



# Survey of Public Awareness, Understanding, and Attitude Toward Epilepsy in Khon Kaen

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## Introduction

Epilepsy is a common neurological disease. Epileptic patients face social stigmatization due to negative attitudes and incorrect knowledge on epilepsy.

Most people think epileptic patients are physically, mentally and emotionally abnormal. Studies in USA, Germany, Finland, China, Taiwan and Thailand found most people lacked correct knowledge and had negative attitudes on epilepsy. Survey of public awareness, understanding and attitude toward epilepsy will give us a guideline to improve this misunderstanding.

## Objective

To evaluate knowledge and attitude toward epilepsy among the population in Khon Kaen province, Thailand.

## Methodology

The Epilepsy Research Group (EPREG) in Srinagarind hospital is a research group established in 2003. One of its objectives is to provide education about epilepsy to the society. The population in Khon Kaen province was selected for this study. A self-administered questionnaire on knowledge and attitude toward epilepsy was distributed to 500 people in the province. The questionnaire was collected and analysed for the correct answers based on the following questions.

## Result

500 participants joined this survey, with 100% completing and returning the questionnaire. Among these participants 199 (39.8%) were male and 301 (60.2%) were female, age between 9-99 years old (mean: 33.81 years). Married status: single 44.2%, marry 44.8%, separate 4.4%. Current career: student 30.8%, farmer 18%, labor 14.2%. Highest education: primary school 29.4%, high school 39.2%, graduate 17%. Religious: Buddhist 98.2%, Christian 1.4%, Islamic 0.4%. 28.2% of participants had read about epilepsy, 17% known epileptic patient, 48.4% have seen patient with seizure attack. Table 1 shows the question and answers about epilepsy knowledge and Table 2 shows the attitude toward epilepsy.

## Discussion

The 69% of respondents knew an epileptic attack is an abnormal electrical discharge in the brain. Knowledge on types of seizures demonstrated most of people knew GTCs (84.2%), while most of them did not know other types such as atonic seizures and CPS. These findings may be considered most of people still believe that only the GTCs types is really a seizure. Only 28.2% of respondents thought epilepsy was curable disease. About 40.8% of people thought epileptics take AEDs for life-long and only 19.6% of them thought epileptic should take AEDs for 2-5 years. Regarding to management of epileptics during attack, 79.6% try to prevent tongue bitten by put an object between the teeth, massage the body was 45.2% and give AEDs during attack was 14.4%. All of managements were wrong. But 85.4% of respondents suggest the epileptic patient to modern medicine.

Most of respondents had positive attitudes on epilepsy, they think epileptic patient is able to work, pay and learn in the same class as their relatives.

## Conclusion

Our study found that most people in Khon Kaen province had positive attitudes on epilepsy but lacked correct knowledge about the type of epilepsy, the cause, duration of drug treatment and first management during episode. This can cause damage to epileptic patient. Therefore giving knowledge about epilepsy to Thai people is strongly recommended, in order to improve the epileptic problem.

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Table 1. The questions and answer about knowledge of epilepsy

Question	Answer (%)	
	Yes	No
<b>What do you think an epileptic attack is?</b>		
<input type="checkbox"/> An abnormal electrical discharge in the brain	69.0	31.0
<input type="checkbox"/> An abnormal movement	33.8	66.2
<input type="checkbox"/> Demon possession	6.8	93.2
<b>What are the types of seizure?</b>		
<input type="checkbox"/> Generalized tonic-clonic seizure (GTC)	84.2	15.8
<input type="checkbox"/> Simple partial seizures	16.4	83.6
<input type="checkbox"/> Complex partial seizures (CPS)	20.8	79.2
<input type="checkbox"/> Atonic seizures	46.0	54.0
<input type="checkbox"/> Absence seizures	5.2	94.8
<b>What do you think causes epilepsy?</b>		
<input type="checkbox"/> Brain infection	75.8	24.2
<input type="checkbox"/> Demon	2.4	97.6
<input type="checkbox"/> Head injury	31.8	68.2
<input type="checkbox"/> Brain tumor	13.8	86.2
<input type="checkbox"/> Divine punishment	2.4	97.6
<input type="checkbox"/> Alcohol withdrawal or heavy drinking	17.0	83.0
<input type="checkbox"/> Stroke	9.6	90.4
<input type="checkbox"/> Genetic disease	52.2	47.0
<input type="checkbox"/> High fever	32.8	67.2
<input type="checkbox"/> Eating pork	11.8	88.2
<b>Do you think epilepsy is a curable disease?</b>	28.2	71.8
<b>How to take antiepileptic drugs (AEDs)?</b>		
<input type="checkbox"/> Life-long	40.8	59.2
<input type="checkbox"/> During an episode	27.2	72.8
<input type="checkbox"/> 2-5 years	19.6	80.4
<input type="checkbox"/> 3-6 Months	6.4	93.6
<b>What suggestion will you give to the epileptic patient?</b>		
<input type="checkbox"/> Modern medicine	85.4	14.6
<input type="checkbox"/> Traditional medicine	11.2	88.8
<input type="checkbox"/> No curable disease	8.2	91.8
<input type="checkbox"/> Acupuncture	7.4	92.6
<input type="checkbox"/> No recommend	7.2	92.8
<input type="checkbox"/> Surgery	6.8	93.2
<input type="checkbox"/> Food supplement	6.2	93.8
<input type="checkbox"/> No treatment	5.4	94.6
<b>What should be done during seizure attack?</b>		
<input type="checkbox"/> Place in semi-prone position to prevent choking	16.8	83.2
<input type="checkbox"/> Place an object in the mouth to prevent biting the tongue	79.6	20.1
<input type="checkbox"/> Give antiepileptic drug during the episode	14.4	85.6
<input type="checkbox"/> Restrain and perform chest compressions (CRR)	11.8	88.2
<input type="checkbox"/> Prevent injury during episode	27.9	72.1

Table 2. Attitude toward epilepsy

	Answer (%)		
	Yes	No	No answer
1. Epileptic child have problem about learning	46.6	49.8	3.6
2. Your kid can play with epileptic child	77.4	20.0	2.6
3. Your kid can learn in the same class as epileptic child	86.0	12.0	2.0
4. Your relatives can marry with epileptic patient	43.0	54.2	2.8
5. Epileptic patient is able to pregnant	1.6	56.6	41.8
6. Epileptic patient is able to have lactation	2.4	60.6	37.0
7. Epileptic patient has a tendency to be a psychotic patient more than normal people	48.8	48.4	2.8
8. Epilepsy is a transmitted disease	14.4	83.4	2.2
9. Epilepsy is a genetic disorder	65.6	31.6	2.8
10. Epileptic patient is able to work with normal people	87.8	10.0	2.2