

ORIGINAL ARTICLE

Public Awareness, Knowledge, and Attitudes towards Epilepsy among adult population in Najran City- KSA

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ABSTRACT

Epilepsy is the most neurological condition prevalent in humanity, there are several conflicting beliefs about epilepsy, and public awareness about this disease varies widely among different countries. Was to measure public awareness of the adult population toward epilepsy in Najran. Cross-Sectional descriptive community base study, was used to measure public awareness about epilepsy in Najran city, Questionnaire composed of four parts was used for data collection consisting of sociodemographic characteristics, People's knowledge about epilepsy, People's attitudes about epilepsy, and People's awareness about epilepsy. The most 94.5% of the participants heard of epilepsy, as a source of information 46.4% of them heard by social media, more than half 58.7% of them had a positive +attitude level of epilepsy, and more than half 52.7% of them had low awareness level of epilepsy. In addition, there was a statistical correlation between the educational level, function of studied subjects, and their awareness level of epilepsy. More than half of the participants had a positive attitude level of epilepsy, while more than half of them had a low awareness level of epilepsy. In addition, there was a statistical correlation between the educational level, job of studied subjects, and their awareness level of epilepsy, while there was no statistical correlation between age, nationality, gender, marital status, family income of studied subjects, and their awareness level of epilepsy. Health education to the community is recommended to increase the level of knowledge, attitude, and awareness towards epilepsy.

Keywords: Public awareness, epilepsy, Knowledge, Attitude.

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INTRODUCTION

Epilepsy is a common stigmatizing neurological disorder characterized by recurrent seizures. The World Health Organization (WHO) defines epilepsy as a chronic neurological disorder that affects millions worldwide. More than 50 million people worldwide are affected by epilepsy, and 85% of them were from developing countries. Worldwide, epilepsy affects more than 50 million people. In China, the prevalence of epilepsy in 2000 was 5.95–8.75 per 1000 people, and 3.3–7.8 per 1000 in Europe. Among Arabian countries, it was illustrated that around 724,500 persons had epilepsy. The prevalence of epilepsy in Saudi Arabia is 6.54 per 1000 [1].

Epilepsy, or recurrent seizures, is a chronic and serious neurological disorder characterized by episodes of vigorous shaking and disturbed brain activities. Social acceptance of epilepsy patients is largely dependent on the perception of epilepsy in the community and it often represents a considerable problem for patients and their families. Helplessness, personal sensitivity, or the fear of being confronted with an episode of epileptic seizure was among the various reflections of members of the society towards patients with epilepsy. Some patients found social attitude towards their condition more devastating than the disorder itself [2].

There are several conflicting beliefs about epilepsy, and public awareness about this disease varies widely among different countries. Public awareness studies are important to successfully identify misunderstandings and misconceptions, which will help in designing targeted campaigns to improve the overall knowledge of the community. It is imperative to raise public awareness about epilepsy, to assist the

patients and their families in seeking medical advice at the earliest. This leads to an early diagnosis of the disease, followed by immediate treatment for the patients and stress reduction for their caregivers. The negative perception of disease significantly affects public interactions with both patients and caregivers [3].

There are numerous misconceptions surrounding epileptic disorders. For example, in a study that was conducted in Majmaah City in Saudi Arabia to examine the attitudes of its residents toward epilepsy, it was found that 10% think that the jinn “fairy” is the major cause of epilepsy, and 23% presume that evil is the drive for epilepsy. Epilepsy is a disorder that requires long periods of treatment and follow-up. Thus, healthcare professionals are required to have adequate knowledge and skills to meet the needs of patients with epilepsy and their families. Nonetheless, insufficient knowledge and inadequate professional support are problems that are faced by people with epilepsy [4]. aim of this study is to measure public awareness of the adult population toward epilepsy in Najran City KSA.

MATERIAL AND METHODS

This study which follows a cross Sectional descriptive community base study was used to measure public awareness about epilepsy in Najran city, KSA, among Najran community the study was performed between March to June 2023 we targeted adult people above 18 years old, lived in Najran city who were included in this study and excluded people less than 18 years old, The subject for this study was enrolled among Najran community. The sampling technique (604) who participated voluntarily and was estimated as a convenience sample, each subject completed answer question indicating their agreement to participate as a first question in an electronic questionnaire which consisted of sociodemographic characteristics such as age, sex, marital status, nationality, educational level, job, family income, people's knowledge about epilepsy, people's attitude about epilepsy and people's awareness about epilepsy. **Scoring system:** Attitude: Negative from 1 to 1.66 Intermediate 1.67 to 2.33 Positive 2.34 to 3. Awareness: High if score \geq 50% Low < 50%, Quantitative survey data was revised, coded, and entered using Personal Computer (PC).

