

Exploring The Spectrum Of Dissociative Symptoms In Depression: A Case-Control Analysis

Dr. Pankaj Shah¹, Dr. Kunal Kumar², Dr. Abhinit Kumar^{3*}, Dr. Nikhil Nayar⁴, Dr. Abhinav Dhankar⁵,
Dr. Sourabh Ojha⁶, Dr. Parika Kochhar⁷

¹Junior resident

²HOD & Professor

³Associate Professor 3

⁴Assistant Professor 4

^{5,6,7}Junior resident

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ABSTRACT

Dissociative experiences have been reported in the patients of depression that are often unacknowledged but frequently encountered and they contribute to the burden of illness. There are very limited studies in India on the topic of dissociative experiences in patients of depression. This study aims to evaluate dissociative experiences in individuals diagnosed with depression compared to healthy controls. This case-control, observational, and analytical study was conducted in the Psychiatry Department of Sharda Hospital, Greater Noida, U.P. A total of 100 participants were included, comprising 50 patients with depression, 50 healthy controls. Participants were assessed using the Hamilton Depression Rating Scale (HAM-D) and Dissociative Experiences Scale (DES-II). Statistical analyses were performed to compare dissociative experiences among the study groups. Preliminary findings indicate that dissociative experiences were significantly higher in patients with depression compared to controls ($p < 0.05$). This study highlights the presence of dissociative symptoms in patients with depression, emphasizing the need for targeted assessment and management. The findings underscore the importance of integrating dissociative symptoms into routine psychiatric evaluations to improve patient outcomes.

Keywords: *Dissociative experiences, Depression, Case-control study, Mental health, Psychological assessment.*

1. INTRODUCTION

Dissociative experiences are complex psychological phenomena characterized by disruptions in the normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control, and behavior. They range from mild forms, such as daydreaming or "spacing out," to more severe types, such as depersonalization, derealization, or dissociative amnesia. While dissociation has traditionally been associated with trauma and specific dissociative disorders, growing research has revealed its significant presence in other mental health conditions.¹

In clinical practice, patients with depression often report feelings of detachment, emotional numbness, or an altered sense of reality, which can be manifestations of dissociation. Depression, with its hallmark features of persistent sadness, loss of interest, and cognitive impairments, may overlap with dissociative symptoms, particularly in cases where emotional disengagement or derealization is prominent. The clinical overlap between these conditions highlights the importance of studying the spectrum of dissociative experiences in depression, as these phenomena may complicate diagnosis, hinder therapeutic interventions, and worsen prognosis if not properly addressed.²

One of the primary challenges in studying dissociative phenomena in depression and is the diverse nature of dissociation itself. Dissociation can manifest in various forms, ranging from transient episodes of detachment to more chronic and debilitating dissociative states. For example, depersonalization (a feeling of being detached from oneself) and derealization (a sense that the external world is unreal) are common dissociative experiences that may co-occur with depression.⁴ These experiences can significantly influence an individual's subjective experience of their mental health condition. For instance, in depression, depersonalization may contribute to feelings of emotional numbness or an inability to experience pleasure.

Additionally, the relationship between dissociation, trauma, and affective disorders must be considered when examining dissociative experiences in depression. Research has suggested that individuals who have experienced trauma, particularly in childhood, are more prone to dissociative symptoms, and trauma-related dissociation has been linked to the development

of depression later in life. While dissociation may serve as a protective mechanism in the face of overwhelming stress, in the context of depression, it can become maladaptive, exacerbating emotional dysregulation and reinforcing the cycle of psychological distress. Therefore, exploring dissociative experiences in depression may provide critical insights into the role of past trauma and its enduring impact on mental health.⁵

Prasko et al. study, have emphasized the importance of recognizing and treating dissociative symptoms in depression. Patients with significant dissociative symptoms often respond poorly to conventional treatments, such as cognitive-behavioral therapy (CBT) or pharmacotherapy, which may not directly address the dissociative component of their experience. Moreover, dissociation can impede the therapeutic process by making it difficult for individuals to engage with their emotions or maintain a coherent sense of self.⁶ This highlights the need for tailored interventions that specifically target dissociative symptoms in individuals with depression. By identifying and addressing dissociative phenomena, clinicians may be able to improve treatment outcomes and enhance the overall quality of life for these patients.

