

Awareness of Epilepsy and its relation to Stigma: A Survey within Students of Medicine

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ABSTRACT

Purpose: To investigate the awareness of epilepsy and its relation to stigma within the students of the first year of medicine.

Methodology: A questionnaire with 18 questions about general knowledge and perception of epilepsy was applied to students of the first year of medicine of UNICAMP.

Results: Eighty-three out of 109 (77%) of the students of the first year of medicine responded the questionnaire. Sixty-two percent of the interviewed students expressed that their knowledge about epilepsy as regular or insufficient, 26% pointed it as extremely limited and 12% believed that they have sufficient knowledge about epilepsy. Ninety-eight percent of students responded that epilepsy is a neurological disorder and convulsion as its usual manifestation. Sixty-one percent pointed that the best treatment is the use of adequate medication followed by neurological follow-up and surgery. In regard to the causes of epilepsy, 61% responded genetic factors and 40% traumatic brain injury. In regard to what they felt about seeing a seizure, 72% of the students expressed preoccupation and will to help, 42% expressed impotence and 13% fear. In regard to what to do during a seizure; 49% believed that staying close the affected person is the best form to help, 85% pointed the importance to protect patient's head, 34% responded restraining patient's movement, and 53% expressed the need to pull patient's tongue. In reference to stigma, 65% expressed that people with epilepsy has less chances of employment, 40% pointed limitations in physical activities, and 28% expressed that people with epilepsy should not drive.

Conclusion: Students of medicine of first year has superficial knowledge about epilepsy and some degree of prejudice. These facts can increase the stigma towards people with epilepsy and lead to inappropriate behavior when treating this group of patients. Therefore, topics

about epilepsy should be included transversally in different subjects as soon as the first year of medical school to maximize exposure and discussion of this issue to revert stigmatization.

Key-words: epilepsy, stigma, awareness, medical students, teaching

INTRODUCTION

Epilepsy is a common neurological disorder and affects approximately 50 millions worldwide, with 5 millions living in Latin America and Caribbean (Scott, 2001). In addition to increased risk of morbidity and mortality associated with epilepsy, patients face stigma placed upon them by the community. Stigmatization prevents patients of disclosing their condition, and at times to look for treatment. This clearly has impact on employment, education, and ultimately patients' quality of life and their insertion in the society. The laymen's knowledge of epilepsy is clearly unsatisfactory and surrounded by misperceptions. The lack of current information on epilepsy helps to perpetuate the old prejudices against epilepsy (WHO, 1999).

OBJECTIVE

To investigate the awareness of epilepsy and its relation to stigma within the students of the first year of medicine.

METHODOLOGY

Subjects: The first year medical students of University of Campinas.

Instruments: Self-applied questionnaires with seventeen closed questions and one open question. The survey contains questions about awareness and atti

tudes toward epilepsy and perception of the students about people with epilepsy, as the following:

