

## Original Research Article

# Retrospective analysis of commonly prevailing sexually transmitted diseases among transgender who attended outpatient clinic in Govt. Vellore Medical College from 2008-2015

Dharmambal C.<sup>1\*</sup>, Somasundaram A.<sup>2</sup>, Balachander J.<sup>1</sup>, Vasanthamoorthy R.<sup>1</sup>

<sup>1</sup>Department of Dermatology, Government Vellore Medical College Hospital, Vellore 632011, India

<sup>2</sup>Department of Community Medicine, Stanley Medical College, Chennai, Tamil Nadu, India

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**\*Correspondence:**

Dr. Dharmambal C.,

E-mail: [cdharmambal@gmail.com](mailto:cdharmambal@gmail.com)

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### ABSTRACT

**Background:** TGs are considered to constitute an important risk group for the transmission of Sexually Transmitted Infections (STIs) and Human Immunodeficiency Virus. High levels of STIs are predominant among TG sex workers due to unsafe sex practices. A study was conducted to describe the prevalence of sexually transmitted infection among Transgender who attended the outpatient clinic of Dermatoveneroleprology department for over 7 years and describe the contributing factors associated with sexually transmitted infections among transgender as there is a scarce data available about it.

**Methods:** Retrospective study carried out on 123 transgender who attended the sexually transmitted disease clinic at Government Vellore Medical College and Hospital during the period 2008-2015.

**Results:** Most of the transgender have active sexual life. 44% of them were having unprotected sex. Anal sex practice is more prevalent (88%). 25% reported one or other symptoms of sexually transmitted infection. 10.5% were reactive for syphilis and 11% reactive for HIV.

**Conclusions:** A high reported prevalence of sexually transmitted infection exists despite many intervention policies adopted by the health system time to time. Implementation strategies to promote awareness among Transgender to access health care at the earliest time of appearance of symptoms and also periodical check-up may help to diagnose sexually transmitted infections at the early stage. Awareness and behavioral change on safe sex practices are the important needs in preventing sexually transmitted infections.

**Keywords:** Transgender, Sexually transmitted diseases, HIV, Unsafe sex

### INTRODUCTION

Transgender is an umbrella term for all people whose internal sense of their gender is different from their sex they were assigned at birth.<sup>1</sup> TGs are considered to constitute an important risk group for the transmission of Sexually Transmitted Infections (STIs) and Human

Immunodeficiency Virus.<sup>2</sup> In the HIV AIDS control prevention programme strategies TGs are given special focus. Also STD prevention and control is a strategic component among HIV prevention Strategies. Many studies have revealed that high levels of STIs are predominant among TG sex workers.<sup>1</sup> Often TGs present with STIs due to various factors such as unsafe sex

practices, high risk behaviors, non accessibility, stigma, discrimination.<sup>1</sup> We conducted a study in our clinical setting to describe the profile of Transgender attending STD Outpatient Clinic and to describe the STI pattern among TGs who attended OPD in our department over 7 years.

**METHODS**

We did a retrospective analysis of the case records and registers of the transgender who attended the STD outpatient department of Government Vellore Medical College, Vellore during the period from 2008 to 2015. Records of 123 transgender who attended the STD OPD were analysed. White cards maintained for the Sexually Transmitted infection cases were used as source data. Informed consent was obtained from the clients who wilfully accepted. Statistical analysis was done with Epi info software.

**RESULTS**

The minimum age of the transgender in our study data was 18 and maximum was 60 (Table 1). Majority (54%) of them completed High School and 7% were illiterate. The proportion of unemployed transgender and working as coolie were 28% and 18% respectively. Collection of money from public was observed as livelihood in 38 %. 41 persons of the transgender were married. Almost all denied premarital sex. Most of them have active sexual life. 34% of them had been involved in sex with unknown persons. 93% of them had circumcision.

A considerable proportion (44%) of the transgender was having unprotected sex. While analysing the type of sex they practice, it is seen that anal sex practice is more prevalent (58%). 25% reported one or other symptoms of STI.