This study explores the relationship between dissociative experiences and depression, aiming to deepen understanding of dissociation as a transdiagnostic phenomenon. Its findings may inform targeted interventions, improve clinical outcomes, and enhance treatment quality for individuals experiencing both emotional distress and dissociative symptoms in depression.

2. REVIEW OF LITERATURE

Lisa et al.'s meta-analysis of 216 studies with 15,219 individuals found dissociative disorders had the highest dissociation scores (>35), followed by PTSD, borderline personality disorder, and conversion disorder. Bipolar disorder had the lowest score (14.8).⁷

Chatterjee et al. found that bipolar disorder (BD) patients in active episodes had significantly higher dissociative symptoms than unipolar depression (UD) patients, with differences remaining after adjusting for confounders.⁸

Prasko et al. found that 67.5% of patients with anxiety or depression showed improvement after a 6-week program. Higher dissociation at treatment onset predicted less improvement, while reduced dissociation correlated with greater change.⁶

Sar et al. found 10% of women had a current major depressive episode, with 4.1% diagnosed with dissociative depression. Dissociative depression was associated with a younger age but no differences in comorbidities.⁹

Chaturvedi et al. found higher dissociative and somatoform dissociation scores in the clinical group. Depressive spectrum disorders had the highest SDQ scores, with females scoring higher than males.¹⁰

Hozoori et al. found higher alexithymia and dissociative experiences in university students compared to Western populations. Alexithymia and dissociation were linked to anxiety and depression, with gender differences in specific experiences.¹¹

Konuk et al. found significantly higher psychopathology, depression, and dissociative experiences in dermatology patients with lichen simplex chronicus (LSC) compared to a control group with tinea.¹²

Fung et al. found over 60% of participants with clinically significant depressive symptoms also had high dissociative symptoms, correlating with greater trauma exposure, interpersonal stress, and severe depression.¹³

Cernis et al. found dissociation strongly connected to anxiety, depression, hallucinations, paranoia, and cognitive disorganization. Bayesian analysis suggested dissociation likely influences paranoia, cognitive disorganization, and grandiosity.²

Prasko et al. studied 606 inpatients with anxiety and depressive disorders, showing significant symptom reductions after a 6-week treatment. 67.5% showed improvement, with 35.3% achieving remission. Patients without comorbid personality disorders had better depressive symptom reduction. Higher baseline dissociation predicted less improvement, while greater therapeutic change correlated with reduced dissociation.⁶

Pan et al. studied 21 adult females with childhood trauma, PTSD, and DID, finding high anxiety sensitivity. The cognitive subscale of the Anxiety Sensitivity Index predicted depressive symptoms, which indirectly influenced dissociative symptoms. No direct associations were found between anxiety sensitivity and PTSD or dissociative symptoms.¹⁴

Demirkol et al. found higher anxiety sensitivity, dissociative experiences, depression, and perceived stress in patients with borderline personality disorder (BPD) compared to controls. Anxiety sensitivity and depressive symptoms partially mediated the relationship between perceived stress and dissociative experiences in the BPD group.¹⁵

Samanta et al. found that 21.74% of participants experienced dissociative symptoms, with 40.37% reporting perceived stress. Financial loss was the most common life event. Dissociative experiences, perceived stress, and life events were positively correlated, with significant associations observed between life events and socio-demographic variables.¹⁶

Prasko et al. studied 606 inpatients with various anxiety and depressive disorders. After a 6-week treatment, significant symptom reductions were observed. Patients without comorbid personality disorders showed greater improvement in depressive symptoms. Higher baseline dissociation predicted less improvement, while greater therapeutic change correlated with reduced dissociation.¹⁷

3. RATIONALE OF STUDY

The variability in DES scores in depression may stem from differing views of dissociation, either as depersonalization-derealization during panic attacks or as broader memory and awareness disturbances. This highlights the need for further research and suggests that assessing dissociative experiences in depression patients is crucial for treatment outcomes and development.

AIM & OBJECTIVES

AIM: The aim of the study is to evaluate the clinical spectrum of dissociative experiences in depression and normal individuals.

