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Factors Related with Quality of Life in Epileptic Patients

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Abstract : Epilepsy is a chronic condition, which is known to have negative effects on an individual's quality of life. We evaluated major variables associated with the quality of life of epileptics in Korea. We evaluated the quality of life in epilepsy (QOLIE-31) of 202 epileptic adults at Keimyung University Dongsan Medical Center. Eight of the most serious QOLIE concerns were as follows: seizure worry, overall QOL, emotional well-being, energy and fatigue, cognitive functioning, medication effects, social functioning, and overall health. We assessed the correlation between QOLIE concerns and the clinical parameters such as age, gender, marital status, duration of education, seizure onset, duration of illness, number of antiepileptic drugs, etc. The mean subscores of QOLIE-31 items were 54.9 (medication effects), 52.0 (energy-fatigue), 50.1 (overall QOL), 42.4 (seizure worry), 41.5 (emotional well-being), 36.3 (social functioning), and 30.9 (cognitive functioning). We found significant differences in many aspects of quality of life with respect to age (overall QOL and energy-fatigue), gender (seizure worry, emotional well-being, medication effects and overall health), education (cognitive functioning and social functioning), economic status (overall QOL, emotional well-being and overall health), number of antiepileptic drugs (emotional well-being) and frequency of seizure (energy-fatigue). We identified several related factors for poor QOL outcomes in patients with epilepsy. These results provide informations about patients with epilepsy that may help with their emotional support, as well as drug treatment.

Key Words : Epilepsy, Quality of life, Socioeconomic factors

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100 가 [10-13].

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1.

가 (quality of life, QOL) [4-6]. 가

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(function) (WHO) 15 202

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3. 가 (multiple linear regression analysis)
 가 ‘ (Quality of life in epilepsy development group) ’ -31
 (Quality of Life in Epilepsy-31, QOLIE-31)

(multiple linear regression analysis)
 SPSS window 10.0
 P 0.05

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 QOLIE-31 가
 [10,14-17]. QOLIE-31 7
 (seizure worry) ’ 5 , ‘
 (overall QOL) ’ 2 , ‘
 (emotional well-being) ’ 5 , ‘ -
 (energy-fatigue) ’ 4 , ‘
 (cognitive functioning) ’ 6 , ‘
 (medication effects) ’ 3
 (social functioning) ’ 5 ,
 0 100
 가 가
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 (overall health) ’ 31
 ‘ (100) ’ ‘
 (0) ’ 10

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 202 102
 (50.5%), 100 (49.5%)
 31.0(±10.1)
 11.5(±2.9) 102
 (50.5%), 84 (41.6%),
 7 (3.5%), 가 9 (4.5%)
 88 (43.6%)
 20.11(±8.8)
 10.9(±6.8)
 138 (68.3%),
 64 (31.7%)
 1가 84
 (41.6%), 2가
 52 (25.7%), 3가
 66 (32.7%)
 3 110 (54.5%) 3
 92 (45.5%) (Table 1).

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2. QOLIE-31

QOLIE-31
 t-test
 QOLIE-31
 Pearson

QOLIE-31
 ‘ 가 54.9(±18.1), ‘ - ‘
 52.0(±20.0), ‘ QOL ’ 50.1(±11.9),
 ‘ 42.4(±18.0), ‘
 ‘ 41.5(±18.4), ‘ ‘ 36.3(±
 15.9) ‘ ‘ 30.9(±15.1)
 ‘ ‘ 59.4(±19.3)

