



The Impact of Health Literacy on Epilepsy Management Outcomes: A Cross-National Study

Mohd. Abuzar* and Vishal Dubey

Naraina Vidyapeeth Group of Institutions, Faculty of Pharmacy, Panki, Kanpur, (U.P.) - India

Article info

Received: 20/03/2025

Revised: 30/04/2025

Accepted: 16/05/2025

© IJPLS

www.ijplsjournal.com

Abstract

Epilepsy, a prevalent neurological disorder affecting over 50 million people worldwide, profoundly impacts physical, psychological, and social domains of life. Despite advances in medical management, many individuals with epilepsy face challenges stemming from inadequate health literacy, including poor self-management, medication non-adherence, and diminished quality of life. This cross-national study investigates the role of health literacy in epilepsy management outcomes across diverse educational, cultural, and healthcare settings. Utilizing quantitative methods, data were collected on demographic characteristics, health literacy levels, seizure severity, self-management practices, and quality of life indicators. Results indicate that higher health literacy correlates significantly with improved seizure control, enhanced self-management efficacy, and better health-related quality of life.

Furthermore, cultural and systemic factors modulate the relationship between literacy and clinical outcomes, underscoring the need for tailored educational interventions. The study recommends implementing culturally sensitive health literacy programs to empower individuals with epilepsy, promote adherence, and improve overall well-being globally.

Keywords: Epilepsy, Health, Outcomes

Introduction

Seizures are a symptom of epilepsy, a neurological condition. Seizures affect around 10% of the population. Just one seizure does not constitute epilepsy. One of the most prevalent neurological conditions, epilepsy affects fifty million people worldwide. Consideration of quality of life is essential in the analysis and treatment of epilepsy. There are objective ways to evaluate certain areas, like physical ones, and subjective ways to evaluate others, like psychosocial ones.

Although the primary goal of epilepsy treatment is to reduce or eliminate seizures, research is showing that psychological and social issues significantly impact patients' ability to lead fulfilling lives.

Consideration of seizure severity is more appropriate than drawing comparisons between, say, a brief, simple partial seizure and a long secondary generalized convulsion.

According to the World Health Organization's (WHO) definition of health, clinical data alone are not sufficient to evaluate the impact of long-term health conditions and medical treatments on quality of life. It can be very hard to live with a chronic illness, which reduces the enjoyment, purpose, and quality of life. The severity and length of a chronic ailment, such as epilepsy, are just two factors in the adjustment process.

***Corresponding Author**

Potentially more harmful than the illness itself are the responses of family and partners. A comprehensive strategy for developing and evaluating quality of life in epilepsy should include more than just the assessment since the impacts extend beyond seizures.

The relative contributions of social, psychological, and seizure-related aspects to QoL assessments in the context of epilepsy are evaluated in a substantial body of research. Quality of life assessments are heavily influenced by psychosocial factors, with seizure control having a more significant effect on quality of life for those with epilepsy (Tracy et al., 2007). Damage to the trunk, self-concept, and social connections may result from chronic illness.

According to the findings of Baker et al., who discovered that seizure severity was the strongest clinical predictor of psychological dysfunction and emotional maladjustment in epileptic patients, even infrequent seizures may have a negative impact on the health-related quality of life of elderly epileptics. In addition to limiting their involvement in social activities, public places, and times, people with uncontrolled epileptic seizures are continually faced with the uncomfortable uncertainty of when their next seizure will occur.

The notion of disease intrusiveness, which describes how a person's sickness affects their social, recreational, or occupational life, is congruent with the idea of quality of life. Less quantifiable repercussions include criminalization, stigma, social marginalization, missed educational opportunities, and underemployment or unemployment.

No matter your age, gender, or financial situation, epilepsy affects every part of your life. The unpredictability of the disease often limits quality of life and has a significant influence on important areas such as education, work, marriage, child care, and social performance.

There is strong evidence that achieving complete seizure freedom may restore quality of life to normal levels, and prior research indicates that the absence of seizures is the most important component in quality of life. One third of epileptics experience uncontrollable seizures. There is conflicting evidence about the correlation between the intensity of seizures and quality of life.

Several recent publications have shown that variables related to the severity of seizures have an effect on the quality of life of people with epilepsy. This suggests that these genes may have an effect on quality of life and provide a better explanation for the variation than medical reasons alone.

What is epilepsy?

