

Prevalence and sociodemographic correlates of depressive symptoms among transgenders

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Abstract

Objective: To determine the prevalence of depression amongst the transgender community and assess the relationship of socio-demographic features with depression.

Study design: Cross-sectional study.

Place and Study duration: Rawalpindi/Islamabad, Pakistan. Oct to Dec 2016

Materials and Methods: The studied population accounted for one hundred and forty-two transgender persons. The psychometric assessment was done with Beck depressive inventory II (BDI-II) to evaluate depressive symptoms. The sample was categorized as having no, mild, moderate, and severe depressive symptoms. The presence of depressive symptoms was also studied for its relationship with the age of the persons, smoking habits, financial status, illicit substances use, and educational history in the transgender community of Islamabad/Rawalpindi, Pakistan.

Results: Among the 142 studied participants mean age was found 39.55 ± 6.18 . Among them 45.1% didn't have symptomatology suggestive of Depression, However, 31.7% had mild symptoms, 12.7% had moderate and 10.6% were having severe symptoms suggestive of depression. Using Binary logistic regression, it was concluded that the presence of symptoms suggesting depression was having a significant association with the use of illicit substances.

Conclusion: The study revealed a high prevalence of depressive symptoms in the transgender of Rawalpindi/Islamabad. The use of Illicit substances like tobacco, cannabis, opiates, and alcohol should be prohibited and those using these should be routinely screened for the presence of other mental health issues to timely diagnose and treat them.

Keywords: Depression, Socio-demographic factors, and transgenders.

Introduction

Depression has been observed as one of the most common diagnoses among mental health disorders around the world irrespective of race and religion.¹ The same pattern is observed in the population of Pakistan and depression is the topmost mental health problem and mostly goes unrecognized.² Other than the financial impacts on the society, this illness if remains unrecognized and thus untreated can lead to detrimental consequences including physical ailments, psychotic depression, and tendencies for suicides.³⁻⁵

The transgender community includes all those persons having disorders related to gender identity and preference. ICD-11 has devised a new term gender incongruence which encompasses all these gender-related problems faced by a large portion of our community. Transgender or gender dysphoria has been defined in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), as distress resulting from the incongruence between one's experienced gender and one's assigned gender, along with a persistent and strong desire to be of another gender, and accompanied by clinically significant distress.^{6,7} The prevalence of the transgender population was found to 3.9% in the United States as revealed by studies in the general population.⁶ General Census of 2017 in Pakistan has shown that the size of this community is more than 10000 trans-genders living in Pakistan. The main health issues in this community are related to HIV, the use of illicit substances and mental health problems, and also depression.^{7,8}

The trans-gender population is more vulnerable and has been affected by a depressive illness more as compared to the normal population all over the world. Studies revealed that the US transgender population has been exposed to abuse and increased risk of depression as compared to the population without gender identity issues.⁹ Another similar study done in Cambodia revealed results similar to the US study and further observed that and violence are more prevalent in this group of population.¹⁰ In addition to depression or other neurotic illness psychosis was also more common in trans-genders.¹¹ Various causative factors are responsible for the increased prevalence of mental health issues in the transgender population but the stigma related to this population in society has a strong association with mental health disorders.¹²

Various factors have been proposed not only responsible for the presence of symptoms but also linked with the severity of depressive symptoms

amongst the transgender population. They include different types of physical and sexual violence activities, lack of family support, younger age, substance abuse, and stigmatization in society. These contributory factors make the individual more prone directly or indirectly towards the development of depressive symptoms.^{13,14}

The religious and socio-cultural environment in our country has secluded trans-genders and added to the stigma associated with them.^{15,16} Most of them could not avail of the academic and employment opportunities and work as beggars or sex-workers.¹⁵ Therefore they are predisposed to a variety of health problems including HIV.¹⁷ A few research studies are being conducted on their mental health conditions in our setup therefore to fill this gap in literature this study was designed to assess the presence and correlates of depressive symptoms amongst the transgender community of Rawalpindi and Islamabad.

