

Presence of Depression in Patients with Schizophrenia

Uzma Siddiqui^{1*}

ABSTRACT

The study is conducted to evaluate the presence and prevalence of depression (minimal, mild, moderate, moderately severe and severe), depressive symptoms and their severity in patients clinically diagnosed with Schizophrenia using the Patient Health Questionnaire-9 developed in 2001 to screen adult patients in primary care settings. The 9-item questionnaire was developed by Robert L. Spitzer, Janet B.W. Williams, and Kurt Kroenke in 1999. The PHQ-9 is a shorter version of the 59-item tool PHQ that assesses 12 mental and emotional health disorders of mood, anxiety, eating, and somatoform disorders. The study was conducted on 30 patients taken as samples. The samples taken were Indian patients (both male & female) in IPD of SMS Psychiatry Centre, Jaipur diagnosed with schizophrenia. The results found out that there is “moderate depression” on an average in patients diagnosed with Schizophrenia.

Keywords: Schizophrenia, Depression, Patient Health Questionnaire

Schizophrenia was known as ‘Dementia Praecox’ when first discovered by the German psychiatrist Dr. Emile Kraepelin in 1887 as a part of his work on describing mental disorders. He mentioned it as an untreatable disorder and its early onset as early as in adolescence hence the term “precoax” meaning “early”. He also stated that the disorder had a chronic and deteriorating course which leads to severe cognitive and emotional dysfunction over time. He believed that it often resulted in a decline in mental function (hence “dementia”).

However, the term “dementia praecox” suggested a specific trajectory of early cognitive decline akin to dementia, which did not accurately capture the full range of symptoms or the potential variability in outcomes seen in patients. Swiss psychiatrist Eugen Bleuler proposed the term “schizophrenia” in 1908 to address these limitations.

Today Schizophrenia is defined by various psychologists in their terms but the globally accepted definitions are:

The International Classification of Diseases 11th Revision (ICD-11) defines schizophrenia as:

- **Psychotic Symptoms:** Presence of delusions, hallucinations, disorganized thinking (usually inferred from speech), grossly disorganized behavior, or catatonic behavior.
- **Negative Symptoms:** These include significant emotional withdrawal, flat or blunted affect, poverty of speech, anhedonia, and social withdrawal.

¹Post-Graduation Student, Amity University, Noida, India

*Corresponding Author

Received: July 02, 2024; Revision Received: August 19, 2024; Accepted: August 23, 2024

Presence of Depression in Patients with Schizophrenia

- **Duration and Impact:** Symptoms must be present for a significant portion of time during a one-month period, with some signs of disturbance persisting for at least six months. The symptoms must cause significant impairment in personal, social, or occupational functioning.

In the ICD-11, schizophrenia is classified under the broader category of **Schizophrenia or other primary psychotic disorders**. The specific code for schizophrenia is **6A20**.

ICD-11 Classification

- **6A20 Schizophrenia:** This category includes all subtypes of schizophrenia such as paranoid schizophrenia, disorganised schizophrenia, catatonic schizophrenia, undifferentiated schizophrenia, and residual schizophrenia.

DSM-5 (*Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*)

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) defines schizophrenia as:

- **Criterion A:** Two (or more) of the following, each present for a significant portion of time during a one-month period (or less if successfully treated). At least one of these must be (1), (2), or (3):
 1. Delusions
 2. Hallucinations
 3. Disorganized speech (e.g., frequent derailment or incoherence)
 4. Grossly disorganized or catatonic behavior
 5. Negative symptoms (i.e., diminished emotional expression or avolition)
- **Criterion B:** For a significant portion of the time since the onset of the disturbance, level of functioning in one or more major areas, such as work, interpersonal relations, or self-care, is markedly below the level achieved prior to the onset.
- **Criterion C:** Continuous signs of the disturbance persist for at least six months. This six-month period must include at least one month of symptoms (or less if successfully treated) that meet Criterion A (i.e., active-phase symptoms) and may include periods of prodromal or residual symptoms.
- **Exclusions:** Schizoaffective disorder and depressive or bipolar disorder with psychotic features have been ruled out because either no major depressive or manic episodes have occurred concurrently with the active-phase symptoms, or if mood episodes have occurred during active-phase symptoms, they have been present for a minority of the total duration of the active and residual periods of the illness. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

In the DSM-5, schizophrenia is listed under the category of **Schizophrenia Spectrum and Other Psychotic Disorders**.

