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Psychiatric Comorbidity and Quality of Life in patients with Epilepsy

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Abstract

Foundation: The epilepsies are persistent neurological issues in which groups of nerve cells, or neurons, in the mind now and then sign strangely and cause seizures. During a seizure, numerous neurons fire (signal) simultaneously – upwards of 500 times each second, a lot quicker than ordinary. This flood of extreme electrical action occurring simultaneously causes automatic developments, sensations, feelings, and practices and the impermanent unsettling influence of typical neuronal action may cause lost mindfulness. Epilepsy influences patients, all things considered, races, and ethnic foundations. As indicated by the National Institute of Neurological Diseases and Stroke (NINDS), about 2.3 million grown-ups and in excess of 450,000 kids and teenagers in the United States have epilepsy. Point of the Work: to evaluate the mental comorbidity and personal satisfaction in patients with epilepsy through poll 30 patients at the Neurology Unit in Pediatric Department in Benha University.Patients and Methods: At the Neurology Unit, Pediatric Department, Benha University Hospitals, the variables adding to mental comorbidity in epilepsy and to survey the effect of mental co-grimness on personal satisfaction were resolved in 30 patients with epilepsy and 30 benchmark group . The essential end purpose of this investigation is to distinguish the mental comorbidity and personal satisfaction in patients with epilepsy and their effect on personal satisfaction. Results: there is huge distinction between the contemplated bunches with respect to the downturn and tension evaluations, where 86.7% of the controls had no downturn contrasted with 0% of the patients, while just 13.3 % of them had gentle evaluation contrasted with 43.3% of the patients. Then again, 30% and 26.7% of patients endured moderate and extreme sorrow individually contrasted with 0% of the controls. End: mental comorbidity has solid effect on personal satisfaction in persistent with epilepsy.

Keywords: Epilepsy, Psychiatric comorbidity.

1. Introduction

Epilepsy analyzed however a neurological test and a total physical test to pinpoint the reason for the seizures and analyze epilepsy. Tests used to analyze epilepsy include:

- An electroencephalogram (EEG) to quantify the electrical movement of the cerebrum
- A spinal tap to gather spinal liquid for investigation
- Imaging tests, similar to a MRI or CT check, of the head [1].

Epilepsy can be treated through different systems. Typically prescription is expected to control seizures and treat epilepsy; these normally recommended drugs are called anticonvulsants.Medication alone can't generally stop or lessen seizures. A gadget called a vagus nerve trigger may help treat epilepsy in the event that you don't get alleviation from drug [2].

Youngsters with epilepsy likewise have a higher danger of creating wretchedness as well as consideration deficiency hyperactivity problem contrasted and their companions. Social issues may go before the beginning of seizures in certain youngsters. They are particularly powerless against the enthusiastic issues brought about by obliviousness or the absence of information among others about epilepsy [3].

2. Aim of the work

The point of this examination will be to evaluate the mental comorbidity and personal satisfaction in patients with epilepsy through survey 30 patients at the Neurology Unit in Pediatric Department in Benha University.

3. Patients and methods

In this investigation we will evaluate the mental problems and personal satisfaction in 30 patients with epilepsy .We endeavored to decide the variables adding to mental comorbidity in epilepsy and to survey the effect of mental co-grimness on nature of life.In the Neurology Unit, Pediatric Department, Benha University Hospitals

Patients were chosen by the specific measures: Incorporation Criteria: All patients determined to have epilepsy more than 12ms back.

Avoidance Criteria: Children who had an intriguing history of intrinsic disorder influencing brain research of Patients: Children who determined to have epilepsy less 12ms, Children who couldn't collaborate during the survey will to be barred, Children with down condition, Children with CP, Children with cerebrum tumors.

The endpoints of intrigue were: Distinguish the effect of mental comorbidity in epilepsy patients' personal satisfaction.

4. Results

At the Neurology Unit in Pediatric Department in Benha University. 30 patients with epilepsy were contemplated. The table underneath shows that 2/3 of patients (66.75) experienced GTC fits, 20% had central sort, 10% had complex halfway and just 3.3% experienced Absence, the period of beginning of fits went from 6 to 13 years with mean estimation of

10.1±1.9. The normal term of the fit was 6.8 minutes going from 5 to 10. About a third of patients had one fit for every month, 10% had 2 fits, 6.7% had three and just one case (3.3%) had the fits 4 times each month.

Table (1) Characters of patients group.