PRIMARY OBJECTIVE: To study about dissociative experiences in depression patients.

SECONDARY OBJECTIVES

- To find dissociative experiences in patients of depression in comparison to control group
- To find dissociative experiences in patients with different socio-demographic variables.

4. MATERIALS & METHODS

Study Location- Outpatient department and inpatient department of department of psychiatry in Sharda hospital, Greater Noida, U.P.

Sample Size Using Cochran formula, sample size has been calculated as 100.50 in each group of cases and controls.

Study Duration May 2023-November 2024(18 Months)

Study Design: Case-control Observational and Analytical Study.

Inclusion criteria: Patients, who are 18 years and above, giving written and informed consent and are newly diagnosed case of Depression according to ICD-11.

Exclusion criteria: Patients with severe medical or psychiatric illnesses unable to respond to questionnaires, those with psychiatric comorbidities or debilitating medical conditions, individuals under 18 years of age, and patients already receiving treatment or follow-up care for depression.

Inclusion criteria for cases: Healthy sex and age matched controls

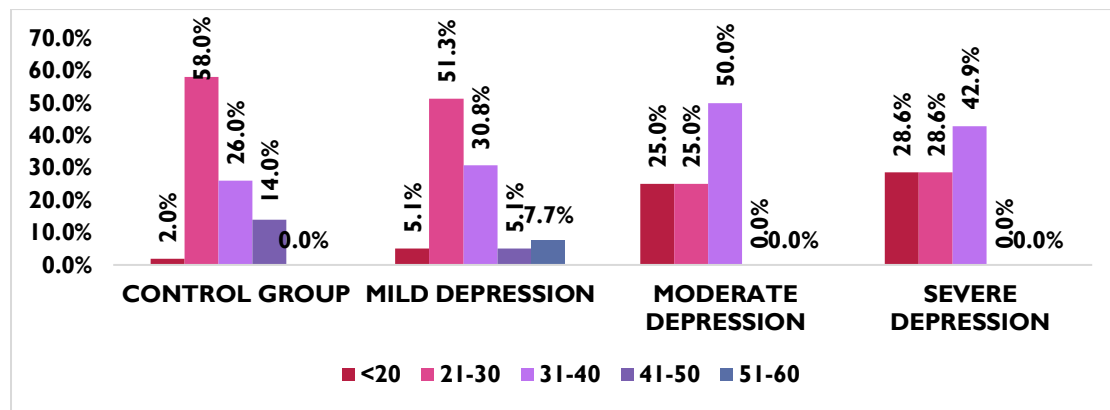
Study Tools: The study utilized several tools: a semi-structured, self-designed sociodemographic data sheet to collect information on personal and clinical details (e.g., age, sex, marital status, education, income, and diseases), the Hamilton Anxiety Rating Scale (HAM-A), the Hamilton Depression Rating Scale (HAM-D), and the Dissociative Experiences Scale-II (DES-II).

Procedure: The study will be conducted at the School of Medical Sciences & Research and Sharda Hospital, involving drug-naïve patients and controls from IPD and OPD meeting inclusion/exclusion criteria. After obtaining informed consent, patients will be clinically assessed and diagnosed with generalized anxiety disorder or depression using ICD-11 criteria. The HAM-A and HAM-D questionnaires will assess symptom severity, followed by the DES-II questionnaire for 50 depression patients, 50 anxiety patients, and 100 controls. Dissociative experiences will be evaluated and compared between cases and controls.