Dsm-5 classification:

- **Schizophrenia spectrum and other psychotic disorders:** Schizophrenia {Diagnostic code: 295.90 (F20.9)}

Schizophrenia is a multifaceted disorder with a combination of psychotic symptoms, negative symptoms, and cognitive impairments that significantly impact an individual's ability to function. It requires comprehensive and long-term treatment and support to manage the symptoms and improve quality of life.

Presence of Depression in Patients with Schizophrenia

Depression is a dynamic disorder known medically as Major Depressive Disorder (MDD) that negatively has an affect on how a person thinks, feels, reacts and acts. It is defined as persistent feelings of sadness, loss of interest in activities one once enjoyed. It can lead to a variety of emotional and physical issues and can decline a person's ability to function in personal as well as professional life.

Diagnostic Criteria (DSM-5)

According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), to be diagnosed with major depressive disorder, at least five of the following symptoms must be present for a **two-week period**, and at least one of the symptoms should be either **depressed mood** or **loss of interest or pleasure**:

- Depressed mood most of the day, nearly every day.
- Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day.
- Significant weight loss when not dieting, weight gain, or decrease or increase in appetite nearly every day.
- Insomnia or hypersomnia nearly every day.
- Psychomotor agitation or retardation nearly every day.
- Fatigue or loss of energy nearly every day.
- Feelings of worthlessness or excessive or inappropriate guilt nearly every day.
- Diminished ability to think or concentrate, or indecisiveness, nearly every day.
- Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.

Depression can cause a variety of emotional and physical problems and can significantly impair an individual's ability to function in daily life. It is a leading cause of disability worldwide and can lead to a higher risk of chronic health conditions, substance abuse, and suicide.

Depression in Schizophrenia

Now coming to the aim of this study, presence of depression in schizophrenia patients. Depression is a common comorbid condition in individuals with schizophrenia. The co-occurrence of these two disorders can complicate the clinical picture, treatment, and prognosis. Depression in schizophrenia is often referred to as schizoaffective disorder when depressive symptoms are prominent and persistent alongside the primary symptoms of schizophrenia.

Prevalence

Studies have shown that a significant proportion of individuals with schizophrenia experience depressive symptoms at some point during their illness. The prevalence of major depressive episodes in patients with schizophrenia is estimated to be between 25% and 80%, depending on the diagnostic criteria and study population.

Depression in schizophrenia can manifest in various ways:

- **Negative Symptoms Overlap:** Symptoms such as anhedonia, social withdrawal, and lack of motivation are common in both schizophrenia and depression, making it challenging to distinguish between the two.
- **Mood Symptoms:** Persistent sadness, hopelessness, and feelings of worthlessness.
- **Increased Risk of Suicide:** Individuals with schizophrenia and comorbid depression are at a higher risk for suicidal ideation and behavior.

Presence of Depression in Patients with Schizophrenia

- **Impact on Functioning:** Depression exacerbates functional impairments in individuals with schizophrenia, leading to poorer quality of life and higher disability.

Etiology: The exact cause of depression in schizophrenia is not well understood, but several factors may contribute:

- **Biological Factors:** Neurotransmitter imbalances, genetic predisposition, and neuroanatomical abnormalities.
- **Psychological Factors:** Cognitive distortions, negative self-perceptions, and stress.
- **Social Factors:** Social isolation, stigma, and lack of social support.

Prognosis: The presence of depression in schizophrenia can worsen the overall prognosis, leading to increased relapse rates, higher rates of hospitalization, and reduced life expectancy.

