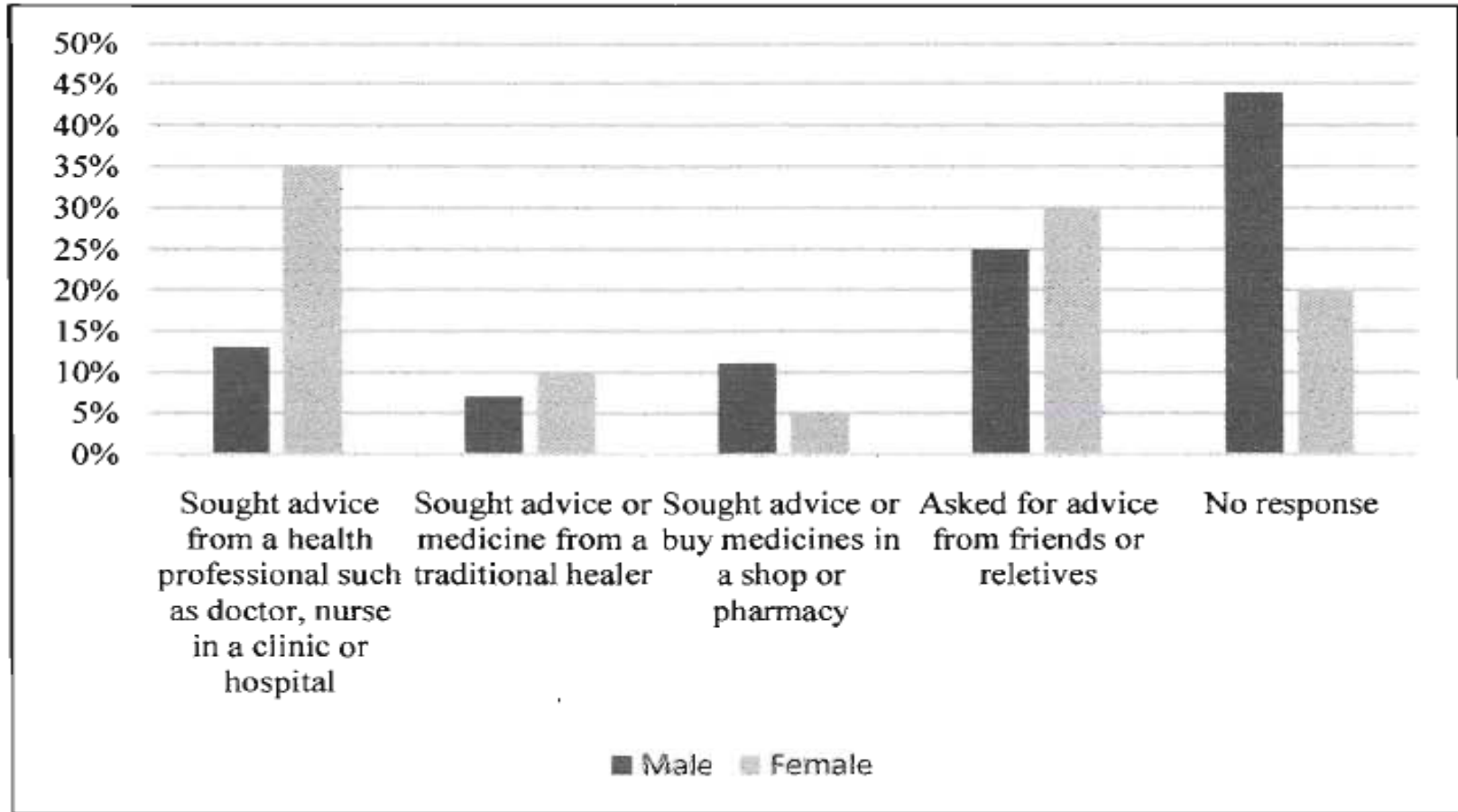
STIs Symptom and Treatment Seeking Behavior of University Students of Dhaka



STIs symptom among female student at Dhaka



STIs Symptom and Treatment Seeking Behavior of University Students of Dhaka



Symptom and Treatment Seeking Behavior of University Students of Dhaka during 2012



Discussion

A structured questionnaire was developed to collect data on knowledge, attitude and risk perception on HIV / AIDS and STIs. Students were purposely selected based on gender, education year and private verses public university.

The study found that hearing the name and treatment of HIV / AIDS is high but a large number of students failed to identify the correct means of contraction and prevention of AIDS. The knowledge on STIs, its causes, signs and symptoms among the students was very poor.



Discussion

First hypothesis that the students of private universities are likely to have more knowledge than public university does not hold for AIDS but seem true for STIs. Knowledge on STIs, its causes, signs and symptoms, complications are much higher among private university students compared to public university

Second hypothesis that male students are more likely to have knowledge about HIV / AIDS than female students, which was the second hypothesis of the study. In both cases (AIDS/STIs) more male students than female students are aware of the diseases students.



Discussion

First hypothesis that the students of private universities are likely to have more knowledge than public university does not hold for AIDS but seem true for STIs. Knowledge on STIs, its causes, signs and symptoms, complications are much higher among private university students compared to public university

Second hypothesis that male students are more likely to have knowledge about HIV / AIDS than female students, which was the second hypothesis of the study. In both cases (AIDS/STIs) more male students than female students are aware of the diseases students.



Discussion

Third hypothesis of the study, femal year students were more likely to have awareness than first year students about STIs including HIV / AIDS. The knowledge of HIV / AIDS between first and final year students were same but knowledge that of its contraction and prevention is high among the final year students. Similar trends have been also found in case of the knowledge of STIs, its causes, signs and symptoms, and complications.

Fourth hypothesis that students of urban background were more likely, to have awareness than students from rural background is partially true. Moreover, rural background students are aware of HIV / AIDS knowledge in contrast, urban background students were more aware about STIs, its causes, signs and symptoms, complications awareness.



Discussion

The last hypothesis that students who lived with others students have higher risk perception than students who lived with family came out true. The large proportion of students who live with other students discussed about ways to prevent AIDS and correctly identified that AIDS can be transmitted to mother to children and healthy looking person could have this disease.

The study also revealed that the students have prevalence of STIs, and large proportion of students did not know the place where they can get STIs tests and treatment service.



Conclusion

It can be stated that, the general knowledge of HIV / AIDS and STIs is much higher among university students. This study also revealed that private university students have more knowledge compared to public university students on STIs, its causes, signs and symptoms and complication. Male students are much more aware than female students considering knowledge of AIDS, its contraction and prevention and STIs, its signs and symptoms, complication. First year students are slightly more aware on contraction and prevention of AIDS, but considering all other factors final year students were found to be more knowledgeable on STIs including AIDS. It was partially true that urban background students have more knowledge on STIs including AIDS. Students who live with other students have higher risk perception and positive attitude compared to the students who lived with family.



Policy Recommendation

STIs is also considered as a vulnerable of human health that can make our young generation more anxious. To reduce the risk of these types of disease, people should be more conscious about the causes and consequences of AIDS and STIs. And there is no alternative of increasing the awareness of our youth.

Effective steps should be taken by private and public organizations. Voluntary council service and STIs testing place should be placed in every town and campaigns carried out.

Awareness programmes in educational institutions, social events and village community should be ensured to aware people, especially the youth community. Family



Further Research Direction

In this study the primary data has been used on a small scale due to time restriction. Thus the sample size was limited within 320 students. I have selected only 4 universities where the characteristics of the respondents may be more or less same. Present analysis is based on cross sectional data but a time series data may be more valuable to conduct these kind of vulnerability analysis in the future.



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Question?



THANK YOU