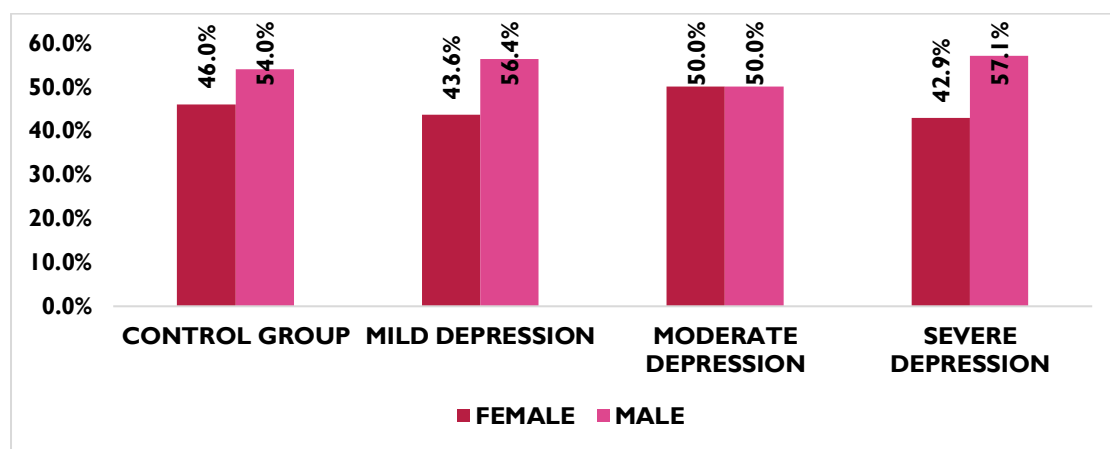
Statistical analysis: Data will be compiled in Microsoft Excel and analyzed using SPSS Version 22.0. Quantitative data distribution will be tested using the Kolmogorov-Smirnov test, with mean and standard deviation reported. Qualitative data will be expressed as numbers and percentages with graphical representation. The Student's t-test will compare means, and the chi-square test will assess associations between qualitative variables. A p-value ≤ 0.05 will be considered statistically significant.

5. RESULT

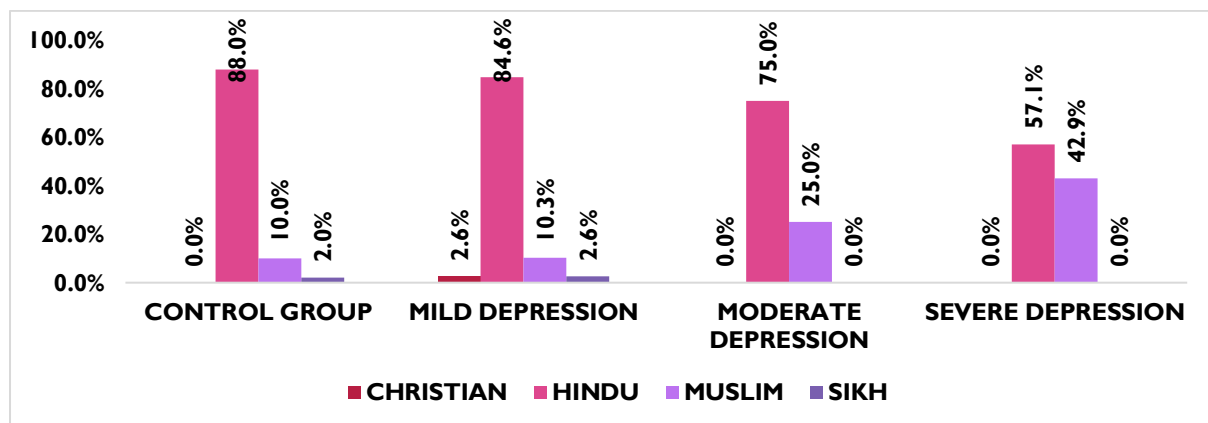
The majority of participants were in the 21-30 age group across all categories. Severe depression was more common among younger individuals (<20 years: 28.6%). **However, the association between age and depression levels was not statistically significant (p = 0.062).**