Variable		**No. (N=30)**	**% (100%)**
Type of seizures	Absence	1	3.3
	Complex partial	3	10.0
	Focal	6	20.0
	GTC	20	66.7
	Mean ±SD	Minimum	Maximum
Age of onset (years)	10.1±1.94	6	13
Duration (m)	6.8±1.9	5	10
		No. (N=30)	% (100%)
	Non	15	50.0
Frequency	One	9	30.0
	Two	3	10.0
	Three	2	6.7
	Four	1	3.3

Table (2) Comparing the studied groups regarding socio-demographic character**s.**

Variable		**Patients (n=30)**		**Controls (n=30)**		**Test of significance**	**P**
Age (ys)	Mean±SD	13.0±2.0		12.4±1.95		St "t"=	0.27 (NS)
	Range	10-16		10-16		1.11	
		No.	%	No.	%	χ^2	P
Sex	Female	17	56.7	15	50.0	0.26	0.61 (NS)
	Male	13	43.3	15	50.0		
Residence	Urban	18	60.0	20	66.7	0.29	0.59 (NS)
	Rural	12	40.0	10	33.3		
Family problems	No	16	53.3	23	76.7	3.59	0.058 (NS)
	Yes	14	46.7	7	23.3		
Socio-economic level	Poor	13	43.3	12	40.0	0.07	0.79 (NS)
	Good	17	56.7	18	60.0		

The table above shows that there was no statistically significant difference between the studied groups regarding age, sex, residence, family problems or socio-economic level (P>0.05 for all variables).

Table (٣) Comparing the studied groups regarding school performance.

Variable		**Patients (n=30)**		**Controls (n=30)**		χ^2	**P**
		No.	**%**	**No.**	**%**		
School attendance	Irregular	14	46.7	4	16.7	6.24	0.012 (S)
	Regular	16	53.3	25	83.3		
School performance	Poor	10	33.3	0	0.0	20.2	<0.001 (HS)
	Adequate	18	60.0	15	50.0		
	Good	2	6.7	15	50.0		

This table illustrates that there was a significant difference between the studied groups regarding scholastic attendance, where 46.7% of cases attended school irregularly compared to 16.7% of the control group (P<0.05). Also, 33.3% of patients had poor school performance compared to nill of the controls, and only 6.7% of them had good performance compared to 50% of the controls . these differences were statistically highly significance (P<0.001).

Table (4) Comparing the studied groups regarding depression and anxiety scores.

Variables	Patients (n=30)			Controls (n=30)			Z_{MWU}	P value
	Mean	± SD	Median (Range)	Mean	± SD	Median (Range)		
Depression score	20.4	9.19	18.0 (10-37)	7.3	2.35	7 (4-14)	6.35	<0.001 (HS)
Anxiety score	20.0	8.23	18.5 (10-36)	13.5	4.12	13.5 (7-22)	3.25	=0.001 (HS)

This table shows that the mean and median values of depression (20.4 and 18 respectively) and anxiety scales (20 and 18.5 respectively) were significantly higher in patients group than in controls (7.3 & 7 respectively for depression and 13.5 for both mean and median anxiety) P<0.001 for both.

Table (5) Comparing the studied groups regarding depression and anxiety grades.

Variable		Patients (n=30)		Controls (n=30)		Fisher's exact test	P
		No.	%	No.	%		
Depression grade	**No**	0	0.0	26	86.7	55.4	<0.001 (HS)
	Mild	13	43.3	4	13.3		
	Moderate	9	30.0	0	0.0		
	Severe	8	26.7	0	0.0		
Anxiety grade	**Mild**	11	36.7	26	86.7	17.3	<0.001 (HS)
	Moderate	12	40.0	4	13.3		
	Severe	7	23.3	0	0.0		

This table illustrates that there was a significant difference between the studied groups regarding the depression and anxiety grades, where 86.7% of the controls had no depression compared to 0% of the patients, while only 13.3 % of them had mild grade compared to 43.3% of the patients. On the other hand, 30% and 26.7% of patients suffered moderate and severe depression respectively compared to 0% of the controls. (P<0.001).

Table (6) Correlation between depression score and the studied continuous variables.

With	Depression score	
	Patients group (N=30)	
	rho	P
Age (ys)	0.267	0.15
Socio-economic level	-0.599	<0.001 (HS)
Age of onset (ys)	-0.078	0.68
Duration (min)	0.742	<0.001 (HS)
Frequency/month	0.664	<0.001 (HS)
No. of drugs	0.766	<0.001 (HS)
Anxiety score	0.685	<0.001 (HS)

This table shows that there were significant positive correlation between depression scores and duration of fit, frequency/month, number of drugs and anxiety score (P<0.001 for all). While there was a significant negative correlation between it and socio-demographic level (P<0.001).

Table(7) Correlation between depression score and the studied continuous variables.

With	Anxiety score	
	Patients group (N=30)	
	rho	P
Age (ys)	0.386	0.035 (S)
Socio-economic level	-0.581	=0.001 (HS)

Age of onset (ys)	0.035	0.85
Duration (min)	0.794	<0.001 (HS)
Frequency/months	0.702	<0.001 (HS)
No. of drugs	0.811	<0.001 (HS)

This table shows that there were significant positive correlation between anxiety scores and age, duration of fit, frequency/month and number of drugs (P<0.001 for all). While there was a significant negative correlation between it and socio-demographic level (P<0.001).

Table (8) Depression scores according to socio demographic factors.

