

# Retrospective Study of Pattern of STDs in a Teaching Hospital

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## ABSTRACT

Various STDs are continued to be a public health problem in the people with promiscuity. Retrospective study of prevalence of different STDs was done based on the case records of the patients attending the STD OPD in the teaching Hospital during the period of January 2013 to October 2013. All these patients were clinically examined by the specialist and standard laboratory investigations were done except in the case Herpes virus infection which was clinically diagnosed. In this study 926 patients were diagnosed as suffering with STD were included. Details of age, gender and pattern of STDs are discussed.

**KEY WORDS :** Gonorrhoea, Syphilis, Candidiasis, Herpes genitalis

## Introduction

Sexually Transmitted diseases (STDs) are historically showing variable rates of prevalence in different age group of populations and different geographical parts of the country.[1-6] With increased migration of men and women to metros and big cities for jobs and higher studies, family values and control is lessened to some extent resulting

in liberal approach to pre marital and extra marital relationships. These factors have lead to an increasing trends of STDs among the people in various parts of the country. People from educated and employed category are also presenting with STDs. In view of casual relationships it is difficult to practice partner treatment and so the cycle of transmission is not tackled leaving the sources of infection in the community. Moreover, many people with common STDs remain asymptomatic and without diagnosis or even after diagnosis do not continue the full treatment. It is important to understand the profile of the people with STD in a particular region in order to devise appropriate control measures. The present study aimed to understand the profile of STDs and its pattern in a teaching Hospital catering to semi urban and rural people in this part of the country.

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## Material and methods

Case records of the 926 patients who attended the STD OPD in the teaching hospital during the period of January 2013 to October 2013 were taken for this study after obtaining the necessary ethical clearance. All these patients were diagnosed as suffering with STD after clinical examination and required laboratory diagnostic procedures were also done and the diagnosis was recorded. This sample consists of 579 males and 347 females. These patients were in the age group of 19 yrs to 54 years. The focus of this study was only on common STDs other than HIV infection and so the HIV status was not considered in this study.

## Results and discussion

Of the sample (n= 926) patients included in this study, males were more than females (Table.1). Males were 579 (62.53%) and females were 347 (37.47%). Males were more in all the age groups than females except in the age group of 26-30 years in which females were slightly more than males. Of these, highest number of patients 259 (27.97%) were in the age group of 26-30 years followed by 242 (26.13%) patients in the age group of 31-40 years and 216 (22.33%) patients in 19-25 years age group.

Table- I : Age and gender distribution seen in the study population

Age	Male	Female	Total
19-25 yrs	152 (16.42%)	64 (6.91%)	216 (22.33%)
26-30 yrs	122 (13.18%)	137 (14.80%)	259 (27.97%)
31-40 yrs	146 (15.77%)	96 (10.37%)	242 (26.14%)
41-45 yrs	79 (8.53%)	31 (3.35%)	110 (11.88%)
46-50 yrs	52 (5.62%)	13 (1.40%)	65 (7.02%)
Above51 yrs	28 (3.02%)	6 (0.65%)	34 (3.67%)
Total	579 (62.53%)	347 (37.47%)	926

Similar to the findings of other studies carried out in other parts of India[1,5,6] a majority of our patients (27.9%) were also in the age group

of 26 to 30 years with male preponderance. Although women are more vulnerable to STD, yet lower number of STD patients in the present series (37.4%) was perhaps due to their apprehension to come to teaching Hospital STD clinic. They may be taking treatment from quacks or from Gynecologists.[3]

Table- II : Pattern of STDs seen in the study population

Pattern of STDs	Gender		Total
	Male	Female	
Chancroid	113 (12.2%)	42(4.5%)	155 (16.7%)
LGV	71 (7.66%)	23(2.5%)	94 (10.1%)
Syphilis, Primary or Secondary	127 (13.7%)	62(6.7%)	189 (20.4%)
Gonorrhoea	93(10%)	48(5.18%)	141 (15.1%)
Donovanosis	46(4.96%)	14(1.5%)	60 (6.4%)
Candidiasis	69(7.4%)	96(10.4%)	165 (17.8%)
Herpes genitalis	32(3.4%)	23(2.4%)	55 (5.8%)
Genital warts	28(3%)	39(4.2%)	67 (7.2%)
Total	579 (62.53%)	347 (37.47%)	926

Table 2 shows the different types of STD's present in these patients. Syphilis was the most common STD (20.4%) followed by Candidiasis (17.8%) and Chancroid (16.7%) . Syphilis and chancroid were more predominant among males i.e 13.7% and 12.2% respectively whereas candidiasis was more common in females (10.4%).

