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Original Research Article

Hospital-Based Prevalence of Schizophrenia in a Psychiatric Outpatient Department of a Tertiary Care Center in Western Nepal

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ABSTRACT:

Introduction: Schizophrenia is a disabling brain disorder affecting approximately 24 million people worldwide. Epidemiological data on schizophrenia from western Nepal are sparse. This study aimed to determine the hospital-based prevalence and sociodemographic profile of schizophrenia among patients attending the psychiatric outpatient department of a tertiary care center in western Nepal. **Methods**: This retrospective, record-based, descriptive study reviewed records of patients visiting the center over a two-year period from January 2022 to December 2023. All patients diagnosed with schizophrenia according to ICD-10 criteria were included using total enumeration. Data were retrieved from the OPD register using a semi-structured proforma and analyzed with descriptive statistics using Microsoft Excel. Ethical approval was obtained from the Institutional Review Committee. **Results**: A total of 7,739 patients attended the psychiatric OPD, of whom 192 were diagnosed with schizophrenia, giving an overall hospital-based prevalence of 2.48%. The prevalence was 2.75% in 2022 and 2.17% in 2023. Males constituted 53.98% of cases in 2022 and 67.09% in 2023. The most common age group was 20–29 years (28.31% in 2022; 37.97% in 2023). Unemployed patients (30.97%) were most common in 2022, while students (32.91%) were most common in 2023. Secondary education was the most common educational level, and most patients were married. **Conclusion**: Schizophrenia constituted a notable proportion of psychiatric OPD attendances. Cases were predominantly young, married males with secondary education. These findings provide baseline data to guide mental health service planning in western Nepal.

Keywords: ICD-10; Schizophrenia; Prevalence; Psychiatric outpatient; Sociodemographic profile.

INTRODUCTION:

Schizophrenia is a disabling brain disorder characterized by hallucinations, delusions, disorganized communication, poor planning, reduced motivation, and blunted affect.[1,2] Perceptual distortions may affect all five senses but most commonly manifest as auditory hallucinations, paranoid or bizarre delusions, or disorganized speech and thinking, with significant social or occupational dysfunction.[3]

Schizophrenia affects approximately 24 million people worldwide, with a prevalence of somewhat less than 1% of the population.[3] Despite being relatively uncommon, it is one of the most important psychiatric illnesses because of its early onset, chronicity, and associated disability, and it remains a leading contributor to the global burden of disease.[4,5]

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The incidence of schizophrenia varies with race and ethnicity, and is higher in urban than in rural areas.[6] Although prevalence is generally reported to be similar across developing and developed countries, outcome has been found to be better in developing countries.[6] Risk factors include urban environment, poverty, migration and social adversity, racial discrimination, family dysfunction, unemployment, and poor housing; maternal exposure to infection has also been implicated.[7,8]

Epidemiological studies on schizophrenia are sparse in western Nepal, and local data are needed for mental health service planning and resource allocation. Therefore, the present study was undertaken to determine the hospital-based prevalence of schizophrenia and to describe its sociodemographic profile among patients attending the psychiatric outpatient department of a tertiary care center in Palpa, western Nepal.

METHODS:

This was a retrospective, record-based, descriptive study conducted in the psychiatric outpatient department (OPD) of Lumbini Medical College – Teaching Hospital (LMCTH), a tertiary care center in Palpa, western Nepal. The study was conducted over a three months period – April through June 2026 – during which records of patients vising the center over a two-year period from January 2022 to December 2023 were reviewed. Ethical approval was obtained from the Institutional Review Committee (IRC) of LMCTH (Protocol No. 37/26/V1.R0). As the study was retrospective and based on existing medical records, the requirement for informed consent was waived by the IRC.

All patients diagnosed with schizophrenia according to ICD-10 criteria who visited the psychiatric OPD during the study period were included.[9] A non-probability consecutive sampling method was used. As this was a record-based study using total enumeration, all eligible cases during the study period were included, and no formal sample size calculation was performed.

Patients were included if they had been diagnosed with schizophrenia according to ICD-10 criteria and had visited the psychiatric OPD between January 2022 and December 2023. Patients with dementia or other organic brain disorders, substance-induced psychosis, schizoaffective disorder, chronic medical illness, or incomplete medical records were excluded. Pregnant patients were also excluded.

