

ORIGINAL ARTICLE

Knowledge and attitude toward epilepsy among Ardabil Medical University students and staff, Ardabil, Iran

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ABSTRACT

Background: Epilepsy is a common neurologic disorder that occurs as frequent seizures. This study investigates the awareness and attitude toward “epilepsy” amongst Ardabil Medical University staff and students in Ardabil province, Iran.

Methodology: In this cross-sectional study, 151 staff and medical students in Ardabil Medical University, Ardabil province, Iran, filled out an investigator designed questionnaire, including questions about their knowledge and attitude concerning epilepsy. There were 17 questions in the questionnaire. Nine questions addressed the knowledge and the rest were about attitude and perception.

Results: A total of 151 participants completed the questionnaires. Most of the participants had proper awareness about the definition about epilepsy; whereas, approximately 93.4% had heard about the term epilepsy. Most of the participants had a positive attitude toward epilepsy; however, misconceptions and negative attitudes were observed.

Conclusion: Results showed that the awareness of participants about the etiology of epilepsy and their attitude toward epilepsy was in moderate level; hence, educational programs by health centers for increasing the people awareness and attitudes about epilepsy is essential.

Keywords: Attitude, knowledge, epilepsy, Ardabil.

Introduction

Epilepsy is a common neurologic disorder that occurs as frequent seizures. If seizure attacks occur at least two or more times or longer than normal state is called epilepsy. Epilepsy is a brain chronic disease that usually occurs as seizure and/or distractions that occur in short time and based on different types of epilepsy the signs could be different [1].

Epilepsy is the most common serious and chronic neurological disorder worldwide. It is becoming a burden for more than 70 million people in the world [1]. Nearly, 80% of the people with epilepsy are found in the developing countries, where the disease remains a major public health problem yet [2–4]. Lack of knowledge about the causes of epilepsy has been associated with negative attitudes, beliefs, and stigma [3,4] in people.

Most studies showed that a high number of people never heard about epilepsy. However, most of them had lower level of knowledge and attitudes about epilepsy [2,4,5]. The awareness toward epilepsy in people who lived in the developing countries was lower than people who lived in the developed countries. Studies showed that the

rate of suffering in epilepsy in the developed countries was six to seven per 1,000, in industrial countries were 49 per 1,000 and in Iran the suffering rate is 2.5 times more than European countries [6,7].

Due to negative attitude toward epilepsy, many people do not want to work or live with epileptics. Large number of people do not want even to shake hands with epileptic individuals, and they try to keep their children away from these patients [8].

Therefore, this study was designed to assess knowledge and attitude toward epilepsy in Ardabil Medical University students and staff.

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Subjects and Methods

The study was conducted in Ardabil province, Ardabil, Iran, from May to September 2017. Community based cross-sectional design was employed in the study. It was supplemented with qualitative data collected through a questionnaire included demographic data and questions about knowledge and attitudes of samples toward epilepsy. The study population was randomly selected sample of Ardabil Medical University staff and students aged 18 years or above.

The sample size was determined by using single population proportion formula. The final sample size was 151 individuals, of them 52 were staff and 99 were medical students. The sampling method was random sampling method and the samples selected randomly of all the university staff and medical students. Data were collected by using questionnaire. The questionnaire was designed to cover socio-demographic characteristics, knowledge, and attitude questions regarding epilepsy.

Collected data were analyzed by statistical methods. *p*-value less than 0.05 was considered significant. All data were analyzed by SPSS version 19.

Results

In this study, 151 individuals completed the interviewer administered questionnaire. Of all samples, 53% were males and rest of them were females.

Most of participants stated that they read about epilepsy (77.5%) and know about the term of epilepsy (93.4%). Nearly, 87.2% of participants pointed epilepsy as a nervous system disorder and 40.7% pointed that the etiology of epilepsy was neurological diseases (Table 1).

The most common sources for obtaining the information were books with 42.6% and then internet with 21.2% (Table 2). Of all samples, 92.7% believed that patients with epilepsy are “Insane” and 84.8% tended to shake hands with someone with epilepsy (Table 3).

Table 1. Knowledge among staff and students toward epilepsy (yes/no questions).

No	Questions	Yes		No	
		<i>n</i>	%	<i>n</i>	%
Q1	Do you know anything about the term “epilepsy?”	141	93.4	10	6.6
Q2	Have you ever heard or read anything about “epilepsy?”	117	77.5	34	22.5
Q4	Do you know someone with epilepsy?	49	32.5	102	67.5
Q5	Have you ever witnessed someone with an active seizure?	88	58.3	63	41.7
Q12	Do you think “epilepsy” is contagious?	6	3.9	145	96.1
Q14	Do you know etiologic factors for epilepsy?	113	74.8	38	25.2
Q16	Do you know if there is any treatment for epilepsy?	115	76.2	36	23.8

Table 2. Knowledge among samples about epilepsy (descriptive questions).