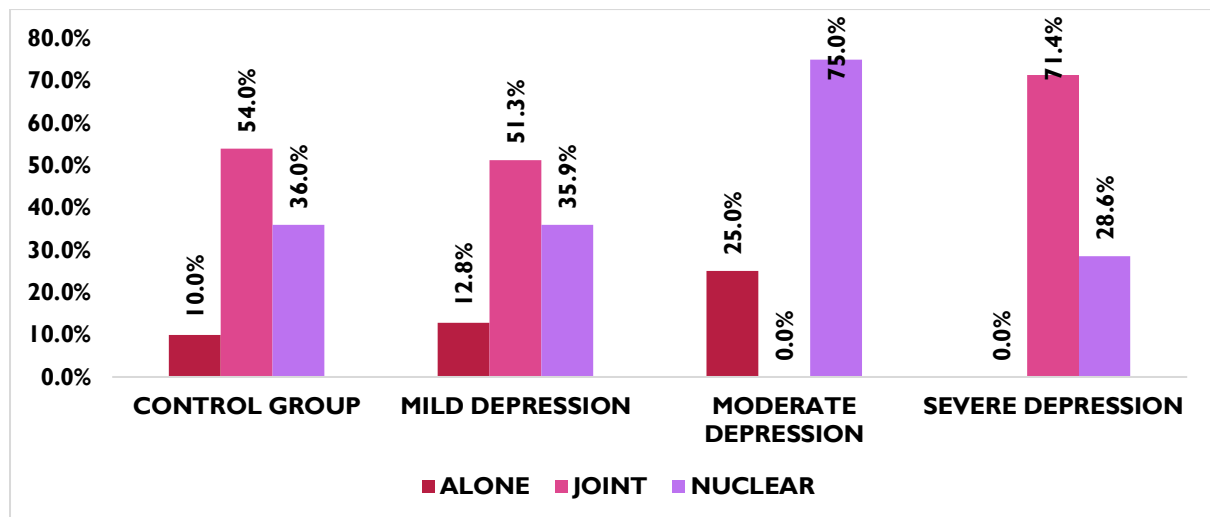
Males were more prevalent across all groups except for moderate depression, where both genders were equally represented. However, the difference was not statistically significant ($p = 0.991$).



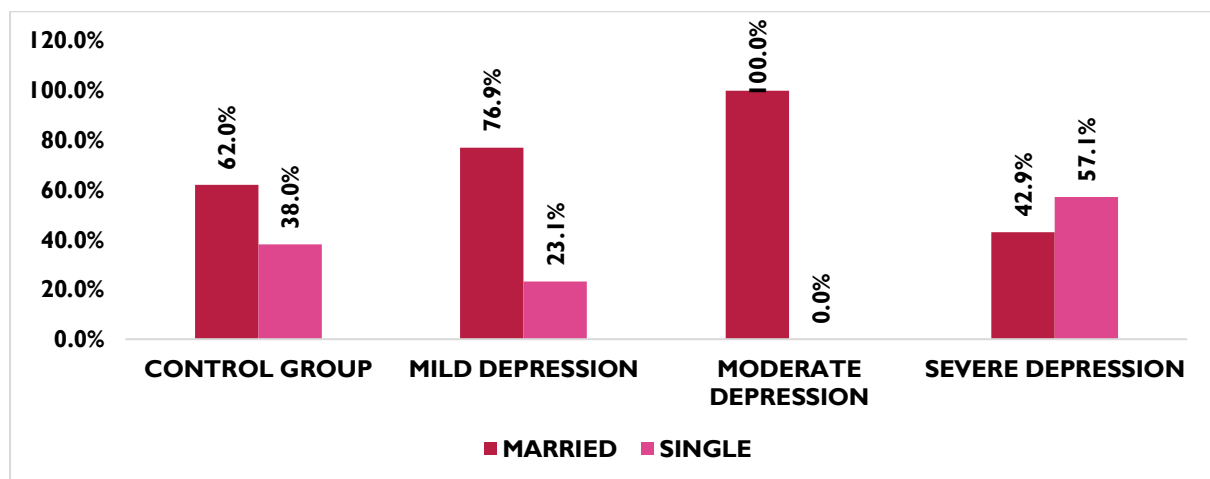
Hindus were the predominant group across all categories, but Muslims had a higher proportion in severe depression (42.9%). The association between religion and depression levels was not statistically significant ($p = 0.495$).



Those in a nuclear family had the highest proportion of moderate depression (75.0%), while severe depression was most prevalent in those from a joint family (71.4%). However, the association was not statistically significant ($p = 0.423$).