Materials and Methods

Approval from the ethical review board was obtained from the ethical review board committee of the institute and informed consent was obtained from the participants of the study. The sample was collected using a non-probability consecutive sampling technique. The trans-genders at Chandni chowk and F-10 Markaz in the given duration were initially enrolled. Exclusion criteria were formulated and those who were under 18 years of age or those having chronic conditions like Diabetes Mellitus, Hypertension, Ischaemic heart diseases, or those who had a medical or surgical history for Gender identity issues or those having a history of psychiatric illnesses were excluded.

Beck Depression Inventory (BDI): A validated tool to assess the presence or absence of depressive symptoms and their severity. The BDI-II (Beck, Steer, & Brown, 1996) is a standardized tool that comprises of 21 questions assessing the affective, cognitive, motivational, vegetative, and psychomotor aspects of depression. Therefore, it comprehensively covers all the dimensions of depression. The Questionnaire was used in the Urdu version which is validated in the population of our country in this study.¹⁸ All 21-items were graded from 0 to 3 in four categories.

Procedure: The participants were enrolled in the study after the initial screening of the inclusion and exclusion criteria of the study. After informed consent, all persons were evaluated clinically by history taking and clinical examination to rule out chronic illnesses

which may become confounding variables in the study. To assess the presence of depressive symptoms, Beck Depressive inventory was used. The questions asked were for the presence of these symptoms in the past two weeks. A separate performa was used for details of socio-demographic factors. For ethical reasons, privacy and confidentiality were ensured.

Statistical analysis: For analyzing the association of risk factors in trans-genders with the presence of depressive symptoms descriptive statistics was used. The population sample was categorized based on no, mild, moderate, and severe depressive symptoms. Variables studied are age, smoking, family income, illicit substance use, and education. The relationship between the presence of suicidal attempts was evaluated using binary logistic regression analysis. Statistics Package for Social Sciences version 24.0 was used for statistical analysis. *p*-values of less than or equal to 0.05 were considered significant.

Results

160 transgender were initially enrolled for participation in the study. Among them, 2 participants refused and not consented, 16 were excluded for meeting exclusion criteria (07 had a history of medical and/or surgical history for gender identity disorders, 04 had Diabetes mellitus, 01 had hypertension, 02 had a history of mood disorders, 02 were of low IQ since birth).

142 participants were finally enrolled and were evaluated. The mean age was found at 39.55 ± 6.18 . Among them, 45.1% didn't have depressive symptoms. 31.7% had mild depressive symptoms, 12.7% had moderate and 10.6% had severe symptoms of depressive illnesses. Chi-square was applied and it revealed that tobacco smoking and illicit substance use was related to the presence of depressive symptoms. (Table 1). While using binary logistic regression, revealed that the presence of symptoms of depression is significantly associated with the use of illicit substances in the transgender population. (Table 2).

Table 1: General characteristics of the trans-genders participating in the study

Socio-demographic factors	N0 depressive symptoms (0-9)		Mild Depressive symptoms (10-16)		Moderate Depressive symptoms (17-29)		Severe Depressive Symptoms (30-63)		p-value
	N	%	N	%	N	%	N	%	
Total	64	45.1	45	31.7	18	12.7	15	10.6	
Age									
<50 years	28	43.7%	18	40%	07	38.9%	07	46.7%	0.949
50 years or more	36	56.3%	27	60%	11	61.1%	08	53.3%	
Education									
Matriculate or more	27	42.2%	09	20%	08	44.4%	07	46.7%	0.051
Less than matriculate	33	57.8%	36	80%	10	55.6%	08	53.3%	
Smoking									
No	28	43.7%	11	24.4%	12	66.6%	07	46.7%	0.014
Yes	36	56.3%	34	75.6%	06	33.4%	08	53.3%	
Illicit substance use									
No	56	87.5%	28	62.2%	08	44.4%	07	46.7%	<0.001
Yes	08	12.5%	17	37.8%	10	55.6%	08	53.3%	

Family income									
Less than outgoing	06	12.5%	03	6.7%	01	5.6%	02	13.3%	
More than or equal to outgoing	58	87.5%	42	93.3%	17	94.4%	13	86.7%	0.829

