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Study Of Perceived Discrimination, Social Support, Anxiety, And Depression In Patients With Gender Dysphoria

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Abstract

Aim: The study aimed to assess the levels of perceived discrimination, social support, anxiety, and depression among patients with gender dysphoria and to explore the associations between these factors.

Materials and Methods: A cross-sectional study was conducted over 12 months at S.S.G. Hospital, Vadodara, including 40 patients aged 18–45 years diagnosed with gender dysphoria as per DSM-5 criteria. Perceived discrimination was assessed using the DISC-12, social support with the MSPSS, and severity of anxiety and depression with the HAM-A and HAM-D scales, respectively. Data analysis was performed using MedCalc and Epi Info 7.1, with a p-value <0.05 considered significant.

Results: Perceived discrimination was moderate in 47.5% of participants, while 27.5% reported low social support. Anxiety and depression were prevalent in 65% and 38% of participants, respectively. A significant association was found between perceived discrimination and anxiety (p=0.04), and between low social support and depression (p=0.0017).

Discussion: Patients with gender dysphoria were found to have high levels of psychiatric comorbidities linked to experiences of discrimination and inadequate social support. These psychosocial stressors contribute significantly to their mental health burden.

Conclusions: The findings highlight the need for preventive strategies focusing on enhancing social support, reducing discrimination, promoting societal awareness, and strengthening mental health services for individuals with gender dysphoria.

Keywords: Gender dysphoria, perceived discrimination, social support, anxiety, depression

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Introduction

In recent times, there has been a huge discussion going around the world regarding gender dysphoria. Gender dysphoria is a complex and deeply personal experience characterized by a profound sense of discomfort, distress, and disconnection between an individual's gender identity and biological sex.(1)

People with gender dysphoria can face discrimination in various areas of their lives, including employment, education, transport, legal services, social interactions, health services, housing, etc.(2) it can have a negative impact on the mental health of individuals. Persistent discrimination may lead to social isolation, avoidance of social gatherings, and reluctance to seek personal and professional growth opportunities. Perceived discrimination in the context of gender dysphoria refers to the subjective experience of being treated unfairly or negatively because of one's gender identity or expression.(3)

Social support, defined as providing resources from others perceived beneficial to a recipient, is as essential for gender dysphoric individuals as it is for others. Social support has been reported to be related to higher psychological resilience, whereas the perceived level of discrimination is inversely correlated. Large-scale studies on the relationship between discrimination and stigmatization experiences and mental problems emphasize the protective role of social support, especially from peers. Experiences of familial acceptance or rejection among transgenders play an important role in shaping their lives.(4)

In studies conducted with different sampling and evaluation methods, the prevalence of mental disorders associated with stress (especially major depression and anxiety disorders) has been reported

higher in individuals with gender dysphoria compared to the general population.(4)
Given the high risk of depression, anxiety, and suicidality among transgender people, there is a pressing need to characterize mental health and its influencing factors better. In light of the restricted knowledge in this area, this study aimed to investigate the prevalence of depression and anxiety, the effect of perceived discrimination and social support, and to explore the determinants of depressive symptoms and anxiety symptoms among patients with gender dysphoria.

Aims and objectives

- To assess the level of perceived discrimination and social support in patients with gender dysphoria.
- To assess anxiety and depression in patients with gender dysphoria.
- To find the association between the level of perceived discrimination, social support, anxiety, and depression in patients with gender dysphoria.

Materials and Methods

A cross-sectional study was conducted over 12 months, from 19th August 2023 to 19th July 2024, at S.S.G. Hospital, Vadodara, after obtaining approval from the Institutional Ethics Committee for Human Research (IECHR) of Medical College and S.S.G. Hospital, Vadodara (approval dated 09/08/2023). Forty consecutive patients aged 18–45 years, diagnosed with gender dysphoria as per DSM-5 criteria, and providing informed consent were enrolled. Patients were excluded if they lacked a reliable informant, had substance use disorders (except nicotine use disorder), or suffered from other psychiatric illnesses.
Participants were informed about the study through a participant information sheet, and consent was obtained either in writing or verbally in the presence of an attendant. Data were collected using a pretested questionnaire available in English, Hindi, and Gujarati, and filled in the patient's preferred language before translation into English for data entry. The questionnaire included socio-demographic details, perceived discrimination, perceived social support, and severity of anxiety and depression symptoms. Study tools included the Discrimination and Stigma Scale (DISC-12), the Multidimensional Scale of Perceived Social Support (MSPSS), the Hamilton Anxiety Rating Scale (HAM-A), and the Hamilton Depression Rating Scale (HAM-D). DISC-12 Subscale-1 measured unfair treatment experiences on a 4-point Likert scale, with higher scores indicating greater discrimination. MSPSS assessed perceived social support from family, friends, and significant others, scored from 1 to 7, where higher scores reflected stronger support. HAM-A evaluated anxiety severity, categorized as normal (0–13), mild (14–17), moderate (18–24), or severe (25–30). HAM-D assessed depression severity, categorized as normal (0–7), mild (8–13), moderate (14–18), severe (19–22), or very severe (≥23).
The study maintained confidentiality and privacy throughout. Patients identified with clinically significant anxiety or depression were offered appropriate treatment at the Department of Psychiatry, Medical College Baroda. Data were coded, checked for completeness, and entered into Microsoft Excel 2021. Analysis was performed using MedCalc and Epi Info 7.1 software. Quantitative variables were tested for normality using histograms and the D'Agostino-Pearson test, summarized as mean (standard deviation), and compared using the t-test. Qualitative variables were expressed as percentages and compared using the chi-squared test. A p-value <0.05 was considered statistically significant.

