International Journal of Current Advanced Research
ISSN: O: 2319-6475, ISSN: P: 2319-6505, Impact Factor: 6.614
Available Online at www.journalijcar.org
Volume 8; Issue 07 (D); July 2019; Page No.19563-19565
DOI: http://dx.doi.org/10.24327/ijcar.2019.19565.3783

Research Article

PSYCHIATRIC COMORBIDITIES IN STROKE PATIENTS

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A R T I C L E I N F O

Article History:

Received 6th April, 2019
Received in revised form 15th May, 2019
Accepted 12th June, 2019
Published online 28th July, 2019

Key words:

Comorbidities in Stroke Patients

A B S T R A C T

Introduction: Presence of psychiatric comorbidities in the patients with stroke/CVA impair quality of life in these patients.
Aim: To evaluate psychiatric comorbidities in stroke patients.
Methods: Fifty-eight patients with stroke were included in the study from October 2018 to Jun 2019 at regional hospital, Bilaspur (HP). Patients already receiving treatment for psychiatric comorbidities were excluded. MINI 6.0 scale was used to assess psychiatric comorbidities.
Results: 34.5% patients had psychiatric comorbidities. Depression (31%) was most common in these patients. 3% had anxiety while 66% had no psychiatric comorbidity.
Conclusion: There is a significant burden of psychiatric comorbidities in stroke patients.

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INTRODUCTION

Stroke has been reported to cause about 5.54 million deaths globally in 1999 with two-thirds of these deaths occurring in less developed countries. It is a major health problem, and the most common neurological condition resulting in long-term disability. It also leads to enormous emotional and socioeconomic consequences in patients and their families.

The latest estimates in 2004 suggested 930,985 cases of stroke in India with 639,455 deaths and 6.4 million disability adjusted life years (DALY) lost in India.[1]

Age is suggested to be an important factor of stroke. Comorbities of stroke are found to increase with age.[2,3] It has been reported that stroke frequently occurs in elderly and results in neurological deficits. Stroke patients also have comorbidity which is defined as the coexistence of more than one different condition in the same individual.[4]

Comorbidity may result in the deterioration of functional status, quality of life, frequent hospital admission and increased health related expenses.[5] The relationship between comorbidities and mortality risk is not clear.[5]

Stroke has also been reported to produce a wide range of mental and emotional disorders.[6,7] Studies of communities and population with stroke report comorbidity of depression and anxiety disorders.

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Meta-analyses of point-prevalence rates suggest that one third of stroke-survivors develop post-stroke depression and one quarter develop post-stroke anxiety[8] while more than half of stroke survivors will be affected by depression at some point.[9] The relationship between psychiatric symptoms and stroke appears to be bidirectional and this complicates their studies. In India, there are not much data available about prevalence of psychiatric symptoms in stroke/CVA patients. Hence, this study was aimed to evaluate psychiatric comorbidities in stroke patients.

Patients and Methods

The study was carried out during October 2018 to Jun 2019 at regional hospital, Bilaspur (HP). A total of 58 patients with stroke were included in the study. The patients with stroke event not more than 6 months were included in the study. Unconscious patients, and the patients receiving treatment for psychiatric disorders, and unable to provide consent were excluded from the study.

METHODOLOGY

All the patients with stroke who followed the inclusion criteria were included in the study. The patients and/or relatives were informed about the procedure and an informed consent was obtained. Upon enrollment into the study, a structured proforma was used to record the sociodemographic details, neurological examination findings and radiological findings.

Assessment of Psychiatric comorbidities

Psychiatric comorbidities were assessed using the MINI 6.0 scale. The MINI 6.0 is a short structured diagnostic interview

used by psychiatrists and clinicians. It was developed in 1990 and assesses the disorders of the DSM-IV and ICD-10.

Data were presented as mean, frequency, and percentages.

RESULTS

Socio-demographic variables

A total of 58 patients were enrolled in to the study after they followed inclusion criteria. We observed that 64% (n=37) of these patients were aged between 51-60 years while 26% of the patients aged more than 60 years (Fig 1). Mean age of the patients was 63.18 years. 71% of the patients were males. Male to female ratio in our study was 2.41:1 (Fig 2). 98% (n=57) of them were married.