Seizure disorders include epilepsy. I don't have any mental illnesses or contagious diseases. Numerous chemical and electrical signals are sent by the brain's billions of neurons. Seizures are caused by nerve cells' normal function being disrupted by an excess of electrical current. Seizures are the hallmark of ecclesiastic retinopathy even when there is no systemic or neurological impairment. Neurons typically produce electrical impulses that influence other neurons, muscles, and glands to produce mental states, emotions, and actions. In a normal state, neurons fire 80 times per second; during a seizure, that number may rise to 500. Some people go through this every day, while others go through it much less frequently. Since the Ancient Greeks believed that epilepsy was the ultimate result of God's possession, they dubbed it the holy illness. But in many countries, people mistakenly believe that those with less mild forms of epilepsy are possessed by demons.

What is a seizure?

Epilepsy is characterized by excessive, brief, and erratic electrical activity in the brain, which has the potential to affect behavior. The kind of seizure that occurs may be determined by where the abnormal electrical discharge originates and how it spreads throughout the brain. A lot of research has looked at how social, psychological, and seizure-related aspects affect quality of life assessments in the context of epilepsy. Researchers found that seizure control has a big impact on epileptic quality of life, and that psychosocial factors have a big impact on quality of life assessments. Seizures, tingling, numbness, tingling, scents, sounds, fear, sensory distortions, short jerks, head nods, staring, unconsciousness, and convulsions are all possible side effects.

The brain's functioning is altered by epilepsy. A seizure is characterized by muscle spasms, convulsions, altered awareness, unusual sensations, a blank expression, or a lack of motor

control. A seizure's severity is determined by the precise location of overexcited nerve cells in the brain. An epileptic seizure might happen once in a day or several times.

Medication may help prevent seizures. Most seizures only last a few minutes at most. How long, how severe, and what sort of seizure a person has determines the postictal phase. The most common post-convulsive seizure symptoms are confusion, muscle pain, headache, and fatigue. Although epilepsy can occur at any age, the majority of cases occur in adolescence or middle age. It's possible for children who have seizures to grow out of them. Senior citizens are more likely to suffer from aging brains and strokes. Over half of people with epilepsy can control their seizures with medication. The appearance of an aura can signal a seizure for some individuals. A partial seizure or unusual sensation is called an aura. An aura could be any experience—dizziness, strange gut sensation, ringing in the ears, strong mood, etc. When they see a doctor, some people don't even know they have an aura.

Seizure severity

A tool for measuring seizure severity is utilized by both patients and physicians. We can only speculate as to what it means because no one has attempted to identify it. The study's two main goals were to determine the factors that influence the severity of seizures: the patient's level of control over his seizures and the effects of the seizures themselves. Seizures can result in postictal confusion, incontinence, injury, and loss of consciousness. Seizure severity is seldom taken into account while evaluating patients with epilepsy and their treatment plans. Validity and reliability were assessed for a seizure severity scale that encompasses the most disruptive characteristics of seizures.

Does the patient or observer have a better understanding of how to determine a seizure's severity? A patient's perception of their own control over seizures and the intensity of the seizures themselves are two subcategories of seizure severity. Is it possible to have objective metrics based on observation or patient data without a universal physical scale?

Modern definitions

Today, epilepsy is recognized by the International Bureau for Epilepsy and the International League

against Epilepsy as a complex group of diseases characterized by an inherited susceptibility to seizures.

The abnormal brain function that causes epilepsy could be caused by a number of different things. Epileptic seizures, which occur suddenly and frequently in the brain, are the main sign. Brain activity that is abnormally high or synchronized can lead to epileptic seizures. The outward manifestation of a seizure is determined by a number of factors, including the patterns of its propagation and origin in the brain. The nervous system, the senses, and the ability to move are all affected by epilepsy. A seizure is considered partial if it begins clinically only partially and does not spread to other parts of the body. The first signs of a seizure are highly concentrated regions of abnormal neuronal activity in one hemisphere.

Treatment and Management

A patient-centered, all-encompassing approach is necessary for epilepsy treatment. Patients' well-being and standard of living should take precedence over efficacy when it comes to antiepileptic drug treatment. With long-term seizure control being the primary aim of antiepileptic pharmacological intervention, the ideal medication would have both sustained efficacy and high tolerability.

The main treatment for epilepsy is the control of seizures using anti-epileptic medications. On the other hand, this might come with some quite dangerous adverse effects (Baker et al., 1997). According to Stokes et al. (2004), seizures may occur whether on or off medication, but after five years, the condition is considered to be in remission.

