



# A Study on Depression among Transgender Residing In Chennai District, Tamil Nadu

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## ABSTRACT

**Introduction:** In India, transgender population is one among the stigmatized and discriminated sector who face a lot of psychological problems due to their gender identity and lack of support. The study was done with the major objective to find out the prevalence of depression and the associated factors among transgender people residing in Chennai district.

**Methodology:** This is a descriptive cross-sectional study done among 178 transgender residing in Chennai district selected by snowball sampling method. Patient Health Questionnaire – 9 was used to assess the prevalence of depression and semi-structured questionnaire was used to collect details regarding associated factors. Data was analyzed using SPSS version 22.

**Results:** The prevalence of depression among the present study was found out to be 76.8%. The major factors associated with depression were found to be lack of family and social support, faced violence due to discrimination and involvement in sex work which had a statistically significant association.

**Conclusion:** Outreach camps have to be conducted among transgender population to screen for common mental health problems like depression and provide counseling to them and identify their problems and measures can be taken to address the same.

**Keywords:** mental health, hijra, gender identity, stigma, suicide

## INTRODUCTION

Transgender can be considered as a term which refers to people who do not have a strict adherence to cultural definitions of gender.<sup>1</sup> It includes both transsexual women and men, or persons who undergone surgery to alter their genitals in order to match the gender they wish to match or even persons who possess a gender identity other than the one by birth but do not wish to undergo gender alteration surgeries.<sup>2</sup>

One among the common mental health problems affecting the general population is depression.<sup>3</sup> Research shows that transgender individuals are 6 times to suffer from depression or anxiety disorders compared to the general population and they are at

increased odds of attempting suicide requiring hospitalization.<sup>4</sup>

In developing countries like India, transgenders are called as Hijras. Most of the transgenders leave their homes once they attain their puberty. This action may be either voluntary or due to factors related to family and society.<sup>5</sup> Most of hijras are alienated from their society and families despite the notion that they bring good luck to families and functions. They are feared and stigmatized, and they are mostly underprivileged for the rest of their lives.<sup>6,7</sup>

The major factors which can cause depression among transgenders may include distress associated with gender identity, discrimination and stigma,

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abuse and lack of social and family support.<sup>8</sup> Though transgender people could identify that they suffer from mental health problems are reluctant to seek medical help due to their notion that health professionals will be biased towards transgender clients.<sup>9</sup>

Intimate partner violence and abuse is another major factor which can cause depression among the transgenders. In India, due to the fear of stigma and discrimination, many transgenders never disclose their gender identity until marriage. Their spouses and partners when they come to know of this, abuse them and exploit their fear making threatening remarks that they will disclose their gender identity.<sup>10</sup> These may cause them to develop stress, anxiety, and depression which if not treated can lead to suicidal ideation among them leading to significant mortality and morbidity.

Considering this background, this study was done among transgenders residing in Chennai district to estimate the prevalence of depression among them and also to find out the factors associated with depression among the study participants.

## METHODOLOGY

This was a descriptive cross-sectional study conducted in remote areas of Chennai district among transgender people above 18 years of age.

**Sample Size Calculation and sampling method:** In a study done by Budge S et al, the prevalence of depression was found to be 55%.<sup>11</sup> Taking this as P and applying in the formula  $4PQ/L^2$ , the required sample size was calculated as 145. Accounting for 10% non-response the required sample size was rounded off to 160. As per logistics and availability of transgenders, 178 people were included in the present study.

As per the convenience of the researcher and the available logistics, transgender people residing in Chennai district were selected by snowball sampling method. Among the hotspots in Chennai, where transgenders reside, one of them was contacted and details were collected about the whereabouts of others. Each of the communities was visited and details were collected until the required sample size was reached.