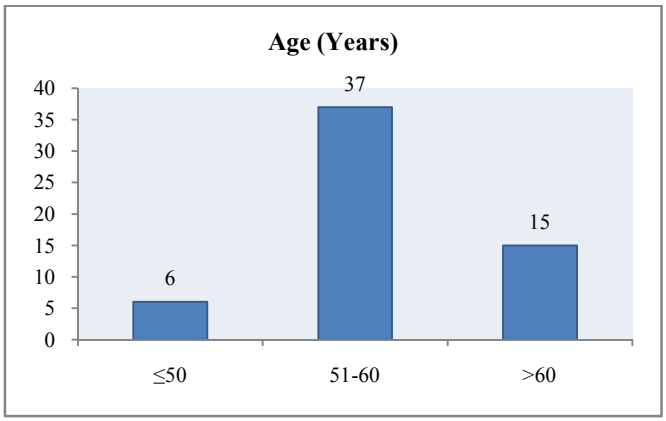

Figure 1 Age-based distribution of patients

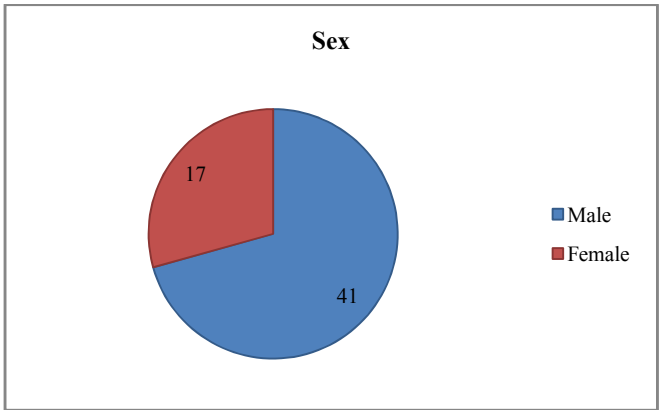

Figure 2 Sex-based distribution of patients

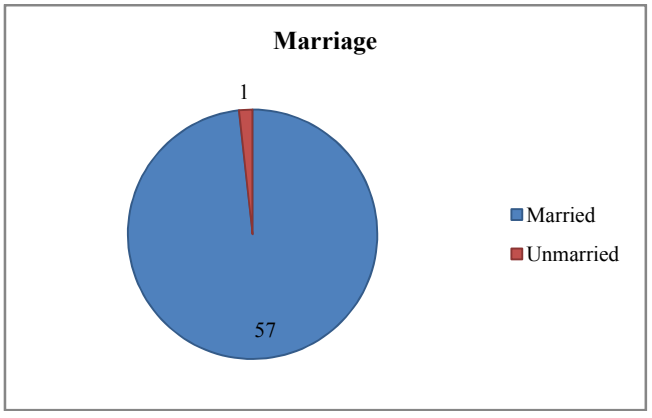

Figure 3 Marriage-based distribution of patients

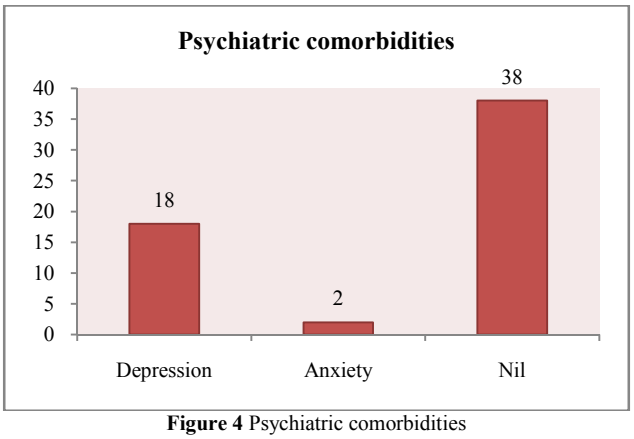

Figure 4 Psychiatric comorbidities

Risk factors

53% (n=31) of the patients had diabetes while 33% (n=19) had hypertension. 62% (n=36) of these patients were alcoholics and 36% (n=21) were active smokers (table 1).

Table 1 Risk factors

Risk Factors		n(%)
Alcohol abuse	Yes	36 (62%)
	No	22 (38%)
Smoking	Yes	21 (36%)
	No	37 (64%)
Diabetes	Yes	31 (53%)
	No	27 (47%)
Hypertension	Yes	19 (33%)
	No	39 (67%)

Psychiatric comorbidities

31% (n=18) of the patients had depression. 3% (n=2) of them had anxiety. 66% (n=38) had no psychiatric comorbidities.

DISCUSSION

In this study, overall psychiatric comorbidities were present in 34.5%. Iteke *et al* showed an overall psychiatric morbidity prevalence of 37.8% with depression representing 31.1% and anxiety disorders 6.6% (i.e. 2.2% for social phobia and 4.4% for generalized anxiety disorder).[11] Our findings are also in agreement to that of Ajiboye *et al*. who reported a psychiatric morbidity of 36.0% among stroke patients.[12]

Depression was the most common in our study which is in agreement with Ajiboye *et al* who reported 19.2% depression, 9.6% GAD, 2.4% for Harmful alcohol use and 1.2% each for somatoform disorder, phobia, delusional disorder and vascular dementia.

Comorbidity may be related to the factors such as age, gender, education level, marital status, family structure and lower socioeconomic status.[5] The identification of these characteristics may be useful in terms of identifying and implementing preventive measures. However, Beghi *et al*, a study from a developed country that reported no significant association between psychiatric disorders and sociodemographic and clinical variables.[13] Comorbidity may result in the deterioration of functional status, quality of life, frequent hospital admission and increased health related expenses.[5]

Major limitation of our study is duration of study and absence of control group.

CONCLUSION

Patients with stroke have psychiatric comorbidities. Early identification and treatment of these comorbidities is important.

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How to cite this article:

Neeraj Kanwar and Naresh Chauhan (2019) 'Psychiatric Comorbidities in Stroke Patients', *International Journal of Current Advanced Research,* 08(07), pp. 19563-19565. DOI: http://dx.doi.org/10.24327/ijcar.2019.19565.3783

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