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Public awareness, knowledge, and practice relating to epilepsy among adults in Konya

Ayşe Kartal [a,*], Abdülbaki Akyıldız [b]

[a] Department of Child Neurology, Selçuk University Faculty of Medicine, Turkey
[b] Department of Child & Adolescent Psychiatry, Süleyman Demirel University Faculty of Medicine, Turkey

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ABSTRACT

Introduction: This study aimed to determine the familiarity with, knowledge of, misunderstandings, and attitudes toward epilepsy among a group of Turkish adults living in Konya, an urban city in central Turkey.
Methods: By using an established familiarity–knowledge–attitudes practice questionnaire, 500 randomly selected adult residents of Konya were interviewed face-to-face. Demographic and sociocultural factors that predicted negative attitudes were determined.
Results: More than half of all participants (68.4%) reported hearing or reading about epilepsy, 44% knew someone with epilepsy, and 42.2% had witnessed a seizure. The primary source of knowledge was via relatives and friends; Negative attitudes were about marriage and inability to live alone with epilepsy (63.2% objected to marriage and 84% objected to living alone). A preconception of epilepsy being a dangerous and lifelong disease was the primary reason for negative attitudes. Predictors of negative attitudes were female gender, lower educational status, and living in a rural area.
Conclusion: Negative attitudes regarding the marital status of patients with epilepsy still exist. These may stem from misconceptions about the cause and treatability of epilepsy.

1. Introduction

Epilepsy is known to be one of the most common neurological brain disorders worldwide and represents a significant public health challenge due to it high prevalence [1]. In addition, it has been associated with incorrect beliefs about its religious or sociocultural aspects. These beliefs have been associated with approaches to epilepsy treatment and patient quality of life in previous reports [2]. People with epilepsy are faced with discrimination in education, employment, and marriage due to the lack of adequate and accurate information about epilepsy [3–6]. Thus, patients with epilepsy are faced not only with the complex demands of a chronic illness but also with the social stigma and discrimination it comes with. Valid and reliable information about a country's particular misconceptions and misunderstanding may help develop the best approaches to epilepsy management and improve the quality of life in patients with epilepsy. The present study aimed to investigate the perceptions of, attitudes toward, and knowledge of epilepsy among residents of a central Anatolian city of Turkey.

2. Materials and methods

2.1. Study design and the sample

Konya is a city located in the central part of Turkey with an estimated population of about 2 million and regarded as the seventh most populous city in Turkey. The study was conducted in July 2015 as a cross-sectional survey of 500 Konya residents. To obtain data regarding the population's familiarity with, knowledge of, and general attitudes toward epilepsy, a structured questionnaire comprising 23 questions was developed based on literature review. The questionnaire was administered during a face-to-face interview with randomly selected healthy individuals visiting Selçuk University Medical Faculty Hospital (Konya, Turkey).

The questionnaire was adapted from a previous report by Aydemir et al. and consisted of four sections. The sections covered respondent's demographics, familiarity with epilepsy, knowledge of epilepsy, and attitudes toward epilepsy [7]. The first section included five items to provide information about the demographic characteristics of the respondents (gender, age, education level, marital status, employment, and area of residence). Section two consisted of four questions to explore the familiarity of the study participants with epilepsy. The third section included ten questions to determine knowledge with regard to epilepsy. Section four included nine questions to explore attitudes toward epilepsy.

* Corresponding author at: Department of Child Neurology, Selçuk University Faculty of Medicine, Konya, Turkey.
E-mail address: ayskartal06@gmail.com (A. Kartal).

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In response to the items, subjects could choose "true", "false", or "don't know". The Epilepsy Knowledge Scale yielded a Kuder–Richardson-20 internal consistency coefficient of 0.72. Scores regarding epilepsy attitudes ranged from 5 (completely agree) to 1 (completely disagree). The reliability of the Epilepsy Attitude Scale was found to be 0.84.

2.2. Statistical analyses

Statistical analysis was carried out using SPSS for Windows Version 17.0 (SPSS Inc., Chicago, IL, USA). Results are expressed as frequencies, percentages, means, and standard deviations. The χ^2 test was used to verify differences between variables.

3. Results

The demographic characteristics of the participants are listed in Table 1. There were 253 (50.6%) females and 247 (49.4%) males. Participants' ages ranged from 18 to 72 years, with a mean ± SD age of 34.09 ± 8.7 years. A majority (71%) of the study participants lived in the city center. Regarding educational status, more than half of the participants had high school or university degrees.