Patient data were retrieved from the psychiatric OPD register/logbook. A semi-structured proforma was designed to record sociodemographic variables (age, sex, marital status, residence, education, occupation, and family history) and clinical details. Diagnoses were based on ICD-10 criteria as recorded by the treating psychiatrist.[9]

Data were analyzed using descriptive statistics. Categorical variables were expressed as frequencies and percentages and presented in tables. Microsoft Excel was used for data entry and analysis.

RESULTS:

A total of 7,739 patients attended the psychiatric OPD during the two-year study period, of whom 192 were diagnosed with schizophrenia, giving an overall hospital-based prevalence of 2.48%. In 2022, 113 of 4,102 OPD patients (2.75%) were schizophrenic, while in 2023, 79 of 3,637 OPD patients (2.17%) were schizophrenic (**Table 1**).

Male patients constituted the majority in both years, and the proportion of males increased from 53.98% in 2022 to 67.09% in 2023 (**Table 2**).

The most common age group in both years was 20–29 years, accounting for 28.31% of cases in 2022 and 37.97% in 2023. The majority of patients were aged 20–49 years in both years (**Table 3**).

Regarding occupation, unemployment was the most common category in 2022 (30.97%), whereas students constituted the largest group in 2023 (32.91%) (**Table 4**).

Secondary education was the most common level of education in both years, followed by tertiary education in 2023 and primary education in 2022 (**Table 5**).

Most patients were married in both years, although the proportion of married patients decreased from 64.60% in 2022 to 51.90% in 2023 (**Table 6**).

Table 1. *Total number of OPD patients and schizophrenic patients per year*

Year	Total OPD patients	n	%
2022	4,102	113	2.75
2023	3,637	79	2.17

Table 2. *Gender distribution of patients*

Year	Gender	n	%
2022	Male	61	53.98
2022	Female	52	46.02
2023	Male	53	67.09
2023	Female	26	32.91

Table 3. *Age distribution of patients*

Age range (years)	2022 n	2022 %	2023 n	2023 %
10–19	13	11.50	7	8.86
20–29	32	28.31	30	37.97
30–39	29	25.66	18	22.78
40–49	19	16.81	14	17.72
50–59	17	15.04	6	7.59
60–69	2	1.77	4	5.06
70–79	1	0.88	0	0.00
Total	**113**	**100.00**	**79**	**100.00**

Table 4. *Occupation of patients*

Occupation	2022 n	2022 %	2023 n	2023 %
Student	24	21.24	26	32.91
Unemployed	35	30.97	11	13.92
Housewife	23	20.35	16	20.25
Farming	21	18.58	17	21.52
Business	10	8.85	9	11.39
Total	**113**	**100.00**	**79**	**100.00**

Table 5. *Level of education of patients*

Level of Education	2022 n	2022 %	2023 n	2023 %
Primary	33	29.20	17	21.52
Secondary	55	48.67	36	45.57
Tertiary	25	22.12	26	32.91
Total	**113**	**100.00**	**79**	**100.00**

Table 6. *Marital status of patients*

Marital status	2022 n	2022 %	2023 n	2023 %
Married	73	64.60	41	51.90
Unmarried	40	35.40	38	48.10
Total	**113**	**100.00**	**79**	**100.00**

DISCUSSION:

This was a naturalistic, hospital-based study that provides data from real-world clinical practice. Such data are likely to be more representative of day-to-day practice than those from randomized controlled trials, particularly in resource-limited settings where treatment protocols are often adapted to local realities.

Social disadvantages have been identified as risk factors for schizophrenia, including poverty, migration related to social adversity, discrimination, family dysfunction, unemployment, and poor housing.[10] These factors are highly relevant to the population served by our center, where many patients come from rural districts with limited access to mental health services.

In this study, schizophrenia was more common in males than in females. It has been proposed that despite a higher prevalence of schizophrenia in males, the prognosis is better in females.[11] This observation is consistent with findings from other South Asian settings.[12] The male predominance observed in our study may reflect the earlier age of onset in males, as well as the possibility that females in this region are less likely to seek psychiatric care due to social and cultural factors, including stigma and household responsibilities. The better prognosis reported in females has been attributed in part to the protective effects of estrogen and to better social support.[13]

The age distribution showed that the highest number of patients belonged to the 20–29 year age group, a finding supported by previous epidemiological studies.[14] Similarly, the peak age of onset of schizophrenia has been reported to be 15–30 years,[15] which corresponds with our study. The concentration of cases in early adulthood is clinically significant, as this is the period when educational and occupational trajectories are established. Early onset may therefore contribute to long-term disability and lost productivity, underscoring the importance of early detection and intervention.

