

Frequency of psychiatric illnesses and opinion/vantage of patients attending neurology out-patient department

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Abstract

Objective: To determine the Frequency of psychiatric illnesses in patients with neurological conditions, and to take their opinion about psychiatric disorders.

Method: The cross-sectional study was conducted from June 1 to August 30, 2021, at the Neurology Outpatient Department of Allied Hospital, Faisalabad, Pakistan, and comprised patients of either gender aged 12-70 years from among those visiting the outpatient clinic. Data was collected through interviews and the 41-item Depression Anxiety Stress Scale. Data was analysed using SPSS 21.

Results: Of the 201 patients, 160(79.6%) were females and 41(20.4%) were males. The overall mean age was 34.5+/-9.38 years. Primary neurological problem was headache 119(59.2%). Overall, 155(77.2%) patients met the criteria of psychiatric disorders; 55(27.4%) anxiety, 37(19.4%) had depressive disorder, 42(20.8%) mixed anxiety depressive disorder, and 19(9.5%) had other psychiatric illnesses. Also, 101(50.2%) patients lacked awareness about psychiatry illnesses, 35(17.4%) had fear of stigma, and 28(13.9%) had misconceptions.

Conclusion: The frequency of psychiatric disorders among those visiting the neurology outpatient department was high, and was associated with negative views about such illnesses.

Key Words: Comorbidity, Neurology outpatient, Psychiatric illness, Opinion
(JPMA 73: 1583; 2023) DOI: 10.47391/JPMA.4965

Submission completion date: 29-10-2021 — **Acceptance date:** 26-11-2022

Introduction

It is imperative to distinguish between psychiatric and neurological illnesses. The former presents as an altered state in an individual's cognition, emotions and behaviour produces social and psychological dysfunction, while in the latter, brain, spinal cord and nerves are affected.¹⁻² Considering the chronic nature of disease and treatment, it is not surprising to identify mental and behavioural problems in patients suffering from neurological disorders. Unfortunately, psychiatric disorders are frequently missed in neurological patients³⁻⁴. Depression, somatoform disorder, substance abuse and anxiety disorders are the common psychiatric comorbidities in patients with neurological disorders.⁵⁻⁸

According to a recent World Health Organisation (WHO) report, <2% of government health budgets is dedicated globally for the management of mental and neurological disorders.⁷⁻⁹

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Misconception, fear of stigma and unawareness can misguide individuals in terms of mental disorder, but in the United States, 87% adults in a study believed that individuals were not ashamed to have mental illness, and 86% believed patients can recover from mental illnesses. In Pakistan, both neurological and psychiatric illnesses are common as well as associated with multiple comorbidities, and carry a certain level of social stigma. Misconceptions about psychiatric co-morbidity make it even more difficult for patients to target quality mental health services.¹⁰⁻¹²

The current study was planned to determine the frequency of psychiatric illnesses in patients with neurological conditions, and to take their opinion about psychiatric disorders.

Subjects and Methods

The cross-sectional study was conducted from June 1 to August 30, 2021, at the Neurology Outpatient Department (OPD) of Allied Hospital, Faisalabad, Pakistan. After approval from the ethics review committee of Faisalabad Medical University (FMU), Faisalabad, the sample was raised using purposive random sampling technique from among patients of either gender aged 12-70 years who were attending the Neurology OPD.

Data was collected using a semi-structured proforma

designed for patients whose neurological diseases were not fully confirmed. In such cases, after taking informed consent, data was collected using interviews done in line with the Diagnostic Statistical Manual version 5 (DSM-5)¹³ for the diagnosis of psychiatric disorders. Besides, the 42-item Depression Anxiety Stress Scale (DASS)¹⁴ was also used to measure the negative emotional states of depression, anxiety and stress. This proforma, in addition to demographic information, also gathered patients' views about psychiatry illnesses.

Data was analysed using SPSS 21. Chi-square test was used to investigate the relationship between co-morbid psychiatric symptoms and neurological illnesses, while descriptive analysis and Fisher's exact test were used as appropriate. $P < 0.05$ was considered statistically significant.

Results

Of the 201 patients, 160(79.6%) were females and 41(20.4%) were males. The overall mean age was 34.5+/-9.38 years. Primary neurological problem was headache 119(59.2%) (Table 1).

Table-1: Socio-demographic characteristics (n = 201).