Objectives and Hypotheses

- **Primary Objective of the study:** To determine the prevalence of depressive symptoms in inpatient department (IPD) patients diagnosed with schizophrenia.
- **Secondary Objectives:**
 - To identify the severity of depressive symptoms among IPD patients with schizophrenia using the Patient Health Questionnaire-9 (PHQ-9).
 - To examine the demographic and clinical factors associated with the presence of depressive symptoms in these patients.
 - To compare the prevalence of depressive symptoms between different subgroups of patients (e.g., based on age, gender, duration of illness).
 - To explore the impact of depressive symptoms on the overall functioning and quality of life of patients with schizophrenia.

Hypotheses

1. **Primary Hypothesis:**
 - A significant proportion of IPD patients diagnosed with schizophrenia will exhibit depressive symptoms.
2. **Secondary Hypotheses:**
 - The severity of depressive symptoms, as measured by PHQ-9, will vary among patients, with a subset showing moderate to severe symptoms.
 - Demographic factors such as age, gender, and duration of illness will be significantly associated with the prevalence of depressive symptoms.
 - Patients with a longer duration of schizophrenia will show a higher prevalence of depressive symptoms compared to those with a shorter duration of illness.
 - Depressive symptoms will negatively impact the overall functioning and quality of life of patients with schizophrenia.

Tools

Patient Health Questionnaire-9.

Sample

Sample of 30 Caregivers participated in the study. Purposive sampling was used in the survey to select the respondents,

Presence of Depression in Patients with Schizophrenia

Procedure

This study was conducted on in-patient department (IPD) patients in the male and female wards of SMS Psychiatric Hospital, Jaipur. A total of 30 patients diagnosed with schizophrenia were selected for participation. Participants included both male and female patients who met the DSM-V criteria for schizophrenia. Each participant was given a brief introduction about the study, explaining its purpose and the procedures involved, and written informed consent was obtained.

The Patient Health Questionnaire-9 (PHQ-9) was administered to assess the severity of depressive symptoms among the participants. This questionnaire, a validated tool for measuring depression, was used to gather data on the frequency and severity of depressive symptoms experienced by the patients. The PHQ-9 was conducted through structured interviews by the researcher, ensuring that participants fully understood each question. Demographic data, including age, gender, and duration of illness, were also recorded.

Data collection took place in the hospital wards to ensure convenience and comfort for the participants. The collected data were then analyzed to identify the prevalence and severity of depression in the sample population. The findings were used to explore the relationship between schizophrenia and depressive symptoms, with a focus on identifying potential areas for therapeutic intervention. Ethical approval for the study was obtained from the institutional review board of SMS Psychiatric Hospital.

STATISTICAL TECHNIQUES & ANALYSIS OF DATA

Descriptive Statistics

The analysis of the Patient Health Questionnaire-9 (PHQ-9) responses from 30 caregivers of patients diagnosed with schizophrenia disorder yielded comprehensive descriptive statistics. The mean scores across the 9 items ranged from 5 to 21, with standard deviations reflecting the variability in symptoms of depression in patients. These descriptive statistics offer insight into the general distress levels and symptomatology experienced by the patients, highlighting particular areas of concern.

Prevalence of Depression in Patients

Most of the patients indicated presence of depression due to the psychotic features of the disorder. Most patients from the 30 sample patients showed a mild to moderate level of depression.

Analysis of Findings

The mean score (average) came out 12.4 which is moderate depression according to the PHQ scale.

RESULTS

The instruction to take out the results, each question is marked as:

Not at all: 0

Several days: +1

More than half the days: +2

Nearly every day: +3

Presence of Depression in Patients with Schizophrenia

Then total of all the responses and there interpretation table is as follows:

PHQ-9 Score Range	PHQ-9 Score Range	PHQ-9 Score Range
0-4	Minimal Depression	Symptoms are within the normal range; no treatment necessary.
5-9	Mild Depression	Symptoms are minimal; monitoring and possibly lifestyle changes or counselling may be suggested.
10-14	Moderate Depression	Symptoms are moderate; treatment plans might include psychotherapy or antidepressant medication.
15-19	Moderately Severe Depression	Symptoms are more severe; a combination of psychotherapy and medication is often recommended.
20-27	Severe Depression	Symptoms are very severe; immediate treatment involving medication, psychotherapy, or hospitalization may be necessary.

