Prevalence and Clinical Correlates of Depression among Young Adults Attending a Tertiary Care Hospital.

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Abstract

Background: Depression is a major public health concern, particularly among young adults, impacting emotional, social, and occupational functioning. Tertiary care hospitals often serve as key points for identifying undiagnosed depression.

Objective: To assess the prevalence, severity, and clinical correlates of depression among young adults attending a tertiary care hospital.

Methods: A cross-sectional observational study was conducted on 120 young adults aged 18–35 years at Autonomous state Medical College, Pilibhit, attending outpatient or inpatient departments, collaboration with the District Institute of Education and Training, Siddharth Nagar, Depression severity was assessed using the PHQ-9 and HAM-D scales. Clinical correlates including sleep disturbance, anxiety, substance use, chronic medical illness, and family psychiatric history were evaluated.

Results: Of the participants, 38% had moderate to severe depression. The highest prevalence was observed in the 21–25 years age group. Clinical correlates such as sleep disturbance (57%), anxiety (60%), substance use (63%), chronic medical illness (60%), and positive family history (72%) were significantly associated with higher depression severity. A strong positive correlation was observed between PHQ-9 and HAM-D scores ($r = 0.89$, $p < 0.001$). Gender differences were not statistically significant.

Conclusion: Depression is highly prevalent among young adults in tertiary care settings and is associated with sleep problems, anxiety, substance use, chronic illness, and family history. Routine screening using validated tools like PHQ-9 and timely intervention are essential to reduce the burden of depression in this vulnerable population.

Keywords- Skin diseases like acne, scabies, eczema, urticarial, Homoeopathic remedies etc.

Introduction

Depression represents a significant public health challenge and is among the leading causes of disability worldwide, with profound effects on emotional well-being, social relationships, and work performance. In recent years, the prevalence of depressive disorders has increased notably among young adults, placing this population at heightened risk. Evidence from the Global Burden of Disease (GBD) 2021 update indicates that depressive disorders remain a major contributor to years lived with disability, with a considerable share of cases occurring in individuals aged 18–35 years.[1] This phase of life is characterized by academic demands, career uncertainty, financial stress, and evolving interpersonal relationships, all of which may predispose young adults to psychological distress and depression. [2]

Emerging evidence suggests that the prevalence of depression among young adults has increased significantly in the post–COVID-19 era. Disruptions in education, employment instability, social isolation, and increased screen time have been identified as key contributors to worsening mental health outcomes in this population.[3] Recent Indian studies have also reported a rising prevalence of depressive symptoms among young adults attending healthcare facilities, highlighting the growing need for early identification and intervention.[4] Despite this, depression often remains under-recognized, as symptoms may be nonspecific and overlap with physical complaints such as fatigue, sleep disturbances, and appetite changes.[5]

Tertiary care hospitals serve as important points of contact for young adults with both physical and psychological complaints. Many individuals with depression present to non-psychiatric departments, where the underlying mood disorder may go undetected. Clinical correlates such as anxiety symptoms, substance use, sleep disturbances, and comorbid medical conditions frequently coexist with depression and can influence its severity, course, and treatment outcomes.[6] In the Indian context, limited hospital-based data are available focusing specifically on the prevalence and clinical correlates of depression among young adults. Sociocultural factors, stigma related to mental illness, and variability in healthcare-seeking behavior further complicate timely diagnosis and treatment. [7]

Material & Methods: study was conducted on 120 young adults aged 18–35 years at Autonomous state Medical College, Pilibhit, attending outpatient or inpatient departments, collaboration with the District Institute of Education and Training, Siddharth Nagar,

Study design: cross-sectional observational study

Sample size: 120 participants.

Inclusion criteria:

1. Young adults aged 18 to 35 years at the time of enrollment.
2. Individuals attending outpatient or inpatient departments of the tertiary care hospital for any medical or psychiatric complaint.
3. Participants who are able to understand and respond to the study questionnaire.
4. Individuals who provide written informed consent to participate in the study.
5. Patients willing to undergo clinical assessment for depressive symptoms using a standardized rating scale.

