

Assessment of Depression, Anxiety and Suicidal Ideation Among Transgenders

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Abstract: ***Background:** Transgender individuals face significant mental health challenges due to social stigma, discrimination, and marginalization. Limited research exists on the prevalence of depression, anxiety, and suicidal ideation among transgender populations in India. **Objective:** To assess the prevalence and severity of depression, anxiety, and suicidal ideation among transgender individuals in North India. **Methods:** A hospital-based cross-sectional study was conducted at Mahatma Gandhi Medical College and Hospital, Jaipur, from June 2024 to December 2024. Eighty-five transgender individuals aged 18-65 years were recruited through purposive sampling. Participants were assessed using the Hamilton Depression Rating Scale (HAM-D), Hamilton Anxiety Rating Scale (HAM-A), and Suicide Behaviours Questionnaire-Revised (SBQ-R). Data were analyzed using descriptive statistics and correlation analysis. **Results:** The study sample had a mean age of 27.1 ± 6.6 years, with 65.9% being male-to-female transgender individuals. Clinically significant depression (HAM-D > 7) was found in 94.1% of participants, with 34.1% having severe depression. Clinically significant anxiety (HAM-A > 17) was present in 50.6% of participants. Suicidal ideation (SBQ-R > 6) was identified in 22.4% of participants. Strong positive correlation was observed between depression and anxiety scores ($r = 0.930, p < 0.001$). **Conclusion:** Transgender individuals demonstrate alarmingly high rates of depression and substantial prevalence of anxiety and suicidal ideation. These findings underscore the urgent need for targeted mental health interventions and supportive care for this vulnerable population in India.*

Keywords: Transgender, Depression, Anxiety, Suicidal ideation, Mental health

1. Introduction

Transgender individuals represent one of the most marginalized populations globally, facing significant discrimination, social exclusion, and health disparities. In India, despite recent legal recognition and policy changes including the Transgender Persons (Protection of Rights) Act 2019, transgender individuals continue to experience substantial social, economic, and healthcare challenges. The transgender population in India is estimated to be approximately 490,000 individuals, though this may be an underestimate due to social stigma and reluctance to disclose gender identity.^{[1][2][3][4]} Mental health issues among transgender populations have been documented extensively in Western countries, with studies reporting significantly higher rates of depression, anxiety, and suicidal behavior compared to the general population. However, research specifically focusing on the mental health of transgender individuals in the Indian context remains limited, with most studies concentrating on HIV risk behaviors or general healthcare access rather than comprehensive mental health assessment.^{[5][6][7][8]}

The few available Indian studies have reported concerning mental health statistics among transgender individuals. A pilot study from South India found that 100% of transgender participants had significant depressive symptoms, and 73.3% had attempted suicide at least once. Another recent study from Telangana reported depression prevalence of 72.9% and suicidal ideation in 50.3% of transgender participants. These findings highlight the critical need for systematic assessment of mental health conditions in this population.^{[9][10]} Depression, anxiety, and suicidal ideation are interconnected mental health conditions that significantly impact quality of life and functional outcomes. Among transgender individuals, these conditions are often exacerbated by minority stress,

including rejection by family and society, employment discrimination, and inadequate healthcare access. The minority stress model provides a framework for understanding how chronic stress related to stigmatization and discrimination contributes to mental health disparities in sexual and gender minorities.^{[11][12][13][14]}

2. Methodology

This was a hospital-based, cross-sectional, observational study conducted at the Department of Psychiatry, Mahatma Gandhi Medical College and Hospital, Jaipur, Rajasthan, India. The study was conducted over a six-month period from June 2024 to December 2024. Transgender individuals seeking healthcare services at the hospital were approached for participation. Recruitment was conducted through purposive sampling technique. Primary objective of the study was assessing the prevalence and severity of depression, anxiety, and suicidal ideation among transgender individuals attending a tertiary care center in North India. Secondary objectives included determining the demographic characteristics of the study population and examining correlation between depression, anxiety, and suicidal ideation. The study included transgender individuals aged 18-65 years who were willing to provide informed written consent. Individuals already on psychotropic medications were excluded. Based on previous studies reporting depression prevalence of 70-80% among transgender populations, with 95% confidence interval and 10% margin of error, a minimum sample size of 85 participants was calculated and achieved.

A semi-structured questionnaire was used to collect demographic information including age, gender identity, education level, employment status, and relevant clinical history. Hamilton Depression Rating Scale (HAM-D 17), a

17-item clinician-administered scale was used for assessing depressive symptoms.^{[15][16]} Hamilton Anxiety Rating Scale (HAM-A) was used for evaluating anxiety symptoms.^{[17][18]} Suicide Behaviours Questionnaire-Revised (SBQ-R) was used to assess suicidal ideation, plans, attempts, and communication of suicidal intent.^[19] Data were analyzed using SPSS version 25.0. Descriptive statistics were calculated for demographic variables and scale scores. Prevalence rates were calculated with 95% confidence intervals. Pearson correlation coefficients were computed to examine relationships between continuous variables. Statistical significance was set at $p < 0.05$. The study was approved by the Institutional Ethics Committee of Mahatma Gandhi Medical College and Hospital. All participants provided written informed consent, and confidentiality was maintained throughout the study.