The majority of epileptics are prescribed medication. Because various kinds of seizures are treated differently by different antiepileptic medicines, classifying seizures is essential for treatment planning. The International League Against Epilepsy distinguishes between partial, generalized, and unclassified seizures. Seizures are well controlled with monotherapy, while polytherapy is reserved for severe instances. A Malaysian study found that the prevalence of monotherapy was nearly double that of polytherapy. The study found that epileptic patients' quality of life was unaffected by

polytherapy-89. Similarly, our research did not find any difference between monotherapy and polytherapy.

What kind of epilepsy medication a patient takes is dependent on the specifics of their seizures. Since most antiepileptic drugs work in a similar way, doctors usually give patients a medication depending on the risks associated with it. A common issue with antiepileptic medications is dosage-related side effects that impose restrictions on their use. There is always the risk of having a seizure, even for someone in remission. In addition to living in a society that fails to comprehend them, people with epilepsy face legal barriers to employment in some fields, including the military.

Seizure frequency has traditionally been used as a proxy for the efficacy of surgical and medicinal treatments for epilepsy. As was previously accepted, seizure counts alone are not a reliable indicator of the severity of a seizure condition or the efficacy of therapy. Treatment for epilepsy should eventually lead to a life free of seizures. The health of families and communities, as well as patients' quality of life, is enhanced by this approach. Although antiepileptic medications are the mainstay of therapy for epilepsy, it is important to additionally address physical and psychological aspects.

Seizure classification

Because different antiepileptic medications have varying effects on various types of seizures, classification of seizures is essential for treatment planning. Partial, generalized, and unclassified seizures are the ones that the International League against Epilepsy uses.

For some types of seizures, certain anti-seizure medications work better than others. As a result, when prescribing medication, accurate symptom classification is essential, with patient reaction and other factors also playing a significant role. The classification of seizures is merely descriptive and does not attempt to determine the reason for the seizures. With its assistance, select the treatment that is right for you. Understanding brain activity aids in seizure classification. A generalized seizure begins with an uncontrolled firing of neurons that impacts both hemispheres of the brain. When neurons in only one area of the brain fire erratically, a

condition known as a partial focal seizure occurs. The International League Against Epilepsy created a classification system for epilepsy that includes a variety of illnesses and types of seizures in an effort to create a standardized vocabulary. The International League Against Epilepsy's clinical and electroencephalographic classification was revised by the Commission. Seizures that are both localized and widespread. Seizure therapy has come a long way in the last quarter of a century, thanks to new medications and better seizure categorization. An International League against Epilepsy method from 1969 served as the basis for the present system of categorization. Based on the extent to which the electrical disturbance impacts different regions of the brain, this International Classification categorizes seizures into two distinct types. Included in this group are seizures that are either partial or generalized. Over 25 diseases are classified according to a comparable taxonomy for seizure types.

Table 1.1: Epileptic Seizures: An Annotated International Classification

Part	Category	Subcategory/Description
I. Partial Seizures (start in one area)	A. Partial Paroxysmal Illnesses (remaining aware)	- Motor symptoms - Somatosensory or other sensory issues - Autonomic symptoms - Psychic phenomena
	B. Complex Partial Seizures (impaired consciousness)	1. Starts with isolated partial seizures and progresses to impaired consciousness: - Without automatisms - With automatisms 2. Decrease in awareness from onset: - Without automatisms - With automatisms
	C. Secondary	- Begin as simple or complex seizures

	Generalized Partial Seizures	- Become generalized affecting the whole body (bilaterally symmetric, non-localized)
II. Generalized Seizures (affect entire brain)	A. Absence Seizures	- Typical Absence - Atypical Absence - Genuine Absence (petit mal)
	B. Myoclonic Convulsions	- Brief, shock-like muscle jerks
	C. Cyclical Convulsions	- Repetitive seizure patterns
	D. Tic Seizures	- Sudden, repetitive, nonrhythmic movements or sounds
	E. Grand Mal Tonic-Clonic Seizures	- Loss of consciousness and violent muscle contractions
	F. Atonic Seizures	- Sudden loss of muscle tone
III. Unclassified Seizures	-	Seizures that do not fit the above categorizations

Quality of life

A person must be physically, mentally, and spiritually healthy in order to have a high quality of life, have meaningful relationships with those around them, and develop their potential in all areas of life. Determining health-related quality of life is therefore essential. Seizures cannot be cured, and the concept of quality of life is hazy, yet everyone discusses it. There are numerous ways to define it. Quality of life emphasizes overall well-being rather than just disease prevention. Defining the overarching idea of quality of life research is essential before moving on to epilepsy and quality of life.