Exclusion criteria:

1. Individuals with severe cognitive impairment, intellectual disability, or organic brain disorders that may interfere with reliable assessment.
2. Patients who are critically ill or medically unstable at the time of evaluation.
3. Individuals with a previously diagnosed major psychiatric disorder such as schizophrenia, schizoaffective disorder, bipolar affective disorder, or other psychotic disorders.
4. Individuals currently receiving antidepressant treatment, mood stabilizers, or antipsychotic medications.
5. Pregnant or postpartum women (up to 6 months postpartum), due to the potential influence of hormonal and psychosocial factors on mood.
6. Individuals unwilling or unable to provide informed consent.
7. Patients with current substance dependence (excluding nicotine), as per ICD-11 / DSM-5 criteria.

Assessment Tools:

Patient Health Questionnaire-9 (PHQ-9): Depressive symptoms were assessed using the PHQ-9, a validated self-report screening tool. Scores range from 0 to 27 and were categorized as minimal (0–4), mild (5–9), moderate (10–14), moderately severe (15–19), and severe depression (20–27). A score of ≥10 was considered indicative of moderate to severe depression.

Hamilton Depression Rating Scale (HAM-D): Depression severity was also assessed using the clinician-rated HAM-D scale. Scores were categorized as normal (0–7), mild (8–13), moderate (14–18), severe (19–22), and very severe (≥23).

Result:

Table 1 Gender wise distribution of the participants.

Gender	Number of Patients (n)	Percentage (%)	p-value
Male	68	56.7	
Female	52	43.3	0.18
Total	120	100	

In the present study, males constituted 56.7% (n = 68) of the study population, while females accounted for 43.3% (n = 52). The difference in gender distribution was not statistically significant (p = 0.18), indicating that depression prevalence did not differ significantly between male and female participants. This suggests that both genders were comparably affected by depressive symptoms among young adults attending the tertiary care hospital.
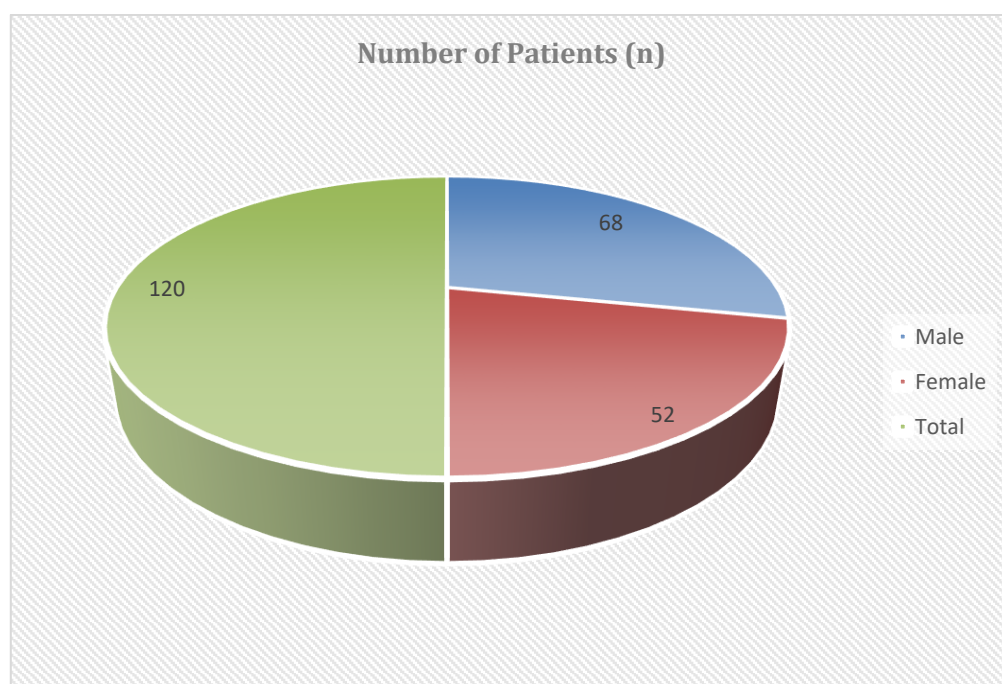

Figure 1: Graphical Represents gender wise distribution of the participants.

Table 2: Age wise distribution of the participants.