Table 1: Demographic characteristics of survey respondents (N=604)

Variable	Response	Frequency	Percent %
Participation	Yes	604	100
	No	0	0
Age	18-29	435	72.0
	30-39	60	9.9
	more than 30	109	18.0
Nationality	Non-Saudi	25	4.1
	Saudi	579	95.9
Gender	Female	560	92.7
	Male	44	7.3
Education	High School	147	24.3
	Intermediate	35	5.8
	Read and Write	14	2.3
	University	408	67.5
Marital Status	Divorced	12	2.0
	Single	372	61.6
	Married	215	35.6
	Widower	5	0.8
Job	I do not work	146	24.2
	Other	16	2.6
	Student	303	50.2
	Work	139	23.0
Family Income	Enough	434	71.9
	Enough and More	85	14.1
	Not Enough	85	14.1

The data obtained from the pilot sample were not used later in the study and obtained via an electronic questionnaire linked through social media, Computerized data entry, and statistical analysis were fulfilled using the Statistical Package for Social Sciences (SPSS) version 25 Data were presented using descriptive statistics in the form of frequencies, percentages, and Mean SD. The Chi-Square statistic is commonly used for testing relationships between categorical variables. Correlation coefficients are used to measure how strong a relationship is between two variables, Statistical significance was determined at a threshold of

$p < 0.05$. A total of 604 were initially enrolled in the study as seen in Table 1, all respondents 100% participated in the survey, the most common age group was 18 to 29 years old 72%, most of them 95.9% were Saudi, the majority of them 92.7% were female. Most respondents 67.5% had a university education, 61.6% of the respondents were single, while 50.2% were students, and 71.9% of them reported having adequate family income.

As seen in Figure 1, 94.5% of the studied subjects heard about epilepsy, the most common symptoms and signs of epilepsy are cramps 69.7%, regarding the causes of epilepsy 36.9% of them said mental illness, and "What would do if someone had an acute attack" 33.8% of them said they put spoon/cloth in the mouth. Figure 2 showed more than half 58.7% of the studied subjects had a positive attitude level of epilepsy, while 12.6% of them had intermediate and 28.7% of them had a negative attitude level of epilepsy. Figure 3, The assessment of awareness level of epilepsy approximately more than half 52.7% of studied subjects had a low awareness level of epilepsy, while less than half 43.3% of them had a high awareness level of epilepsy.

Table 5: showed that there was a statistical correlation between the educational level p -value (0.01), jobs of studied subjects, and their awareness level of epilepsy p -value (0.00), while there was no statistical correlation between age, nationality, gender, marital status, family income of studied subjects and their awareness level of epilepsy.

Figure 1: Distribution of studied subjects related to their knowledge level of epilepsy (N=604)

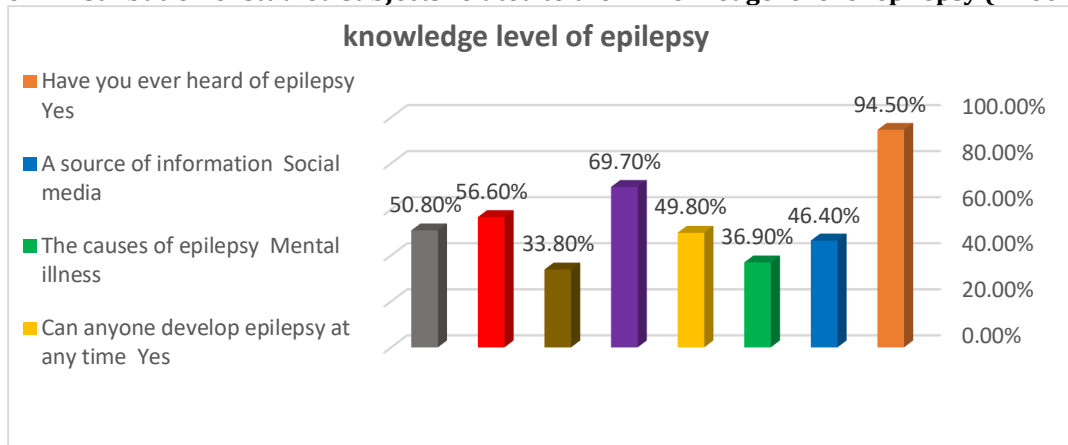


Figure 2: Distribution of studied subjects related to their attitude level of epilepsy (N=604)

