

A STUDY ON SEXUALLY TRANSMITTED DISEASES IN PATIENTS IN A STD CLINIC IN A DISTRICT HOSPITAL IN NORTH INDIA

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Abstract

Introduction: The Sexually transmitted diseases (STDs) are a global health problem of great magnitude. The pattern of STDs differs from country to country and from region to region. The increased risk of the transmission of HIV is known to be associated with the presence of sexually transmitted diseases (STDs) and despite the presence of the National STD Control Program in India the number of people with STDs remains high.

Aim: The aim of our study was to study the profile of patients in a STD clinic in North India and to study various sexually transmitted infections in both male and female patients.

Material and Methods: A prospective study of the patients attending STD clinic in a district hospital in North India from December 2009 to December 2012 was done. A total of 2700 patients attending the STD clinic in three years from December 2009 to December 2012 were taken up for the study.

Results: The commonest sexually transmitted infection in males was herpes genitalis (30%) followed by 20% cases of genital warts. 10% patients had gonorrhoea, genital molluscum contagiosum, syphilis and genital scabies each and 5% patients had nongonococcal urethritis. Only 5% of the total patients had chancroid, donovanosis and LGV. The commonest sexually transmitted infection in females was vaginal discharge seen in 40% patients, lower abdominal pain in 20% patients, herpes genitalis in 15% patients followed by 20% cases of genital warts and syphilis each. Genital molluscum contagiosum was seen in 5% patients only.

Conclusions: The treatment of STD's is important as both non-ulcerative and ulcerative STDs increase the susceptibility to or transmissibility of HIV infection and as such, an increase in STD prevalence as revealed by clinic attendance in this study was bound to facilitate the spread of HIV/AIDS. Perhaps it is high time health planners adopted a more aggressive and result oriented HIV/AIDS/STD awareness campaign strategy.

Key words: Sexually transmitted diseases; HIV; infections; laboratory; investigations

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Introduction

Sexually transmitted diseases (STDs) have great impact on health of the individual and community. Control of STDs has been given priority since the advent of the HIV/ AIDS epidemic, in recognition of their role in facilitating the sexual transmission of HIV [1,2]. Although the course of many of these STDs is benign even without treatment, some infections may lead to long-term sequelae, including pelvic inflammatory disease, infertility and cervical cancer. Their epidemiological profile varies with geography and depends upon ethnic, demographic, social and economic factors. In addition to the burden on youth, women

are also severely affected. Biological factors place women at greater risk than men for the severe health consequences of STDs. Sexually transmission requires the agent to be present in one partner, the other partner to be susceptible to infection with that agent and that the sex partners engage in sexual practices which can transmit the pathogen. STDs rank among the five leading health problems in the developing countries.

The majority of these diseases affect men and women during their reproductive years. Eighty-six percent of STDs occur among persons 15-29 years of age.

The health and economic costs of STDs are heightened because many STDs, especially those among women, produce no symptoms and can remain undetected until more serious health complications, such as pelvic inflammatory disease (PID) or cervical cancer, have developed [3]. STD clinics have served as the primary avenue for assessing disease patterns in high-risk groups and implementing control programs. Since most data about persons with STDs have been obtained from government STD clinics, little is known about patterns of seeking medical care for STDs outside of government clinics. NACO(National aids control organization) data based on STD clinic data may not provide reliable information about the treatment of STDs, because an estimated 30% - 40% of STD cases are treated outside of STD clinics.

Aim

1. To study the profile of patients in a STD clinic in North India.
2. To study various sexually transmitted infections in both male and female patients.

Sr no	Age distribution (years)	Number	Percentage %
1	11 - 20	108	4
2	21 - 30	1512	56
3	31 - 40	918	34
4	41 - 50	135	5
5	51 - 60	27	1
	TOTAL	2700	100

Table I. Age distribution of patients.

Sr no	Occupation	Number	Percentage %
1	students	540	20
2	farmers	270	10
3	housewives	810	30
4	labourers	270	10
5	female sex workers	540	20
6	unemployed	270	10

Table III. Occupation of patients.

Sr no	Sexually Transmitted Infections	Number	Percentage %
1	vaginal discharge	648	40
2	lower abdominal pain	324	20
3	herpes genitalis	243	15
4	syphilis	162	10
5	genital warts	162	10
6	genital molluscum	81	5
	TOTAL	1620	100

Table V. Sexually transmitted infections in female patients.

Material and Methods

A prospective study of the patients attending STD clinic in a district hospital in North India from December 2009 to December 2012 was done. A total of 2700 patients attending the STD clinic in three years from December 2009 to December 2012 were taken up for the study. Prior approval of hospital ethical committee was taken before the start of the study. The consent of patients was taken before the start of the study. All the patients were subjected to laboratory investigations including HIV & VDRL. In patients of vaginal discharge, KOH examination for fungus, whiff test, wet mount and gram stain was done in all the patients. In patients of urethritis, smear was made from urethral discharge and stained with grams stain.

Results

The data of all the patients was compiled and tabulated Tabl. I - IV).

