

# Youth's knowledge and attitude to epilepsy

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## Abstract

**Purpose:** The aim of this research is to assess youth's knowledge and attitude towards their epileptic peers.

**Material and methods:** The present study concerned 181 students of two secondary schools in Poznań, including 107 girls and 74 boys. The tool used was a self-made questionnaire. The criterion of including a questionnaire into data was the answer to the following question: "Have you heard about epilepsy?"

**Results:** The questionnaire has shown that 46% of secondary school students had already known a person with epilepsy. 91% of students knew that epilepsy was not a contagious disease, but 12% of pupils thought that epilepsy was a mental illness. Almost 23% of respondents claimed they knew what could cause epilepsy. Only 2% of the students knew how to provide first aid during an epileptic fit. 92% of the respondents accepted a person with epilepsy among their friends.

**Conclusions:** The level of the knowledge about epilepsy among pupils is insufficient. The youth do not know the causes of epilepsy, provocative factors of convulsions, and symptoms and the rules of giving first aid during an epileptic fit. The main source of information about the disease were television programs. The majority of the school – graduates expressed willingness to make friends with epileptic people and acceptance of the ill.

**Key words:** epilepsy, knowledge, attitude.

## Introduction

Epilepsy is one of the most frequent neurological conditions of adolescence. Usually, it is a chronic disease and it has a negative influence on the social situation of the person. Many of the researches so far have shown lack of tolerance, or even a stigma attached to epileptic people [1-7].

Thus, it seems that social attitude based on tolerance and frankness is a necessary condition for the right social functioning of the ill. In the case of epilepsy, the knowledge about the illness also plays a crucial role. The correct way of providing first aid during an epileptic fit may greatly influence the ill person's health and life [9].

The research done in Poland so far have shown insufficient knowledge of the society. There is a belief that while helping in an epileptic fit one should put an object into the patient's mouth and the clinical picture is associated mostly with generalized fits [8,9].

Nowadays the youth at schools have unusual access to information (the internet) and the media often raise the subject of tolerance. Therefore, it is worth finding out what attitude towards epileptic people have young people and if they have sufficient knowledge about this illness.

The objective of this study was to learn the secondary school students' knowledge and attitudes towards the ill. Moreover, the research was to show if the following factors influence the knowledge and attitudes: age, sex, previous acquaintance with an epileptic person.

## Material and methods

The study was carried out from September until December 2004. It concerned 181 secondary school students, including 107 girls and 74 boys. Among the surveyed, 110 people attended XVIII Secondary School and 71 were from Geodesy-Oriented Secondary School in Poznań. The questionnaire used in the research was based on a review of some academic literature

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Figure 1. The most frequently mentioned causes of epilepsy

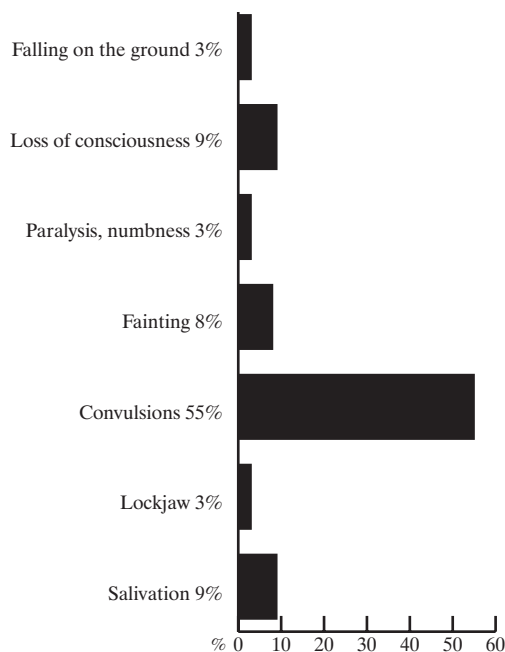
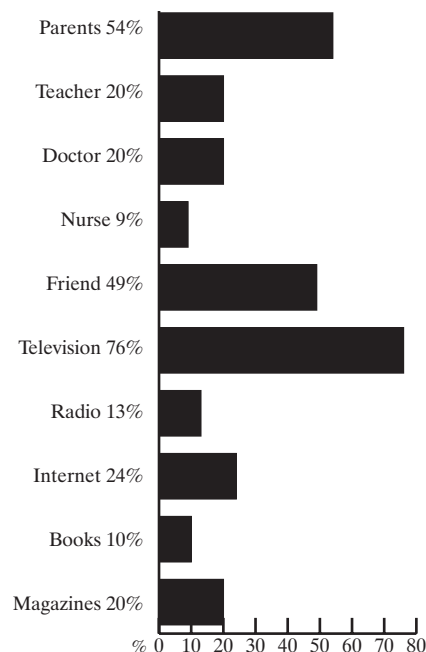