Table 2: The correlated factors relating to the presence of depression among the trans-genders of twin cities of Pakistan: the binary logistic regression analysis

	p-value	Odds ratio	Confidence interval	
			Lower	Upper
Age(ref. is <50 years)	0.369	1.425	0.658	3.085
Illicit substance use (reference is No use)	0.000	6.677	2.689	16.577
Smoking (ref. is no smoking)	0.359	1.433	0.664	3.092
Family income (ref. is more than or equal to outgoing)	0.940	0.952	0.261	3.472
Education (ref. is less than matriculate)	0.275	1.534	0.712	3.304

Discussion

The transgender population has been affected by social stigma and prejudices for ages. They have never remained part of the mainstream population in any culture. These issues have made them vulnerable to various medical and psycho-social problems including depressive illness. The study is done to assess the presence and severity of depressive symptoms amongst this specific group of population which has been living with a clear social disadvantage since known. Even the general population of Pakistan has a high prevalence of mental health problems including major depressive disorder.¹⁹ Use of standard psychometric tools in assessing depression has shown that depressive symptoms were present in the transgender community in a larger number in comparison to other populations. The studies already done on trans-genders in other countries have also shown similar results. This group of community is still kept deprived of their civic rights even in the western countries in the current era.^{9,10} Stigma in society, social injustice in, unemployment, and lack of educational facilities for this community may be accounted for the reasons for depression in this community.¹⁶ Various studies already done have shown that stress, presence of anxiety, depressive symptoms, and other similar

mental health issues are strongly related to suicidal tendencies in this community.^{6,9} This could be alarming and raise red flags for our mental health professionals and policymakers as a huge number of trans genders are found to be sufferers of depressive symptoms in our study and most of them have no access to management which means increased predisposition towards lethal complication like suicide. A slight increase in presence of mental health issues in this study in comparison to similar studies done in developed countries may be explained based on compromised socioeconomic conditions or extreme stigmatization based on religion and culture in our country which is less prevalent in other developed countries in people with gender identity disorders.¹⁶ Lack of empathy and assessing individuals on judgmental approaches in general in our society and in particular the attitude towards the transgender community have increased the stigmatization and thus mental health problems in our society to a much larger extent.

Various studies already done in other countries have shown age as found related to the presence of depression in the trans-genders.^{20,21} But this study did not show this relation. This may be due to the reason that the transgender community usually resides separately from the rest of the community and usually, the elder member is assigned the role as head of the group of transgender persons and is therefore

exempted from financial responsibilities of earning for himself rather he has been assigned administrative roles of managing individuals who are working and earning for him which may act as a protection from mental health problems.

Financial status when evaluated based on income generated on monthly basis was found unrelated to depressive symptoms in our study. These results were different from the existing literature.^{12,20} Most of the participants of our study were also found earning to the extent to meet their livelihood. This is because most of them work as beggars, sex workers, or commercial dancers at weddings or functions. Though they might earn well work satisfaction may need to be studied among them to understand this phenomenon in detail.

The presence of depression in this study has shown a strong association with illicit substances use like opiates, cannabis, benzodiazepines, organic solvents, or other similar substances. Studies done in past showed similar results.^{13,21} Illicit substance use may prone the individual towards depression due to biological factors or may be linked with more self-harm, personality problems, emotional instability, and poor stress coping. Further studies with bigger sample size and better sampling techniques are required to analyze further.

This study has limitations due to the sampling technique and the small sample size. Because of these limitations in the sampling technique, the findings of this study cannot be applied to the whole transgender community of the country. It was a questionnaire-based study instead of a clinical interview so another limitation aroused which is depressive symptoms were assessed rather than depression as a clinical diagnosis. Larger studies with improved study design and incorporating local religious and cultural factors may produce more accurate and generalizable results.

Conclusion

The prevalence of depressive symptoms was observed high amongst the transgender population of Rawalpindi/Islamabad. Illicit substances use like tobacco, opiates, cannabis, and alcohol should be dejected as they were found strongly associated with depressive symptoms in this population, and those using these should be enrolled routinely in screening programs for mental health issues to timely diagnose and treat them.

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