Sr no	Sex Distribution	Number	Percentage %
1	females	1620	60
2	males	1080	40
	TOTAL	2700	100

Table II. Sex distribution of patients

Sr no	Sexually Transmitted Infections	Number	Percentage %
1	herpes genitalis	324	30
2	genital warts	216	20
3	gonorrhoea	108	10
4	non gonococcal urethritis	54	5
5	genital molluscum	108	10
6	syphilis	108	10
7	genital scabies	108	10
8	chancroid, donovanosis & LGV	54	5
	TOTAL	1080	100

Table IV. Sexually transmitted infections in male patients.

Discussion

There were total 2700 patients for this study. The commonest age group (56%) in our study was 21-30 years, followed by 34% patients in the age group of 31-40 years. Females outnumbered males and the female: male was 1.5:1. Regarding the occupation of the patients, housewives comprised 30% patients followed by students and female sex workers having percentage of 20% each. Farmers, labourers and unemployed persons formed 10% each of the total population. The commonest sexually transmitted infection in males was herpes genitalis (30%) followed by 20% cases of genital warts (Figs. 1, 2). 10% patients had gonorrhoea, genital molluscum contagiosum (Fig. 3), syphilis and genital scabies each and 5% patients had non gonococcal urethritis. Only 5% of the total patients had chancroid, donovanosis and LGV (Figs. 4, 5). The commonest sexually transmitted infection in females was vaginal discharge seen in 40% patients, lower abdominal pain in 20% patients, herpes genitalis in 15% patients followed by 20% cases of genital warts (Fig. 6) and syphilis each. Genital molluscum contagiosum (Fig. 7) was seen in 5% patients only. 40% of the patients were educated upto the tenth standard. 60% patients were from urban areas and 40%

patients were from rural areas. Out of the total of 1080 males, 35% of the males were involved in premarital sex and 24% had extramarital sex. Out of 1620 females, 10% were involved in premarital sex and 15% indulged in extramarital sex. 90% of the female patients were married whereas only 50% of the males were married. Out of all the patients 11% were HIV positive and 21% were VDRL positive.

In our study, females outnumbered males which is in contrast to the previous studies in which males exceeded females [4]. The reasons for increased female patients in our study may be due to the STD awareness campaign launched in our region. Second possible reason for increased female patients in our study might be due to the fact that the incharge of the STD clinic in the district hospital is a female consultant (STD specialist) and most of the male STD patients have certain inhibitions in getting themselves examined from a female doctor.

In addition to STDs awareness campaign already in progress, the invitation of sexual partners using partner notification cards in syndromic case management might have been responsible for increased number of male and female outpatients observed in this study.



Figure 1. Herpes genitalis in a 28 years old male patient.



Figure 2. Genital warts in a 20 years old male.

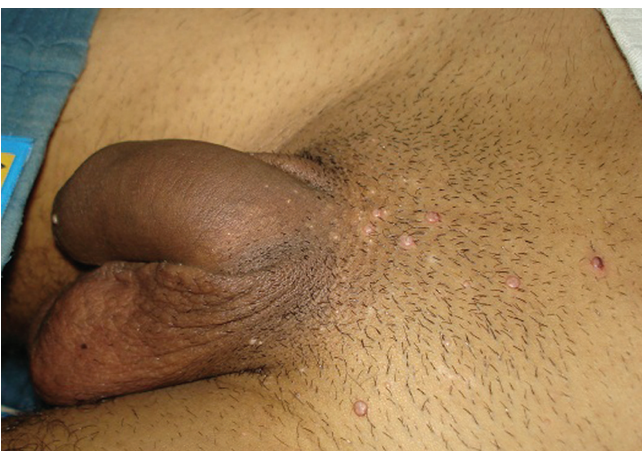


Figure 3. Genital molluscum contagiosum in a 30 years old male.



Figure 2. Iguinal bubo (LGV) in 37 years old male.



Figure 5. Multiple chancroidal ulcers in a 33 years old male.



Figure 6. Genital warts in a 17 years old female.



Figure 7. Genital molluscum contagiosum in a 35 year old female.

It was seen from our study that the trends of STD are more toward viral origin (e.g. genital herpes, warts or molluscum Contagiosum) as compared to bacterial origin (e.g. syphilis, chancroid). This is probably due to the fact that most of the bacterial and treponemal STDs are treated at the primary level by virtue of large number of currently available antibiotics and these organisms are responding to antibiotics [5,6]. Genital herpes is the second most prevalent STD worldwide and the commonest cause of GUD in the developed World. There has been a constant increase, both in the incidence and prevalence of genital herpes. The increasing incidence of genital herpes infection may be attributed to a decreased in the incidence of bacterial STD owing to their treatment at primary level and change in the pattern of sexual behavior [7].

The most commonly associated risk factor for the spread of sexually transmitted infections was multiple sexual partners.

Men reported that they had multiple partners because this practice supports their sense of masculinity [8-10]. Many other parts of the developing world, including South Asia where the HIV epidemic is now spreading rapidly, are having high rates of STDs as both HIV and STDs are closely interlinked, early diagnosis, treatment and control of STDs offers a rational approach to the control of HIV [11,12].

Conclusion

treatment of STD's is important as both non-ulcerative and ulcerative STDs increase the susceptibility to or transmissibility of HIV infection and as such, an increase in STD prevalence as revealed by clinic attendance in this study was bound to facilitate the spread of HIV/AIDS. Perhaps it is high time health planners adopted a more aggressive and result oriented HIV/AIDS/STD awareness campaign strategy.

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