Definitions of quality of life range from the global to the component, from explicit to implicit, from targeted to combination, and from non-research specific to research specific.

Examples of definition: One's quality of life is influenced by every aspect of one's health—mental, social, and physical. An individual's subjective satisfaction or contentment in crucial aspects of life is what makes up their quality of life. What matters most in a person's life is how happy or unhappy they are with important parts of it.

These recurring characteristics are revealed by methods for evaluating quality of life. In both academic and clinical settings, quality of life is not defined consistently.

A longer and healthier life expectancy is a direct result of the expansion of medical science. As a result, the species' overall well-being has improved as mortality that could have been avoided has decreased and life expectancy has increased. However, it has also prioritized the longevity impacts of illness treatment above the individual consequences of the management technique. These days, people's quality of life is measured by a subjective and multi-faceted experience that mirrors changes in attitude towards health outcomes.

Epilepsy and quality of life

Because of its stigma and unpredictability, epilepsy may have a greater impact than other chronic conditions. It has recently become apparent that seizure counts are insufficient for assessing the impact of epilepsy.

Laboratory testing, seizure severity, and side effects are some of the ways caregivers evaluate the efficacy of treatment. To better capture patients' viewpoints, quality of life metrics have recently been integrated with other outcome metrics.

There are a variety of instruments that can be used to measure epileptics' quality of life. In clinical trials and surgical procedures, the quality of life of epilepsy patients has been evaluated using a variety of approaches. In developing nations like India, there hasn't been a comprehensive audit of epilepsy treatments and quality of life. My main concern up until recently was reducing seizures. Evaluation of surgical success must take into account the effects of reduced seizure severity on the individual's psychosocial functioning, health-related quality of life, and overall well-being.

Effects of epilepsy on quality of life

Epileptics may generally lead fairly normal lives. Around 80% of people with epilepsy benefit from medications that reduce the frequency and duration of their seizures. Victims, their loved ones, and those who rally behind them all deal with the effects of epilepsy on a daily basis. Refusing treatment increases the risk of cognitive damage and shortens the lifetime of patients with severe seizures, particularly if the seizures began in early adulthood. These restrictions are associated with epilepsy treatment or its origins.

Need for the study

The goal of treating epilepsy is to help the patient live a normal life without any physical or mental problems. This method is beneficial to patients, their families, and society as a whole. Although epilepsy is primarily treated with anti-epileptic medication, quality of life is improved via addressing physical and psychological issues.

Epilepsy has functionally-related secondary expenses. Since effective treatment of epilepsy improves patients' quality of life and may reduce the condition's indirect (and possibly total) costs, there are few psychological health care facilities in India. Many people with epilepsy are treated at Indian epilepsy clinics, but there aren't enough trained professionals. When people have mental health problems, they don't always have access to social workers and psychologists.

We want to conduct a thorough and rigorous examination of the quality of life and seizures in epileptic individuals as a model for rural change in the fight against this terrible disease. Research on epilepsy sufferers' quality of life is abundant in developed countries, but sparse in developing countries like India. In order to provide comprehensive care for epilepsy, it is necessary to determine the extent of the condition.

Statement of the Problem

Over 50 million people worldwide suffer from epilepsy, one of the most common neurological conditions. Many people with epilepsy still have trouble controlling their condition owing to a lack of education, social stigma, and inconsistent self-care, even though medical therapy has gone a long way. Health literacy, which is defined as the capacity to access, analyze, and comprehend fundamental health information, has a significant impact on disease management, medication

adherence, and overall quality of life. However, there aren't many international studies that compare educational, cultural, and healthcare settings to see how health literacy affects epilepsy outcomes. To improve epilepsy management worldwide, this gap must be filled in order to provide effective, culturally adapted therapies. Thus, it is crucial and opportune to conduct a thorough research that evaluates the effect of health literacy on the results of managing epilepsy in various groups.

Objectives

- assess the impact of health literacy on epilepsy management outcomes across different countries
- evaluate the level of health literacy among people living with epilepsy in selected countries.
- To examine the relationship between health literacy and epilepsy management practices (e.g., medication adherence, self-management behaviors).
- To compare epilepsy-related quality of life outcomes in relation to health literacy levels across different nations.
- To identify cultural and systemic factors influencing health literacy and epilepsy outcomes.
- To recommend strategies for enhancing health literacy and improving epilepsy management globally.