Results

Table 1: Sociodemographic details of study participants (n=40)

Variables	Frequency (n= 40)	Percentage (%)
Gender (biological sex)		
Female	5	12.5%
Male	35	87.5%
Marital status		
Divorced	4	10.0%
Married	15	37.5%
Single	21	52.5%
Education		
Illiterate	1	2.5%
Primary level	10	25.0%
Secondary level	18	45.0%
Graduate	11	27.5%
Religion		
Hindu	33	82.5%
Muslim	7	17.5%
Type of family		
Joint family	16	40.0%
Living alone	11	27.5%
Nuclear family	13	32.5%

Table 1 shows mean age of the patients included in this study was 36.18 ± 10.58 years. The table provides a comprehensive overview of demographic characteristics for a sample of 40 gender dysphoric individuals. Regarding demographic factors, gender distribution shows that the majority of the sample are biological males (87.5%), with biological females making up 12.5%. Marital status indicates a significant majority of single participants (52.5%), followed by married (37.5%) and divorced (10.0%). In terms of Education, the largest group has a secondary level education (45.0%), followed by graduates (27.5%), those with primary level education are 25.0%, and a small percentage are illiterate (2.5%). The predominant religion is Hinduism (82.5%), with a smaller proportion identifying as Muslim (17.5%). Regarding types of family, participants are divided among joint families (40.0%), those living alone (27.5%), and nuclear families (32.5%).

Table: 2 Level of perceived discrimination & social support in study participants (n=40)

Perceived discrimination (disc-12 score in % for subscale 1)	Frequency	Percentage (%)
≤33% 33 to 66% >66%	15 21 4	37.5% 47.5% 15%
Social support (mspss score in %)	Frequency	Percentage (%)
High Moderate Low	13 16 11	32.5% 40% 27.5%

Table 2 shows the distribution of perceived discrimination and levels of social support among the study participants (n=40). Based on the DISC-12 Subscale 1 scores, 37.5% of participants reported low perceived discrimination (≤33%), 47.5% experienced moderate perceived discrimination (33–66%), and 15% reported high perceived discrimination (>66%). Regarding social support measured by the MSPSS, 32.5% of participants reported high social support, 40% had moderate social support, and 27.5% experienced low levels of social support.

Table: 3 Prevalence & severity of anxiety & depression in study participants (n=40)

Prevalence (%)	Present	Absent
Anxiety Depression	65% 38%	35% 62%
Severity (%)	Mild	Moderate
Anxiety Depression	42.31% 80%	57.69% 20%

Table 3 shows the prevalence and severity of anxiety and depression among the study participants (n=40). Anxiety was present in 65% of participants, while 35% showed no symptoms of anxiety. Depression was present in 38% of participants, whereas 62% did not report depressive symptoms. Among those with anxiety, 42.31% had mild anxiety and 57.69% had moderate anxiety. Among participants with depression, 80% had mild depression and 20% had moderate depression.

Table: 4 Association between level of perceived discrimination and anxiety among study participants (n=40)

	Anxiety			
Perceived discrimination	Yes	No	Total	Chi-square test
≤33%	12 (30%)	3 (7.5%)	15 (37.5%)	P=0.04
33 to 66%	13(32.5%)	8 (20%)	21 (52.5%)	
>66%	1 (2.5%)	3 (7.5%)	4 (10.0%)	
Total	26(65.0%)	14(35.0%)	40	

Table 4 shows the association between the level of perceived discrimination and the presence of anxiety among the study participants (n=40). Among those with low perceived discrimination (≤33%), 30% had

anxiety, whereas among those with moderate perceived discrimination (33–66%), 32.5% had anxiety. In the high perceived discrimination group (>66%), only 2.5% reported anxiety. The association between perceived discrimination and anxiety was found to be statistically significant (p=0.04).

Table: 5 Association between level of social support and depression among study participants (n=40)

	Depression			
Social support	Yes	No		Chi-square test
High support	3 (8.57%)	10 (28.57%)	13 (32.5%)	P= 0.0017
Low support	9 (25.71)	2 (5.71%)	11 (27.5%)	
Moderate support	3 (8.57%)	13 (37.14%)	16 (40.0%)	
	15 (37.5%)	25 (62.5%)	40	

Table 5 shows the association between the level of social support and the presence of depression among the study participants (n=40). Among participants with low social support, 25.71% had depression compared to 8.57% of those with moderate support and 8.57% with high support. A majority of those without depression reported moderate or high social support. The association between lower levels of social support and the presence of depression was found to be statistically significant (p=0.0017).

