A Study on Evaluation of Quality of Life among Epileptic Patients and the Impact of Clinical Pharmacist in Improving the Quality of Life

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Abstract:

Epilepsy exists as a common neuropsycological condition marked with frequent spontaneous convulsive attacks. sometimes accompanied by unconsciousness. It is anticipated to have an impact on 50 million of individuals globally. The present investigation aims towards the evaluation of Quality of life in those who have epilepsy, considering various factors such as seizure frequency, medication, psychological well-being and social functioning. The QOL of 200 individuals with epilepsy was evaluated in a prospective observational research, carried out in a tertiary care hospital using the standard QOLIE-31 scale. The sum of 200 PWE, their QOL evaluated. Nearly 62.5% of patients reveal they had a good quality of life, while about 23% had mixed experiences.Findings reveal that male were slightly higher chance than female to have epilepsy. The age group most impacted by epilepsy was 30 - 40 years old. About one-fourth of patients said they had slight memory problems, and 15.5% reveals they occasionally had memory problems. The study shows that to accommodate the special demands of epileptic residents especially men also those between the ages of 30-40 underscores the holistic management strategies to enhance QOL in epileptic patients.

Keywords: Epilepsy, Quality of life, Neurological disorders, Seizure frequency, Neurological functioning, People with epilepsy .

1. Introduction:

Epilepsy is a neuropsychological complication marked as a sequence of frequent spontaneous seizure attacks, sometimes accompanied by unconsciousness. People's QOL can be greatly influenced by epilepsy on multiple levels , including physical and emotional well-being. Compared to many other chronic conditions, the impact may be greater. These effects result in restrictions on social activities, independence, and work. All ages are impacted by epilepsy, a severe and prevalent neurological condition that is most common in the youngest and oldest people [1,2]. Due to variations in diagnosis and assessment, the prevalence of epilepsy varies greatly around the globe, between the economic and health care difficulties that impact people's health, as well as between various nations and areas [3]. The well-being of people with epilepsy has impacted by neurological , cognitive , psychological and social ramifications such extend apart from seizure frequency [4,5,6]. "People with epilepsy (PWE) and their caregivers bear a heavy burden of living with epilepsy, which might include stigma, widespread public

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misconceptions, absence of community service, solitude , humiliation, fright along with prejudice" [1, 5]. Young people with epilepsy (PWE) who have epilepsy face more difficulties in school, are more uncertain about their social contacts and work or underemployment, and may have constraints when it comes to driving and independent living [7,8,9]. The social stigma associated with epilepsy is very high, and those who have it typically have a lower quality of life. The subjects tend to be affected more often by anxiety, despair, and psychological distress [10]. Quality of life (QOL) analysis has emerged like pertinent factor within a number from long term neurological illnesses because of its correlation with decreased life expectancy, treatment-related issues, and a decline in personal autonomy and independence [11]. Quality of life (QOL) is a multifaceted, intricate concept that goes beyond physical health to characterize a person's overall well-being by highlighting both their good and negative life experiences [12]. Epilepsy diagnoses significantly affect the QOL as a result of subjects along with their kin together care providers [13,14]. "Numerous elements of QOL, comprising social, cognitive, physical, and psycho-behavioral, are impacted by epilepsy". In severe cases, patients with epilepsy may require hospitalization as a result of their condition or injuries from seizures [15].

At varying levels of the health system, they encounter distinct psycho-social obstacles. Compared to others who have other chronic illnesses, it significantly affects their quality of life and lowers their income [16,17]. "The World Health Organization (WHO) certifies that ,individuals well-being is depicted as reflected in public opinion" [18]. The study's objective was to ascertain the components that have been associated to a decreased QOL in people with epilepsy, given the recent approval of numerous new anti-seizure medications concerning the quality of life (QOL). In order to give sufferer with customized epilepsy medication, this study also sought to better understand several elements of epilepsy treatment. Epileptics most frequently encounter stigmatization, co-morbidity, socioeconomic status, seizure frequency and intensity, and other circumstances that make it difficult for them to live fulfilling lives [19]. "An individual's perceptions of their physical, psychological, social, and overall well-being are all described by the multifaceted concept of QOL". Studies measuring the well-being linked to potent convulsions treatment. Among the main aspects of quality of life that epilepsy affects are social isolation, work, education, and independence. Individuals with epilepsy face challenges such as limitations on driving, social shame, delayed marriage, dread of having another seizure, and other consequences. This may result in a reduced quality of life (QOL) connected to health; it includes features relating to a particular disease as well as physical, emotional, social, spiritual, occupational, and economic components. diverse viewpoints lead to diverse strategies to improve QOL. Enhancing the quality of life can be achieved through educating patients, changing their views, increasing their communication, and removing bias. Misconceptions and ignorance regarding the illness and its treatment are the primary causes of low quality of life. Patients and their families need comprehensive and accurate information on epilepsy, particularly the danger of fatal collapse of individual due to epilepsy, in order to manage the illnesses' anxieties and needless distress [20].

2. Methodology:

2.1. Study Design: A prospective study was carried out in various hospitals in Vijayawada, Andhra Pradesh from June 2024 to December 2024 for a period of 7 months among 200 Epileptic patients receiving Anti-epileptic drugs. After receiving

approval from the Institutional Ethical Committee and informed consent from the subject, this study was carried out. Based on inclusion and exclusion criteria, subjects were screened. This examinations comprised the patients who met the inclusion criteria. The details were gathered using pre-designed data collection form following the subjects inclusion in study. In this study each participants details like "demographic details, seizure worry, emotional well-being, cognitive function and social function." A standard form questionnaire was asked to assess the QOL among epileptic patients receiving anti-epileptic drugs were collected. Later evaluation of QOL in epileptic patients receiving the treatment is done. Collected data is evaluated and interpreted by using a statistical software.