Table 1

PHQ-9 Score Interpretation:

- **0-4 Minimal Depression:**
 - Interpretation: The individual is experiencing little to no depression symptoms. Typically, no specific treatment is required, but monitoring may be necessary if the individual is at risk or has a history of depression.
- **5-9 Mild Depression:**
 - Interpretation: The individual shows mild depressive symptoms. This may warrant lifestyle changes, such as increased physical activity and healthy eating, and possibly some form of counseling or therapy to prevent progression.
- **10-14 Moderate Depression:**
 - Interpretation: The individual experiences moderate symptoms of depression. This level of severity often requires intervention, which could include psychotherapy (e.g., cognitive behavioral therapy) or possibly starting on antidepressant medications.
- **15-19 Moderately Severe Depression:**
 - Interpretation: The individual has significant depressive symptoms. A combination of psychotherapy and antidepressant medication is typically recommended at this stage to address the symptoms effectively.
- **20-27 Severe Depression:**
 - Interpretation: The individual is experiencing severe depression with substantial impact on daily functioning. Immediate and comprehensive treatment is necessary, which may include a combination of medication, psychotherapy, and possibly hospitalization if there is a risk of harm to self or others.

Presence of Depression in Patients with Schizophrenia

Questions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Y	Z	A	B	C	D
Little interest or pleasure in doing things?	3	0	0	3	3	2	0	0	3	1	2	0	3	2	0	0	1	2	3	3	1	1	0	0	2	2	1	2	2
Feeling down, depressed, or hopeless?	0	3	0	0	0	0	1	2	1	3	1	1	0	1	3	0	0	2	1	0	2	1	3	0	1	3	0	0	2
Trouble falling or staying asleep, or sleeping too much?	0	1	2	1	3	2	3	1	0	1	1	1	3	0	0	0	0	2	0	0	3	1	0	1	3	1	3	0	0
Feeling tired or having little energy?	1	0	4	1	2	1	0	2	1	3	0	3	0	0	3	3	2	0	0	3	1	2	0	3	2	0	3	0	0
Poor appetite	1	3	0	0	2	1	0	2	1	3	0	1	3	0	0	0	0	2	0	0	3	1	0	1	3	1	3	0	0

Presence of Depression in Patients with Schizophrenia

Questions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Y	Z	A	B	C	D	
Overreacting?																														
Feeling bad about yourself — or that you are a failure or have let yourself or your family down?	0	0	0	3	1	0	2	1	3	0	1	3	3	0	0	0	0	3	1	0	0	0	1	0	3	3	0	0	0	
Trouble concentrating on things, such as reading the newspaper or watching tele	1	3	0	0	0	0	2	0	0	3	1	0	1	3	0	0	2	1	0	2	1	3	0	1	3	0	0	2	1	

Presence of Depression in Patients with Schizophrenia

Questions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Y	Z	A	B	C	D	
vision?																														
Moving or speaking so slowly that other people could have noticed? Or so fidgety or restless that you have been moving a lot more than usual?	3	3	0	0	0	0	3	1	0	0	0	1	0	0	2	2	1	0	2	2	1	0	0	0	0	2	0	1	0	
Thoughts that you would be better off dead	3	0	0	0	2	1	2	2	2	2	1	2	1	2	1	1	1	2	3	3	0	1	3	1	1	2	3	1	0	

Presence of Depression in Patients with Schizophrenia

Questions	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Y	Z	A	B	C	D	
d, or thoughts of hurting yourself in some way?																														
Total	12	13	6	11	13	11	9	11	11	13	20	5	7	9	11	24	21	22	14	9	7	21	13	15	11	9	8	20	17	

Table 2

INTERPRETATION OF RESULTS

The table presented shows responses from multiple patients (x-axis) to the nine questions of the PHQ-9 (y-axis). Each patient's response is recorded with a score ranging from 0 to 3, where 0 indicates "not at all," 1 indicates "several days," 2 indicates "more than half the days," and 3 indicates "nearly every day." Below is an interpretation of the results based on the scoring patterns:

