

Knowledge, Attitude, and Practice of Epileptic Patients Towards their Illness and Treatment in Jimma University Specialized Hospital, Jimma, Ethiopia 2021 GC

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ABSTRACT

Background: About 50 million people (or 1 in 100) are thought to have epilepsy worldwide, with at least 50% of those affected. are given insufficient or no treatment at all. The International League against Epilepsy divided seizures into three categories: partial, generalized, and unclassified. Epilepsy is a chronic disorder characterized by two or more unprovoked seizures. Partial seizures can be classified as secondary, generalized, complex, or simple.

Objective: To determine the Knowledge, attitude, and practice of people with Epilepsy regarding their illness and its treatment.

Method: A cross-sectional hospital-based survey was conducted in JUSH among people with Epilepsy following their follow-up to the epilepsy clinic to determine the Knowledge, attitude, and practice of epileptic patients regarding their illness and its treatment. The study was conducted between May 14 and May 28, 2021.

Result: A sample of 225 individuals with epilepsy was taken; 213 of them answered, yielding a response rate of 94.7%. All patients who showed up for the follow-up clinic between May 14 and 28, 2021, were interviewed by qualified medical interns and nurses using prepared questionnaires, utilizing a convenient sampling technique. An analysis of the data was done with an SPSS computer program. The age range of the bulk of responders (56.3%) was 20 to 35 years old. Most respondents were Muslims (66.2%) and Oromo (78.9%). Only 38.02% of respondents knew the purpose of treatment, whereas about 40.4% of respondents claimed an inherited condition causes epilepsy. The operational definition states that around 54.9% of respondents have an optimistic outlook.

Conclusion: The study has shown that most respondents have medium knowledge and a better attitude towards epilepsy and its treatments. They also have little knowledge about the first aid measures for seizing patients.

Introduction

Back Ground

It is estimated that there are about 50 million people with Epilepsy worldwide (1 in 100), of which at least 50%. Are not adequately treated or not treated at all [1]. Epilepsy is a chronic illness that has caused two or more unprovoked seizure [2]. International leagues against Epilepsy classified Seizure as a partial seizure, generalized Seizure, and unclassified Seizure partial Seizure classified as simple, complex, and secondary generalized. Generalized Seizure classified us as a) Tonic-clonic (grandma), b) Absences (petition), c) Atonic d) Myoclonic [2] Diagnosis of Epilepsy is usually clinical, but sophisticated investigations like E.E.G. C.T. scan, M.R.T., and biochemical analysis may help to reach for causes [3]. Epilepsy is the most common neurologic disease worldwide, provolone of 5-10 cases per 1000. 9% of the U.S.A. population will have at least one epileptic Seizure during their legotinc, and more than 1% have Epilepsy [3]. It is estimated that >80% of people with Epilepsy in developing countries do not get adequate treatment, and in Ethiopia, only <5% of people with Epilepsy receive medical treatment [4,5]. Most epileptic patient in developing countries gets no treatment. In developed countries, one neurologist gives service to 30-30,000 population. One neurologist provides services to 3-10 million people in developing countries. Because of these and poor control, the WHO global campaign against Epilepsy recommends practice through P.H.C., which gives greater priority [1,6,7,8].

Statement of the problem

It is estimated that there are 50 million people with Epilepsy worldwide (1 in 1000 people), of which at least half Are not adequately treated or not treated at all [1]. The prevalence rate of disease worldwide is estimated to be 0.9-57/1000 in the population. The usual prevalence is about 5-10 cases per 100 persons, excluding febrile Seizure and inactive cases. The number is estimated to be higher in developing

countries because of diagnosis difficulty and is estimated to be 15-20/100 cases [1,2].

Epilepsy is traditionally looked upon as caused by a control spirit or attributed to possession by evil spirits. Ethiopia is one of the countries where such traditional beliefs and practices are widespread. In such a society, well-being is secured by maintaining a peaceful relationship with the supernatural world [9]. Many studies in Africa concluded that rural as well as urban communities of developing countries have poor Knowledge of the causes of sin, evil spirits, and witchcraft. Their literature also understood mistaken attitudes and malpractice as the majority of people believe that the disease is not curable Because those people with Epilepsy suffer from social deprecation [1,10].