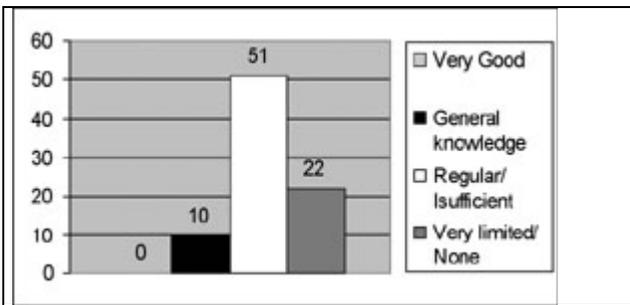
1. How do you rate your knowledge about epilepsy?
 - Very Good
 - Enough/general knowledge
 - Regular/insufficient
 - Very limited/none
2. What is the nature of epilepsy?
 - Psychological
 - Neurological
 - Mental Disorder
 - Genetics
 - Physical
 - Other
3. The following are manifestations of epilepsy:
 - Convulsion
 - Loss of consciousness
 - Excessive salivation
 - Faint
 - Aggressivity
 - Momentary detachment from reality
 - Suffocation by tongue swallowing
 - Post ictal aggressivity
 - Post ictal somnolence or can continue to execute usual tasks
4. What do you feel when you see a person having a seizure?
 - Fear
 - Worry
 - Indifference
 - Will to help
 - Rejection
 - Pity
 - Impotence
 - Others
5. What would you do if you see a person having a seizure?
 - Nothing
 - Pull out the patient's tongue
 - Throw some water on patient's face
 - Give something (alcohol, ether) for patient's to smell
 - Protect patient's head
 - Put something into patient's mouth
 - Restrain patient's movements
 - Position patient's head on one side
 - Stay close the person
 - Others
6. What are the sources of information on epilepsy you get?
 - Books
 - Magazines
 - TV
 - Physicians
 - Relatives/Friends
 - Scientific environment
 - On experience - Witness some seizures
 - Scientific Meetings
7. What do you know about treatment of epilepsy?
 - Medication
 - Surgery
 - Neurological consultation and follow-up
 - Psychiatric treatment
 - Psychological treatment
 - Nothing (for instance, if cause is genetic)
 - Others
8. What can a person with epilepsy do?
 - Go to normal school
 - Go to specialized school for person with handi-cap
 - Any option of professional carrier
 - Restriction of professional carrier, such as scuba diving, metallurgy
 - Can not drive
 - Can not work
 - Can not donate blood
 - Have normal cognition
 - Have impaired cognition
 - Should not participate on physical activities
 - Should participate on physical activities
 - Should participate on physical activities, with some restrictions
 - Should not get married
 - Should not have children
9. Which of the following can cause epilepsy?
 - Parasites
 - Neurocisticercosis
 - Toxic agents
 - Infectious disease
 - Trauma
 - Cancer
 - Genetic defect
 - Depression
 - Drugs
10. Is epilepsy a contagious disease?
 - Yes No
11. Is epilepsy more prevalent in a particular social-economic class?
 - Yes No
12. Would you get married to a person with epilepsy?
 - Yes No
13. Would you hire a person with epilepsy?
 - Yes No

14. Do you have a friend with epilepsy?
 Yes No
15. Do you know a person with epilepsy in your class?
 Yes No
16. Do you know someone in your family that has epilepsy?
 Yes No
17. How do you, as a physician, perceive a person with epilepsy?
18. After answering these questions, your perception about epilepsy:
 remained the same
 changed. I became more aware of epilepsy and realized that I knew little about this condition.

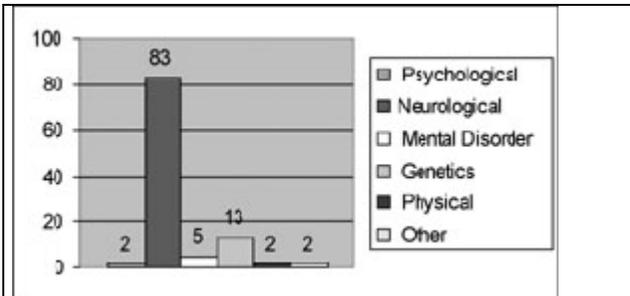
RESULTS

The questions allowed more than one answer, and their results are displayed as the following.

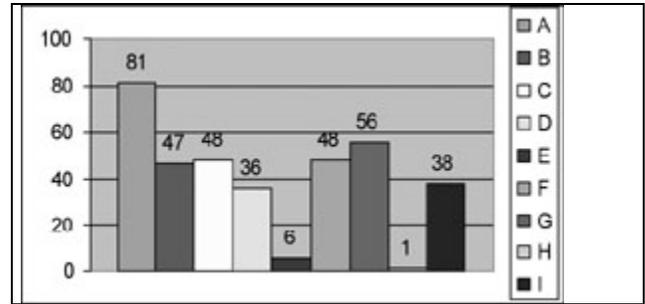
1. How do you rate your knowledge about epilepsy?