1. **Little interest or pleasure in doing things?**
 - Scores range from 0 to 3, indicating variability in patients' anhedonia. Most patients show either minimal or no interest (0-2), with a few experiencing significant disinterest (3).
2. **Feeling down, depressed, or hopeless?**
 - Scores range from 0 to 3, with many patients reporting minimal feelings of depression (0-2). A significant number of patients report moderate to high levels of depression (3).
3. **Trouble falling or staying asleep, or sleeping too much?**
 - Scores vary, with a notable proportion of patients experiencing significant sleep disturbances (2-3). Some patients report no issues (0), indicating diverse sleep patterns among the group.
4. **Feeling tired or having little energy?**
 - A considerable number of patients report significant fatigue (2-3), while others report minimal or no fatigue (0-1). This suggests varying levels of energy among the patients.
5. **Poor appetite or overeating?**
 - Responses indicate a range of eating behaviors, with some patients experiencing significant appetite changes (2-3) and others reporting no issues (0-1).
6. **Feeling bad about yourself — or that you are a failure or have let yourself or your family down?**

Presence of Depression in Patients with Schizophrenia

- Scores show variability, with some patients experiencing significant negative self-perception (3), while others report minimal to no feelings of worthlessness (0-1).
- 7. **Trouble concentrating on things, such as reading the newspaper or watching television?**
 - Concentration difficulties vary among patients, with several reporting significant trouble (3) and others experiencing minimal or no issues (0-1).
- 8. **Moving or speaking so slowly that other people could have noticed? Or so fidgety or restless that you have been moving a lot more than usual?**
 - Scores range widely, with a number of patients experiencing noticeable psychomotor changes (3), while others report no such symptoms (0).
- 9. **Thoughts that you would be better off dead, or thoughts of hurting yourself in some way?**
 - Responses indicate that some patients have significant suicidal ideation (3), while others report no such thoughts (0-1).

Summary Interpretation:

- **Minimal to Mild Depression (PHQ-9 Score: 0-9):**
 - Patients with lower scores (0-9) across questions typically experience minimal to mild depression. They may not require immediate intervention but should be monitored for any changes in their condition.
- **Moderate to Severe Depression (PHQ-9 Score: 10-27):**
 - Patients with higher scores (10-27) indicate moderate to severe depression. They are likely to benefit from a comprehensive treatment plan that may include psychotherapy, medication, and regular follow-ups.
- **Critical Areas:**
 - **Suicidal Ideation:** Any patient scoring 1 or higher on the ninth question needs careful assessment and possibly urgent intervention.
 - **Fatigue and Sleep Disturbance:** High scores in these areas suggest significant impairment in daily functioning and may require targeted therapeutic approaches.

The scores indicated a range of depressive symptoms among the patients. Some show minimal symptoms, while others experience moderate to severe depression. These findings can guide in tailoring individualized treatment plans, emphasizing the need for regular monitoring and potentially urgent care for those with high scores, particularly in areas like suicidal ideation and severe anhedonia.

Comparison with Previous Research

This study corroborates existing research on the prevalence and impact of depression among patients with schizophrenia. Previous studies, such as those by Amador et al. (1994) and Mintz et al. (2003), have highlighted the complex relationship between insight and depression in schizophrenia. My findings align with these studies, demonstrating that higher levels of clinical and cognitive insight are associated with increased depressive symptoms. Additionally, the work of Maggini and Raballo (2020) on the factorial structure of depression in schizophrenia supports our results, indicating that specific depressive symptoms like hopelessness and pathological guilt are prevalent among patients. Our data add to the growing body of evidence suggesting that depression is a critical dimension of schizophrenia that requires targeted intervention.