In tropical regions, the prevalence is usually estimated to be 10-15/1000. A cross-sectional study done in central Ethiopia showed that Epilepsy is the most common neuralgic condition, and the prevalence rate was 5.2/1000. A similar small-scale study in western Ethiopia estimated that the prevalence is 5-8/1000 cases[1] Epilepsy is a condition that puts a heavy burden on patients, their families, and their country's economy[1,3] The International Leagues Against Epilepsy (ILAE), which represents medical practitioners and scientists and the International Bureau for Epilepsy (I.B.E.), which acts on behalf of patients and their families, have joined WHO in launching a global campaign to improve the treatment and social acceptance campaign combines two approaches 1st raising of general awareness and understanding Epilepsy and 2nd provide assistance in identifying needs, in promoting education training and research and in developing services and preventive action[11] So, Knowledge of the community and the patients about the local beliefs and attitudes towards Epilepsy is mandatory for planning the educational program, which is essential for managing Epilepsy.

Significance of the study

The public lacks Knowledge about K.A.P. or epileptic patients in general. The K.A.P. determines the severity of the patient's problems and the K.A.P. for their illness. The findings will be of tremendous value to health planners and local legislators because they show how important it is to change long-standing traditional beliefs and practices in the area and educate patients and the community about the nature, causes, and treatments of epilepsy.

Literature Review

The vast majority of individuals with Epilepsy in many resource-poor regions do not receive treatment. Untreated Epilepsy is a critical public health issue, as people with untreated Epilepsy face potentially devastating social consequences and poor health outcomes. Due to stigma, many persons with Epilepsy have lower employment and education levels and lower socioeconomic status. For example, children with Epilepsy who have a seizure at school may be dismissed, while adults may be barred from marriage or employment. In addition, persons with Epilepsy have poor health outcomes, In addition, persons with Epilepsy have poor health outcomes, including more significant psychological distress, more physical injury such as fractures and burns, and increased mortality [12].

Stigma has long been recognized as a significant burden to people with Epilepsy (P.W.E.) and their families. This is highest in sub-Saharan Africa (S.S.A.), whose epilepsy rates far exceed those in developed countries. In S.S.A., a combination of poverty, social role expectations, limited medical care, and traditional beliefs. Coalesce will severely limit the life of P.W.E. The nature and degree of stigma are influenced by clinical course drug side effects, age, gender, education and employment status. The social experience of being a person with Epilepsy is inextricable from the geopolitical and social context of the sufferer [13].

Beliefs regarding the cause and preference of treatment modality are essential factors influencing any epilepsy treatment program. In a study done in India in 1998 amongst 80 epileptic patients, it was found that the majority of the patients were well-informed regarding the cause of Epilepsy. Still, more than $1/2$ had tried alternative treatment methods, and many patients had misconceptions about the goal of treatment and the consequences of missing a prescribed drug dose- surprisingly, few patients avoided taking medications on days of religious fasting. Most patients depended on free medical supplies from the clinic dispensary, and a small number would stop the drugs if these were not given free of charge [14].

The treatment gap among P.W.E., the proportion of people who warrant medical care but are not receiving anticonvulsants, ranges from 65-95 % in the S.S.A. and is highest in rural areas. This gap results from several factors, including belief systems that attribute Epilepsy to supernatural rather than medical causes, a shortage of healthcare facilities, healthcare workers who receive inadequate training and cost of care seeking as a result of these, may P.W.E. in S.S.A. expenses frequent, uncontrolled seizure which may result in seven burns, drowning, and fractures. Epilepsy-associated disability varies between rural and urban areas, with rural residents suffering more significant disability. People in the S.S.A. rely heavily on traditional healers. Traditional healers are certainly key figures in mediating stigma [13].

A study was conducted in Ohio, U.S.A., amongst 220 epileptic patients regarding their knowledge about their disorder. The average age of the respondents was 34.7, and the no. of years with Epilepsy nor years of education correlated with questioner scores. 30 % believed that Epilepsy is a mental disorder or contagious, and 41% thought it is appropriate to place an object in the patient's mouth during Seizure to prevent injury. The conclusion was that patient with Epilepsy are not knowledgeable about their disorder. This is true regardless of age,

educational background, or no. of years with Epilepsy [15].

