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## Research Article

# Quality of life in patients with epilepsy

## Abstract

**Introduction:** Epilepsy affects health globally and reduces the quality of life of those who suffer from it.

**Objectives:** To analyze the quality of life in adult patients diagnosed with epilepsy.

**Methods:** An observational, descriptive, cross-sectional study was carried out. The QOLIE-31 questionnaire was applied to all the included patients.

**Results:** 30 patients, 17 men and 13 women participated. 73.3% (n = 22) of the patients had a history of epilepsy greater than 5 years. 43.3% of the patients presented poor quality of life. The factor that generates the greatest impact on the quality of life of these patients is the side effect of antiepileptic drugs. The patients who perceived having a better quality of life are those who were treated with monotherapy, especially levetiracetam.

**Conclusion:** Patients with epilepsy require a multidisciplinary management, whose objective is not only to achieve total control of the crisis, but also that the patient has the tools to overcome daily the impact that this disease generates on their quality of life.

## Introduction

Epilepsy is defined as a hypersynchronous discharge of a group of neurons at the level of the cerebral cortex, and is expressed through sudden changes in behavior, whose clinical manifestations depend on the site of origin and the cerebral topographic path performed by the brain discharge during its propagation [1].

In our country, the prevalence of active epilepsy (reported a history of doctor-diagnosed epilepsy and were taking medication to control it, had had one or more seizures in the past year, or both) is 3.8 ‰ inhabitant, and that of total epilepsy is 6.2 ‰ [2].

This disease affects health globally and reduces the quality of life of those who suffer from it. Patients with epilepsy not only have to face the symptoms of their illness, but also the side effects of treatment, the fear of the sudden appearance of a possible crisis, the impact on the activities of daily life and social stigmatization [3,4].

The control of the crisis is only one of the points of the clinical management of the patient with epilepsy, since the cognitive, physical and psychological deterioration of the patient influence their quality of life and therefore a multidisciplinary approach is required.

For this reason, numerous questionnaires have been designed with the purpose of evaluating the quality of life of patients with epilepsy. One of them is the QOLIE-31, which consists of 31 questions separated into 7 groups:

- Concerns about crises.
- Overall assessment of the quality of life.
- Emotional well-being
- Sensation of energy or fatigue.
- Cognitive functions.
- Effects of the medication.
- Social relations.

The aim of this study is to analyze the quality of life in adult patients with a diagnosis of epilepsy.

## Patients and Methods

An observational, descriptive, cross-sectional study was conducted between the months of February and March 2018. All patients over 18 years of age with an established diagnosis of epilepsy more than 6 months old and who are receiving treatment, attended to were included. In the outpatient clinics of the Neurology Service of the Italian Hospital in the city of Córdoba.

Those patients with associated comorbidities (oncological, cardiac, chronic respiratory, psychiatric diseases) were excluded.

The QOLIE-31 questionnaire (version 1.0) validated in Spanish was applied to all the included patients [5]. The questionnaire is individual and self-administered, with an approximate duration of 10 to 15 minutes. The patients answered the sociodemographic data referred to their person, alone or helped by direct relatives in cases of disability or mild mental retardation. The author completed the card number, antiepileptic drugs indicated, type of crisis and frequency of these.

The scores obtained in the questionnaire were converted into a scale of 0 to 100 points, with the help of tables and mathematical operations previously designed for this questionnaire, the sum of the scores of each domain gives the global score, which indirectly reflects the quality of life of the patient.

The Valuation of the Quality of Life of these patients will be carried out in the following way:

- 91-100: excellent quality of life.
- 81-90: very good quality of life.
- 71-80: good quality of life.
- 61-70: regular quality of life.
- Less than or equal to 60: poor quality of life.

In addition, clinical and demographic data were collected independently.

### Statistical analysis

The sampling technique was successive. The statistical processing was done with the Infostat program. To determine the independence between variables, the Chi square test was used, taking as a reference point a p value <0.05 (95%). Descriptive statistics will be used.

### Results

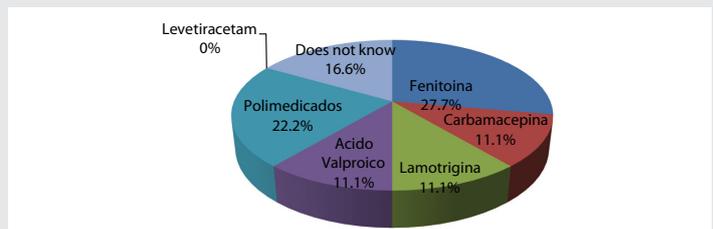
Of the 30 patients who participated in the study, 56.6% (n = 17) were men, and 43.3% (n = 13) were women. The average age of the sample studied was  $40 \pm 17$  years. 40% (n = 12) did not know how to respond to the type of convulsive seizures. The different types of crises presented by patients are described in table 1. 73.3% (n = 22) of the patients had a history of epilepsy greater than 5 years, 6.7% (n = 2) of less than 5 years and 20% (n = 6) did not remember the age of onset of their epilepsy. In relation to the overall result of the QOLIE-31 questionnaire, it was observed that 43.3% of the patients presented poor quality of life (Table 2). More men presented poor quality of life (n = 8) in relation to women (n = 5), but it was not statistically significant (p = 0.63). 100% of patients treated with levetiracetam reported having a quality of life between good and excellent. Among the patients treated with monotherapy, those who reported worse quality of life were those treated with phenytoin. All the polymedicated patients negatively rated their quality of life. The most common factor associated with poor quality of life were the adverse effects of the drugs (Figure 1).

**Table 1:** Frequency of the different types of epileptic seizures.

Type of crisis	%	n
Does Not Know	40%	12
Generalized Clonic Tonic	23.3%	7
Single partial	16.6%	5
Absences	13.3%	4
Partial Complex	6,66%	2

**Table 2:** Quality of life in patients with epilepsy according to the QOLIE-31 questionnaire.

Quality of life of the patient	%	N
Bad	43.3	13
Regular	16.6	5
Good	23.3	7
Very Good	3.3	1
Excellent	13.3	4



**Figure 1:** Treatment received by patients who perceived to have a negative quality of life (bad/regular).

### Discussion

The Quality of Life is a concept, which is understood as the degree of general well-being that a person reaches in his physical, mental and social aspect. In patients with epilepsy, this is compromised because it is a chronic disease that influences the patient's daily life, both personally and socially.

In our population, there was a lower number of patients with poor quality of life (43.3%) than that described in a Mexican study, where the poor quality of life was 58.3% [6], and higher than that described in a similar Spanish study (33%) [7-10].

The main factor that causes greater concern and worsens the quality of life of epileptic patients, is due to the side effects of antiepileptic drugs. There is evidence that if the treating physician emphasizes reducing and controlling the adverse effects of these medications, patients improve their quality of life.

The patients with the best quality of life were those medicated with levetiracetam, which coincides with other studies, since it is a well-tolerated drug that decreases the frequency of seizures [11-13]. On the other hand, those who presented worse quality of life were those who received more than one medication, while those who received monotherapy, reported worse quality of life were those treated with phenytoin.

### Conclusion

In addition to achieving total control of the crisis, we must take into account the possible side effects of medication, with the aim of achieving psychosocial adaptation of the patient, overcome the stigmas that these patients may have and thus contribute to improving the quality of life.

A multidisciplinary management of these patients is required, with the objective not only of achieving total control of the crises, but also of the patient having the tools to overcome daily the impact that this disease generates on their quality of life.

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