**Table 1: General characteristics of transgender who attended STD clinic.**

	N=123	Proportion	95% CI
<b>Age*</b>			
18-24	48	39.0	(30.4 - 48.3)
25-34	46	37.4	(28.9 - 46.6)
35-44	17	13.8	(8.3 - 21.2)
Above 45	12	9.8	(5.2 - 16.5)
*Minimum 18 and maximum age 60			
<b>Education</b>			
Illiterate	9	7.3	(3.4 - 13.5)
Primary	23	18.7	(12.3 - 26.8)
High School	67	54.5	(45.3 - 63.5)
Higher Secondary	22	17.9	(11.6 - 25.9)
Degree	2	1.6	(0.2 - 5.8)
<b>Occupation</b>			
Dancer	3	2.4%	(0.6 - 7)
Mason	9	7.3%	(3.4 - 13.5)
Coolie	23	18.7%	(12.3 - 26.8)
Temple Staff	3	2.4%	(0.6 - 7)
Fruit Seller	4	3.3%	(0.9 - 8.2)
Collection**	46	37.4%	(28.9 - 46.6)
Unemployed	35	28.5%	(20.7 - 37.3)
** Collection as reported by them, in tollgates, trains, temples, other public places of gathering			
<b>Marital Status</b>			
Married	41	33.3	(25.1 - 42.4)
Separated	1	0.8	(0.1 - 4.5)
Unmarried	81	65.9	(56.8 - 74.2)

**Table 2: Type of sexual practices and safe sex behavior.**

	N=123	Proportion	95% CI
<b>Oral Sex</b>	42	34.2	(25.9 - 43.3)
<b>Anal Sex</b>	58	47.2	(38.1 - 56.4)
<b>Thigh Sex</b>	20	71.4	(51.4 - 86.8)
<b>Oral and anal sex</b>	9	7.3	(3.4 - 13.5)
<b>Anal and thigh sex</b>	8	53.3	(26.6 - 78.8)
<b>Protected sex</b>	69	56.1	(46.9 - 65.1)
<b>Unprotected sex</b>	54	43.9	(35 - 53.2)

**Table 3: Sexually transmitted infections identified.**

	N=123	Proportion	95% CI
Urethral discharge	2	1.6	(0.2 - 5.8)
Herpes genitalis	5	4.1	(1.4 - 9.3)
Scabies	3	2.4	(0.6 - 7)
Perianal Warts	7	5.7	(2.4 - 11.4)
Oral candidiasis	14	11.4	(6.4 - 18.4)
Molluscum Contagiosum	14	11.4	(6.4 - 18.4)
Asymptomatic	92	74.8	(66.2 - 82.2)
Urethral discharge	2	1.6	(0.2 - 5.8)
<b>Laboratory confirmed Reactive for HIV/syphilis</b>			
Reactive for Syphilis	13	10.6	(5.8 - 17.4)
Reactive for HIV	14	11.4	(6.4 - 18.4)
Reactive both for HIV and Syphilis	6	4.9	(1.9 - 10.4)

They were tested for syphilis and HIV, and 10.5% and 11% were reactive respectively. Majority (89%) of the transgender came for visits only during the routine medical check-up and not when they develop symptoms and 81% had reported as new STI infections.

Odds of clinic attendants with history of oral sex is 7 times among the clinically symptomatic patients than clinically asymptomatic and it is significant at 5% level [OR 7.1 (CI 2.9 – 17.4)]. Odds of clinic attendants with history of oral sex is 4 times among syphilis reactive than syphilis non-reactive and it is significant at 5% level [OR 3.6 (CI 1.1 – 11.7)].

Exposure variables education status, marital status, protected sex, method of sex (anal, thigh) with outcome variables of clinically symptomatic, lab confirmed

Syphilis and HIV positive were not statistically significantly associated at 5% level.