2. What is the nature of epilepsy

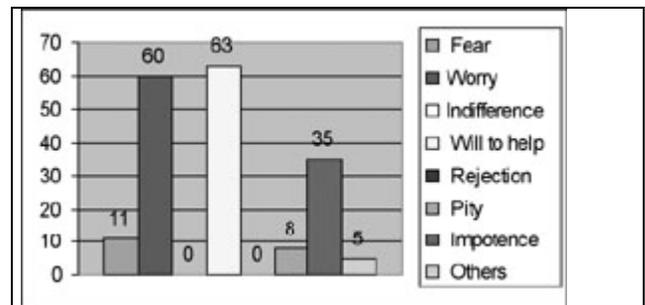


3. The following are manifestations of epilepsy

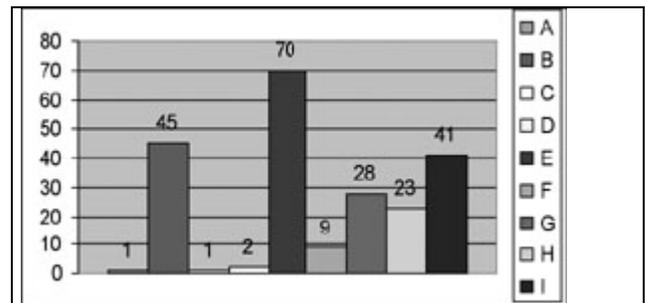


- A Convulsion
- B Loss of consciousness
- C Excessive salivation
- D Faint
- E Aggressivity
- F Momentary detachment from reality
- G Suffocation by tongue swallowing
- H Post ictal aggressivity
- I Post ictal somnolence or can continue to execute usual tasks

4. What do you feel when you see a person having a seizure?

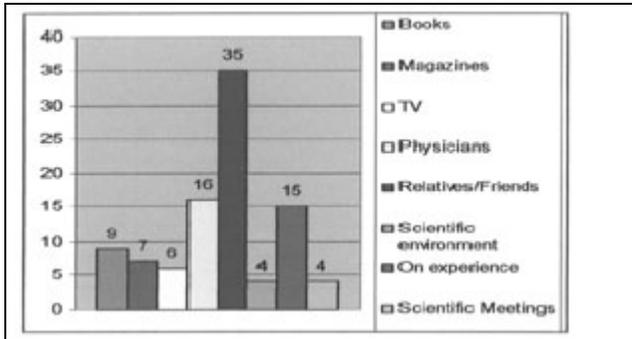


5. What would you do if you see a person having a seizure?

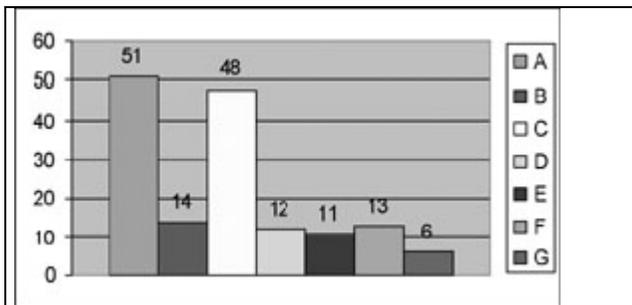


- A Nothing
- B Pull out the patient's tongue
- C Throw some water on patient's face
- D Give something for patient's to smell
- E Protect patient's head
- F Put something into patient's mouth
- G Restrain patient's movements
- H Position patient's head on one side
- I Stay close the person

6. What are the sources of information on epilepsy you get?

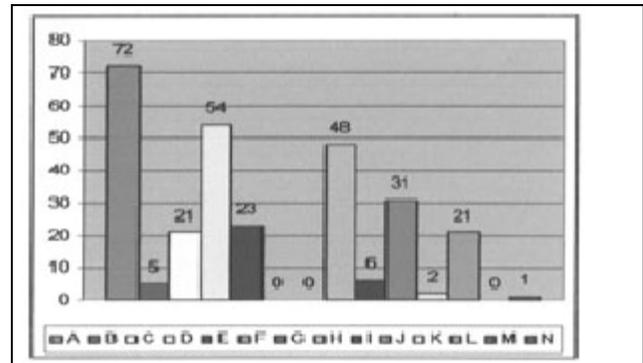


7. What do you know about treatment of epilepsy?



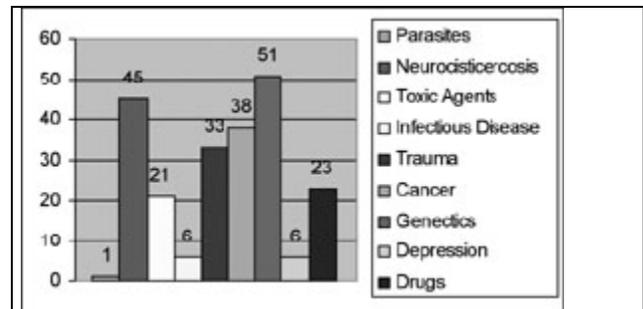
- A Medication
- B Surgery
- C Neurological consultation and follow-up
- D Psychiatric treatment
- E Psychological treatment
- F Nothing (for instance, if cause is genetic)
- G Others