Sociodemographic variables	Frequency (n)	Percentage (%)	Depression (%)	Anxiety (%)	Stress (%)
Age (years)					
12-18	19	9.5	3.9%	4.7%	7.9%
19-30	62	30.8	21.6%	34.4%	34.2%
31-50	82	40.8	58.8%	45.3%	42.1%
50-70	38	18.9	15.7%	15.6%	15.8%
Total					
Mean Age 34.5±9.38	201	100.0			
Gender					
Female	160	79.6			
Male	41	20.4			
Total	201	100			
Marital Status	Frequency (n)	Percentage (%)			
Married	149	74.1			
Single	49	24.4			
Divorced	2	1.0			
Widowed	1	0.5			
Total	201	100			
Habitat	Frequency (n)	Percentage (%)			
Urban	131	65.21			
Rural	70	34.8			
Total	201	100			
Primary diagnosis (neurological)	Frequency (n)	Percentage (%)			
Epilepsy	21	10.4			
Headache	119	59.2			
Other illnesses	61	30.3			
Total	201	100			

SD: Standard deviation.

Table-2: Patients' opinions, psychiatric disorders and comorbidities.

Patients opinion about psychiatric disorders	Frequency (n)	Percentage (%)	Cumulative Percent (%)
Valid			
Awareness	37	18.4	18.4
lack of awareness	101	50.2	68.7
Stigma	35	17.4	86.1
Misconception	28	13.9	100.0
Total	201	100.0	
Psychiatric disorders and their co-morbidities			
• Depression	22	10.9	10.9
• Anxiety	43	21.4	21.4
• Stress	24	11.9	11.9
• Depression & anxiety	21	10.4	10.4
• Depression and stress	17	8.5	8.5
• Anxiety & stress	12	6	6
• Depression ,anxiety & stress	21	10.4	10.4
• Others	19	9.5	9.5
• None	22	10.9	10.9
Total	201	100	100

Overall, 155(77.2%) patients met the criteria of psychiatric disorders; 55(27.4%) anxiety, 37(19.4%) had depressive disorder, 42(20.8%) mixed anxiety depressive disorder, and 19(9.5%) had other psychiatric illnesses. Also, 101(50.2%) patients lacked awareness about psychiatry illnesses, 35(17.4%) had fear of stigma, and 28(13.9%) had misconceptions (Table 2).

The level of intensity of anxiety and depression was compared with different neurological illnesses (Figure). There was a significant association between stress and neurological illnesses ($p < 0.001$). There was also a significant difference between depressive symptoms and neurological illnesses ($p < 0.001$), as well as a very significant difference between symptoms of anxiety disorder and neurological illnesses ($p < 0.001$). There was also a significant difference between co-morbid psychiatric symptoms and attendance at psychiatric services in the neurological department ($p < 0.05$).

Discussion

The study identified the need for psychosocial assessment, diagnosis and treatment of neurological patients keeping in view the higher Frequency of co-morbid

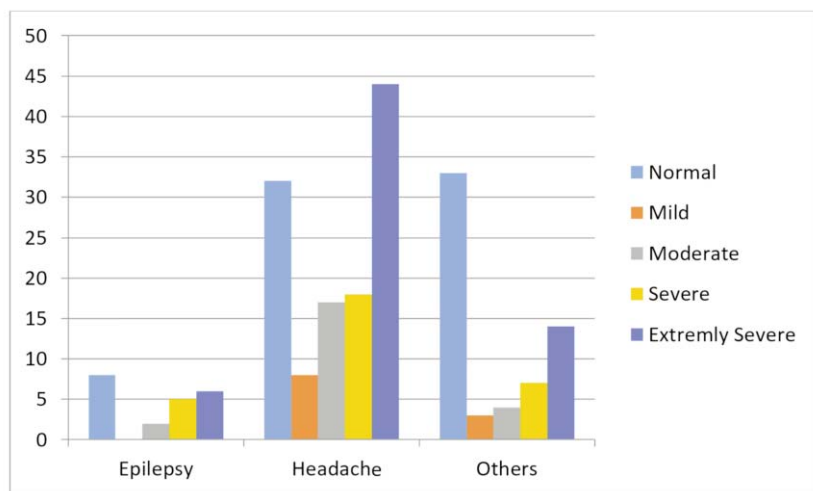


Figure: (A)