3. Results

A total of 85 transgender individuals participated in the study. The mean age was 27.1 ± 6.6 years (range: 18-42 years). The majority of participants (65.9%, $n=56$) identified as male-to-female transgender, while 23.5% ($n=20$) identified as female-to-male, and 10.6% ($n=9$) identified as non-binary. Regarding education, 27.1% ($n=23$) had completed higher secondary education, followed by 25.9% ($n=22$) with graduate degrees. Employment status showed that 34.1% ($n=29$) were self-employed, 32.9% ($n=28$) were unemployed, and 17.6% ($n=15$) worked in the private sector. Notably, 8.2% ($n=7$) were engaged in sex work. The mean HAM-D score was 20.42 ± 10.84 (range: 4-50), indicating moderate depression severity on average. The mean HAM-A score was 18.39 ± 8.25 (range: 4-42), suggesting mild-to-moderate anxiety levels. The mean SBQ-R score was 4.35 ± 2.69 (range: 0-12).

Depression severity distribution showed that 94.1% ($n=80$) of participants had clinically significant depression (HAM-D > 7). Specifically, 43.5% ($n=37$) had mild depression, 16.5% ($n=14$) had moderate depression, and 34.1% ($n=29$) had severe depression. Only 5.9% ($n=5$) showed minimal or no depression symptoms. Clinically significant anxiety (HAM-A > 17) was found in 50.6% ($n=43$) of participants. The distribution showed 49.4% ($n=42$) with mild anxiety, 24.7% ($n=21$) with mild-to-moderate anxiety, 18.8% ($n=16$) with moderate-to-severe anxiety, and 7.1% ($n=6$) with severe anxiety. Strong positive correlation was observed between depression and anxiety scores ($r = 0.930$, $p < 0.001$). Moderate correlations were found between depression and suicidal ideation ($r = 0.084$) and anxiety and suicidal ideation ($r = 0.090$). Age showed weak negative correlations with both depression ($r = -0.224$) and anxiety ($r = -0.149$) scores, suggesting that younger participants tended to have higher symptom scores. Male-to-female transgender individuals showed slightly higher mean depression scores (21.2 ± 11.1) compared to female-to-male individuals (18.9 ± 9.8) and non-binary individuals (19.1 ± 10.2). Similar patterns were observed for anxiety scores, though these differences were not statistically significant in this sample.

4. Discussion

This study provides important insights into the mental health status of transgender individuals in North India, revealing

alarmingly high rates of depression, substantial anxiety, and concerning levels of suicidal ideation. The findings are consistent with previous research from India and other countries, highlighting the significant mental health burden faced by this marginalized population.^{[9][10][20]}

The 94.1% prevalence of clinically significant depression found in this study is consistent with the 100% prevalence reported in the Poguri et al. pilot study from South India. This extremely high prevalence, with over one-third experiencing severe depression, underscores the critical mental health needs of transgender individuals in India. The high depression rates likely reflect the cumulative impact of minority stress, social rejection, discrimination, and limited access to appropriate healthcare services.^{[10][20][19][9]} The 50.6% prevalence of clinically significant anxiety aligns with global studies reporting anxiety rates of 29-75% among transgender populations. The strong correlation between depression and anxiety scores ($r = 0.930$) suggests these conditions frequently co-occur, which is consistent with established patterns in mental health research. This comorbidity has important implications for treatment planning and clinical management.^{[5][13][21]} The 22.4% prevalence of significant suicidal ideation, while concerning, is lower than the 31-73% rates reported in some other Indian studies. However, any level of suicidal ideation in this population requires immediate clinical attention. The relatively lower correlation between suicidal ideation and depression/anxiety scores suggests that suicidality may be influenced by additional factors beyond mood symptoms, such as social isolation, victimization, or access to means.^{[19][22][9]}

The predominance of male-to-female transgender individuals (65.9%) in the sample reflects patterns seen in clinical settings globally. The relatively young mean age (27.1 years) and high unemployment rate (32.9%) highlight the socioeconomic challenges faced by this population. The negative correlation between age and symptom severity suggests that younger transgender individuals may be at particularly high risk for mental health problems, possibly due to recent disclosure, family rejection, or social transition challenges.^{[23][24]}

These findings have several important clinical implications. First, routine mental health screening should be implemented for all transgender individuals seeking healthcare services. Second, integrated care models addressing both physical and mental health needs should be developed. Third, specific training for healthcare providers on transgender-affirmative care is essential to reduce healthcare discrimination and improve treatment outcomes.

Several limitations should be acknowledged. First, this was a cross-sectional study limiting causal inferences. Second, the sample was recruited from a single hospital, potentially limiting generalizability. Nevertheless, based on these findings, several recommendations emerge. Healthcare systems should implement transgender-inclusive policies and provide cultural competency training for staff. Mental health services specifically tailored for transgender individuals should be developed, including group therapy and peer support programs. Community-based interventions addressing stigma and discrimination are needed. Finally,

longitudinal research is needed to understand the trajectory of mental health outcomes in this population.

5. Conclusion

This study reveals critically high levels of depression, substantial anxiety, and concerning suicidal ideation among transgender individuals in North India. With 94.1% experiencing clinically significant depression and 22.4% reporting significant suicidal ideation, these findings highlight an urgent public health crisis requiring immediate attention. The strong correlation between depression and anxiety suggests the need for comprehensive mental health interventions addressing multiple symptom domains simultaneously. These results underscore the critical importance of developing transgender-affirmative healthcare services, implementing anti-discrimination policies, and creating supportive community environments. Healthcare providers must be trained to provide culturally competent care for transgender individuals, and mental health services must be made accessible and inclusive. The extremely high prevalence of mental health conditions in this population reflects the profound impact of societal stigma, discrimination, and marginalization on psychological well-being. Addressing these mental health disparities requires coordinated efforts across healthcare, policy, and community levels to create a more inclusive and supportive environment for transgender individuals in India.

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