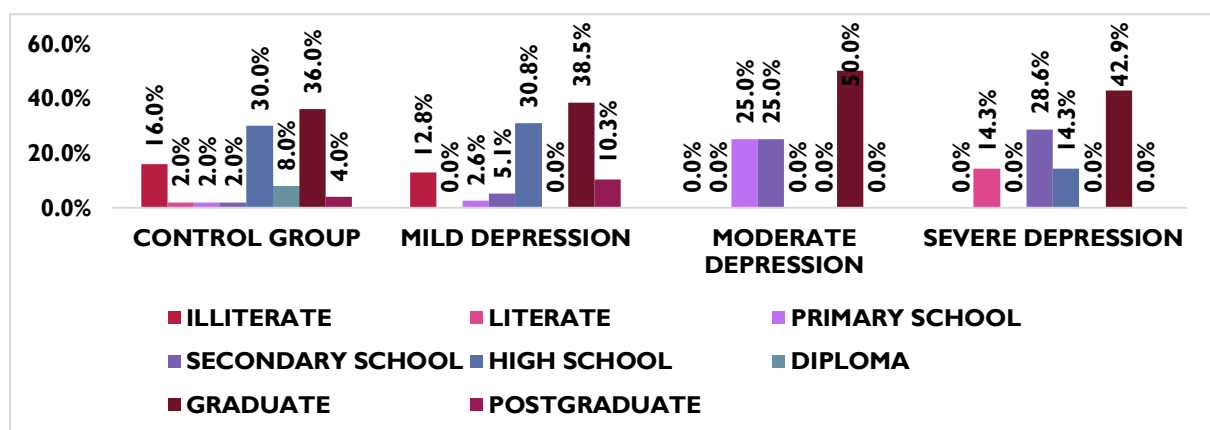


Married individuals were more prevalent in all groups, especially among those with moderate depression (100.0%). However, single individuals showed a higher prevalence in severe depression (57.1%). The association was not statistically significant ($p = 0.104$).



Graduates were the largest group across all depression levels. High school-educated individuals were common in the control and mild depression groups but less in moderate and severe groups. Illiteracy was more prevalent in the control and mild groups, while secondary school education was more common in moderate and severe depression groups.

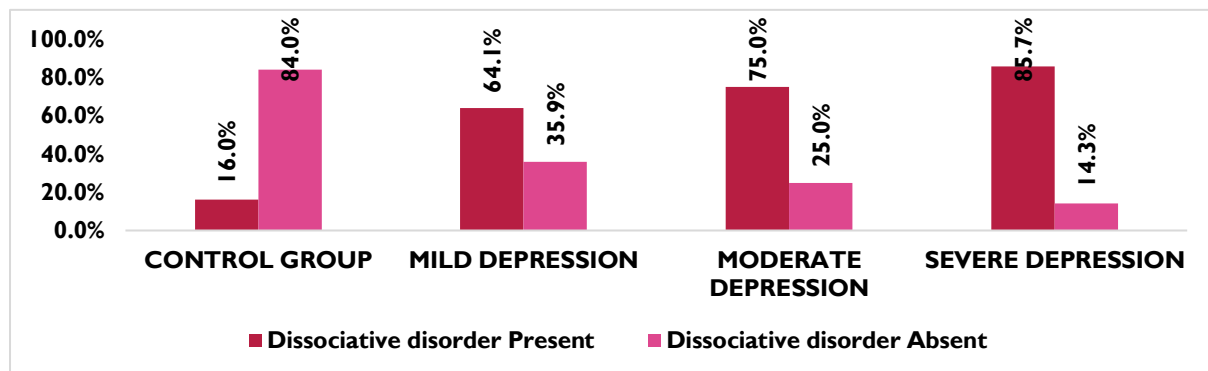
The Pearson chi-square test indicated a statistically significant association between educational status and depression severity ($p = 0.050$), suggesting that education level may influence mental health outcomes.



Occupational status varied significantly across depression levels. Professionals and business professionals were mostly in the control group, while housewives (50%) and students (57.1%) were more prevalent in moderate and severe depression, respectively. Ayurvedic therapists, painters, and unemployed individuals were more common in severe depression, while laborers and farmers were in control and mild groups.

The Pearson's chi-square test indicated a statistically significant association between occupational status and depression severity ($p = 0.001$).