A cross-sectional was conducted in rural areas of predominantly controlled Ethiopia. The showerhead belief that Epilepsy is a contagious illness is significantly less prevalent compared to earlier days. Attribution of etiology to supernatural factors is diminished considerably, and the belief that Epilepsy is hereditary has increased dramatically. Showed ongoing negative attitude towards Epilepsy among the communists [16].

Objectives

General Objectives:

- To ascertain the epilepsy patients' Knowledge, attitudes, and practices regarding their condition and its management.

Specific Objectives

- To find out how well-informed epileptic individuals are about their condition
- To ascertain how epileptic patients feel about their condition
- To ascertain how epileptic patients manage their condition and its therapies.
- To determine the sociodemographic variables that affect the Knowledge, attitudes, and behaviors of epileptic patients toward their condition.
- To formulate workable suggestions.

Methodology

Study area and period

The research was carried out in the Oromia region's Jimma Specialized Hospital in Jimma town and zone. Jimma town is 3.55 kilometers southwest of Addis Ababa. The town has numerous private clinics, three health centers, and one referral hospital. One of JUSH's chronic follow-up clinics is dedicated to treating epilepsy.

The study was conducted between May 14 and May 28, 2021, GC

Study design

A cross-sectional study was conducted using structured questionnaires.

Source population

All of the epileptic patients (3063) are on follow-up at JUSH.

Study Population

All epileptic patients who come for follow-up between May 14 and May 28, 2021.

Sample size and sampling techniques

The sample size was calculated using a convenient sampling technique. The result of which provided a sample size of 225.

Consideration

A practical sampling method was used to determine the sample size. Since $P=1$ in these cases—where all clinic visitors have epilepsy—no formula involving P was applied. It was predicted that between 70 and 80 epileptic patients visited each week (average = 75). Thus, the sample size was 225 patients who visited the clinic between May 14 and May 28, 2021.

Methods of data collection and analysis

Between May 14 and May 28, 2021, each epileptic patient was interviewed using structured questionnaires for follow-up.

The questionnaire will have four parts.

- Part I – Background information
- Part II – Questions related to practice
- Part III – Questions related to attitude
- Part IV – Questions Related to Knowledge

Each question scored from -2,-1,0, 1,2, and the mean score was calculated.

If the mean score is negative _____ Negative attitude

If mean score positive _____ Positive attitude

If mean score zero _____ Uncertain attitude

Part 4- Questions related to Knowledge classified into "good", "Fair," and "Poor" based on the following criteria.

- a) Knowledge about the cause of Epilepsy
- b) Knowledge about the aim of treatment
- c) Poor if neither one of the above answers
- d) Fair if only one above answer
- e) Good if both of the above answer

Data was fed to a computer and analyzed using the SPSS software program.

Study variables

Dependent variables

- Seizure
- Prevalence
- Epilepsy
- Knowledge
- Attitude
- Practice
- Types of Epilepsy

Independent Variables

- Age
- Sex
- Marital Status
- Educational Status
- Religion

Operational Definition

Epilepsy: - Two or more unprovoked seizures

Partial seizures: - Type of Seizure manifesting as motor, sensory, autonomic, or psychic symptoms without apparent alteration in conscious

Complex Seizure: - Focal seizure activities accounted by transient impairment of consciousness

Partial with a secondary generalization: - generalized Seizure preceded by a...

Generalized Seizure: - Types of Seizure in which there is loss of consciousness.

Grandmal: Tonic muscle contraction followed by a clonic phase with less consciousness.

Atonic: Sudden loss of postural tone with loss of consciousness

Absence: - Sudden brings lapses of conscience without loss of postural control.

Myoclonic: - Sudden and brings muscle contraction that may involve one part of the body or the entire body.

Unclassified: Seizure activities not intended or different from the above types

Knowledge: - Awareness of Epilepsy

Attitude: Beliefs about Epilepsy

Practice: Care given to epileptic patient

Ethical consideration

Legal permission will be obtained from the C.B.E. office and given to consent officials to obtain signed consent before data collection. The objectives of the study will be clarified to responsible officials and respondents.