Age Group (years)	Number of Patients (n)	Percentage (%)	p-value
18–20	30	25	0.02
21–25	40	33	
26–30	28	23	
31–35	22	19	
Total	120	100%	

The age-wise distribution of study participants showed that the highest proportion of patients belonged to the 21–25 years age group (33.3%), followed by those aged 18–20 years (25.0%), 26–30 years (23.3%), and 31–35 years (18.3%). The association between age group and depression was statistically significant (p = 0.02), indicating that depressive symptoms varied significantly across different age groups. Young adults in the 21–25 years age range were more frequently affected, suggesting that this transitional phase of life may be associated with increased vulnerability to depression.
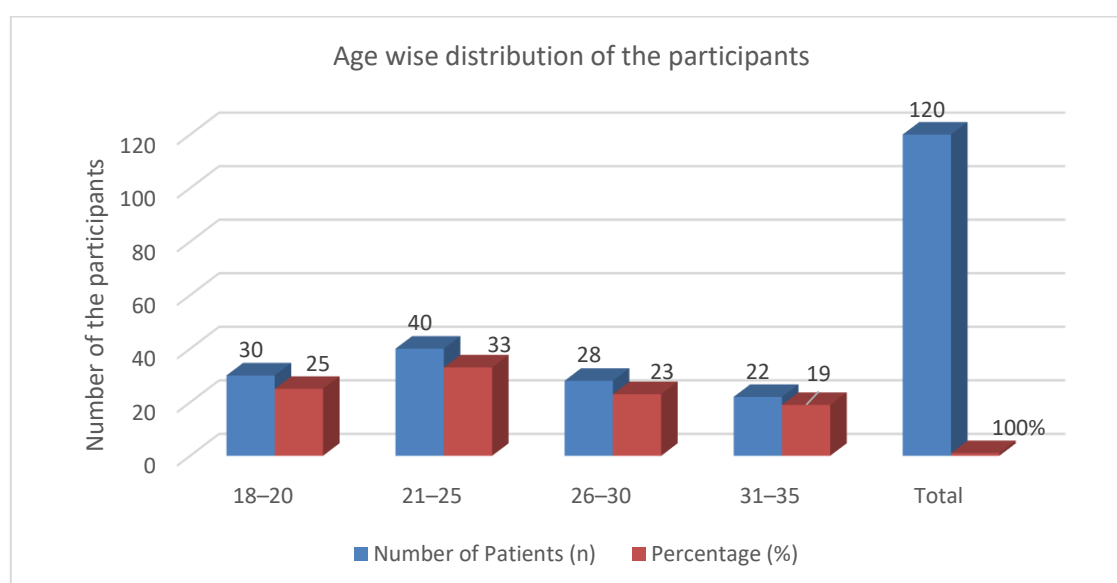

Figure 2: Graphical represents age wise distribution of the participants.

Table 3: Distribution of Depression Severity Among Study Participants.

Depression Severity	PHQ-9 score Range	HAM-D Score Range	Number of Patients (n)	Percentage (%)
None / Minimal	0–4	0–7	35	29
Mild	5–9	8–13	40	33
Moderate	10–14	14–18	25	21
Moderately Severe	15–19	19–22	12	10
Severe	20–27	≥23	8	7
Total	–	–	120	100

