

A study of behavioral and disease patterns among transgenders in a tertiary care center

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Abstract

Introduction: Transgenders are a group whose sexual identity, orientation, and practices differ from majority of the society. **Aim:** The aim of the study is to highlight the presence of infectious and noninfectious dermatological and venereal diseases among transgender population. **Materials and Methods:** A retrospective study was conducted on 120 transgender patients who attended DVL OPD from January 2011 to April 2015. The demographic profile, behavioral patterns, and prevalence of infectious and noninfectious dermatological and venereal diseases were studied. **Results:** All transgenders were male to females. Almost 46.6% (56) of transgenders belonged to age group 21-30, 25% (30) to 11-20 and 30-40, and 3.4% to >40 years. Nearly 61.3% (74) completed high school, 14.7% (18) graduation, 12% (14) primary school, 9% (10) higher secondary, and 1.3% (2) were illiterate and postgraduates each. All had multiple sex partners at certain point of time, of which 25% (31) are now committed to a single partner and 15% (19) involved in commercial sex. The safe sexual practice was followed by 68% (84). Among sexual practices, oral contributed 97.3% (117), anal 92% (110.4), finger 9% (11), thigh 6% (7), and vaginal 24% (28.8). Of 120 patients, 63.3% (76) had infectious diseases, 42.5% (51) had noninfectious diseases, and 5.9% (7) had both. Nearly 76.3% (58) had infectious dermatological diseases 76.3 (58) and 23.7% (18) had venereal infections. Noninfectious dermatological diseases accounted for 96.1% (49) and venereal diseases for 4% (2). **Conclusion:** There was relatively lower prevalence of infectious venereal diseases among transgender population, attributable to the good level of awareness among them.

Key words: Behavioral patterns, dermatological infections, sexual practices, transgenders, venereal infections

INTRODUCTION

Transgender persons are biological males who dress and socially behave as females, whose identity or behavior fall outside the usual stereotype gender norms. This group is often stigmatized and may use sex for a living.^[1] Transgenders constitute an important group for the transmission of sexually transmitted infections (STIs).^[2,3] They are usually included under males having sex with men category, throughout the world, including India. Worldwide,

transgender people are marginalized and go through high levels of social exclusion and challenges. They are unable to achieve their full health potential as it is limited in to a number of settings by laws that criminalize same-sex relationships and sexual/gender diversity^[4]. Our study is to highlight the prevalence of infectious and noninfectious dermatological and venereal diseases among the transgender patients who attended the transgender clinic.

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MATERIALS AND METHODS

All the 120 transgender persons, irrespective of emasculation status and/or attire, who had attended the transgender clinic were included in the study. Key elements of the study such as (i) Demographic information comprising the (a) patient age, (b) educational status, and (c) marital status; (ii) sexual orientation and history of last sexual contact; (iii) sexual practices; (iv) chief complaint of presentation; and (v) serological results of HIV and venereal disease research laboratory were analyzed and studied in a retrospective manner from the hospital records. Percentage analysis was done to determine the demographic patterns and to study the prevalence of infectious and noninfectious dermatoses among the transgender persons.

RESULTS

All transgenders were male to females. A majority of the patients belonged to age group 21-30 years constituting 46.6% (56) of the population, followed by the age group 11-20 and 30-40 years each constituting 25% (30). The least amount was from the age group >40 years forming 3.4% of the population. The youngest patient was 16 years old and the oldest was 56 years old [Figure 1].

Among the 120 transgenders, 77 (64.3%) of them were educated upto high school, 18 (14.7%) had completed graduation, 12 (10.5%) had completed primary schooling, 9 (7.8%) were educated upto higher secondary, 2 (1.3%) had completed post-graduation, and 2 (1.3%) were illiterates [Table 1].

All the 120 (100%) transgenders were passive partners with men they maintained casual sexual relationship with. They have had multiple sex partners at certain point of time, of which 25% (31)

are now committed to a single partner and 15% (19) involved in commercial sex work.

Of the 120 patients, 95% (114) indulged in fellatio-oral intercourse, 93% (111) practiced anal intercourse, and 41% indulged in unprotected receptive anal intercourse, 11% practiced non penetrative form of sex, where the partners' penis was placed between their two fingers and 8% (10) nonpenetrative sex between thighs and 22% (26) of the transgenders practiced unprotected vaginal intercourse with their female partners [Table 2].

Of 120 patients, 63.3% (76) had infectious disease, 42.5% (51) had non-infectious disease, and 5.9% (7) had both. Of 76 patients with infectious diseases, 76.3% (58) had dermatological and 23.7% (18) had venereal infections [Figure 2].

