Awareness about Sexually Transmitted Infections and Human Immunodeficiency Virus Infection among Patients with Genital Symptoms

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Abstract

Introduction: Sexually transmitted infections (STIs) are a major cause of public health problem. In developing countries, human immunodeficiency virus (HIV) infection is spreading rapidly, with sexually transmitted infections acting as a cofactor for the spread of HIV. Yet adequate awareness regarding these infections is lacking.

Objective: To explore the knowledge and awareness about STIs and HIV infection in patients visiting Dermatology and Venereology Clinic of Institute of Medicine, Tribhuvan University Teaching Hospital (TUTH) with genital symptoms.

Material and Methods: A cross sectional descriptive study was carried out in the department of dermato-venereology, TUTH for a period of one year. Total of 130 consecutive cases were enrolled. After taking consent and assuring confidentiality they were interviewed regarding awareness of STIs and HIV/AIDS.

Results: Out of 130 cases, 95% and 98.5% had heard of an STI and HIV/AIDS respectively. Only 43.8% could mention discharge from genitalia as a symptom of STI whereas 38.5% could mention none. Most (91.5%) knew about the sexual mode of transmission of both STIs and HIV. None could mention about mother to child transmission of an STI, whereas 15% knew that an infected mother can transmit HIV to her baby. About 58% were aware that condoms could protect them from acquiring an STI, 63% perceived this as best method of prevention from HIV. When only 26% knew that being faithful to one partner is the best mode of prevention from an STI, 45% mentioned avoiding contact with multiple partners could prevent them from HIV transmission.

Conclusions: Awareness programme on STIs as a whole could improve knowledge and awareness on HIV and STIs and hence prevent both.

Key words: knowledge, awareness, STIs, HIV

Introduction

Worldwide STIs are a major cause of acute illness, cervical cancer, infertility, long-term disability, economic loss and death. Though prevention is the only solution to get rid of HIV/AIDS and STIs, lack of knowledge makes people vulnerable to acquire and to spread STIs and HIV/AIDS. In the developing countries, risky behaviors (early initiation of sex, premarital sex,

bisexual orientation and multiple sexual partners) are prevalent due to lack of awareness about STI/ HIV, though government and various organizations are putting their effort to raise awareness about these infections.

Most of the studies conducted in our community are focused on different focus groups like street teenagers¹, Himalayan seasonal migrants² and boatmen³ in which

a significant number of people had misconception regarding mode of transmission and prevention of STIs and HIV. While most of the high school students knew that it is spread by unprotected sexual intercourse and can be prevented by safe sexual practice⁴, majority of the university students felt that condom can protect them from HIV instead of limiting sex to single partner and most of them were unaware regarding the mode of transmission of HIV⁵. In a similar Indian study, one third of the respondents felt HIV/AIDS could be cured⁶, likewise one third of Bangladeshi men did not know how to avoid AIDS and very less people knew that HIV can be transmitted through infected blood and syringes⁷.

If diagnosed and treated early, most of the serious health problems caused by STIs are preventable. Not only it imposes tremendous public health burden but also acts as a facilitator for the spread of HIV. Limited study is available from Nepal about knowledge of STIs and HIV among the patients who visit hospital with symptoms related to genitalia.

Collected data about their awareness regarding STIs and HIV infection will become critical information for the development of effective behavioral interventions which are required for the control of STIs and HIV.

Material and Methods

A cross sectional study was carried out in the department of dermatology-venereology of Tribhuvan University Teaching Hospital over a period of one year (June 2008 to May 2009). A total of 130 consecutive adult patients who admitted sexual exposure and presented with genital symptoms and/or positive serological tests for syphilis were enrolled in the study. After assuring confidentiality for the provided information verbal consent was taken from each patient. The patients were interviewed according to a standard proforma which inquired symptoms, modes of transmission and preventive measures of STI and HIV.

Results

A total of one hundred thirty patients who presented with genital symptoms were studied.

Baseline characteristics of the study population are described in Table 1.

Knowledge and awareness about symptoms and mode of transmission of STIs

When asked, 95% said they had heard of STIs. Out of 130, 50 (38.5%) could not tell any symptoms of an STI while others had some idea about symptoms of STIs. Male seemed to be unaware compared to female. It was found that 43.8% could mention discharge from genitalia as a symptom of STI while 17.7% named genital ulcer (Table 2). Most (91.5%) could tell about the sexual mode of transmission of STIs, whereas nobody could tell about mother to child transmission

Knowledge about method of prevention of an STI

Majority (90%) knew that STIs can be prevented. About 58% were aware that condoms could protect them from acquiring an STI while only 26% knew that being faithful to one partner is the best mode of prevention. (Fig 1) Most (77%) were aware that treatment of partner is required for the effective prevention of STIs while 14% felt there is no need of partner treatment and 9% had no idea about this.

Knowledge and awareness about mode of transmission and prevention of HIV

It is satisfying to know that 98.5% of the patients had heard of HIV/AIDS and majority 92% had knowledge about its sexual mode of transmission while only 15% people knew that an infected mother can transmit the infection to her baby (Fig 2)

The non-curable nature of HIV/AIDS was known to 83.8% of patients while 8.5% thought that cure is possible for this infection and 7.7% did not know about it. Most of the study population (93.8%) knew that it is a preventable infection while 4.6% were not sure about it. The best method of prevention for HIV/AIDS seems to be use of condom as perceived by 63% of the respondents while 45% mentioned avoiding contact with multiple partners could prevent them from HIV (Fig 3).

