

A study of patients with epilepsy attending T.U. Teaching Hospital

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ABSTRACT

There have been only few studies on Epilepsy in Nepal. The present work was undertaken with the aim of studying socio-demographic and diagnostic profile of patients presenting with Epilepsy in Tribhuvan University Teaching Hospital, Kathmandu. It was a prospective, cross-sectional, descriptive study, and the sample comprised all patients of Epilepsy attending the Psychiatric Outpatient Department of Tribhuvan University Teaching Hospital for the first time during one year study period from August 1997 to July 1998. The majority of the patients were less than 40 years of age (91.98%), more than half of the patients were single and students outnumbered other professionals. Most of the patients were diagnosed as Generalized idiopathic epilepsy and epileptic syndromes (85.02%). Only one-fourth of the patients sought treatment within one month of the onset of epilepsy. There is a need for general public education programmes to create awareness and destigmatize the disease so that early recognition and management maybe possible.

Keywords: Epilepsy; TUTH; ICD-10.

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INTRODUCTION

Epilepsy, although known since the earliest historical times, is still considered throughout the world a mysterious and undoubtedly a serious global problem. Despite the rapid growth of health facilities in Nepal, like in majority of developing countries, epilepsy is still associated with increased morbidity and mortality¹, and the burden of this disease in economic and social terms is enermous. Poverty, unemployment, lack of family and social support and the superstitious beliefs and stigmatizing attitudes that still exist in Nepal, are likely to be responsible for the fact that the majority of people with epilepsy are untreated.² There have been only few studies on Epilepsy in Nepal. Some of the studies have been done in hospital settings^{3,4} while few reports are derived from small community studies^{2,5} which in themselves are indadequate and possess methodological flaws. The present work was undertaken with the aim of studying socio-demographic and diagnostic profile of patients presenting with Epilepsy in Tribhuvan University Teaching Hospital (TUTH), Kathmandu.

MATERIAL AND METHOD

It was a prospective, cross-sectional, descriptive study and sample comprising all patients of Epilepsy attending the Psychiatry OPD of TUTH for the first time. The period covers one year from August 1997 to July 1998. Inclusion criteria were diagnosis of Epilepsy according to Chapter IV of ICD-10 (International Classification of Diseases, 10th edition)⁶ and informed consent by the

patients. Those who did not fulfill ICD-10 diagnostic criteria for Epilepsy or who did not have a consensual diagnosis of Epilepsy by two qualified psychiatrists, were excluded. A self-designed semi-structured proforma was used to record the socio-demographic data and details of the illness. The information was kept confidential. Data analysis was done by SPSS software, version 7.5 for Microsoft Windows.

RESULTS

A total of 287 patients (179 males and 108 females) were included in the study, that is 10.47% of total new cases who attended the Psychiatry OPD during one-year study period. Table I shows the age distribution of the patients. The maximum number of patients was in the age-group 11-20 years (36.93%), followed by 21-30 years (29.61%). majority of the patients were less than 40 years of age (91.98%), showing a steady decline in the prevalence of epilepsy with age after 40 years. More than half of the patients were single (57.14%) while 41.64% of them were married (Table II). Students were in substantial number (39.37%) as compared with other occupations (Table III).

Most of the patients were diagnosed as generalized idiopathic epilepsy and epileptic syndromes (85.02%). In fact, more than 90% were suffering from different types of generalized epilepsy while localization-related (focal/partial) epilepsy accounted for less than 10% (Table IV). Only one-fourth of the patients (24.04%) sought treatment within one month of the onset of epilepsy whereas more

than three-fourth (75.96%) presented later (Table V).

Table I: Age distribution of patients.

Age-groups	Females	s (N=108)	Males	(N=179)	Total ((N=287)
(in years)	N	%	N	%	N	%
1-10	12	11.11	22	12.29	34	11.85
11-20	44	40.74	62	34.64	106	36.93
21-30	28	25.93	57	31.84	85	29.61
31-40	12	11.11	27	15.08	39	13.59
41-50	4	3.70	8	4.47	12	4.18
51-60	6	5.56	2	1.12	8	2.79
61-70	1	0.93	1	0.56	2	0.70
>70	1	0.93	0	-	1	0.35

Table II: Marital status of the patients.

Marital status	Females	(N=108)	Males	(N=179)	Total (N=287)
	N	%	N	%	N	%
Married	44	40.74	75	41.99	119	41.64
Single	62	57.41	102	56.98	164	57.14
Widow/widower	2	1.85	2	1.12	4	1.40

Table III: Occupational status of patients.

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Occupation	Females	s (N=108)	Males	(N=179)	Total ((N=287)
	N	%	N	%	N	%
Business	9	8.33	19	10.61	28	9.79
Service	4	3.70	34	18.99	38	13.24
Farmer/Labourer	2	1.85	33	18.44	35	12.20
Homemaker	37	34.26	0	-	37	12.89
Student	43	39.81	70	39.11	113	39.37
Others	5	4.63	8	4.47	13	4.53
Unemployed	8	7.41	15	8.38	23	8.01

Table IV: Diagnostic distribution of patients.