Of 58 patients with dermatological infections, fungal infections were highest accounting for 68.9% (40), 12% (7) for bacterial infections, 12% (7) for parasitic

Table 1: Educational status of the transgenders

Educational status	Percentage
High school	64.3
Graduation	14.7
Primary school	10.5
Higher secondary	7.8
Post graduation	1.3
Illiterates	1.3

Table 2: Distribution of sexual practices

Sexual Practices	Frequency	Percentage
Oral	114	95
Anal	111	93
Anal receptive	50	41
Fingers	13	11

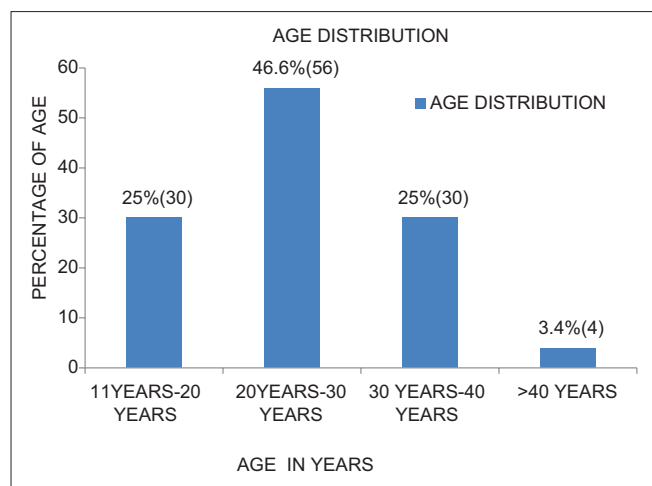


Figure 1: Age distribution of transgenders

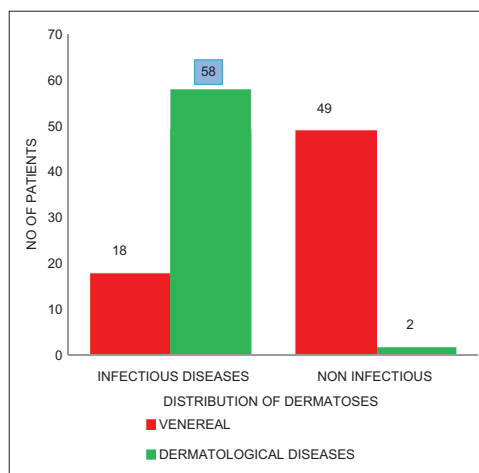


Figure 2: Prevalence of infectious dermatological and venereal diseases

infections and least with viral infections attributing 6.9% (4). Among 18 venereal infections, 55.6% (10) patients had viral [Figures 3 and 4], 22.2% (4) fungal, 16.7% (3) parasitic, and 11.1% (2) had bacterial infections [Figures 5 and 6].

Noninfectious dermatological diseases accounted for 96.1% (49) and venereal diseases for 4% (2). Among the dermatological diseases, acne vulgaris was highest with 32.6% (16), 30.6% (15) of them had eczema, followed by 10.2% (5) transgenders with lichen planus. About 6.1% (3) of the remaining transgenders had psoriasis vulgaris, urticaria, pruritus, acanthosis nigricans, keloid, and aphthous stomatitis each [Table 3].

Of two patients with non-infectious venereal dermatoses, both had benign pearly penile papillomatosis.

All the 120 patients were negative for HIV infection.

DISCUSSION

Transgender is an international umbrella term for individuals who relate to and/or behave sexually in

a manner different from their birth sex. They often express discomfort with their biological gender.^[5,6] Transgenders broadly include the following groups: (1) Transsexuals, (2) transgenderist, (3) bigenderist, (4) transvestites and (5) drag queens or kings.^[7]

In India, the estimation of high risk men who have sex with men and transgender population is about 4.27 lakhs. The transgender community forms a diverse group of population. Due to varying cultural and social differences and patriarchal society, many transgenders do not expose their sexual identity and even get married. These transgenders constitute an important bridge for transmission of HIV or other STI to the population.^[8,9]

All the 120 patients in our study identified themselves as male to female. In our study, we provide data on demographic profile, behavioral patterns, and prevalence of infectious and noninfectious dermatological and venereal dermatoses among the 120 transgender patients.

One of the demographic characteristics we observed from the study was that maximum number of