Table 1: Baseline characteristics of the study population

Age group (years)	Number (n=130)	Total (%)	
15-19	9	6.9	
20-24	55	42.3	
25-34	44	33.8	
35-44	18	13.8	
>45	4	3.1	
Occupation			
Farmer	7	5.4	
Housewife	15	11.5	
Student	25	19.2	
Security	18	13.8	
Driver	11	8.5	
Hotel	8	6.2	
Business	14	10.8	
Laborer	3	2.3	
Unemployed	13	10	
Other	16	12.3	
Education			
Illiterate	13	10	
Secondary	41	31.5	
Higher secondary	38	29.2	
Plus two	17	13.1	
University	21	16.2	
Marital status			
Married	68	52.3	
Unmarried	54	41.4	
Divorced	4	3.1	
Second marriage	4	3.1	

Table 2: Knowledge of symptoms of STIs according to gender

Correct symptoms	Male (n)	Female (n)	Total (%)
one symptom	13	8	16.2
Two symptoms	24	9	25.4
>Three symptoms	18	4	16.92
No symptoms	40	10	38.5
Wrong symptoms	4	0	3.1
	No (n=130)*		
Discharge	40	17	43.8
Itching	35	14	37.7
Growth on genitalia	10	2	9.2
Burning micturition	12	2	10.8
Genital ulcer	19	4	17.7
Genital pain	4	0	3.1

^{*}includes multiple responses

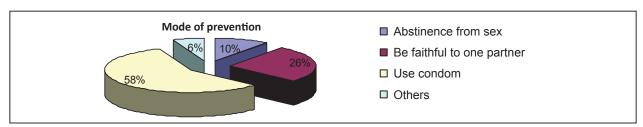


Figure 1: Knowledge about modes of prevention of STIs

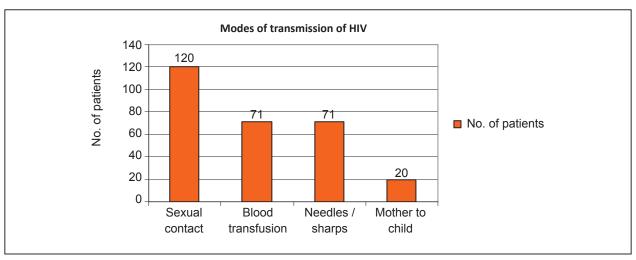


Figure 2: Knowledge of modes of transmission of HIV/AIDS

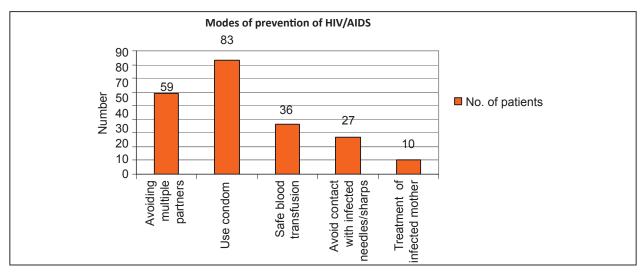


Figure 3: Knowledge about preventive measures for HIV/AIDS

Discussion

It is satisfying to note that 95% of our participants had heard of STIs and 98.5% had heard of HIV/AIDS which was a finding similar to Singh's observation⁴. This finding contradicts with Rahman's finding 7 in which 86% of people had heard of HIV/AIDS but 45.2% of the men had no idea about STIs. In the present study, 58% could mention at least one or more symptoms while 38.5% could not tell any symptoms of an STI. This finding does not match with Rahman's study⁷ in which 54.8% of men knew specific signs and symptoms of STIs. Whereas in Garg's⁸ study 70% could not mention even one symptom of STI. The low level of awareness about STIs when compared to HIV could be due to differences in the resources spent in awareness raising programmes on HIV/AIDS versus STIs. Therefore, the findings in our study suggest the need to highlight this aspect of health education.

Sexual mode of transmission of both STIs and HIV was known to 92% of the people which is much similar to that in other studies^{1, 4, 9}. Only 15.4% knew about mother to child transmission of HIV while none could mention that some of the other STIs can also be transmitted from mother to child.

In our study, 90% had an idea that STIs/HIV can be prevented; for the majority (58%) condom was the most reliable means to prevent STIs while only 26% knew that being in a monogamous relationship is important to prevent STIs. Contrary to this finding 63% of the respondents perceived condom as most effective preventive measure for HIV while 45% mentioned avoiding contact with multiple partners could prevent them from HIV. This finding is similar to that of Joshi⁵, whereas, in another study 73% of the slums knew that staying in a monogamous relationship could prevent STI while only 39% were aware that condom could

afford protection against an STI⁸. In our study people seemed to be aware about the use of condom as a preventive measure for STI/HIV similar to a Georgian study where, most students (71.4%) considered condoms protect against HIV and interestingly, only 12% believed they were necessary when partners love each other and 76% of them stated that condoms can be reused after washing¹⁰. Most of our respondent knew the importance of treatment of partner which is supported by a study from Vietnam¹¹.

Conclusion

Our study showed a poor level of awareness with regard to knowledge about the symptoms, mode of transmission and prevention of STI in comparison to

HIV. Very few knew about mother to child transmission of HIV and none had idea about the same for STIs. Participants gave much importance to condoms than avoiding multiple partners or to stay in a faithful monogamous relationship for the prevention of STIs/ HIV. The disparity in knowledge between STIs and HIV/ AIDS is due to a lot of emphasis put on HIV/AIDS without giving much importance to the other STIs in the past. Lots of money has been spent in the media, which has played an important role for the promotion of condom in the prevention of HIV/AIDS. Due to this 'condom campaign' the importance of mutual monogamous relationship has been super shaded. Since majority of HIV is transmitted through sexual route it can be prevented in combination with other STIs if emphasis is given for the control of STIs as a whole.

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