Table 1. Demographic and disease characteristics

Parameter	Mean (\pm SD)	Number (%)
Age (year)	31.0 (\pm 10.1)	
Gender		
Male		102 (50.5)
Female		100 (49.5)
Education (year)	11.5 (\pm 2.9)	
Below high school		55 (27.2)
High school		47 (23.3)
Above high school		35 (17.3)
NA*		65 (32.2)
Marriage		
Never married		102 (50.5)
Married		84 (41.6)
Divorced or widowed		7 (3.5)
NA*		9 (4.5)
Economic status		
Middle		100 (49.5)
<Middle		79 (34.1)
NA*		33 (16.3)
Age at onset of epilepsy (year)	20.1 (\pm 8.8)	
Duration of epilepsy (month)	10.9 (\pm 6.8)	
Number of antiepileptic drugs	2.1 (\pm 1.1)	
One		84 (41.6)
Two		52 (25.7)
Three		66 (32.7)
Type of seizure		
Generalized		64 (31.7)
Partial		138 (68.3)
Overall seizure frequency	2.5 (\pm 0.9)	
< 3 per year		110 (54.5)
3 per year		92 (45.5)

* NA: not available; SD: standard deviation.

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Table 2. Comparisons among subscale scores of QOLIE-31 by demographic characteristics

Parameter	Seizure worry	Overall QOL	Emotional well-being	Energy-fatigue	Cognitive functioning	Medication effects	Social function	Overall health
Age	0.161	0.049	0.188	0.128	0.160	-0.088	0.111	-0.137
Gender								
Male	38.7 ± 17.6	49.0 ± 12.6	38.4 ± 15.9	47.9 ± 17.4	30.8 ± 15.3	57.2 ± 17.6	35.8 ± 14.5	62.5 ± 17.8
Female	46.3 ± 18.2	51.7 ± 10.7	44.4 ± 20.7	55.7 ± 21.9	31.9 ± 15.4	52.6 ± 18.3	37.0 ± 17.1	55.5 ± 20.5
Women								
Child-bearing (18-35 years)	42.1 ± 17.6	49.3 ± 12.6	41.0 ± 18.8	50.3 ± 20.6	31.2 ± 15.9	54.9 ± 17.8	36.2 ± 15.8	60.8 ± 16.8
No child-bearing (36 years)	42.8 ± 19.1	51.5 ± 10.3	42.1 ± 18.4	54.3 ± 19.0	30.8 ± 14.9	54.7 ± 18.7	36.3 ± 16.1	56.5 ± 22.5
Education								
Below high school	45.3 ± 21.2	48.5 ± 12.9	44.4 ± 19.7	54.1 ± 22.7	35.9 ± 16.4 [†]	53.2 ± 19.6	38.3 ± 16.5 [†]	57.7 ± 18.6
High school	38.9 ± 13.6	51.0 ± 8.7	43.7 ± 16.4	55.0 ± 15.2	31.7 ± 15.5	59.3 ± 14.4	41.2 ± 15.7	58.3 ± 16.3
Above high school	41.4 ± 15.9	52.0 ± 7.0	36.6 ± 15.2	50.0 ± 17.9	24.1 ± 13.2	56.2 ± 19.8	31.5 ± 14.5	59.8 ± 18.4
Marriage								
Never married	42.8 ± 18.7	51.3 ± 11.1	43.0 ± 18.6	54.0 ± 19.9	32.3 ± 14.3	54.4 ± 19.6	39.0 ± 16.6	57.9 ± 19.1
Married	39.6 ± 16.1	49.6 ± 12.6	38.0 ± 17.0	49.1 ± 18.3	29.7 ± 16.9	56.2 ± 16.4	35.6 ± 15.5	60.9 ± 18.1
Economic status								
Middle class	39.1 ± 17.5	52.2 ± 9.3	38.6 ± 18.3	49.9 ± 19.4	29.8 ± 13.3	56.6 ± 17.8	38.3 ± 14.6	62.7 ± 17.3
<Middle class	44.0 ± 17.4	47.3 ± 11.5	44.5 ± 18.6	56.4 ± 19.3	33.4 ± 18.3	54.7 ± 17.3	34.8 ± 17.4	53.3 ± 19.5

[†]P <0.05 in t-test; [†]P <0.05 in ANOVA; Values of age are Pearson's correlations and the other values are mean score ± standard deviation.

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