A significant association was found between depression severity and dissociative disorder. Prevalence increased with depression severity: 64.1% (mild), 75.0% (moderate), and 85.7% (severe), compared to 16.0% in the control group. A chi-square test (28.976, $p < 0.001$) emphasizes the importance of early detection and intervention in severe depression.



Diagnosis	Mean Age \pm SD	Mean Monthly Income \pm SD
Control Group	31.60 \pm 8.24	45,480 \pm 38,172.13
Mild Depression	31.05 \pm 9.85	38,487.18 \pm 27,288.78
Moderate Depression	28.75 \pm 8.88	21,250 \pm 7,500.00
Severe Depression	26.86 \pm 8.49	60,571.47 \pm 45,117.83
Total	30.94 \pm 8.90	42,840 \pm 34,411.56
p-value	0.579	0.227

The mean age decreased with increasing severity of depression, with the severe depression group having the lowest mean age (26.86 years). However, the difference was not statistically significant ($p = 0.579$). **Similarly, although the mean monthly income varied across groups, with the severe depression group having the highest income (₹60,571.47), the difference was not statistically significant ($p = 0.227$).**

Diagnosis	Mean DES-2 Score \pm SD
Control Group	16.89 \pm 11.86
Mild Depression	31.72 \pm 11.83
Moderate Depression	36.07 \pm 12.36
Severe Depression	44.18 \pm 12.07
Total	25.35 \pm 14.79
p-value	<0.001

There was a significant difference in the mean Dissociative Experiences Scale (DES-2) scores across different depression severity levels ($p < 0.001$). The control group had the lowest mean DES-2 score (16.89), while the severe

depression group had the highest (44.18). **This suggests that higher depression severity is associated with increased dissociative experiences.**

Dissociative Disorder	Age (Mean \pm SD)	Monthly Income (Mean \pm SD)
Present	30.42 \pm 11.24	50,092.65 \pm 41,725.68
Absent	31.14 \pm 9.06	50,485.07 \pm 41,730.38
Total	30.91 \pm 9.81	50,355.57 \pm 41,624.27
p value	0.628	0.950

There were no significant differences in age ($p = 0.628$) or monthly income ($p = 0.950$) between participants with and without dissociative disorder. **This suggests that dissociative symptoms are not significantly associated with age or income levels in the study population.**

Dissociative Disorder in Depression group	Age (Mean \pm SD)	Monthly Income (Mean \pm SD)
Present	30.52 \pm 10.00	41,619.05 \pm 36,301.55
Absent	31.24 \pm 8.08	43,724.14 \pm 33,270.18
Total	30.94 \pm 8.90	42,840.00 \pm 34,411.57
p value	0.693	0.764

There were no significant differences in age ($p = 0.693$) or monthly income ($p = 0.764$) between depression patients with and without dissociative disorder. **This indicates that dissociative symptoms in depressed individuals are not significantly influenced by age or income levels.**

6. STRENGTHS OF THE STUDY

This study's strengths include a case-control design comparing 50 depression patients and 50 healthy controls, providing insights into depression severity and dissociative symptoms. Using validated tools like HAM-D and DES-II ensures reliable measurement. Statistical analyses (chi-square, Pearson's correlation) reveal significant associations. Addressing a gap in Indian research, the study is locally relevant and considers demographic factors such as age, gender, and education, offering a comprehensive view of their impact on depression severity and dissociative experiences.

7. LIMITATIONS OF THE STUDY

This study has several limitations, including its cross-sectional design, which prevents establishing causal relationships. Conducted at a single hospital, its findings may lack generalizability. It doesn't account for comorbid psychiatric disorders, treatment history, or long-term follow-up. Self-report measures like the DES-II may introduce response biases, and cultural factors affecting dissociation were not explored, limiting the understanding of how dissociation evolves with treatment and its broader implications.

8. CONCLUSION

The study highlights a significant relationship between depression severity and dissociative symptoms, showing that dissociative experiences increase with the severity of depression. Educational and occupational status were found to influence depression severity, with professionals and business people more prevalent in mild depression groups. However, no significant associations were observed between age, income, and dissociative symptoms. The findings underscore the importance of addressing dissociative symptoms, particularly in patients with severe depression, emphasizing the need for comprehensive care in managing both depression and dissociation. The study suggests further research to explore these relationships in diverse populations.