Figure 3: Condyloma acuminata 1



Figure 4: Condyloma acuminata 2

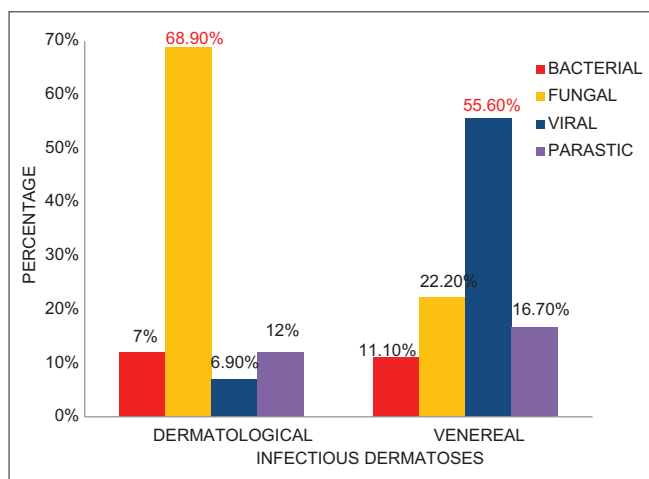


Figure 5: Distribution of dermatological and venereal diseases

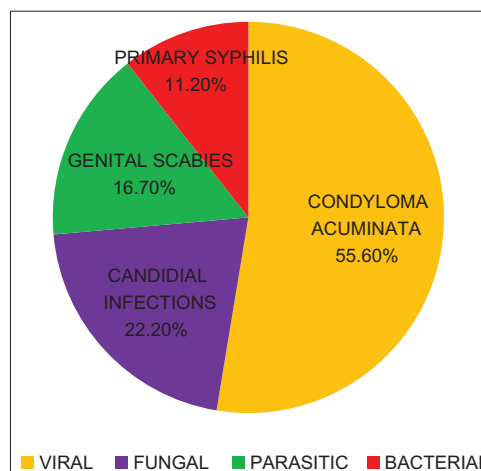


Figure 6: Distribution of venereal infections

Table 3: Distribution of noninfectious dermatological and venereal diseases

Dermatological	Percentage	Venereal dermatoses	Percentage
Acne vulgaris	32.6	Benign	100
Eczema	30.6	pearly penile papillomatosis	
Lichen planus	10.2		
Psoriasis vulgaris	6.1		
Urticaria	6.1		
Pruritus	6.1		
Acanthosis nigricans	6.1		
Keloid	6.1		
Aphthuous stomatitis	6.1		

patients belonged to the age group 21- 30 years and the mean age of transgenders in our study was 27.4 years. Indian studies by Setia *et al.* Brahman *et al.* also observed similar findings.^[10,11] These data suggest that majority of patients from this community who presented to hospitals belonged to younger age group.

The majority of our patients had completed high School whereas only 1.3% were illiterates. Chakrapani *et al.* also reported similar findings where over half of their patients had completed high school.^[12] Higher education and income can attribute to lesser likelihood in unprotected receptive anal intercourse.^[13]

Only 15% indulged in commercial sex work which was low compared to the reports from other studies by Shinde *et al.*, Chakrapani *et al.*, and Khan *et al.*, where the majority of patients were commercial sex workers which was their primary source of income^[11,13] and limits their ability to negotiate their protection terms.

A sexual practice where the partner's penis was inserted between two fingers was reported among 11% was unique to our study and has been reported in only in one other study by Shinde *et al.* where 64% practiced the same. All 120 patients have had multiple partners which was consistent with all other studies that have multiple partners.

Infectious dermatological diseases with a majority of fungal infections were more prevalent among the study group. Tinea cruris and tinea corporis of the dermatophytic infections were the most common dermatological infections seen. The other most common infections were scabies among the parasitic, verruca vulgaris the most common viral infection, and folliculitis among the bacterial infections.

Among the venereal infections, viral infections were more prevalent with condyloma

acuminata (55.6%) being the most common disease followed by candidal balanoposthitis and perianal intertrigo (22.2%) and genital scabies (16.7%). One of the interesting findings in our study was that the highest prevalence of venereal viral infections could be significantly attributable to the sexual practice followed by them. The second most common sexual practice in the study group was anal route, and the most common viral infection noted was condyloma acuminata of the perianal region.

Two patients were diagnosed with primary syphilis and were treated for the same. Shinde *et al.* reported a 32% prevalence of STI in their study, with a majority of perianal warts and genital scabies similar to our study. Our study results were inconsistent with Khan *et al.* where there was a high prevalence of syphilis, chlamydia, and gonorrhoea.^[14]

Noninfectious dermatological diseases were noted in 49 patients. Acne vulgaris (32.6%) was the most common dermatoses followed by eczema (30.6%). In our study, lichen planus and psoriasis vulgaris contributed each 10.2% and 3%, respectively.

CONCLUSION

Sex workers are among the key populations to transmit HIV and other STIs due to multiple factors, including a large number of sex partners, unsafe working conditions, and barriers to consistent condom usage. Transgenders who are involved in commercial sex act as a bridge for unnoticed transmission of STI among vulnerable population in a community.

An elaborate study on the behavioral patterns and various sexual practices among the transgenders is important to understand the contexts within which sex work occurs, the power structures surrounding it, and their social needs. Knowledge of both clinical and demographic profile of the STI population helps provide technical recommendations to actively support the development of effective intervention programs that are transgender targeted.

Training on interacting with transgender people should be made available to health-care professionals to help remove barriers and increase the level of service for the transgender population. Proper healthcare facilities for transgenders on both psychological and physical health grounds helps remove the emotional strain dealt due to stigma and promptly improve their quality of life. Many studies have shown lower prevalence of STI, HIV, lower-risk behaviors which may be attributed to

higher education and income with less chances of indulging in sex work. Transgenders targeted effective intervention programs have the potential to both improve the health of individual sex workers and slow STI transmission among vulnerable populations.

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Conflicts of interest

There are no conflicts of interest.

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