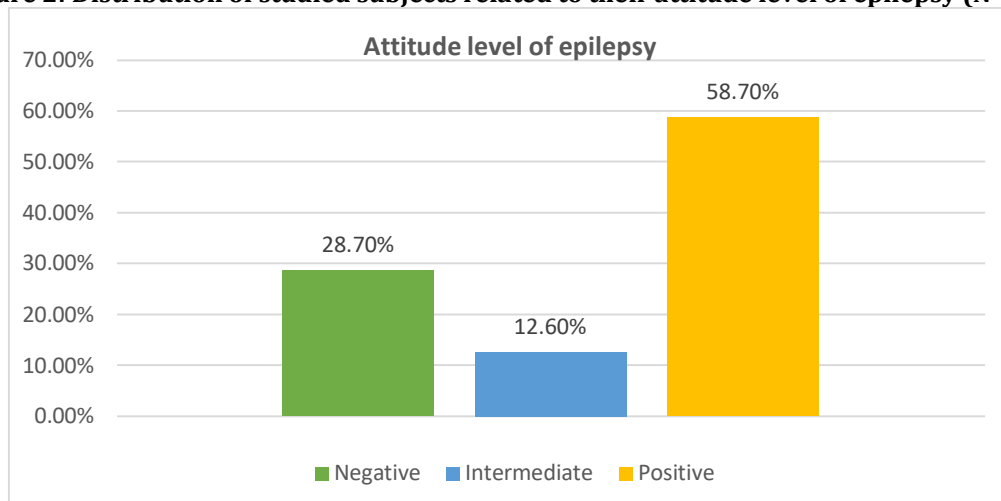


Figure 3: Distribution of studied subjects related to their awareness level of epilepsy (N=604)

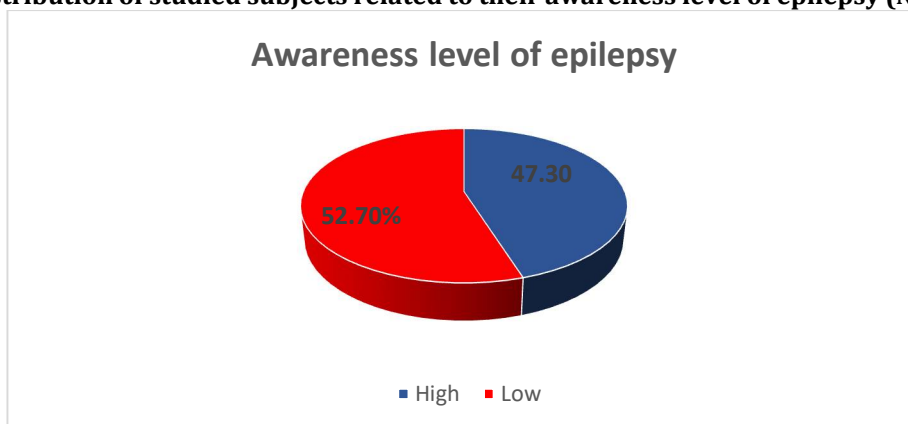


Table 5: The relationship between the demographic characteristics of the studied subjects and their awareness level of epilepsy.

Demographical characteristics		Awareness Level				P-Value
		Low		High		
		F	%	F	%	
Age	18 to 29 years	7	1.6	428	98.4	0.25
	30 to 39 years	0	0	60	100	
	39> years	0	0	109	100	
Nationality	Saudi	6	1.0	573	99	0.18
	Not Saudi	1	4.0	24	96	
Gender	Male	7	1.3	553	98.8	0.46
	Female	0	0	44	100	
Educational level	Read and Write	1	7.1	13	92.9	0.01*
	Intermediate	1	2.9	34	97.1	
	Secondary	4	2.7	143	97.3	
	University education	1	0.2	407	99.8	
Marital Status	Married	1	8.3	11	91.7	0.09
	Single	5	1.3	367	98.7	
	Widow	1	0.5	214	99.5	
	Divorced	0	0	5	100	
Job	Work	1	0.7	138	99.3	0.00*
	I do not work	2	1.4	144	98.6	
	Student	2	0.7	301	99.3	
	Other	2	12.5	14	87.5	
Family Income	Not enough	3	3.5	82	96.5	0.08
	Enough	3	0.7	431	99.3	
	Enough and more	1	1.2	84	98.8	