Figure 2. The sources of students' knowledge about epilepsy



[5-9], accompanied by a register with the questions concerning the socio-demographic situation of the students. The statistical analysis accounted 181 of questionnaires. The inclusion criterion was a positive answer to the following question: "Have you ever heard about the disease of epilepsy? To examine the relation between the variables the Chi-square test was used, with the significance level  $p \leq 0.05$ .

## Results

The most numerous group among the surveyed were students at the third grade (46%), the second grade (37%), and the first grade (17%). The questionnaire has shown that 46% of the secondary students said they knew an epileptic person. 91% of the youth know that epilepsy is not an infectious disease but 12% consider it as a mental illness.

The majority of the respondents did not know the cause of epilepsy and factors evoking epileptic fits. Almost 23% of students mentioned: increased emotional pressure (7%), malfunctioning of the nervous central system (5%), head injury (4%), genetic factors (3%), and hypoxia (2%). The students, who declared the knowledge about the factors evoking the epileptic seizures reported: nervousness (17%), overtiredness (3%), alcohol (2%), anxiety, fear (2%), hypoxia (2%), and blinking light (1%). The respondents, who thought they knew the symptoms of epileptic fits, named: convulsions (55%), loss of consciousness (9%), salivation (9%), fainting (8%), lockjaw (3%), paralysis (3%), and falling on the ground (3%) (Fig. 1). The question concerning first aid during an epileptic fit had four answers. Students were supposed to choose the correct one. Only 4 of them pointed out this answer (Tab. 1).

Table 1. Answers to the question: „Do you know how to behave when a person is having an epileptic fit?“

| Answer  | N   | %     |
|---|-----|-------|
| Put the person on one side and observe.<br>If the epileptic fit continues, call an ambulance. | 4   | 2.2   |
| Put something between the teeth so that the person does not bite their tongue.                | 129 | 71.3  |
| Do not touch the person during the epileptic fit, call an ambulance immediately.              | 17  | 9.4   |
| Hold the hands and legs so that the body is not injured.                                      | 31  | 17.1  |
| Total   | 181 | 100.0 |

The youth's opinions about relations between epileptic children and their healthy peers were verified to analyze the area of social life. 81% of the students claimed that ill children could play with healthy ones, attend a state school (71%) and go away for summer camps (54%).

Almost all the surveyed (92%) would accept an epileptic person among their acquaintances, however, 84% could become friends with them.

Another vital point was to learn the sources of students' knowledge about epilepsy. The students listed TV programs most frequently (76%) and knowledge gained from their parents (54%) (Fig. 2). The answers do not equal 100% because the respondents could choose more than one answer.

In answer to the question how to increase students' knowledge about epilepsy the majority of the youth (53%) pointed education in schools.

The Chi-square test showed many relations between sex of some of the answers. It was girls, who more often confirmed the knowledge about epilepsy ( $p=0.03740$ ), acceptance of an ill person ( $p=0.00070$ ). They also knew that epilepsy is not a contagious disease ( $p=0.03583$ ). Neither of the girls, however, knew the right behaviour during an epileptic fit. A relation between confirmed knowledge about the symptoms of epilepsy ( $p=0.00102$ ) and the age of the surveyed was also noted.