8. What can a person with epilepsy do?



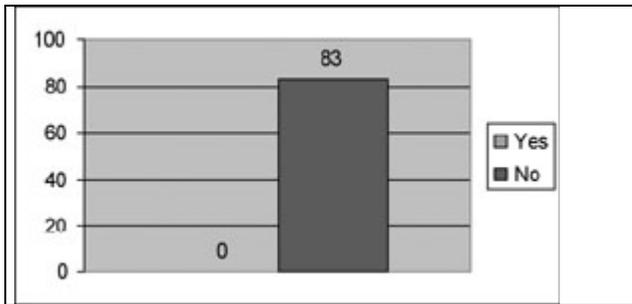
- A Go to normal school
- B Go to specialized school for person with handicap
- C Any option of professional carrier
- D Restriction of professional carrier, such as metallurgy
- E Can not drive
- F Can not work
- G Can not donate blood
- H Have normal cognition
- I Have impaired cognition
- J Should not participate on physical activities
- K Should participate on physical activities
- L Should participate on physical activities, with some restrictions
- M Should not get married
- N Should not have children

9. Which of the following can cause epilepsy?

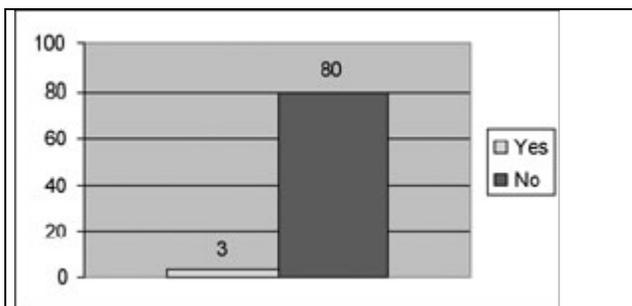


One person added Don't know as answer.

10. Is epilepsy a contagious disease?

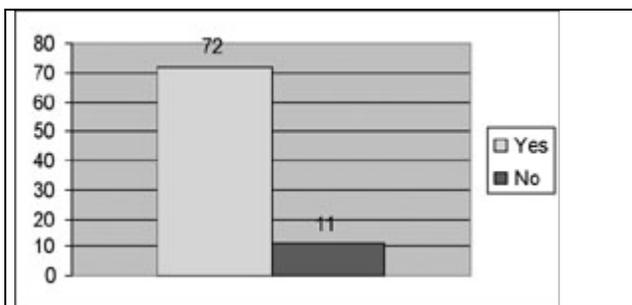


11. Is epilepsy more prevalent in a particular social-economic class?



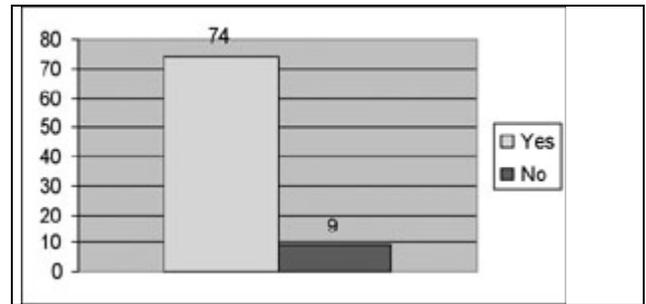
One person answered Don't know.

12. Would you get married to a person with epilepsy?



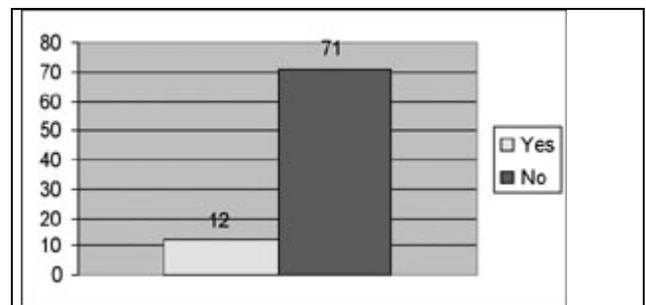
Three people answered Don't know, and their answers were grouped as NO.