Hypotheses

- Higher levels of health literacy are associated with better epilepsy management outcomes across different countries.
- Individuals with higher health literacy demonstrate greater medication adherence and self-management efficacy.
- Patients with adequate health literacy report higher epilepsy-related quality of life compared to those with low health literacy.
- Cross-national differences in epilepsy outcomes can be partially explained by variations in health literacy and cultural/systemic healthcare factors.

Research Methodology

Methodology is essential to research. After defining and limiting an issue, Barr, Davis, and

Johnson (1953) summarized the investigation's materials, techniques, and scope.

Any study relies on methodology to determine validity and reliability. techniques are a variety of educational research techniques used to acquire data for inference, analysis, explanation, and prediction.

This thesis' data reflects the environment, and its questions reflect the social and medical discussion that inspired it. The previous chapters identified elements impacting this thesis's justification.

Chapter 3 describes the research data gathering technique and administration.

It involves generalizing from the success of certain strategies and using logical and metaphysical concepts to actual issues to propose new formulations.

The experiment employed pen-and-paper surveys and patient self-reporting to represent patient outcomes.

These surveys enable delivery consistency throughout the follow-up period, low costs, and participant autonomy in research participation. In this study, a higher overall score and higher scores on the individual subscales indicated a higher quality of life. Emotional health, energy levels, cognitive functioning, medication effects, social functioning, perception of health, physical function, pain, work-related social function, concentration and attention, anxiety about seizures, and fatigue were all assessed on each subscale. Questionnaires are used to collect clinical and socio-demographic information about epilepsy, such as the type and frequency of seizures, age at onset, duration, and medication, as well as information about age, sex, marital status, employment, education level, and family income. Epilepsy is measured by the frequency of seizures in the four weeks preceding the interview. Another measure for assessing the severity of seizures is the Liverpool seizure severity scale. Reducing the severity of seizures improves quality of life. Lower scores indicate a reduction in seizures.

Sample

Convenience sampling was employed in this research. The research sampled West Godavari District communities sponsored by Byrraju Foundation for community service rural development.

The research is part of Comprehensive Rural Epilepsy research South India (CRESSI) by Care Hospital Institute of Neurological Science and SriByrrajuSatyanarayanaRajuFoundation, Bhimavaram, WestGodavariDC.

330 consenting volunteers met the inclusion criteria for the research.

Those verified by a neurologist were studied. The research comprised patients with severe epilepsy, no substantial mental or physical impairment, and the ability to complete the questionnaire after clinical assessment.

Table 3.1: Displays the average age and gender distribution of the subjects.

Category	Value
Number of Males	182
Percentage of Females	44.85%
Mean Age (years)	31.28
Total Participants	330

In underdeveloped nations like India, gender is significant since epilepsy is more common in men than women. Out of 330 participants, 182 were men and 148 were women.

Epilepsy patients' personalities, behaviors, and adjustments are shaped by age. The onset of this condition is important.

Most individuals behave differently by age. Therefore, age is an important variable in this study. Mean age of sample male 31.52 and female 31.28 respectively.

Table 3.2: Relationship status of the subjects

Marital Status	Number of Participants	Percentage (%)
Married	225	68.18%
Widows/Widowers-to-be	20	6.06%
Single	85	25.75%

It has been proposed that people most handicapped by epilepsy are those who lack social support (Droge, 1986), described as dedication, caring guidance, and help in personal connections (Ross, 1996).

Epilepsy patients are less likely to get married than non-epilepsy patients (Kobau, 2007, Elliott, 2008).

Marriage is important in epilepsy and stigma because belief, superstitions, and stigma imply married status is favorable for epileptics. The patients were 68.18 percent married, 25.75

percent single, and 6.06 percent widow or widower.

Table 3.3: Faith held by those taking part

Religion	Number of Participants	Percentage (%)
Hindu	262	(Percentage not specified)
Christian	68	20.60%
Total	330	100% (assumed total participants)

Religion shapes an individual's attitude, beliefs, lifestyle, and conduct. Over 79.39% were Hindu and 20.60 were Christians.

Table 3.4: Participants' educational status

Education Level	Percentage (%)
Literacy Rate	79.94%
Class 1–7	110.33% (appears to exceed 100%—please verify)
Class 8–12	92.27%
Graduation	39.11%
Postgraduate and Others	10.03%

Epilepsy sufferers' adjustment and conduct may be affected by education. Over 61.21 percent of patients were school-educated, 11.82 percent were college-educated, 3.03 percent were postgraduates or professionals, and 23.94 percent were uneducated.