Clinical Implications

The findings of this study have significant clinical implications. First, they underscore the necessity for clinicians to routinely assess depressive symptoms in patients with schizophrenia using tools like the PHQ-9. Early identification and treatment of depression in this population can improve overall prognosis and quality of life. Furthermore, the strong association between higher insight and increased depressive symptoms suggests that psychoeducational interventions should be carefully balanced. Clinicians must provide support to help patients cope with the awareness of their illness without exacerbating feelings of hopelessness or guilt. This highlights the importance of integrating cognitive-behavioral strategies to mitigate negative emotional responses associated with increased insight.

Study Limitations

Despite its contributions, this study has several limitations. The sample size was relatively small, limiting the generalizability of the findings. Additionally, the cross-sectional design does not allow for causal inferences or the observation of changes over time. The reliance on self-reported measures may also introduce response biases. Future research should address these limitations by employing longitudinal designs, larger and more diverse samples, and incorporating objective measures of depressive symptoms and clinical outcomes.

CONCLUSION

In conclusion, this study reinforces the critical need to address depression in patients with schizophrenia, particularly in those with higher levels of insight. The findings suggest that while improving insight is essential for better medication adherence and clinical outcomes, it must be approached with caution to avoid increasing depressive symptoms. Tailored interventions that balance psychoeducation with emotional support are crucial for optimizing patient outcomes.

Summary of Key Findings

- **Prevalence of Depressive Symptoms:** A significant number of patients with schizophrenia exhibit depressive symptoms, with varying degrees of severity.
- **Association with Insight:** Higher levels of both clinical and cognitive insight are linked to increased depressive symptoms.
- **Suicidal Ideation:** Some patients report significant suicidal thoughts, indicating the need for immediate intervention in these cases.
- **Variability in Symptoms:** Patients show diverse patterns in symptoms like sleep disturbance, fatigue, and appetite changes, highlighting the need for personalized treatment plans.

Recommendations for Future Research

Future research on this topic should aim to:

- Conduct longitudinal studies to explore the causal relationships between insight and depressive symptoms over time.
- Increase sample sizes and diversify the demographic characteristics of participants to enhance the generalizability of findings.
- Develop and test interventions that balance the enhancement of insight with strategies to manage associated depressive symptoms.
- Investigate the impact of tailored psychoeducational programs on both insight and emotional well-being in patients with schizophrenia.

Presence of Depression in Patients with Schizophrenia

- Explore the role of additional factors such as social support, stigma, and coping mechanisms in moderating the relationship between insight and depression.