9. SUMMARY

The study investigates the link between depression severity and dissociative symptoms, revealing a significant association. Using validated tools, it highlights the influence of educational and occupational status on depression severity. It emphasizes the need to address dissociative symptoms in severe depression and calls for further research on long-term effects and causality.

REFERENCES

- [1] Ouwersloot G, Derksen J, Glas G. Reintroducing Consciousness in Psychopathology: Review of the Literature and Conceptual Framework. *Front Psychol* 2020; 11: 17.
- [2] Černis E, Evans R, Ehlers A, et al. Dissociation in relation to other mental health conditions: An exploration using network analysis. *J Psychiatr Res* 2021; 136: 460.
- [3] McKinnon MC, Boyd JE, Frewen PA, et al. A review of the relation between dissociation, memory, executive functioning and social cognition in military members and civilians with neuropsychiatric conditions. *Neuropsychologia* 2016; 90: 210–234.
- [4] Şar V. The Many Faces of Dissociation: Opportunities for Innovative Research in Psychiatry. *Clinical Psychopharmacology and Neuroscience* 2014; 12: 171.
- [5] Boyer SM, Caplan JE, Edwards LK. Trauma-Related Dissociation and the Dissociative Disorders:: Neglected Symptoms with Severe Public Health Consequences. *Dela J Public Health* 2022; 8: 78.
- [6] Prasko J, Grambal A, Kasalova P, et al. Impact of dissociation on treatment of depressive and anxiety spectrum disorders with and without personality disorders. *Neuropsychiatr Dis Treat* 2016; 12: 2659
- [7] Lyssenko L, Schmahl C, Bockhacker L, et al. Dissociation in Psychiatric Disorders: A Meta-Analysis of Studies Using the Dissociative Experiences Scale. *Am J Psychiatry* 2018; 175: 37–46.
- [8] Chatterjee SS, Pal A, Mallik N, et al. Dissociative Experience in Unipolar and Bipolar Depression: Exploring the Great Divide. *Clinical Psychopharmacology and Neuroscience* 2018; 16: 262.
- [9] Sar V, Akyüz G, Öztürk E, et al. Dissociative Depression Among Women in the Community. *Journal of Trauma & Dissociation* 2013; 14: 423–438.
- [10] Chaturvedi SK, Sinha P. DISSOCIATIVE EXPERIENCES AND SOMATOFORM DISSOCIATION IN NON PSYCHOTIC PATIENTS ATTENDING OUTPATIENT SERVICES.
- [11] Hozoori R, Barahmand U. A Study of the Relationship of Alexithymia and Dissociative Experiences with Anxiety and Depression in Students. *Procedia Soc Behav Sci* 2013; 84: 128–133.
- [12] Konuk N, Koca R, Atik L, et al. Psychopathology, depression and dissociative experiences in patients with lichen simplex chronicus. *Gen Hosp Psychiatry* 2007; 29: 232–235.
- [13] Fung HW, Chien WT, Lam SKK, et al. Prevalence and correlates of dissociative symptoms among people with depression. *J Psychiatr Res* 2022; 154: 132–138.
- [14] Pan X, Palermo CA, Kaplan CS, et al. Anxiety sensitivity predicts depression severity in individuals with dissociative identity disorder. *J Psychiatr Res* 2022; 155: 263–268.
- [15] Demirkol ME, Tamam L, Cakmak S, et al. The relationship between perceived stress, dissociative experiences, depressive symptoms, and anxiety sensitivity in borderline personality disorder. *dusunenadamdergisi.org*ME Demirkol, L Tamam, S Cakmak, K Ugur, C YesilogluDusunen Adam, 2020•*dusunenadamdergisi.org* 2020; 33: 130–138.
- [16] Samanta S, Nandi S, Saha I, et al. A study to assess perceived stress, life events and prevalence of dissociative experiences in patients with anxiety disorders. *Int J Res Med Sci* 2024; 12: 2428–2435.
- [17] Prasko J, Grambal A, Sigmundova Z, et al. Dissociation and therapy of depressive and anxiety disorders with or without personality disorders. *European Psychiatry* 2017; 41: S111.