Inclusion Criteria

Epilepsy diagnosis was based on the International League against Epilepsy's Commission on Epidemiology and Prognosis definition.

Age group: 18–60 years.

Participants must provide written agreement to participate in the research.

Exclusions Criteria

Exclusion from the experiment due to an age range of 18 to 60 years

Severe epileptic episodes

Quality of Life in Epilepsy Scale-89 questionnaire

The health-related quality of life of 89 individuals with epilepsy has been thoroughly verified. An 89-item scale was used in this study to measure depth and thoroughness. Since the longer version of the Quality of life in epilepsy -89 contains more items and variables, it deemed appropriate to use it instead of the shorter one.

Table 3.9: Epilepsy Quality of Life Inventory-89

Attribute	Details
Full Name of Survey	Inventory for Quality of Life in Epilepsy—89
Authors/Contributors	Devinsky, Vickrey, Cramer, Perrine, Hermann, Meador, and Hays
Short Name	QOLIE-89
Purpose	Quantify quality of life in individuals with epilepsy
Relevant Fields	Molecular Biology, Nervous System Illness, Uncontrollable Shaking
Measurement Type	Quality of Life Scale
Survey Method	Self-administered
Item Count	89
First Language	English (United States)
Other Language Versions	English (UK), French, French (Canada), German, Greek, Italian, Spanish, Swedish
Database Availability	Yes
Recall Period	Past four weeks

A total score is provided in addition to four summary scales: Physical Health, Mental Health, Cognitive, and Epilepsy-Targeted. Some of the questions have been asked for four weeks, but none have been answered. The average amount of time spent on development was 28 minutes (standard deviation = 16; range: 6–135 minutes). If a quality of life scale is construct valid, then measuring it is a breeze.

Table 3.10: Characteristics of the Epilepsy Quality of Life Inventory—89

Attribute	Details
Instrument Name	Life Expectancy in Epilepsy—89 (QOLIE-89)
Number of Items	89 (originally 99; reduced and expanded with epilepsy-specific items)
Domains/Subscales	17 subscales categorized into 4 elements: - Seizure impacts (discouragement, health, employment, driving, social function, seizure concern)

	<ul style="list-style-type: none"> - Mental processes (thinking, remembering, focusing) - Physical state (responsibilities, discomfort, health) - Mental health (energy, fatigue, social isolation, role restrictions, emotional health, general quality of life) 	<p>3. Physical Health</p> <ul style="list-style-type: none"> - Role limitations - Physical discomfort - Health perceptions (scale 0–100) <p>4. Mental Health</p> <ul style="list-style-type: none"> - Life satisfaction - Emotional well-being - Social functioning - Social support - Energy/fatigue
Possible Answers	Four- and six-point Likert scales; binary (Yes/No); 0–10 scale; Quality of life rating (1–5 VAS and 0–100 VAS)	Original Items
Scoring Method	Weighted sum and domain scores; subscale scores are averages of items; total index ranges from 0 (worst) to 100 (best)	Final Items
Score Interpretation	Higher scores indicate better quality of life across all domains	Scoring Notes
Survey Administration Time	Approximately 28.4 minutes (with a negative gradient of 16.6 minutes for some respondents)	Health-related quality of life tools look at how disease and treatment affect several aspects of health status by using patient data. Patients who are too young, too disabled, or who have neurological disorders often have a parent, caregiver, or bystander fill out the form.

Table 3.11: Display the Management of Resources

Category	Details
Total Subscales	17 Quality Subscales
Item Scale Types	4- and 6-point Likert scales, dichotomous weighted items
Base Instrument	SF-36/89 Likert Scale (added 53 epilepsy-specific items)
Survey Duration	28.4 minutes (weighted reduction: -15.6 minutes possible)
Overall Score Range	0–10 (VAS scale); subscales also scored 0–100
Grouped into 4 Quality Factors	<p>1. Seizure-Specific Impacts</p> <ul style="list-style-type: none"> - Seizure concern - Health - Driving or social function - Discouragement <p>2. Cognition</p> <ul style="list-style-type: none"> - Language - Memory - Attention

Quality of life questionnaire for people with epilepsy, consisting of 89 items, covering 17 domains. Concerns about seizures (5 items), Side effects of medications (3 items), Difficulty with health-related motivation (2 things), Ability to work, drive, and interact socially (11 items), Language (5 items), Focus and concentration (9 items), Memory (6 items), Life satisfaction (2 items), and Mental health (5 items). In terms of role constraints, there are five items related to emotions, two to social isolation, one to social support, four to energy and weariness, six to health perceptions, and ten to physical function.