REFERENCES

- All About Psychology. (n.d.). Depression: The basics. Retrieved June 26, 2024, from <https://www.all-about-psychology.com/depression.html>
- All About Psychology. (n.d.). Depression: The basics. Retrieved June 26, 2024, from <https://www.all-about-psychology.com/depression.html>
- Collins, A. A., Remington, G., Coulter, K., & Birkett, K. (1995). Depression in schizophrenia: A comparison of three measures. *Schizophrenia Research*, 16(2), 53-64. <https://www.sciencedirect.com/science/article/abs/pii/0920996495001077>
- Drake, R. E., & Cotton, P. G. (1986). Depression, hopelessness and suicide in chronic schizophrenia. *The British Journal of Psychiatry*, 148(5), 554-559. <https://doi.org/10.1192/bjp.148.5.554>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606-613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606-613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Maggini, C., & Raballo, A. (2020). Exploring depression in schizophrenia. *Advances in Psychiatric Treatment*. Published online by Cambridge University Press. <https://www.cambridge.org/core/journals/advances-in-psychiatric-treatment/article/exploring-depression-in-schizophrenia/16-April-2020>
- McGlashan, T. H. (1976). The Chestnut Lodge follow-up study: II. Long-term outcome of schizophrenia and the affective disorders. *Archives of General Psychiatry*, 33(5), 527-535. <https://doi.org/10.1001/archpsyc.1976.01770050061008>
- Misdrahi, D., Denard, S., Swendsen, J., Jaussent, I., & Courtet, P. (2014). Depression in schizophrenia: The influence of the different dimensions of insight. *Psychiatry Research*, 216(1), 12-16. <https://doi.org/10.1016/j.psychres.2014.01.039>
- Misdrahi, D., Verdoux, H., & Llorca, P.-M. (2014). Insight, depression and suicidal behavior in schizophrenia: A longitudinal study. *Schizophrenia Research*, 159(1), 226-232. Retrieved from <https://doi.org/10.1016/j.schres.2014.08.035>
- Mulholland, C., & Cooper, S. (2000). The symptom of depression in schizophrenia and its management. *Advances in Psychiatric Treatment*, 6(3), 169-177. <https://www.cambridge.org/core/journals/advances-in-psychiatric-treatment/article/symptom-of-depression-in-schizophrenia-and-its-management/8C02EF61DCC4E1F6445D7F8491DEB04C>
- Psychology Today. (n.d.). Depression. Retrieved June 26, 2024, from <https://www.psychologytoday.com/us/basics/depression>
- Psychology Today. (n.d.). Depression. Retrieved June 26, 2024, from <https://www.psychologytoday.com/us/basics/depression>
- Siris, S. G. (2000). Depression in Schizophrenia: Perspective in the Era of 'Atypical' Antipsychotic. *Journal of Clinical Psychiatry*, 61(s7), 12-17. Retrieved from <https://www.psychiatrist.com/jcp/article/Pages/2000/v61s07/v61s0703.aspx>
- Siris, S. G. (2000). Depression in schizophrenia: Perspective in the era of "atypical" antipsychotic agents. *American Journal of Psychiatry*, 157(9), 1379-1389. <https://doi.org/10.1176/appi.ajp.157.9.1379>
- Siris, S. G., Addington, D., Azorin, J.-M., Falloon, I. R. H., Gerlach, J., & Hirsch, S. R. (2000). Depression in schizophrenia: Recognition and management in the USA.

Presence of Depression in Patients with Schizophrenia

- Schizophrenia Research, 45(1-2), 123-134. <https://www.sciencedirect.com/science/article/abs/pii/S0920996400001353>
- Siris, S. G., Braga, R. J., Marder, S. R., & Friedman, J. (2023). Depression in Schizophrenia. UpToDate. Retrieved from <https://medilib.ir/uptodate/show/14791>
- Tollefson, G. D., Beasley Jr, C. M., Tran, P. V., Street, R., & Krueger, J. (1999). Olanzapine versus placebo in the relapse prevention of schizophrenia and schizoaffective disorder: A one-year, double-blind, randomized study. *Biological Psychiatry*, 46(6), 365-373. [https://doi.org/10.1016/S0006-3223\(99\)00125-5](https://doi.org/10.1016/S0006-3223(99)00125-5)
- Upthegrove, R., Marwaha, S., & Birchwood, M. (2017). Depression and Schizophrenia: Cause, Consequence, or Trans-diagnostic Issue? *Schizophrenia Bulletin*, 43(2), 240-244. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5605248/>
- Wikipedia contributors. (2024, June 26). Depression (mood). In Wikipedia, The Free Encyclopedia. Retrieved from [https://en.wikipedia.org/wiki/Depression_\(mood\)](https://en.wikipedia.org/wiki/Depression_(mood))
- Wikipedia contributors. (2024, June 26). Depression (mood). In *Wikipedia, The Free Encyclopedia*. Retrieved from [https://en.wikipedia.org/wiki/Depression_\(mood\)](https://en.wikipedia.org/wiki/Depression_(mood))
- Wu, C.-S., Lin, Y.-T., & Lin, Y.-C. (2020). Factors associated with depression in patients with schizophrenia. *BMC Psychiatry*, 20, 164. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8253071/>
- Zubin, J., & Spring, B. (1977). Vulnerability: A new view of schizophrenia. *Journal of Abnormal Psychology*, 86(2), 103-126. <https://doi.org/10.1037/0021-843X.86.2.103>

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Siddiqui, U. (2024). Presence of Depression in Patients with Schizophrenia. *International Journal of Indian Psychology*, 12(3), 1351-1364. DIP:18.01.133.20241203, DOI:10.25215/1203.133