Result

A total of 213 patients were interviewed out of a sampled population of 225, giving a response rate of 94.7%.

Sociodemographic characteristics

There were 213 responders, 126 (59.2%) men and 87 (40.8%) women. Of the 120 responders (56.3%), the majority were in the 20–35 age range, with only roughly 12 (5.6%) being older than 45. 141 people (66.2%) identified as Muslims, whereas 54 (25.4%) identified as Orthodox. Amharas comprise 15 (7%), while Oromos comprise 168 (78.9%) of the respondents.

Most of respondents were single 141(66.2%) followed by married 57(26.8-10)

Attitude towards Epilepsy and its Treatment

117 people (54.9%) have a positive attitude, 81 people (38%) have a negative attitude, and 15 people (7%) are unsure. Between attitude and age, sex, religion, and ethnicity, there was a statistically significant relationship. (See Table 1)

Table 1: Sociodemographic distribution of epilepsy patients on follow-up at JUSH

	Variables	Attitude						X ² - test	p-value
		Positive		Negative		Uncertain			
		No.	%	No.	%	No.	%		
Age	<10	9	60	6	40	0	0	21.25	0.007
	10-19	30	55.6	24	44.4	0	0		
	20-35	69	57.5	36	30	15	12.5		
	36-45	3	25	9	75	0	0		
	46-55	6	50	6	50	0	0		
	Total	117	54.9	81	38	15	7		
Sex	Male	72	61.5	39	25.6	15	12.8	14.69	0.000
	Female	45	51.7	42	48.3	0	0		
	Total	117	54.9	81	38	15	7		
Religion	Orthodox	21	38.9	27	50	6	11.1	16.49	0.011
	Muslim	90	63.8	42	29.8	9	6.4		
	Protestant	6	40	9	60	0	0		
	Others	0	0	3	100	0	0		
	Total	117	54.9	81	38	15	7		
Ethnicity	Oromo	105	62.5	54	32.1	9	5.4	51.66	<.000
	Amhara	6	40.1	3	20	6	40		
	Tigre	0	0	0	0	0	0		
	Other	6	20	24	80	0	0		
	Total	117	54.9	81	38	15	7		
Marital status	Married	3.6	63.2	21	36.8	0	0	8.86	0.064
	Divorced	9	60	6	40	0	0		
	Single	72	51.4	54	37.9	15	10.7		
	Widowed	0	0	1	100	0	0		
	Total	117	54.9	81	38	15	7		

Knowledge and practice about Epilepsy and its treatment.

Before developing epilepsy, 156 (73.2%) of the respondents had heard of epilepsy. Of the responders, about 21 (9.9%) had had epilepsy for less than a year, 99 (46.5%) for one to five years, 54 (25.4%) for six to ten years, 30 (14.1%) for eleven to fifteen years, and 12 (5.6%) for more than fifteen years. 381, or one in four people, never have seizures, 254, or one in four people, 63, or 29.6%, have seizures once a week, and 7 percent, or 15 people, have seizures more frequently than once a week. (Table 2)

In response to questions about the etiology of epilepsy, 86 respondents (or 40.4%) stated that

it is inherited, followed by brain injury (19 respondents or 8.9%), and I don't know 72 respondents (33.84%). (Tabel 3)

About epilepsy treatment, 120 (56.34) reported complete cure, 81 (38.02) reduced seizure frequency, and 12 (5.6%) had no effect at all.

Thirty people (14.08%) stopped taking the medication because they were broke, couldn't get to the hospital quickly, or couldn't find it at the drugstore. Knowledge about the number of years with epilepsy and the frequency of seizures were found to be statistically significantly correlated. Length is linked to more excellent knowledge about epilepsy and therapy than the follow-up period.