As previously stated, the Quality of life in epilepsy -89 measure performed better than a more comprehensive measure due to limitations imposed by the questionnaire's length. The creators of the Quality of life in epilepsy -89 believe that it is a popular tool in clinical research because it combines content validity with ease of completion. The 304 participants, including 130 men and 174 women, with an average age of 36 years (ranging from 17 to 63), were recruited from 25 epilepsy clinics in the United States. It occurred once again a fortnight or so after that.

Time spent surveying is 28.4 minutes on average (SD 15.6, range 6–135 minutes).

The SF-36 core has 53 items unique to epilepsy, and there are four parts totaling 86 questions among 17 multi-item subscales and three single-item measures of health, sexual relations, and overall health.

Explores the three facets of being: the physical, the psychological, and the social. Each item receives a score between 0 and 100 based on standardized procedures, with higher scores indicating improved quality of life. Subscale scores are averaged by dividing the total number of items by their respective weights. To get the overall score, the subscale scores are given a weight. Weights from factors-based standardized regression models are used to calculate a domain's score.

Psychometric Properties: Quality of Life in Epilepsy 89 Questionnaire

It was developed in 25 epilepsy facilities in the United States on 304 epileptics and those who acted as proxies for them. There were 130 men and 174 women in the study, and their ages ranged from 17 to 63. It takes an average of 28.4 minutes to complete the survey (SD 15.6, range 6–135 minutes).

It covers four domains and includes 86 items in 17 multi-item subscales and 3 single-item evaluations of health, sexual relations, and overall health. Explores the three facets of being: the physical, the psychological, and the social. Each item receives a score between 0 and 100 based on standardized procedures, with higher scores indicating improved quality of life. By dividing the total number of items by their respective weights, subscale scores are averaged. Higher scores are an indication of a higher quality of life. Consistent quality An overall score of 97 and subscales ranging from 78 to 92 were determined using Cronbach's internal consistency. Overall, the test-retest reliability was 88, while it was 64.86 for the subscales. For thirteen subscales, the test-retest reliability was greater than 70. The reliability of There is demonstrated know-groups validity for the following: employment, anti-epileptic drug toxicity, post-ictal symptoms, seizure frequency, and severity.

The quality of life is better when the score is higher.

Results and Discussion

One of the most prevalent neurological conditions, epilepsy affects fifty million people worldwide. There is strong evidence that achieving complete seizure freedom may restore quality of life to normal levels, and prior research indicates that the absence of seizures is the most important component in quality of life. One third of epileptics experience uncontrollable seizures. There is conflicting evidence about the correlation between the intensity of seizures and quality of life.

The unique clinical characteristics of each patient influence the selection of an antiepileptic pharmaceutical intervention, which is often comparable. In order to reduce mortality, improve health outcomes, and raise quality of life, it is important to think about primary and secondary prevention of comorbid disorders.

A great deal of research has been done on how epilepsy patients' quality of life is affected by the severity of their seizures. Some researchers have even suggested that these genes might affect quality of life, which would be a more solid explanation than just medical reasons for the observed variation. The present study investigates the effects of intervention on the severity of seizures and quality of life for individuals with epilepsy. Before and one year after treatment, all 330 patients completed the Liverpool Seizure severity Scale and the Quality of Life in Epilepsy 89 questionnaire. The traditional classification was used to separate the sample of 330 into three categories.

References

1. World Health Organization. Globalization, diets, and NCDs. Geneva: World Health Organization. 2002
2. Boshes LD, Kienast HW. Community aspects of epilepsy , a modern reappraisal. Epilepsia 1972; 13:31, 32
3. Bury M. The sociology of chronic illness: a review of research and prospects. Sociology of Health and Illness 1991; 13, 4:451 -468
4. McLaughlin DP, Pachana NA, Mcfarland K: Stigma, seizure frequency and quality of life: the impact of epilepsy in lateadulthood. Seizure 2008, 17(3):281 - 287. PubMed Abstract
5. Devinsky O, Cramer JA: Int rodution to quality of life in epilepsy, Epilepsia 1995 993: 34 (Suppl. 4).