The present study also evaluated the occupational status of patients. Unemployed patients (35, 30.97%) outnumbered other occupational groups in 2022, while students (26, 32.91%) constituted the largest group in 2023. This finding is similar to previous studies from tertiary care settings.[16] Studies have found that people with schizophrenia are more likely to reside in areas characterized by higher social deprivation and to occupy lower socioeconomic positions.[17] This may reflect the social drift hypothesis, in which individuals with schizophrenia gradually move down the socioeconomic ladder as a consequence of their illness.[18] In our setting, where vocational rehabilitation services are limited, unemployment may further compound disability and reduce the likelihood of recovery.

Regarding education, in both 2022 and 2023, the highest number of patients had completed

secondary education. This finding is similar to some previous studies,[19] but contrasts with others that have reported higher rates of illiteracy among patients with schizophrenia.[16] This difference may be explained by the fact that most patients attending our hospital come from the Syangja, Palpa, Arghakhanchi, and Gulmi districts, which are relatively well known for education in our country. It is also possible that patients with higher education are more likely to recognize symptoms and seek psychiatric care.

Regarding marital status, the majority of patients were married in both 2022 and 2023. This finding contrasts with studies from other settings, in which the majority of patients were unmarried.[17] Geo-political differences and the early age of marriage in this part of Nepal may explain the contrast. Marriage may also provide social support that facilitates treatment-seeking, although the burden on families caring for patients with schizophrenia should not be underestimated.

Taken together, these findings suggest that schizophrenia in this region predominantly affects young, married males with secondary education, many of whom are unemployed or students. This profile highlights the need for targeted mental health services, including early intervention, vocational support, and family-based care, in western Nepal.

This study provides real-world data on the hospital-based prevalence and sociodemographic profile of schizophrenia from a tertiary care center in western Nepal, a region where epidemiological data are sparse. The two-year study period and the inclusion of all eligible cases (total enumeration) strengthen the representativeness of the findings within the hospital setting.

This study has several limitations. It assessed only outpatients, and the study period was limited to two years. As a hospital-based study, the findings cannot be generalized to the general population. Additionally, the use of non-probability sampling and retrospective record-based data may have introduced selection and information bias.

CONCLUSIONS:

This study found that schizophrenia constituted 2.48% of psychiatric OPD attendances over the two-year study period in this tertiary care center of western Nepal. Male patients outnumbered females, and the majority of cases belonged to the 20–49 year age group. Secondary education was the most common educational level, and most patients were married. The findings provide baseline data on the hospital-based prevalence and sociodemographic profile of schizophrenia in this region and may assist health care providers and policymakers in planning mental health services.

Conflict of Interest: None.

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Authors' Contribution:

Bhaskkar Sharma: Conceptualization, methodology, research design, definition of intellectual content, investigation, data curation, writing-original draft, writing- review and editing, supervision. ***Bishnu Acharya:*** Literature search, methodology, data analysis, statistical analysis and interpretation, writing-review and editing. Resources, manuscript editing, and manuscript review.

Ethical Consideration:

Ethical issues (including plagiarism, data fabrication, and double publication) have been completely observed by the authors.