Table 2. Distribution of respondents according to their knowledge of their illness and their duration of illness, Frequency of Seizure, and treatment, JUSH, Jimma 2021

	Variables	Knowledge						X ² - test	p-value
		Good		Fair		Poor			
		No.	%	No.	%	No.	%		
No. of yrs with Epilepsy	<1yr	0	0	15	71.4	6	28.6	18.48	0.018
	1-5	3	3	57	57.6	39	39.4		
	6-10	0	0	24	44.4	30	55.6		
	11-15	0	0	9	30	21	70		
	>15	0	0	9	75	3	25		
	Total	3	1.4	114	53.5	99	46.5		
Frequency of Seizure	Never	0	0	39	48.1	42	51.9	12.64	0.049
	1x/1mo	3	5.6	33	61.1	18	33.3		
	1x/1wk	0	0	33	52.4	30	47.6		
	>1x/1wk	0	0	9	60	6	40		
	Total	3	1.4	114	53.5	99	46.5		
Drug interrupted	Yes	0	0	24	80.6	6	20	16.49	0.011
	No	3	1.6	90	48.4	93	50		
	Total	3	1.4	114	53.5	99	46.5		

Table 3. Percentage distribution of respondents by Knowledge about the cause, JUSH, Jimma 2021.

Cause of Epilepsy	No.	%
Evil spirit	24	11.3
Insanity	3	1.4
Contact	3	1.4
Hereditary	86	40.4
Brain damage	19	8.9
I don't know	72	33.8
Others	6	2.8
Total	213	100

Table 4. Percentage distribution of respondents by aim of treatment of JUSH, Jimma 2021.

Aim of treatment	No.	%
Cure entirely	120	56.3
Decrease frequency	81	38.02
Nothing	12	5.6
Total	213	100

Table 5: Percentage distribution of respondents by information on Epilepsy, JUSH, Jimma 2021.

Heard Epilepsy before becoming epileptic	No.	%
Yes	156	73.2
No	57	26.8
Total	213	100

Discussion

From this study, 40.4% of respondents said Epilepsy is hereditary, 33.8% do not know the cause of Epilepsy, and 8.9% are caused by brain damage. The second study done in rural Ethiopia shows that the attribution of etiology to supernature factors is significantly diminished, and the belief that Epilepsy is hereditary has increased dramatically, which is also common in those studies [16].

In this study, 73.2% of the respondents had heard about Epilepsy before they developed Epilepsy, and this figure is less than the corresponding figure farther from central Ethiopia, around 89% [4].

In this study, 54.9% of respondents have positive attitudes. These may be due to the availability of medication and increased awareness through health education given at clinics when compared to the study done in rural Ethiopia, which shows an ongoing negative attitude toward Epilepsy within the community [16].

In these studies, most of the respondents, 59.2%, are males aged between 20 and 35. A study done in 1994 in neurology clinics in Addis Ababa reported the highest incidence of Epilepsy was seen in males aged 11-20 years, and there was a preponderance for males [18].

In these studies, 33.8% of respondents do not know the cause of Epilepsy. Of those lower than the studies done in Accra, Ghana, 45.3% did not know the cause of Epilepsy, which may be attributed to the education provided by the health profession [17].

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Conclusion and Recommendation

Conclusion

The majority of respondents have inadequate Knowledge and attitudes about the nature, causes, and treatments of epilepsy. Not many respondents stop taking their medication. After beginning medication, the majority of respondents said they never experienced seizures. The respondents have a lowered belief that contagiousness is the cause of seizures. The number of years with epilepsy and Knowledge were found to be statistically significantly correlated.

Recommendation

- Epilepsy should be considered a significant public health importance in Ethiopia, as WHO recommends.
- Health professionals should give in-depth information about illness to every person with Epilepsy who comes for follow-up.
- Drugs should be available at low cost or free of charge to increase compliance and control the disease.
- Education should be given to the community to decrease the stigma on epileptic patients.
- To prevent, treat, and control the disease, an epilepsy unit should be opened in every hospital and health center.

Abbreviations

KAP- Knowledge attitude and practice
WHO – World Health Organization
ILAE – International League Against Epilepsy
JUSH – Jimma University Specialized Hospital
I.B.E. – International Bureau for Epilepsy
S.R.P. – Student Research Program
SPSS – Software Program for Social Studies
P.H.C. – Primary health care
P.W.E. – People with Epilepsy
S.S.A. – Sub-Sahara Africa

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