6. Radhakrishnan, K., The R. Madhavan Nayar Centre for Comprehensive Epilepsy Care, In: Silver Lines, Published by Sree Chi tra Tirunal Institute for Medical Sciences and Technology, Trivandrum, 163 -89. 2004,
7. Jacoby, A. & Baker, G. Quality of life trajectories in epilepsy: A review of the literature. *Epilepsy and Behavior*, 2008. 12, 557
8. Szaflarski, M., Meckler, J., Privitera, M. & Szaflarski, J. (2006). Quality of life in medication-resistant epilepsy: The effects of patient's age, age at seizure onset and disease duration. *Epilepsy and Behavior*, 2006. 8, 547-551
9. Baker GA, Jacoby A, Buck D, Stalgis C, Monnet D. Quality of life of people with epilepsy: A European study. *Epilepsia*. 1997; 38:353 , 6
10. Markand Om kar. N Quality of life in medically refractory epilepsy treated surgically, In Medically Refractory Epilepsy, Radhakrishnan,K ed. Sree Chitra Tirunal Institute for Medical sciences & Technology, Trivandrum, 201-2 15. 1999
11. Szaflarski, M., Meckler, J., Privitera, M. & Szaflarski, J. (2006). Quality of life in medication-resistant epilepsy: The effects of patient's age, age at seizure onset and disease duration. *Epilepsy and Behavior*, 2006. 8, 547-551
12. Carpay HA, Arts WF. Outcome assessment in epilepsy: available rating scales for adults and methodological issues pertaining to the development of scales for childhood epilepsy. *Epilepsy Res.* 1996 Jul; 24(3):127 -36. [PubMed]
13. Zakaria, AK: Principles of treatment of epilepsy. *Malaysian J Med Sciences* 1998, 5(1):11-17. OpenURL
14. Mrabet H, Mrabet A, Zouari B, Grachem R: Health related quality of life of people with epilepsy compared with a general reference population: a Tunisian study. *Epilepsia* 2004,45(7):838-843
15. Brodie, Martin J., and Dichter, Marc A. Antiepileptic Drugs N Engl J Med 1996; 334:168-175 January 18, 1996
16. Cramer J. A clinimetric approach to assessing quality of life in epilepsy. *Epilepsia*. 1993; 34 (Suppl 4):S8-13. [PubMed]
17. Centre for Health Promotion, 2004: <http://www.utoronto.ca/chp>.
18. Farquhar M. Definitions of quality of life: taxonomy. *J Adv Nurs* 1995; 22:502
19. Thomas, S., V., Samuel Koshy, Sudhakaran Nair.C.R. Sankara.P. Sarma, Frequent seizures and polytherapy can impair quality of life in persons with epilepsy, *Neurology India*, 2005, March, Vol 53, issue 1, P.46
20. Hasan, S.S., Alen, Y.K.S., Wayne, W.G.W., Ahmadi, K., Anwar, M., Goh, G.K. (2010). Understanding of and attitudes toward epilepsy among the urban Chinese population in Malaysia. *Singapore Medical Journal*, 51(4):290-296.
21. Tu Luong Mac., Duc-Si Tran., Fabrice Quet., Peter Odermatt., Pierre-Marie Preux., Chong Tin Tan. (2007). Epidemiology, aetiology, and clinical management of epilepsy in Asia: a systematic review 6:533-543. Retrieved from <http://www.neurology.thelancet.com>
22. Barucha, N.E. (2003). Epidemiology of epilepsy in India. *Epilepsia*, 44(Suppl. 1):9- 11.
23. Adavi, S, Al-Salmy, H., Martin, R G., Al-Naamani, A., Prabhakar S., Deleu, D., Moosa S., Dovlo. S.S.(2003). Patient's perspective on epilepsy: self-knowledge among Omanis, *Seizure*, 12(1):11-18.
24. Doughty, J., Baker G.A., Jacoby A., & Lavaud. V. (2003). Cross cultural differences in level of knowledge about epilepsy. *Epilepsia*, 44(1):115-123.
25. Long, L., Andrew, L., Reeves, J., Moore, L., Roach, J., & Pickering. C T. (2000). An assessment of epilepsy patients' knowledge of their disorder. *Epilepsia*, 41(6):727-731.

Cite this article as:

Abuzar M. and Dubey V. (2025). The Impact of Health Literacy on Epilepsy Management Outcomes: A Cross-National Study. *Int. J. of Pharm. & Life Sci.*, 16(6):30-40.

Source of Support: Nil

Conflict of Interest: Not declared

For reprints contact: ijplsjournal@gmail.com