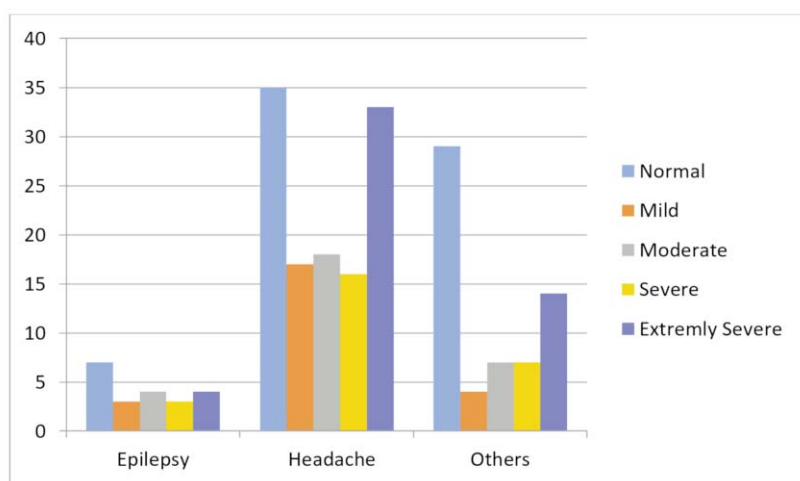


Figure: (B)

Figure: (A) level of anxiety and neurological comorbidity, and (B) level of depression and neurological comorbidity..

psychiatric illnesses as has been shown by earlier studies as well.⁸

A recent study reported a similarly high frequency of psychiatric co-morbidities in neurology specialty, with significantly higher association of dementia rather than depression with older age. Likewise, a national survey in 2007 showed increased frequency of mental health problems in the middle age which reduced with the increasing age, but was significantly higher in the female gender.¹⁵⁻¹⁶

A recent study done in the United Arab Emirates (UAE) presented findings similar to those of the current study, emphasising the importance of liaison psychiatry.¹⁷ However, literature also has studies showing contrasting

findings.¹⁸ A study carried out by neurologists revealed that 30% of referrals from the general practitioners (GPs) to the Neurology OPD were suffering from depression and anxiety instead of neurological problems.¹⁹

The present study found a strong association between psychiatric disorders and the lack of awareness and negative perspective about mental illness. The imperative role of mental health professionals has been highlighted in terms of addressing the negative health beliefs and to reduce the overall stigma associated with mental disorders.^{12,20-21}. Studies have stressed that there is a considerable need to make a change in people's perceptions about psychiatric illnesses.^{11,22} Double stigma has been linked with co-morbid psychiatric and brain disorders, such as epilepsy and depression, which makes it even more difficult for patients and families to seek specialised psychiatric support.²³

The current findings, in line with literature, suggest the need for joint training of neurologists and psychiatrists for proper identification and management of common disorders to promote immediate referrals to the relevant specialty and to effectively decrease the number of undiagnosed patients and economic burden at both individual and community levels. Moreover, the importance of overall healthcare policies, and awareness programmes has been highlighted.²⁴⁻²⁵

The limitations of the current study include single-centre data, smaller sample and shorter duration.

Conclusion

The Frequency of psychiatric disorders among those visiting the Neurology OPD was high, and was associated with negative views about such illnesses.

Limitation: The sample size was not calculated for this study which could influence the power .

Disclaimer: None.

Conflict of Interest: None.

Source of Funding: None.