Assessment of depression severity using PHQ-9 and HAM-D scales revealed that 29% of participants had no or minimal depressive symptoms, while 33% had mild depression. Notably, 38% of the study population exhibited clinically significant depression, comprising moderate (21%), moderately severe (10%), and severe depression (7%). This indicates that more than one-third of young adults attending the tertiary care hospital required active clinical attention for depressive symptoms, highlighting the substantial burden of moderate to severe depression in this age group.
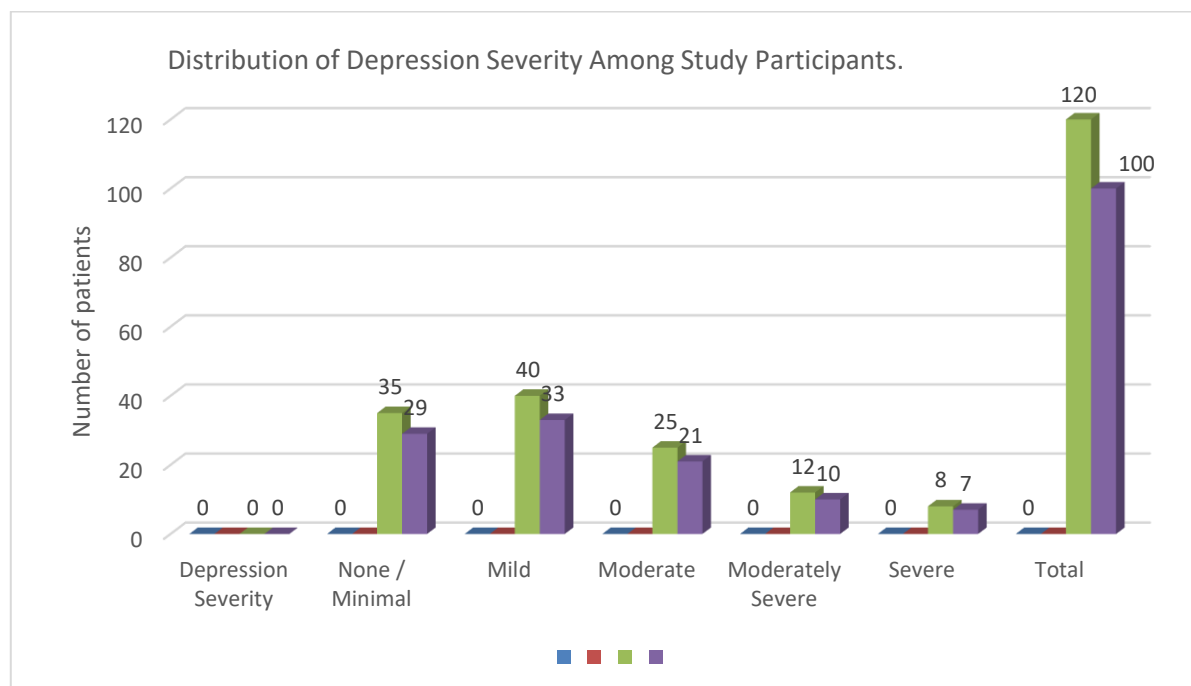

Figure 3: Graphical represents distribution of depression severity among study participants.

Table 4: Association of Clinical Correlates with Moderate to Severe Depression (PHQ-9 ≥10) Among Study Participants.

Clinical Correlate	Number of Patients with Feature (n)	PHQ-9 ≥10 (n, %)	p-value
Sleep Disturbance	70	40 (57%)	0.01*
Substance Use (Alcohol/Tobacco)	35	22 (63%)	0.04*
Anxiety Symptoms	50	30 (60%)	0.02*
Chronic Medical Illness	20	12 (60%)	0.05

Sleep disturbance, substance use (alcohol/tobacco), anxiety symptoms, and chronic medical illness were significantly associated with moderate to severe depression (PHQ-9 ≥10). A higher proportion of participants with these clinical correlates exhibited depressive symptoms, indicating their important role in influencing depression severity among young adults attending the tertiary care hospital.
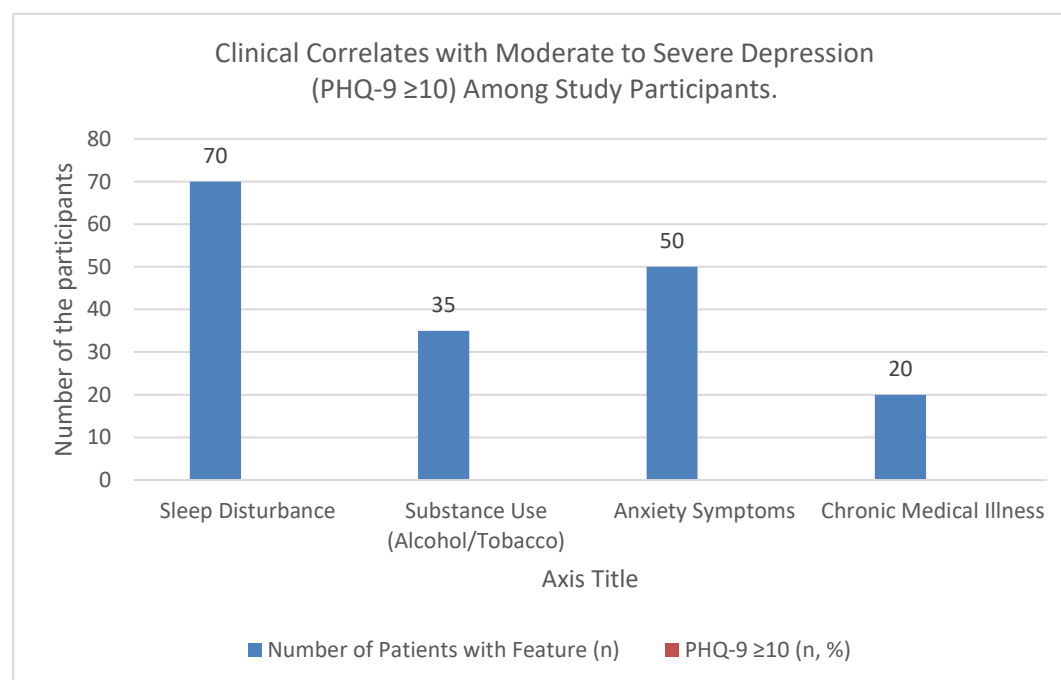