**DISCUSSION**

In this paper we have attempted to describe the scenario of the sexually transmitted infections among transgender attending our hospital outpatient department. Despite many intervention strategies adopted by health services as per the NACO guidelines transgender morbidity with respect to sexually transmitted infections and HIV seems to be high. Sexually Transmitted Infections (STI) and Reproductive Tract Infection (RTI) enhance chances of acquiring and transmitting HIV infection by 4 to 8 times; hence control and prevention of STI/RTI is a key prevention strategy for HIV.



**Figure 1: Perianal molluscum contagiosum.**



**Figure 2: Intraoral wart.**



**Figure 3: Molluscum contagiosum.**

The intervention strategies for the transgender include High Risk Group care, routine medical check-up, condom distribution, health education etc. NACO in its NACP IV has mentioned that the startling rates of HIV among Transgender are one of the challenging situations. As per

the NACO guidelines all core HRGs should be tested for HIV once every six months.



**Figure 4: Vaginal reconstruction.**



**Figure 5: Perianal wart.**



**Figure 6: Oral candidiasis.**

We found a considerable proportion of transgender attendees are suffering from symptomatic STDs or reactive for syphilis. This is consistent with a study report



in Mumbai and southern states of India.<sup>3,4</sup> Aravanis in Chennai reported 72% had at least one potentially sexually-acquired viral infection i.e. 48% tested positive for HSV-1; 29% for HSV-2; and 7.8% for Hepatitis-B.<sup>5</sup> The common STI prevalent among Transgender population are Syphilis, Gonorrhoea, Scabies, HIV and HPV.<sup>6</sup> Similarly Perianal warts, Scabies, oral candidiasis were more seen in our study participants.



**Figure 7 (a): Syphilis.**



**Figure 7 (b): Syphilis.**



**Figure 8: Oral herpes infection.**



**Figure 9: Oral herpes.**

The prevalence of STIs among transgender high in number seems to be due to unsafe sex practices without condoms and high number oral and anal sex practices. A publication on sexual risk of transgender people in Tamil Nadu sample of IBBA reported that consistent condom use with male casual partners increased from 18% in IBBA-1 to 51.5% in IBBA-2 (which was not statistically significant), and last time condom use declined significantly with male paying partners.

High rates of STI/RTI have been observed in commercial sex settings where condom use rates are variable and access to effective STI/RTI treatment services are limited. Genital or peri anal warts are more common in Transgender and similar high risk populations.<sup>9</sup> We observed a high prevalence of perianal warts in our setting.

The TGs are socially suffering due to stigma and discrimination and that desist them from seeking health care services. It is also important to cater for STI management needs of TG population groups. Emergence of anal and oral STI is a cause for concern. Health care providers should be sensitive to the needs of the MSM, TS/TG population groups.<sup>7</sup>

Though many comprehensive health services have evolved over years for general public, however for TGs, STI and HIV services remain the only available source of healthcare and that too in limited places.<sup>8</sup> Sexually transmitted infections are considered to be the gateway for HIV infection. Unsafe sex practices prevail high among TGs despite many interventional strategies. This is reflected in the form of high STI. TGs access health services only when they are taken to the institutions as part of the routine medical check-up. TGs do not approach health services on their own probably due to discrimination and stigma. Our analysis has revealed unsafe sex practices and late reporting to the clinic only when they come for the routine medical check-up.

## CONCLUSION

A high reported prevalence of sexually transmitted infections exists despite many intervention policies adopted by the health system time to time. As there are limited data on transgender morbidity needs, assessment of the Transgender in health care services is essential. Fulfilling the felt needs will help in early identification of sexually transmitted infections and thereby reduction in the HIV prevalence also in this high risk group.

Implementation strategies to promote awareness among TGs to access health care, at the earliest time of appearance of symptoms and strengthening the periodical check-up will help to pick up STI at the early stage. Awareness and behavioural change on safe sex practices are also important in preventing sexually transmitted infections.

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