13. Would you hire a person with epilepsy?

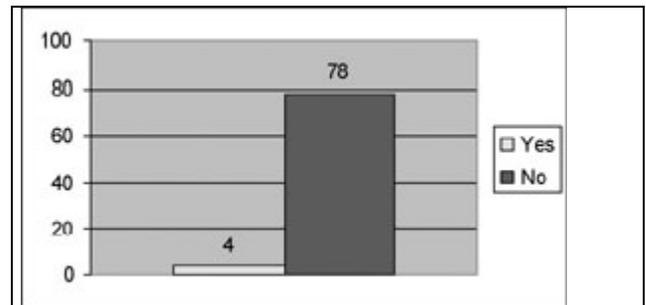


One person answered Don't know, and it was grouped as NO

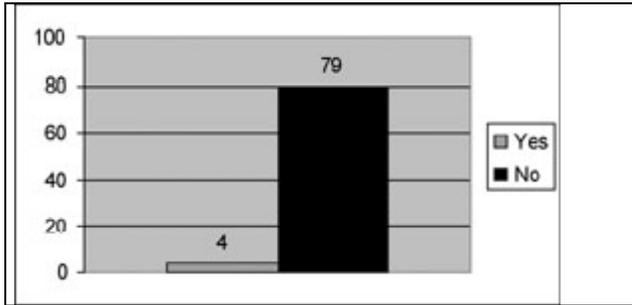
14. Do you have a friend with epilepsy?



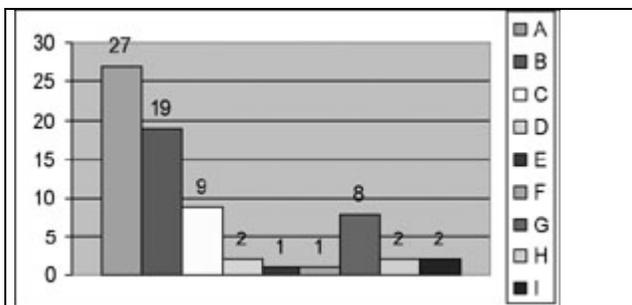
15. Do you know a person with epilepsy in your class?



16. Do you know someone in your family that has epilepsy?

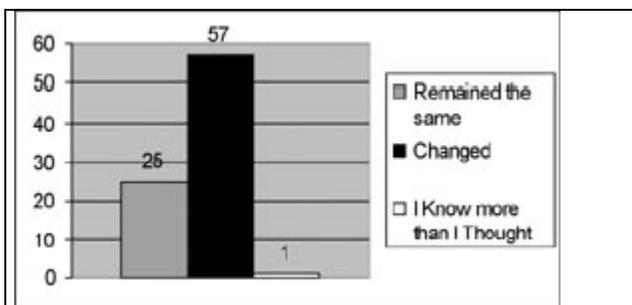


17. How do you, as a physician, perceive a person with epilepsy?



- A A patient like another one
- B I don't have enough experience
- C Impotent
- D Able to help
- E Afraid
- F Worry
- G I would try to help in a seizure
- H Curious
- I I don't know

18. After answering these questions, your perception about epilepsy:



DISCUSSION

This research tried to assess the knowledge of the students of the first year of medicine about epilepsy. These students will be caring physicians and for this reason it is important to investigate their knowledge, specially their perceptions and behaviors towards people with epilepsy.

As it is expected, the majority of students have no deep knowledge about epilepsy, as the majority (97%) considered tonic-clonic seizures as the main manifestation of epilepsy and 13% believed epilepsy is accompanied by psychiatric disorders. Other important finding is that 54% believed that pull out the tongue is the most adequate conduct to help a person during the seizure. In regard to stigmatization of patients with epilepsy, 23 students thought that patients with epilepsy should not drive.

The investigation of students' knowledge is very important because it allows the prevention of inadequate behavior of future health carer and consequently, improves health assistance and quality of life of a person with epilepsy. The demystification of beliefs and prejudice guaranteed more effective care in the treatment of epilepsy (Fernandes & Souza, 2001).

CONCLUSION

Students of medicine of the first year have superficial knowledge about epilepsy and some degree of prejudice. These facts can increase the stigma towards people with epilepsy and lead to inappropriate behavior when treating this group of patients. Therefore, topics about epilepsy should be included transversally in different subjects as soon as the first year of medical school and before the university to maximize exposure and discussion of this issue to revert stigmatization.

BIBLIOGRAPHIC REFERENCES

1. Fernandes PT & Souza EAP. Identification of family variables in parent's groups of children with epilepsy. *Arquivos de Neuropsiquiatria*, 2001; 59 (4): 854-858
2. Scott RA, Lhatto SP, Sander JWAS. The treatment of epilepsy in developing countries and its problems: where do we go from here? *Bull World Health Organ* 2001; 79(4):344-51
3. WHO - World Health Organization. Fact sheet 217: The global burden of mental and neurological problems. 1999. Geneva, WHO. 99.