In a similar study done by Bansal et al in Udaipur, the relative incidence of chancroid was found to be higher (37.7%) than syphilis (32.4%), followed by gonorrhoea (24.7%), mixed infections (3.38%), Donovanosis (1.1%) and lymphogranuloma venereum (0.3%).[7]

In another study done at Cuttack in Orissa, 516 patients with STD were analyzed during the period 1993 to 1994.[8] Herpes genitalis (21.89%) was found to be the commonest STD followed by syphilis (16.27%), chancroid (11.82%) granuloma inguinale (7.55%),

gonococcal urethritis and genital warts (3.87% each). LGV was found in 0.58% of cases, HIV infection in three cases only (0.56%). Other miscellaneous infections like candidiasis (13.75%), trichomoniasis (2.7%) and molluscum (2.14%) were responsible in 18% as a whole and nonspecific infection in 14%. A similar study done at Vadodara, Gujarat showed similar results recorded at Cuttack. In the year 1995-96, 460 (2.45%) STD cases were recorded in this center. Frequency of different STDs observed in descending order was herpes genitalis (28.82%), gonorrhoea (8.26%), Donovanosis (0.43%) and genital wart (8.9%). Other miscellaneous infections like candidiasis, trichomoniasis and molluscum constituted 18.47%.[9]

Sharma and Khandpur reviewed the changing patterns of different STD's (excluding HIV infection) in India and their various risk factors. It was observed that most of the published data are institution based. There is a paucity of community-based data, except for information obtained from high-risk groups such as commercial sex workers, truck drivers, hotel workers and drug abusers. From the literature search undertaken, it was observed that during the 1960s and 1970s, bacterial infections including syphilis, chancroid and gonorrhoea were the major STD's, compared to Viral STDs. [10]. However in the next two to three decades with HIV infection and Herpes genital infections pattern of STDs were changed in many parts of our country.

After HIV epidemic it was realized that STD control measures were to be strengthened. Different interventions were considered due to poor health facilities and financial constraints were considered as great hindrance in achieving the desired reduction in the prevalence of STDs. For better implementation, Govt. of India integrated the STD services into the existing health delivery system at PHC, taluk / area/community Hospital level.

Specialized STD clinics were sanctioned in District Hospitals besides strengthening treatment, teaching, training and research at teaching Hospitals. National AIDS Control Organization (NACO) has recommended the syndromic management of STDs and also STD infections in women are being taken up with more focus to be tackled under broad area of reproductive health[11-12].

With great awareness and focused interventions HIV epidemic is gradually coming under control but other STDs are still a problem and in some areas showing rising trends. This is because of large migration of young people with increased tolerance and indulgence to casual relationships. Further public are scared at HIV infection but they do not show such fear about other STDs. With jobs and sufficient income in the hands of youth they are behaving independent, that is driving them to promiscuity. Besides better organized STD control services it is important to educate the youth about dangers of casual relationships spreading the STDs and their complications. These intervention and education programs must go on regular basis for control of STDs.

## References

1. Jaiswal AK, Banerjee S, Matety AR, Grover S. 2006. Changing trends in sexually transmitted diseases in North Eastern India. *Indian J Dermatol Venereol Leprol* ;68:65-6.
2. Ramesh K, Shaula K. 1996. Sexually transmitted diseases in Bangalore city: Some finding from exploratory Study. *J Fam Welfare*; 42:30-7.
3. Bang RA, Bang AT, Baitule M, Choudhary Y, Sarmukaddam S, Tale O. 1989. High prevalence of gynecological diseases in rural Indian woman. *Lancet* ;1:85-8.
4. Gupta K. Nov 2005. Premarital sex? 53% do it in India, *The Pioneer*.
5. Zamzachin G, Singh NB, Devi TB. 2003. STD trends in regional institute of medical sciences, Manipur. *Indian J Dermatol Venereol Leprol*; 69:151-3.

6. Brajachond Singh NG, Zamzachin G, Lokendro Singh H. 1998. HIV infection among STD patients attending the RIMS hospital. *J Med Soc*;12:4-6.
7. Bansal KN, Khare KA, Upadhyay PO. 1988. Pattern of sexually transmitted diseases in and Around Udaipur. *Indian J Dermatol Venereol Leprol* ;54:90-2.
8. Mohanty J, Das KB, Mishra C. 1995. Clinical profile of sexually transmitted diseases in Cuttack. *Indian J Dermatol Venereol Leprol*;61:143-4.
9. Mishra M, Mishra S, Singh PC, Mishra B, Pande P. 1998. Pattern of sexually transmitted diseases at VSS Medical College. *Indian J Dermatol Venereol Leprol*;64:231-2
10. Sharma VK, Khandpur S. 2004. Changing patterns of sexually transmitted infections in India. *Natl Med J India* ;17:310-9.
11. National AIDS Control Organisation. Country scenario 1997-98. Ministry of Health and Family Welfare: New Delhi; 1998.
12. Hawks S, Santhya KG. 2002. Diverse realities: Sexually transmitted infections and HIV in India. *Sex Transm Infect* ;78:i31-9.
13. Aral SO, Mann JM. 1998. Commercial sex work and STD: The need for policy interventions to change societal patterns. *Sex Transm Dis* ;25:455-6.