

Pattern of sexually transmitted infections from a tertiary care hospital, Pokhara: A six-month retrospective study



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ABSTRACT

Background: Sexually transmitted infections (STIs) are major public health problem that have profound effect in reproductive and mental health. STIs have direct impact on sexual and reproductive health through stigmatization, infertility, and cancers and can increase the risk of HIV.² Unprotected sexual contact with an infected partner is the most important risk factor associated with STI. Pattern of STI varies from region to region depending on socioeconomic status, ethnicity, and educational factor. **Aims and Objectives:** The aim of the study was to assess pattern of STIs in a tertiary level hospital, Pokhara. **Materials and Methods:** The following is a hospital-based retrospective study conducted in the Dermatology department of Pokhara academy of health sciences (PoAHS). All patients who attended the STI clinic of dermatology OPD from 2078/05/01 to 2078/11/30 B.S. with clinical manifestations of STI and associated positive serological investigation with their risky sexual behavior, related information was recorded in STI register and was analyzed. HIV cases are enrolled directly to antiretroviral therapy clinic of PoAHS, so HIV cases were not included in the study. **Results:** Out of 87 STI patients, 71.3% were males and 28.7% were females. The mean age of patient with STI was 31.34 + 8.4. The most common diagnosis was syphilis 55.2% followed by urethral discharge syndrome 16.1%. STIs were common among married individuals 74.7%. Most common high-risk sexual behavior among patients with STI was multiple sexual partners 79.3%. **Conclusion:** The study showed that the prevalence of STIs is still high in the society. Lack of awareness, delinquent behavior, and an inconsistent use of condoms during sexual contact may be the major contributing factors.

Key words: Sexually transmitted infections; Infertility; Serology

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INTRODUCTION

Sexually transmitted infections (STIs) are major public health problem that have profound effect in reproductive and mental health of an individual.¹ More than 1 million STIs are acquired every day worldwide, the majority of which are asymptomatic. STIs have direct impact on sexual and reproductive health through stigmatization, infertility, cancers, and pregnancy complications and can increase the risk of HIV.² Although there are various risk factors associated with STI, unprotected sexual contact with an infected partner is the most important

one.^{3,4} There are several laboratory test for the diagnosis of STI, but due to its unavailability in many parts of our country, diagnosis and management are based on syndromic approach. Pattern of STI varies from region to region depending on socioeconomic status, ethnicity, and educational factor.⁵

Aims and objectives

The aim of the study was to highlight the pattern of STIs in patients attending STD clinic of dermatology department in our hospital.

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MATERIALS AND METHODS

The following is a hospital-based retrospective study conducted dermatology department of Pokhara academy of health sciences. All the patients with symptoms, signs, and positive serological investigations were included in this study, but HIV cases usually visits physician and enrolled directly to anti-retroviral therapy (ART) clinic of WRH, so HIV cases were not included in the study. After ethical clearance from the institutional review committee on 2078/05/01, all patients who attended the STI clinic of dermatology OPD from 2078/05/01 to 2078/11/30 B.S. with clinical manifestations such as genital ulcers, urethral discharge, vaginal discharge, whitish deposits over genitalia, verrucous growth, and pearly white umbilicated papular eruption over genitalia and associated positive serological investigation which includes HIV, HBsAg, HCV, VDRL, and TPHA with their risky sexual behavior, related demographic detail, and diagnosis was recorded in STI register provided by the Ministry of Health and Population.

RESULTS

A total of 87 patients attending dermatology OPD in the past 6-month period were enrolled in the study. Out of 87 patients, 71.3% (n=62) were male and 28.7% (n=25) were female. The male-to-female ratio was 2.5:1. Age of the patients ranged from 17 years to 60 years; the mean age being 31.34 years \pm 8.4 and the most common age group affected was 20–40 years (89.7%). Most of the patients were married (n=65; 74.7%), only 25.3% (n=22) were unmarried.