**Data Collection:** Data was collected by the principal investigator using a pre-tested structured questionnaire to collect the socio-demographic details and variable related to depression. Depression was assessed by English version of Patient Health Questionnaire – 9 (PHQ-9). A cut-off score of above 8 is indicative of some amount of depression among the individuals. It is a validated tool to assess depression with good validity and reliability.<sup>12</sup>

**Ethical clearance and Informed Consent:** Ethical approval was obtained from the Institutional Ethical

Committee of the private medical college and informed consent was obtained from the study participants before including them in the study.

**Data analysis:** Data was entered and analyzed by SPSS version 25. Descriptive statistics was used to represent data in form of tables. Analytical statistics like chi-square was used to find the association between depression and the related variable.

## RESULTS

Majority of the study participants were above 30 years of age (65.1%). Around 63.3% of the study participants have studied only up to high school and 51.5% have been employed in various sectors of jobs. (Table 1)

Regarding substance abuse, 92.9% of the study participants do not consume tobacco in any form. Around 18.9% consume alcoholic beverages and 89.9% of the participants consume a mixed diet. (Table 2)

Among the sociodemographic variables, unemployment and tobacco consumption were found to have a statistically significant association with depression ( $P < 0.05$ ). Those who were unemployed have 2.76 times increased odds of suffering from depression (OR – 2.76, 95% CI – 1.29-5.91) and those who did not consume tobacco have 7.8 times increased odds of suffering from depression (OR – 7.81, 95% CI – 2.21-27.58). (Table 3)

**Table 1: Socio demographic details of the study participants**

Variable	Participants (%)
<b>Age of the study participant</b>	
<30 years	59 (34.9)
>30 years	110 (65.1)
<b>Education of the study participant</b>	
Graduate/Postgraduate	62 (36.7)
Up to High school	107 (63.3)
<b>Occupation of study participant</b>	
Unemployed	82 (48.5)
Employed	87 (51.5)

**Table 2: Lifestyle related factors of the study participants**

Variable	Participants (%)
<b>Consumption of Tobacco in any form</b>	
Yes	12 (7.1)
No	157 (92.9)
<b>Consumption of alcoholic beverages</b>	
Yes	32 (18.9)
No	137 (81.1)
<b>Diet pattern</b>	
Mixed Diet	152 (89.9)
Vegan Diet	17 (10.1)

**Table 3: Association between depression and socio demographic variables**

Variable	Depression		Chi-Square	P Value	Odd's Ratio	95% CI
	Yes (%)	No (%)				
<b>Age of the study participant</b>						
<30 years	43 (72.9)	16 (27.1)	0.597	0.44	0.75	0.36-1.55
>30 years	86 (78.2)	24 (21.8)				
<b>Occupation of study participant</b>						
Unemployed	70 (85.4)	12 (14.6)	7.19	0.007*	2.76	1.29-5.91
Employed	59 (67.8)	28 (32.2)				
<b>Consumption of tobacco in any form</b>						
No	125 (79.6)	32 (20.4)	13.12	0.00*	7.81	2.21-27.58
Yes	4 (33.3)	8 (66.7)				
<b>Consumption of alcoholic beverages</b>						
Yes	21 (65.6)	11 (34.4)	2.5	0.114	0.51	0.22-1.18
No	108 (78.8)	29 (21.1)				

**Table 4: Association between depression and related variables**

Variable	Depression		Chi-Square	P Value	Odd's Ratio	95% CI
	Yes (%)	No (%)				
<b>Family supportive on sexual orientation</b>						
No	67 (84.8)	12 (15.2)	5.9	0.015*	2.52	1.18-5.38
Yes	62 (68.9)	28 (31.1)				
<b>Social Support</b>						
No	110 (80.9)	26 (19.1)	7.98	0.005*	3.11	1.38-7.02
Yes	19 (57.6)	14 (42.4)				
<b>Faced violence due to discrimination</b>						
Yes	101 (80.8)	24 (19.2)	5.3	0.021*	2.4	1.12-5.13
No	28 (63.6)	16 (36.4)				
<b>Economic stability</b>						
No	106 (80.3)	26 (19.7)	5.26	0.022*	2.48	1.12-5.47
Yes	23 (62.2)	14 (37.8)				
<b>Involved in sex work</b>						
Yes	105 (83.3)	21 (16.7)	13.43	0.000*	3.95	1.94-8.48
No	24 (55.8)	19 (44.2)				