Q	Question	Answer	<i>n</i>	%
Q1	What is epilepsy? (141 answers)	A nervous system disorder	123	87.2
		Involuntary movements of the body	11	7.8
		Others	7	5
Q14	What is the etiology of epilepsy? (113 answers)	Genetics	38	33.6
		Neurological diseases	46	40.7
		Fever	16	14.2
		Head trauma	13	11.5
Q15	What do you think is the main reason for etiology? (151 answers)	Central nervous system disorder	139	92.1
		Psychiatric disorder	7	4.6
		others	5	3.3
Q16	What are the treatment options for epilepsy? (115 answers)	Medical therapy	100	87
		Surgical therapy	10	8.7
		Others	5	4.3
Q17	What is the source for your awareness on “epilepsy”? (151 answers)	TV-media	25	16.6
		Books	49	42.6
		Internet	32	21.2
		Others	45	29.8

Table 3. Attitudes toward epilepsy among samples (yes/ no questions).

No	Questions	yes		no	
		n	%	n	%
Q3	Do you think that patients with epilepsy are “Insane?”	11	7.3	140	92.7
Q8	Do you think you have the ability to help someone actively convulsing?	118	77.4	33	22.6
Q9	Do you think that patients with epilepsy suffer from some Limitations in their daily life activities?	101	66.9	50	33.1
Q10	Are you willing for social interaction with epilepsy patients?	106	70.3	45	29.7
Q11	In the classroom, are you willing to sit beside a student who is an epilepsy patient?	65	43	86	57
Q13	Are you willing to shake hands with someone with epilepsy?	128	84.8	23	15.2

Table 4. Attitudes toward epilepsy among samples (descriptive questions).

		Items	n	%
Q6	Have do you feel when you see someone with active seizure “on the scene”? (151 answers)	Fear	17	11.3
		Mercy and sympathy	16	10.6
		Indifference	4	2.6
		Willingness to help	113	74.9
		Others	1	0.7
Q7	What actions do you take when seeing someone convulsing? (151 answers)	Nothing	8	5.3
		Calling emergency services	92	61
		Helping the victim	41	27
Q8	What do you do to help the patient seizing “ on the scene”? (118 answers)	Placing something in between the jaws	28	23.7
		Restricting the body movements	12	10.2
		Taking sharp objects away from the vicinity	24	20.3
		Calling emergency services	25	21.2
		Staying relaxed	11	9.3
		Others	18	15.3
Q9	What limitations do you think patients with epilepsy have in their daily life activities? (101 answers)	Driving	19	18.8
		Attending special places	8	7.9
		Go to height	6	5.9
		Critical jobs	29	28.7
		Being alone	14	13.9
		Sports	4	4
		Diet	5	5
		Others	16	15.8

About 33.9% of the participants would help the patient in an inappropriate way, such as placing something between the jaws or restricting the body movements (Table 4).

Discussion

In this study, 77.1% of the study participants had heard about epilepsy. This was much higher than the study conducted in King Abdulaziz University Hospital, Saudi Arabia (70%), and the study conducted in Tehran, Iran (76.6%), and lower than the study conducted by Henok and Lamaro, in Ethiopia (97.1%) [5,6,9].

In this study, 100 (87%) of the participants reported that the epilepsy is treatable by medical therapy. This was

higher than the study conducted in Saudi Arabia which was 59% and Henok and Lamaro, in Ethiopia (10.6%), but 8.7% reported surgical therapy as a non-medical treatment [9,10]. This difference could probably be because the majority of the participants of this study (76.2%) believed that the epilepsy is a treatable disease and had positive believe about it.

In this study, 3.9% of the participants believed that the epilepsy is a contagious disease. This finding was much higher than the study conducted in King Abdulaziz University Hospital, Saudi Arabia (2%), urban areas of Northeast Brazil (2%) and lower than Lao People's Democratic Republic (33.3%) [5,11]. This difference

might be due to the differences in selected sample, race, education, and other factors. This study showed that the prevalence of not wanting to shake hands with epileptic patients was 15.2%. This was lower than the study conducted in Limpopo Province of South Africa (50.8%) [8].

In the present study, 32.5% of the study participants knew someone who was epileptic. This was higher than the study conducted in Tehran, Iran, which was 23.9% [12]. Most of the participants had positive attitudes and willingness to shake hands with someone with epilepsy which was higher than study done by other places [13,14].

Conclusion

Results showed that the knowledge about the etiology of the disease and attitudes toward epilepsy was in moderate level as compared to other studies. So, increasing the awareness and attitudes of people toward epilepsy in all age groups by broadcasting educational programs via radio and television, providing scientific brochures about the disease and distributing it among people through health centers is essential.

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Conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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Consent for publication

Informed consent was obtained from all participants.

Ethical approval

The study was approved by the ethical committee of Ardabil University of Medical Sciences.

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