Variable			**Depression score**		**Z_{MWU}**	**P**
			Median	**Range**		
Sex	Female	17	19	12-37	2.19	0.028 (S)
	Male	13	14	10-35		
Residence	Urban	18	15	10-28	3.18	0.001 (HS)
	Rural	12	33.5	13-37		
Family problems	No	16	14	10-35	2.74	0.006 (S)
	Yes	14	24	12-37		
Socio-economic level	Poor	13	22	14-37	3.23	0.001 (HS)
	Good	17	13	10-36		

This table demonstrates that the median depression scores were significantly higher among females than males (19 and 14 respectively), among rural (33.5) than urban residents (15.0), among individuals with family problems than those without (24 versus 14), among those with poor socio-economic level than those with good circunstances (22 versus 13). P values are < 0.05 for all variables.

Table(9) Anxiety scores according to socio demographic factors.

Variable			**Anxiety score**		**Z_{MWU}**	**P**
			Median	**Range**		
Sex	Female	17	19	11-36	1.57	0.11 (NS)
	Male	13	18	10-30		
Residence	Urban	18	13.5	10-30	2.78	0.005 (S)
	Rural	12	26.0	12-36		
Family problems	No	16	13	10-22	3.34	=0.001 (HS)
	Yes	14	27.5	12-36		
Socio-economic level	Poor	13	25	12-36	3.13	0.002 (S)
	Good	17	13	10-32		

This table demonstrates that the median anxiety scores were significantly higher among rural than urban residents (26 versus 13.0), among individuals with family problems than those without (27.5 versus 13), among those with poor socio-economic level than those with good circunstances (25 versus 13). P values are < 0.05 for all variables. On the other hand there was no significant difference in the scores regarding sex (P>0.05).

5. Discussion

The current investigation shows that time of patient examined bunch is in sure relationship with uneasiness score(p esteem is lower than 0.035) and that in concurrence with [6] in which p esteem was .028, and interestingly with [7] and [6] in which their outcome show no huge connection between's period of patient and nervousness score.

Likewise span of seizures shows positive relationship with anxeity score (p esteem 0.001) which goes with [7] (p esteem 0.01).

Dissimilar to our study(6) and (4) discovered critical relationship among's tension and despondency score and both p esteem were 0.001.

This investigation exhibited in regards to misery score among all examined cases with Mean +SD was 20.4± 9,19 Regarding depresion grade, mellow were 13 (43.3%), moderate were 9 (30%) and cut off were 8 (26.7%).

In our examination the middle misery scores were altogether higher among females than guys with p esteem .028 conversely with [4] in which exhibit that there is no huge connection between's them .

Number of against epileptic medications utilized

by tolerant in contemplated bunch is decidedly corresponded with melancholy score (p esteem 0.001) and that in concurrence with [6] and [4] (p esteem 0 .01 , .005) individually.

In our investigation uneasiness score is in sure relationship with misery score (p esteem is 0 .001) and that in concurrence with [4] and [6] (p esteem 0.003, 0 .001) separately.

In concurrence with [4] results shows there is positive relationship between's term of seizures and wretchedness score (p esteem is 0.001) (p esteem 0 .005) individually.

Our Results uncovered that seizures recurrence essentially associated with nervousness and gloom score (p esteem <.001) interestingly with [4] who found that lone discouragement score influenced by seizures recurrence with (p esteem .003).

Our Results are in concurrence with Schraegle etal ., 2017 who uncovered that no noteworthy connection between's seizure type (i.e., summed up versus central) with tension and melancholy score conversely with [4] who showed that, in contrast with summed up seizures, central seizures were related with a higher danger of ADHD and Depression in youngsters.

6. Conclusion

Nervousness and gloom in kids and youths with epilepsy are basic comorbidities which place a critical weight on patients and families and muddle the clinical administration of epilepsy. Persistent ailment itself can prompt nervousness and sadness. This might be suggestive of the sickness itself; span of illnes, an outcome of the course and the executives of the disease, prompting a feeling of absence of control and vulnerability or misery and powerlessness from helpless forecasts; an expanding apprehension of death; shame and segregation from peers; overprotective parental conduct; and results from treatment [8].

We presume that: [1] The commonness of uneasiness and misery is expanded in patients with epilepsy, steady with past examinations on youngsters and teenagers with epilepsy [2] The pervasiveness of side effects of nervousness is expanded in patients with epilepsy thought about withcontrol gathering [3] age at seizure beginning, seizure recurrence, and longer length of seizures ,financial status, family issues , number of antiepileptic drugs related with sadness and nervousness in this examination gathering of kids with epilepsy.

Despite the fact that tension and discouragement side effects are as often as possible found in youngsters and teenagers with epilepsy, they are underrecognized and undertreated. It is basic that kids and guardians get training about sorrow and nervousness issues. Expanded consciousness of the clinical introductions of nervousness and burdensome issues may assist clinicians with creating compelling avoidance and intercession techniques to improve the drawn out result.

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