On bivariate analysis, the major risk factors for developing depression among the study participants were found to be no family support on sexual orientation, no social support, non-acceptance among family members, economic instability, involvement in sex work and all those associations were found to be statistically significant ( $P < 0.05$ ). Highest odds of developing depression were found among those with no social support (OR – 3.11, 95% CI – 1.38-7.02) and those who were involved in sex work (OR – 3.95, 95% CI – 1.94-8.48) (Table 4)

## DISCUSSION

Transgenders are one among the minority population in the country. The health problems faced by them are unexplored because they are hard to reach and difficult to interview. Depression is one among the major psychosocial problems faced by them because they seldom get the respect in the society.

From the present study the prevalence of depression was found to be 76% among the study participants. In a study done by Budge SL et al almost, 55% of the transgender suffered from depression.<sup>11</sup> In a study done by Bocking WO et al, the prevalence of depression was found to be 44.1%.<sup>2</sup> In a study done by Clements-Nolle K, the prevalence was found to be

63%.<sup>13</sup> This higher prevalence of depression among the transgenders may be caused due to a variety of factors, from problems in family, workspace to problems related to sexuality and discrimination they face especially in developing countries like in India.

In the present study, social support was one among the factors which had a statistically significant association with depression among transgenders. Social support is the availability of persons in one's circle to whom they can go for their emotional and mental needs without any kind of inhibition. Family support is one among the social support which is seldom seen as the family members won't accept the transitioning and reject the transitioning person. Similar findings were found in studies done by Nuttbrock C et al and Barrington C et al in which lack of family support was found among transgenders causing mental health problems like depression among them.<sup>14,15</sup> In the present study, unemployment was found to be associated with depression. A study done by N. Rondoni G et al in Canada found that unemployment was a major risk factor for depression among transgenders as lack of steady income may have been a stressor as transgenders seldom get jobs with good income due to the discrimination they face.<sup>16</sup>

Sex work is one major sources of income for the transgenders due to the discrimination they face in

the workplace. Around 67% of the transgender population would have been involved in sex work at some point in their lives. In the present study those involved in sex work were found to be more depressed compared with those who were not involved in any sex work. Several studies done among transgenders reported to have no association between sex work and depression.<sup>17-19</sup> In a study done by Nomoto T et al, the study participants reported that they had to take drugs to overcome the stress associated with sex work.<sup>19</sup> This association has to be further explored with further research to establish the causal association if any between transgender and sex work.

Violence among transgender women may be categorized into physical, verbal and psychological abuse which maybe in the form of verbal harassment. In this study, depression was found to be more prevalent among those who faced any kind of violence and there was also a statistically significant association found between them. Nuttbrock et al, in their study states that, violence among transgenders will take a toll on their sense of wellbeing and lower their confidence and self-esteem.<sup>14</sup> In a study done by L Nuttbrock et al among transgenders found that, violence against transgenders were found to be an important predictor of depression.<sup>20</sup> In developing countries like India, where transgenders are always looked down in the community, violence is common against them. Strict laws must enact and enforced to protect the transgenders from all sorts of violence.

## CONCLUSION

The high prevalence of depression found among transgenders in the present study and role played by lack of social and family support indicates that transgender community is at a greater risk of developing the various complications linked to depression, which may range from co-existing psychosocial morbidities like anxiety and stress to non-communicable diseases like diabetes and hypertension. Measures have to be taken to address the same among various transgender communities by Health education and awareness creation especially among those involved in sex work.

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