ICD-10 Diagnosis		males =108)		ales =179)	Total (N=287)	
	Ν	%	Ν	%	Ν	%
G 40.0 Localization related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset.	4	3.70	8	4.47	12	4.18
G 40.1 Localization related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures.	1	0.93	0	-	1	0.35
G 40.2 Localization related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures.	4	3.70	2	1.18	6	2.09
G 40.3 Generalized idiopathic epilepsy and epileptic syndromes.	91	81.26	153	85.47	244	85.02

G 40.4 Other generalized epilepsy and epileptic syndromes.	4	3.70	5	2.79	9	3.14
G 40.5 Special epileptic syndromes	0	-	1	0.56	1	0.35
G 40.6 Grand mal seizures, unspecified (with or without petit mal)	3	2.78	4	2.23	7	2.44
G 40.7 Petit mal, unspecified, without grand mal seizures	1	0.93	6	3.35	7	2.44

Table V: Duration of illness at the time of presentation.

Duration	Females	s (N=108)	Males	(N=179)	Total (N=287)
	N	%	N	%	N	%
1 week	14	12.96	29	16.20	43	14.98
2 weeks	6	5.56	11	6.15	17	5.92
1 month	3	2.78	6	3.35	9	3.14
2 months	8	7.41	6	3.35	14	4.88
6 months	8	7.41	28	15.64	36	12.54
1 year	15	13.81	18	10.06	33	11.50
2 years	9	8.33	26	14.53	35	12.20
5 years	26	24.07	30	16.76	56	19.51
10 years	13	12.04	15	8.40	28	9.79
15 years	5	4.63	4	2.23	9	3.14
>15 years	1	0.93	6	3.35	7	2.44

DISCUSSION

The present study has shown a point prevalence of epilepsy in OPD to be 1 per thousand, which is comparable to the earlier reports. However, there are studies which show, in contrast to the present finding, a higher rate of prevalence of epilepsy in an outpatients department of a tertiary hospital. Some of these variations can be explained by differences in the methods of sampling, in the techniques used for the assessment and diagnosis and the theoretical orientation and classificatory allegiance.

This study has found a marked male preponderance with a male to female ratio of 1.7:1 which is consistent with the findings reported by other.^{2,3} This male

preponderance among those epileptic patients treatment could to the super-ordinate status accorded to male in Nepalese culture. However, male preponderance in Epilepsy has been reported from other parts of the world also.9 expected, most of the patients were either adolescents or young adults and thereafter the number of patients of epilepsy showed a steady decline with increasing age which is consistent with reports researchers.3,4,10 More than half of the patients were single which is possibly due to the stigma attached to epilepsy so that epileptic patients face difficulty in getting married.^{2,11} Students outnumbered other professions because of the preponderance of epilepsy in young age. Long duration of

illness before seeking treatment maybe explained by the lack of awareness, stigma attached to the illness or seeking treatment from traditional faith healers. 10

Major limitation of the present study was that it was based on sample population of a teaching hospital and hence the results cannot be generalized to community. Still it can be concluded that Epilepsy is as prevalent in Nepal as in other parts of the world. However, patients do not seek treatment early due to various reasons discussed above. There is a need for general public education programmes to create awareness and destimatize the disease so that early recognition and management maybe possible.

REFERENCES

- Preux PM, Macharia W, Debrock C, Dumas M. Epilepsy in Sub Saharan Africa: Suffering due to myths and poverty. *International Epilepsy News* 1998; 132 (July-August).
- Nepal MK, Sharma VD, Shrestha P. Epilepsy Prevalence. In: Proceedings of International Workshop on Epilepsy, Kathmandu, 15th April, 1996.
- Rai A. A study of epilepsy cases attending psychiatric outpatient department Teaching Hospital during 1995. In: Proceedings of International Workshop on Epilepsy, Kathmandu, 15th April, 1996.
- Upadhayay KD. A study of 180 cases of epilepsy seen in the psychiatric out-patient department of Western Regional Hospital Pohara in 2 ¹/₂ years.
 In: Proceedings of International Workshop on Epilepsy, Kathmandu, 15th April, 1996.
- Wright C. Community mental health services in Nepal - Early experiences. In: Proceedings of the Workshop on National Mental Health Planning, Kathmandu, Nepal, Dec. 30, 1987 - Jan. 1, 1988.

- World Health Organization. The International classification of Diseases, Edn. 10, 1992, Geneva: WHO.
- Shrestha DM. Mental Health services in Nepal. In: Proceedings of the Workshop on National Mental Health Planning, Kathmandu, Nepal, Dec. 30, 1987
 Jan. 1, 1988.
- Sherchan S. In: Proceedings of First National Mental Health Seminar 'Grounded on Reality', Kathmandu, 1992.
- Brodie MJ, Shrovon D, Johannessen S, Halasz P, Reynolds EH, Weiser HG, Wolf P. Appropriate standards of epilepsy care across Europe. International Epilepsy News 1998; 132 (March-April).
- Finkebine RD, Acland S, Finkebine SS. Epilepsy at four Kaski village health post. In: Proceedings of International Workshop on Epilepsy, Kathmandu, 15th April, 1996.

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