Discussion

This study utilized a cross-sectional analytical approach to ascertain the prevalence of depression and anxiety, as well as the impact of perceived discrimination and social support. Additionally, it aimed to explore the factors that contribute to depression and anxiety symptoms in individuals with gender dysphoria. We recruited a 40 individuals with gender dysphoria who provided written informed consent to participate in this study.

Perceived discrimination

The data obtained using disc-12 scale showed that nearly half of the participants perceive a moderate level of discrimination (33 to 66%), while a smaller proportion experiences either low (≤33%) or high (>66%) levels of perceived discrimination. Higher perceived discrimination in gender dysphoria can be attributed to various factors like societal stigma, limited knowledge about gender dysphoria, transphobia, and discrimination by healthcare providers. We found a significant statistical correlation between the patients with gender dysphoria who had high perceived discrimination and the presence of anxiety. However, no statistical significance was found between the presence of depression and the level of perceived discrimination, which suggests that apart from discrimination there might be multiple factors contributing to the mental health of gender dysphoric individuals like employment, social support, stress, quality of life, etc. The study by Hasan s. Et al. 2017 showed that 62.3% of respondents had high perceived discrimination, and 64.1% had low self-esteem.(5) the cross-sectional study included 106 male-to-female gender dysphoria patients with an age range of 18-45 years, out of which 44.3% and 59.6% had depression and anxiety, respectively. The study found a statistically significant correlation between employment, perception of discrimination, self-esteem, family support, stress, and quality of life.

Social support

In the present study, it has been revealed that 32.5% of transgender patients received high levels of support based on the mspss scale, whereas 40% received moderate support, and 27.5% received low support. Lack of social support in gender dysphoric individuals can be due to societal stigma, rejection by family and friends, cultural beliefs, transphobia, and social isolation. We found a significant statistical correlation between the patients with gender dysphoria who had low social support and the presence of depression. However, no statistical significance was found between the presence of anxiety and the level of social support.

The latent profile analysis conducted by j. A. Puckett et al. 2019 included 695 participants who completed an online survey. For the assessment of social support mspss scale was used. The study showed that 47.1% of the sample indicated high levels of support from all domains, while just 6.7% reported low support.(6) additionally, they also found that most transgender individuals (89.4%) who lacked overall support reported moderate to severe anxiety symptoms and were three times more likely to report severe anxiety symptoms compared to the high support class.

A transgender resilience intervention model study conducted by matsuno e. Et al. 2018 indicated an association between family support and resilience. Therefore, it could be that family support helps transgender people bounce back from adversities by providing a safe and supportive “home base.”(7)

Depression and anxiety

In the present study, it was found that the prevalence of depression and anxiety was 37.5% and 65%, respectively, among transgender individuals, and among them, 30% and 7.5% showed mild and moderate levels of depression, and 27.5% and 37.5%

showed mild and moderate levels of anxiety respectively. However, no statistical correlation was found between sociodemographic variables and depression and anxiety. The higher prevalence of anxiety and depression in gender dysphoria can be attributed to various factors, such as low self-esteem, a sense of negative well-being, childhood trauma, violence, discrimination, rejection by family, low social support, difficulty in finding employment, and accessing healthcare services due to societal stigma.
A cross-sectional study conducted by k clements-nolle et al. 2006 reported the prevalence of depression among transgender individuals was as high as 62%, which was also higher than our study.(8) One more study conducted by andré hajek et al. 2023 showed that depression was observed in 33.3% of transgender people, and anxiety was found in 29.6%.(9) A comparison study conducted by konrad et al. 2020 analysed a total of 535 transgender people, 535 non-transsexual women, and 535 non-transsexual men. It showed that depression was documented in 20% of transgender people versus 7.7% of non-transsexual women and 5.5% of non-transsexual men. Moreover, this study identified anxiety disorders in 5.8% of transgender people versus 1.9% of non-transsexual women and 1.6% of non-transsexual men.(10)

Conclusion

The present study highlights that patients with gender dysphoria often experience significant levels of perceived discrimination and inadequate social support. Psychiatric comorbidities, particularly anxiety and depression, were highly prevalent among the study participants. A significant correlation was observed between perceived discrimination and anxiety, while lower levels of perceived social support were significantly associated with depression. These findings emphasize the urgent need for preventive measures aimed at increasing public awareness, enhancing social support systems, reducing stigma and discrimination, and strengthening mental health services tailored to the needs of individuals with gender dysphoria.

Limitations

This study had several limitations. Due to time constraints, a cross-sectional design was adopted; a longitudinal study could have provided more comprehensive insights. Many participants were reluctant to disclose sensitive information because of the stigma surrounding gender dysphoria, which may have influenced the findings. Additionally, the results cannot be generalized beyond the study population, as no control group was included for comparison. Furthermore, important medical comorbidities such as diabetes, hypertension, and HIV were not assessed, which may have had an impact on the psychiatric and psychosocial outcomes.

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