The students who had already known an epileptic person more often knew the causes of epilepsy ( $p=0.00348$ ), factors bringing about fits ( $p=0.01819$ ) and they knew that epilepsy is not a contagious disease ( $p=0.00689$ ).

The respondents who had not known an epileptic person before more frequently answered "I don't know" to questions concerning acceptance of an ill person ( $p=0.00147$ ).

## Discussion

Vast majority (98%) of the survey participants had heard about this disease. In her research evaluating students' knowledge about epilepsy, Klimek B indicated that 90% of the respondents know what epilepsy is [8]. In Majkowski's studies, 95% of the Polish country population confirmed the knowledge about the disease [7].

In this survey, the majority of students did not know the causes of epilepsy or factors provoking the fits.

More than a half of the surveyed mentioned convulsions as the main symptom of epilepsy. The popularity of this belief was confirmed by Siemiński M in his research carried out on a group of recent secondary school graduates, in which he said that 96% associate epilepsy with convulsions and taut muscles [9].

Epilepsy is often perceived as a mental disease. In the above research, 50.5% of the students linked epilepsy with mental disorder [9], in the self-made survey, 11.6% did.

Very poor knowledge about first aid during epileptic fit has been noticed. This lack of knowledge is also visible in other authors' researches. Karkirawatana's study about teachers' awareness of the problem of epilepsy, 73% of the respondents said they would find putting objects into the epileptic person's mouth during a fit the right procedure [3]. In Klimek's study, 81% of the questioned chose this behaviour as the best [8]. In the self-done research, only 4 boys pointed the correct way of behaviour when giving first aid. Three of them had not known an epileptic person before.

The majority of students pledged acceptance of epileptic

people and expressed readiness to become friends with them. Similar results were achieved by Klimek [8].

In Siemiński's studies, 95% of the questioned were of the opinion that epileptic children should attend a state school. Karkirawatana's study brought corresponding results. Only 15% of the surveyed in his study said that epileptic children should attend special schools [3]. There is a direct correlation between the self-done research and the studies above.

The most frequently listed source of the knowledge about epilepsy in Siemiński's studies was television [9]. 53% of then students found the popularization of the knowledge about epilepsy in schools really essential.

## Conclusions

1. Knowledge about epilepsy among students is insufficient. Youth do not have information concerning first aid during an epileptic fit and factors causing ill people's fits.
2. The main source of information about the disease pointed by students was television.
3. The majority of the surveyed recent secondary school – graduates express willingness to make friends with epileptic people and accept the ill.
4. There is the necessity to educate youth about epilepsy within school curricula.

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Attitudes toward students with epilepsy and epilepsy-related knowledge of teachers are crucial for child's safety in the school. The aim of this study was to evaluate teachers' knowledge and attitudes toward epilepsy. Methods. Both knowledge and attitude median scores were significantly higher in senior teachers with longer teaching experience and in respondents who dealt with a person with epilepsy. There was significant association between knowledge score and attitude score. Logistic regression showed that significant variables, independently associated with poor knowledge after adjusting for possible confounders, were not having a family member with epilepsy, unawareness of life circumstances of persons with epilepsy, and a poor attitude score. Conclusion. Adequate knowledge regarding epilepsy and positive attitude towards epilepsy would make early recognition of and appropriate intervention in this disorder more likely and better outcome of illnesses. Good knowledge regarding the epilepsy can promote treatment adherence, failure of which is the main cause of further precipitation of seizures. Aims and objectives: To find out the efficacy of educational program on epilepsy in nursing student by measuring the pre and post intervention knowledge. High school students' knowledge, attitude, and practice with respect to epilepsy in Kerala, southern India. *Acta Neurol Scand.* 2004 Jul;110(1):39-45.