2.2. Study Operation: The QOLIE-31 questionnaire was used to assess the QOL between individuals receiving drug therapy. "This questionnaire consists of seven-factor inventory which include a crucial aspects of health such as emotional well-being, social functioning, energy/fatigue, cognitive functioning, seizure worry, medication effects and overall quality of life [21]. Based on the outcomes were obtained from these scales the QOL was evaluated.

2.3. Statistical Evaluation: The findings were made an entry into Microsoft Office Excel were examined by ANOVA test. Mean score was calculated. Statistics were deemed significant when $p< 0.05$.

3. Results:

The project report includes 200 epileptic patients taking anti-epileptic medication and measured QOL among them by using QOLIE-31 and the results are as follows:

Table 1: Age distribution among epileptic patients

AGE (in years)	Number (n)	Percentage (%)
11-20	18	9 %
21-30	38	19 %
31-40	33	16.5 %
41-50	37	18.5 %
51-60	41	20.5 %
61-70	23	11.5 %
71-80	10	5 %

Table 1: Depicts the age division based on sample, which reveals that 41 patients, or 20.5% of the total, resided in middle of the ages of 51 and 60. The demographic group of 21–30 of age, which made up 19% among the study group. The male population is greater than the female population in the study from Figure 1.

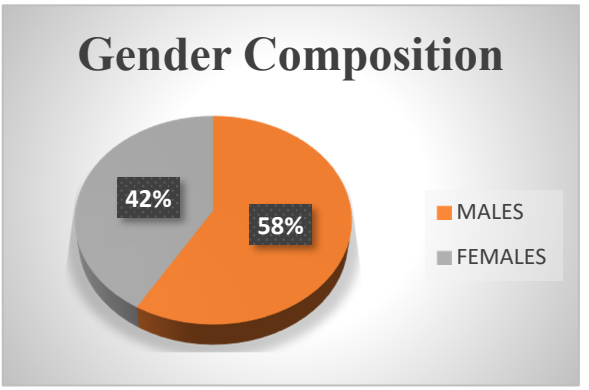

Figure 1: Gender composition among epileptic patients

Table 2: Analysis of QOLIE-31 Questionnaire

PARAMETERS	P-Value
Emotional well-being	1.2203
Social functioning	0.0009
Energy/Fatigue	1.0109
Cognitive functioning	0.0495
Seizure worry	0.0020
Medication effects	0.0004
Overall quality of life	0.0098

Table 2: Which displays the p-values for each parameter, displays the QOLIE-31 questionnaire findings. The significance of each parameter with respect to QOL is demonstrated by the p-values. "The findings show that medicinal effects ($p = 0.0004$) and social adaptability ($p = 0.0009$) possess a profound impact on QOL, suggesting that these variables possess a major effects on the welfare on PWE". We observed some as strong correlation among quality of life and seizure fear ($p = 0.0020$) and overall quality of life ($p=0.0098$). "However, QOL is not significantly correlated with energy/fatigue ($p = 1.0109$), emotional well-being ($p = 1.2203$), or cognitive performance ($p = 0.0495$), while cognitive functioning was on the edge of significance".

4. Discussion:

Epilepsy exists as a intricate with devastating neurological illness which impacts a global population. The disorder arises with acute repetitive seizures , that able to possess a significant impact on individuals QOL. Epilepsy has far-reaching consequences that go beyond physical symptoms together with a considerable influence on a personal , psychological , social along with cognitive well-being.

This study revealed a significant difference in seizure worry compared with the findings along with QOLIE-31 sub scale rankings partially reflected the outcomes of Pimpalkhute *et.al* [22].The duration of illness was not a determining factor in any domain of QOL for individuals accompanied by, this present situation is compliant towards outcomes in a study by Norsa'adah *et.al* [23]. Seizure frequency was recognized as the main clinical element affecting the living standards of epileptic patients. The comparative study revealed a significant disparity in the medication effects among the epileptic patients, contrasting by the findings obtained by Hardik kumar *et.al* [24].Our results obliquely showed no significant link among seizure frequency along with specific aspects of QOL (energy, cognitive function as well as overall quality of life) measured by qolie-31,diverging from previous research [22,25,26,27].

People with epilepsy may gain significantly due to the effects of clinical pharmacist. They can help people with epilepsy better control their illness by offering drug interactions, side effects, and medication management education and counselling. "In addition to developing individualized treatment plans, clinical pharmacists can also keep a check on medication compliance and modify treatment plans as necessary. Along with counselling additionally moral support, they can assist individuals accompanied by epilepsy deal with the non-physical and civil impact of their ill health". In order to meet the specialized needs of people with epilepsy, clinical pharmacist can collaborate with medical teams to create and carry out complete care plans. Pharmacists have a vital role in encouraging for regulations and efforts that help people with epilepsy in addition to their therapeutic work.

5. Conclusion:

Eventually, the impact of epilepsy has a tremendous effect on physical, emotional, social, as well as cognitive facets in regard to quality of life. In order to enhance results, it is critical to address variables which remains negatively associated with well-being, as this study emphasis. "Social support, education, counselling, and comprehensive care are essential to reducing the harmful effects of epilepsy. To enhance the life satisfaction of individuals with seizure disorders, clinical pharmacists must be a part of the health care team". In addition to monitoring side effects and optimizing treatment plans, clinical chemists can offer individualized medication management. Patients and carers can also receive education from them on how to manage seizures, take medications as prescribed, and change their lifestyle.

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