The most common diagnosis was syphilis, followed by urethral discharge syndrome. On contrary, in female group,

no cases presented with features of urethral discharge syndrome. Condyloma accuminata was another common diagnosis (Table 1).

When assessed for high-risk factors, the majority of them had multiple sexual partners 79% (n=69), followed by partners having multiple sexual partners 16.1% (n=14) (Table 2).

DISCUSSION

In the developing world including Nepal, the prevalence of STIs is high and in increasing trend but its actual data are scarce. The epidemiology varies from region to region and country to country due to differences in sociodemographic, economic, and environmental and behavioral factors. According to the WHO, more than 1 million STIs are procured every day among which chlamydia, gonorrhoea, syphilis, and trichomoniasis are major STIs.⁵ Knowledge of prevalence of STIs is important to implement appropriate control strategies. Our study aims to highlight the pattern of STIs in patients attending STD clinic of dermatology department in our hospital.

In this study, the mean age of the patients was 31.34 years with male-to-female ratio of 2.5:1. Similar pattern of male preponderance was reported in other studies too.^{6,9} The reason for few female patients may be because of asymptomatic nature of the majority of STIs in females and also due to shyness and high stigma among females to share their problems.

In our study, STIs were common among age group 20–40 years; it might be due to increased sexual desire with a higher number of sexual partners in this age group. STIs are higher in sexually active age group and thus proper health education targeting these group can lead to tremendous

Table 1: Number and proportion of STIs in total, in male and female

Diagnosis	Total (n=87)		Male (n=62)		Female (n=25)	
	Number	% out of 87	Number	% out of 62	Number	% out of 25
Syphilis	48	55.2	31	50	17	68
Urethral discharge syndrome	14	16.1	14	22.5	0	0
Condyloma accuminata	9	10.4	6	9.7	3	12
Balanoposthitis	6	6.9	6	9.7	0	0
Herpes genitalis	5	5.7	5	8.1	0	0
Vaginal discharge syndrome	3	3.4	0	0	3	12
Molluscum contagiosum	2	2.3	0	0	2	8

Table 2: High-risk factors in patients with STIs

Risky factors	Total (87)		Male (62)		Female (25)	
	Number	% out of 87	Number	% out of 62	Number	% out of 25
>1 partner	69	79.4	51	82.3	18	72
Contact with SWs	3	3.4	3	4.8	0	0
MSM	1	1.1	1	1.6	0	0
Partners with multiple partners	14	16.1	7	11.3	7	28

decrease in incidence as well as prevalence of STIs.⁷⁻⁹ Similar finding was observed in several other studies.^{10,11}

In our study, the most common diagnosis was syphilis 55.2% (n=48), followed by urethral discharge syndrome 16.1% (n=14), similar finding was seen in a study by Karki *et al.*,⁶ whereas in a study by Karn *et al.*, the most common diagnosis was condyloma accuminata.¹² The possible cause for such variation may be due to increased TPHA and VDRL screening for visa processing and antenatal checkup.

The most common high-risk behavior in our study was having multiple sexual partners 79%, followed by partners having multiple sexual partners 16.1%. Similar findings were seen in several other studies.^{13,14}

Limitations of the study

1. This study is hospital-based study, so the result may not be representative of general population
2. HIV cases were not included as they are enrolled directly to ART clinic at WRH.

CONCLUSION

The study showed that the prevalence of STIs is still high in the society. Lack of awareness, delinquent behavior, and an inconsistent use of condoms during sexual contact may be the major contributing factors. Even though most patient seemed to have an awareness about condoms, they were found not to be very well versed with proper usage of it. Proper health education with emphasis in safe sexual practice is needed in the community.

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Authors Contribution:


SK- Idea and design of the study, literature review, data analysis, and manuscript preparation; **SA, PP and AN-** Coordination, interpretation, correction, and revision of the manuscript.


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