3.1. Familiarity with epilepsy

Of all respondents, 68.4% had heard or read about epilepsy, 67% via family members or neighbors, 33% via the mass media, and only 11.5% via health workers (Table 2). Also, 44% knew someone with epilepsy, and 42.2% had seen someone having a seizure before. Observing a seizure was significantly associated with older age, higher education or social economic status, and employment. ($p < 0.05$). Almost half of the participants (47.2%) believed that epilepsy was caused by neurological disorders, but 34% said that they had no idea about the cause of epilepsy. Only 10% stated that epilepsy was caused by genetic disorders. A few respondents believed that epilepsy was contagious (3.8%).

Regarding the symptoms of epilepsy known to the respondents, loss of consciousness (63.6%) and foaming of mouth (56.4) were the most commonly recognized manifestations of epilepsy, while uncontrolled urination was the least known. Fifteen percent of the respondents said that they had no idea about seizure symptoms. Although more than half of the participants agreed that epilepsy is a treatable disease, 71.4% agreed that it is a dangerous illness, and most of them (64.4%) thought that epilepsy is a lifelong condition.

We also studied the comparative ratings of epilepsy among five other chronic conditions. Epilepsy was rated as a disease more severe than stroke, diabetes mellitus, mental disease, hypertension, and cancer by 28.3, 20.4, 19.6, 19% and 12.6% of the respondents, respectively. Most of our sample population recommended modern medicine (82.4%) for the treatment of epilepsy whereas 16.4%, 15.4, and 11.8% of the study

Table 1
Demographic characteristics of the sample.

Parameter	Frequency	Percentage
Age		
18–30	190	38
31–45	259	51.8
46–72	51	10.2
Gender		
Female	253	50.6
Male	247	49.4
Education		
Primary	174	34.8
High school	173	34.6
University	153	30.6
Occupational status		
Housewife	156	31.2
Official	128	25.6
Student	34	6.8
Labor	164	32.8
Retired	18	3.6
Marital status		
Married	443	88.6
Never married	57	11.4
Economic level (*monthly income*)		
Low (1000 TL)	152	30.4
Middle (1000–2500 TL)	189	37.8
High (2500 TL)	159	31.8
Living area		
Urban	351	70.2
Rural	149	29.8

Table 2
Knowledge and perceptions of epilepsy and the cause of the disease.

Questions	Frequency	Percentage
Q1—Do you know someone with epilepsy? (Yes)	220	44
Q2—Have you heard or read anything about epilepsy? (Yes)	343	68.4
Q3—If the answer was "yes" how did you learn about it?[a]		
a—Family member–neighbor	165	48.1
b—Media	138	40.2
c—Health workers	40	11.7
Q4—Have you witnessed a seizure? (Yes)	211	42.2
Q5—Epilepsy is a type of insanity. (True)	29	5.8
Q6—Epilepsy is a contagious disease. (True)	19	3.8
Q7—Epilepsy is a kind of incurable disease. (False)	320	64
Q8—Epilepsy is a lifelong disease. (True)	323	64.6
Q9—Epilepsy is a dangerous illness. (True)	357	71.4
Q10—Do you think epilepsy is a more severe disease than…?		
a—Stroke	101	28.3
b—Diabetes mellitus	73	20.4
c—Mental disease (i.e., Alzheimer)	70	19.6
d—Hypertension	68	19
e—Cancer	45	12.6
Q11—What do you think is the cause(s) of epilepsy?[a]		
a—Nervous system disorder	236	47.2
b—Hereditary disease	50	10
c—Infections	6	1.2
d—A mental or psychological disorder	34	6.8
e—Avitaminosis	4	0.8
f—Don't know	170	34
Q12—What do you think are the symptoms of epilepsy?[a]		
a—Sudden loss of consciousness	319	63.6
b—Foaming of mouth	282	56.4
c—Falling	255	51
d—Biting the tongue	223	44.6
e—Urinary and fecal incontinence	93	18.6
f—Don't know	74	14.8
Q13—What would you do if you see someone having a seizure?[a]		
a—Call an ambulance	383	76.6
b—Insert an object between patient's teeth	265	53
c—Hold the extremities of the patient	130	26
d—Pray for an end to seizure	55	11
e—Throw water on patient's face	53	10.6
f—Seat the patient	51	10.2
g—Let the person smell an onion or cologne	48	9.6
h—Do nothing	31	6.2
Q14—What do you think is the most appropriate way to treat a person with epilepsy?[a]		
a—Medical doctor	383	76.6
b—God's help	82	16.4
c—Acupuncture	77	15.4
d—Brain surgery	59	11.8
e—Herbal medicine or traditional healer	39	4.8
f—Special foods, diet	21	4.2
g—Don't know	39	7.8

[a] Multiple answers allowed.