References

1. Foerschner AM. The History of Mental Illness: From Skull Drills to Happy Pills. *Inqui J* 2010;2;1-4.
2. National Institutes of Health (US), Biological Sciences Curriculum Study (BSCS). NIH Curriculum Supplement Series. Bethesda, MD: National Institutes of Health (US); 2007.
3. Ajiboye PO, Abiodun OA, Tunde-Ayinmode MF, Buhari OI, Sanya EO, Wahab KW. Psychiatric morbidity in stroke patients attending a neurology clinic in Nigeria. *Afr Health Sci* 2013;13:624-31. doi: 10.4314/ahs.v13i3.15.
4. Hackett ML, Köhler S, O'Brien JT, Mead GE. Neuropsychiatric outcomes of stroke. *Lancet Neurol* 2014;13:525-34. doi: 10.1016/S1474-4422(14)70016-X.
5. Poloni N, Ielmini M, Caselli I, Ceccon F, Bianchi L, Isella C, et al. Medically Unexplained Physical Symptoms in Hospitalized Patients: A 9-Year Retrospective Observational Study. *Front Psychiatry* 2018;9:e626. doi: 10.3389/fpsy.2018.00626.
6. Kim J, Kim Y, Bae JS, Lee JH, Song HK. Concomitant Psychiatric Symptoms in Neurological Outpatients. *Int J Environ Res Public Health* 2019;16:860. doi: 10.3390/ijerph16050860.
7. Syed SE, Mullick MS, Hannan MA. Psychiatric co-morbidity among patients with primary headache. *Bang J Psychiatry* 2016;30:32-5.
8. Yang Y, Wang C, Xiang Y, Lu J, Penzel T. Editorial: Mental Disorders Associated With Neurological Diseases. *Front Psychiatry* 2020;11:e196. doi: 10.3389/fpsy.2020.00196.
9. World Health Organization (WHO). Fact sheet: Mental health. News release. The WHO Media Centre. [Online] 2022 [Cited 2023 May 24]. Available from URL: <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
10. Khan TA, Hussain S, Ikram A, Mahmood S, Riaz H, Jamil A, et al. Prevalence and treatment of neurological and psychiatric disorders among tertiary hospitals in Pakistan; findings and implications. *Hosp Pract (1995)* 2020;48:145-60. doi: 10.1080/21548331.2020.1762366.
11. Mental Health Foundation (MHF). Stigma and discrimination. [Online] 2021 [Cited 2023 May 24]. Available from URL: <https://www.mentalhealth.org.uk/explore-mental-health/a-z-topics/stigma-and-discrimination>
12. Naeem F, Ayub M, Javed Z, Irfan M, Haral F, Kingdon D. Stigma and psychiatric illness. A survey of attitude of medical students and doctors in Lahore, Pakistan. *J Ayub Med Coll Abbottabad* 2006;18:46-9.
13. American Psychiatric Association (APA). Diagnostic and Statistical Manual of Mental Disorders, (DSM-5(TM)), 5th ed. American Psychiatric Publishing; 2013. Doi: 10.1176/appi.books.9780890425596
14. Lovibond SH, Lovibond PF. Manual for the Depression Anxiety Stress Scales, 2nd ed. Sydney, NSW: Psychology Foundation of Australia; 1995.
15. Australian Bureau of Statistics. National Study of Mental Health and Wellbeing, 2020-21. [Online] 2022 [Cited 2023 June 16]. Available from URL: <https://www.abs.gov.au/statistics/health/mental-health/national-study-mental-health-and-wellbeing/>
16. Görgülü Ü, Gürhan N, Yalçın Akman Y, Altay K, Polat Ü, Özen Ş, et al. Comorbid Psychiatric Disorders in Some Common Neurological Diseases. *Med J SDU* 2022;29:75-83.
17. Jefferies K, Owino A, Rickards H, Agrawal N. Psychiatric disorders in inpatients on a neurology ward: estimate of prevalence and usefulness of screening questionnaires. *J Neurol Neurosurg Psychiatry* 2007;78:414-6. doi: 10.1136/jnnp.2006.103044.
18. Alsaadi T, Kassie S, Mohamed Ali O, Mozahem K, Al Fardan S, Ahmed AM. Psychiatric Comorbidity in Neurological Disorders: Towards a Multidisciplinary Approach to Illness Management in the United Arab Emirates. *Front Psychiatry* 2019;10:e263. doi: 10.3389/fpsy.2019.00263.
19. Carson AJ, Ringbauer B, Stone J, McKenzie L, Warlow C, Sharpe M. Do medically unexplained symptoms matter? A prospective cohort study of 300 new referrals to neurology outpatient clinics. *J Neurol Neurosurg Psychiatry* 2000;68:207-10. doi: 10.1136/jnnp.68.2.207
20. Rayan A, Fawaz M. Cultural misconceptions and public stigma against mental illness among Lebanese university students. *Perspect Psychiatr Care* 2018;54:258-65. doi: 10.1111/ppc.12232.
21. Sztamári S Jr, Ajtay A, Oberfrank F, Dobi B, Bereczki D. The prevalence of psychiatric symptoms before the diagnosis of Parkinson's disease in a nationwide cohort: A comparison to patients with cerebral infarction. *PLoS One* 2020;15:e0236728. doi: 10.1371/journal.pone.0236728.
22. Yuan Q, Abdin E, Picco L, Vaingankar JA, Shahwan S, Jeyagurunathan A, et al. Attitudes to Mental Illness and Its Demographic Correlates among General Population in Singapore. *PLoS One* 2016;11:e0167297. doi: 10.1371/journal.pone.0167297
23. Mula M, Kaufman KR. Double stigma in mental health: epilepsy and mental illness. *BJPsych Open* 2020;6:e72. doi: 10.1192/bjo.2020.58.
24. Moriarty J. Psychiatric disorders in neurology patients. *J Neurol Neurosurg Psychiatry* 2007;78:331. doi: 10.1136/jnnp.2006.109058.
25. Ran MS, Hall BJ, Su TT, Prawira B, Breth-Petersen M, Li XH, et al. Stigma of mental illness and cultural factors in Pacific Rim region: a systematic review. *BMC Psychiatry* 2021;21:8. doi: 10.1186/s12888-020-02991-5.