Figure 4: Graphical represents clinical correlates with moderate to severe depression (PHQ-9 ≥10) among study participants.

Table 5: Family History of Psychiatric Illness and Depression

Family History	Number of Patients (n)	PHQ-9 ≥10 (n, %)	p-value
Present	25	18 (72%)	0.01*
Absent	95	54 (56.8%)	

Participants with a family history of psychiatric illness had a higher prevalence of moderate to severe depression (72%) compared to those without a family history (56.8%), and this association was statistically significant (p = 0.01).

Table 6: Correlation Between PHQ-9 and HAM-D Scores

Scale	Pearson's r	p-value
PHQ-9 vs HAM-D	0.89	<0.001*
		Highly Statistically significant

There was a strong positive correlation between PHQ-9 and HAM-D scores (r = 0.89,

p < 0.001), indicating high agreement between self-reported and clinician-rated measures of depression.

Discussion: The study found a high prevalence of depressive symptoms among young adults attending a tertiary care hospital, with 38% exhibiting moderate to severe depression. Depression was most common in the 21–25 years age group, reflecting the stress of early adulthood. Gender differences were not significant. Clinical correlates such as sleep disturbance, anxiety, substance use, chronic medical illness, and positive family history were significantly associated with higher depression severity. A strong correlation between PHQ-9 and HAM-D scores confirmed the reliability of self-reported screening for depression. These findings highlight the importance of early identification and integrated mental health care in hospital settings.

Conclusion: Depression is highly prevalent among young adults in tertiary care settings and is associated with sleep problems, anxiety, substance use, chronic illness, and family history of psychiatric disorders. Routine screening using validated tools like PHQ-9, along with timely intervention, is essential to reduce the burden and improve outcomes in this vulnerable population.

Limitations of the Study

Hospital-based, cross-sectional design limits generalizability and causality.

- Small sample size reduces statistical power.

- Exclusion of severe psychiatric and substance-dependent patients may underestimate prevalence.
- Self-reported measures may introduce bias.
- No follow-up to assess changes over time.

Conflict of Interest: The authors declare that there is no conflict of interest related to this study.

Reference:

1. GBD 2021 Mental Disorders Collaborators. Global prevalence and burden of depressive disorders in 204 countries and territories, 1990–2021. *Lancet Psychiatry*. 2024;11(1):1–20.
2. Arnett JJ. Emerging adulthood and mental health: Developmental challenges and opportunities. *World Psychiatry*. 2022;21(3):329–340.
3. Santomauro DF, Mantilla Herrera AM, Shadid J, et al. Global prevalence and burden of depressive and anxiety disorders in 2020 due to the COVID-19 pandemic. *Lancet*. 2021;398(10312):1700–1712.
4. Kumar A, Gupta R, Singh P. Prevalence of depression and associated factors among young adults attending a tertiary care hospital in North India. *Indian J Psychiatry*. 2023;65(4):410–416.
5. Goldberg D. The detection of psychiatric illness by questionnaire. *Oxford University Press*; updated edition 2022.
6. Kessler RC, Bromet EJ. The epidemiology of depression across the lifespan. *Annu Rev Clin Psychol*. 2023; 19:1–25.
7. Chauhan S, Lal P, Nayak H. Mental health service utilization and stigma among young adults in India: A hospital-based study. *Asian J Psychiatr*. 2024; 86:103640