RESULTA AND DISCUSSION

Epilepsy is one of the most stigmatizing disorders. Stigmas and negative attitudes associated with epilepsy are due to poor public awareness and knowledge [2] As shown in the present study 94.5% of participants heard of epilepsy, regard the source of information 46.4% of them heard through social media, regarding the causes of epilepsy 36.9% of them said mental illness, about anyone develop epilepsy at any time 49.8% of them answered yes, approximately 69.7% of responders said cramps was symptoms and signs of epilepsy. About "what would do if someone had an acute attack" 33.8% of them said spoon/cloth in mouth, was the best treatment for epilepsy, 56.6% of them answered medical treatment, 50.8% of them said they don't know if there is a surgical option for treating epilepsy that cannot be medically controlled. This result

agreed with studies done by [2] which showed that (94.74%) of participants heard of epilepsy, (66%) of them said cramps or convulsions are the obvious symptoms and signs of epilepsy, and (54.75%) of them said the medical treatment is the best treatment for epilepsy. Another study done by³ revealed (86.3%) of participants heard of epilepsy, (59.5%) of them said muscles cramps or convulsions are the obvious symptoms and signs of epilepsy, and (53.4%) of them said the medical treatment is the best treatment for epilepsy.

On the other, hand a study revealed by [4], (68%) of participants said anyone develops epilepsy at any time, and most of them said about doing a spoon/cloth in the mouth when someone had an acute attack is not the correct behavior. Another study also disagreed with our results done by [3], which showed the source of information (43%) of participants heard by relatives and friends.

As shown in this study more than half 58.7% of the studied subjects had a positive attitude level of epilepsy, while 12.6% of them had intermediate and 28.7% of them had a negative attitude level of epilepsy. This result matched with a study done by [5], which revealed most of the participants had a positive attitude level of epilepsy. Another study done by [6] showed most of the participants had a positive attitude level of epilepsy. Also, a study done by [7] showed most of the participants (63.1%) felt sympathy toward their epileptic students and had a positive attitude level of epilepsy.

A study done in the Aseer region concluded that the level of epilepsy awareness in the Aseer region's population is relatively poor and needs improvement.

On the contrary, a study done by [8] showed the majority of participants had a negative attitude level of epilepsy. Also, a study done by [9] revealed that (51.6%) of the respondents had an unfavorable attitude about epilepsy and also matched a study done in Moscow There is an overall high level of negative attitudes towards the population with epilepsy in Russia [10], While relatively low stigma among the sampled population in the UK [11].

As shown in our study more than half 52.7% of the studied subjects had a low awareness level of epilepsy, while less than half 43.3% of them had a high awareness level of epilepsy. This result matched with a study done by 3, which showed most of the participants lack awareness about epilepsy. Another study done by¹² reported most of the participants had a low awareness level of epilepsy and in Aseer region also concluded that the level of epilepsy awareness in the Aseer region's population is relatively poor and needs improvement.¹³ and also matched a study done in Majmaah KSA concluded that "Although knowledge about epilepsy is improving, it is still not adequate and the attitude toward epilepsy is poor" [14].

By contrast, a study done by 2 showed that public awareness of epilepsy was acceptable. Another study done by¹ revealed most of the participants had a high awareness level of epilepsy. Also, a study done by 15 showed most of the participants had a high awareness level of epilepsy, also A study done in Tehran show that the knowledge and attitudes towards epilepsy are similar to those in Europe, except a much lower acceptance regarding marriage to a person with epilepsy [16].

The current study showed there was a statistical correlation between the educational level, job of studied subjects, and their awareness level of epilepsy, while there was no statistical correlation between age, nationality, gender, marital status, family income of studied subjects, and their awareness level of epilepsy. This result was agreed with a study done by 17 showed there was a statistical correlation between the educational level of participants and their awareness level of epilepsy. Another study done by 18 reported there was statistical significance between the educational level of participants and their awareness level of epilepsy.

On the contrary, a study done by 15 reported there was no statistical significance between the educational level of participants and their awareness level of epilepsy, while there was statistical significance between the age of participants and their awareness level of epilepsy.

CONCLUSION

In conclusion, most of the participants heard of epilepsy, more than half of them had positive attitude levels of epilepsy, while more than half of them had low awareness levels of epilepsy. In addition, there was a statistical correlation between the educational level, job of studied subjects, and their awareness level of epilepsy, while there was no statistical correlation between age, nationality, gender, marital status, family income of studied subjects, and their awareness level of epilepsy.

Conflict of interest

Disclosure. The authors have no conflict of interest, and the work was not supported or funded by any company.

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