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REFERENCES

1. McCutcheon RA, Reis Marques T, Howes OD. Schizophrenia-An Overview. JAMA Psychiatry. 2020;77(2):201-210. PMID: 31664453 DOI: 10.1001/jamapsychiatry.2019.3360
2. Striebel JM. What is schizophrenia – symptomatology. CNS Spectr. 2024;30(1)-e12. PMID: 39618398 DOI: 10.1017/s1092852924000622
3. Zhang S, Chen Y, Zhang L, Yang X, Dong J, Lu M, Zhou N, Feng Y, Zhang Y, Zhou Y. Global lifetime prevalence of schizophrenia: A systematic review and meta-analysis. Mol Psychiatry. 2026;31(8):4247-4258. PMID: 41872519 DOI: 10.1038/s41380-026-03533-3
4. Yuan Z, Bai C, Li Y, Zhang J, Yu P, Jiang F. Global burden and prediction study of schizophrenia 1990–2030: comparison with China. BMC Psychiatry. 2025;25(1):955. PMID: 41068720 DOI: 10.1186/s12888-025-07168-6
5. Tosato S, Ristic B, Zanini A, Schimmenti S, Maselli FMC, Vassos E. Environmental risk factors for schizophrenia spectrum disorders around the globe: a mapping review of the literature. Epidemiol Psychiatr Sci. 2025;34:e47. PMID: 40910192 DOI: 10.1017/s204579602510022x
6. Mascayano F, Burgos J, Hernandez V, Casanueva R, Yang X, Li Z, et al. Urbanicity, parental social deprivation, and risk of early psychosis in Chile: a national cohort study. Lancet Reg Health Am. 2025;52:101282. PMID: 41439113 DOI: 10.1016/j.lana.2025.101282
7. Hua JPY, Dal Bon K. Social Determinants of Health and Neurobiology Across the Schizophrenia Course: A Systematic Review. JAMA Psychiatry. Forthcoming 2026. PMID: 42307922 DOI: 10.1001/jamapsychiatry.2026.1312
8. Saatci D, van Nieuwenhuizen A, Handunnetthi L. Maternal infection in gestation increases the risk of non-affective psychosis in offspring: a meta-analysis. J Psychiatr Res. 2021;139:125-31. PMID: 34058651 DOI: 10.1016/j.jpsychires.2021.05.039
9. World Health Organization. ICD-10: International statistical classification of diseases and related health problems [Internet]. Geneva: WHO; Available from this link.
10. Ansari SA, Khan FI, Alshanberi AM, Alam MZ, Saboor M, Ashraf GM. Gender-specific perspectives in schizophrenia: Recent advances and future directions. Prog Neuropsychopharmacol Biol Psychiatry. 2026;145:111617. PMID: 41587687 DOI: 10.1016/j.pnpbp.2026.111617
11. Moniem I, Kafetzopoulos V. Sex differences in schizophrenia: symptomatology, treatment efficacy and adverse effects. Front Psychiatry. 2025;16:1594334. PMID: 40589655 DOI: 10.3389/fpsyt.2025.1594334
12. Desai R, Abdur-Rahman Z, Boscoe A, Vitalis J, Qureshi O, Khan Z, et al. Prevalence of psychosis in South Asia: A systematic review and meta-analysis. Schizophr Res. 2026;296:163-174. PMID: 42475773 DOI: 10.1016/j.schres.2026.07.011
13. Seeman MV. Estrogen, schizophrenia and neurodevelopment. Women's Health. 2006;2(4):571-6. DOI: 10.2217/17455057.2.4.571
14. Immonen J, Jääskeläinen E, Korpela H, Miettunen J. Age at onset and the outcomes of schizophrenia: a systematic review and meta-analysis. Early Interv Psychiatry. 2017;11(6):453-460. PMID: 28449199 DOI: 10.1111/eip.12412
15. Rai B. Early intervention in psychosis: Strategies, predictors and challenges. Future Health. 2025;3(2):88-92. DOI: 10.25259/FH_91_2025
16. Indhumathi T, Nisha B, Durairaj J, Ramesh Kumar TC, Selva Savari Raj J, Swarup A et al. Factors predicting employment status among persons with schizophrenia: A cross-sectional study from Chennai, India. Int J Soc Psychiatry. 2025;71(1):90-99. PMID: 39235219 DOI: 10.1177/00207640241280161
17. Afolayan JA, Peter IO, A.N. A. Prevalence of schizophrenia among patients admitted into a Nigeria Neuro-psychiatric hospital. IOSR Journal of Dental and Medical Sciences. 2015;14(6):9-14. DOI: 10.6084/M9.FIGSHARE.1464927.V1
18. Sariaslan A, Fazel S, D'Onofrio BM, Långström N, Larsson H, Bergen SE, et al. Schizophrenia and subsequent neighborhood deprivation: revisiting the social drift hypothesis using population, twin and molecular genetic data. Transl Psychiatry. 2016;6(5):e796. PMID: 27138795 DOI: 10.1038/tp.2016.62
19. Luo Y, Pang L, Zhao Y, Guo C, Zhang L, Zheng X. Gender difference in the association between education and schizophrenia in Chinese adults. BMC Psychiatry. 2020;20(1):296. PMID: 32532241 DOI: 10.1186/s12888-020-02700-2