

Awareness, attitudes and understanding towards epilepsy among school teachers in Medan, Indonesia

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Abstract

Background and Objective: A survey on awareness, attitudes and understanding towards epilepsy among elementary school teachers based on a structured-questionnaire in Medan.

Methods: The subjects were primary school teachers who were attending an epilepsy symposium. The self-administered questionnaire was completed before the symposium. *Results:* There were 84 respondents, 69% were females. The mean age was 41 ± 9 years. Sixty-two percents were teaching in government schools. The respondents received a mean 15 years formal education. All respondents had heard of epilepsy although only 16% admitted to be well informed about epilepsy. Forty nine percent of respondents thought that epilepsy affected the education of a person. Twenty-five percents of the respondents objected to their children playing with a child with epilepsy, 56% objected to their children marrying a person with epilepsy. Fifty seven percent of respondents thought that epilepsy was a mental illness, and 20% thought that epilepsy was contagious.

Conclusions: A significant proportion of primary school teachers from Medan, Indonesia had negative attitudes towards and considerable misunderstanding of epilepsy.

INTRODUCTION

A recent study in different European countries showed that epilepsy has considerable social implications, with impact on driving, education, occupation, leisure activities and insurance.¹ A study from the rural Malay state of Kelantan in the neighboring Malaysia showed that 20% of children with epilepsy did not receive any formal education, although primary schooling is free in Malaysia.² This educational underachievement is likely to be due to many factors, including the seizures themselves, the anticonvulsants used to treat seizures, the psycho-behavioral problems, and the stigma and discriminations experienced by persons with epilepsy.³ Among these multifaceted factors, some patients find that stigma, and discrimination against epilepsy are probably more devastating than the seizures themselves.⁴

Other than the parents, the attitude of teachers with regards to epilepsy is likely to have important impact on whether children with epilepsy is able to continue schooling. Furthermore, in Indonesia, schoolteachers are regarded as community leaders. Recent Asian studies on the public show that education is associated with a more positive

attitude to epilepsy.⁵⁻¹⁰ On the other hand, a study among school teachers from Thailand¹¹ showed that 46.6% believed that epilepsy was a chronic incurable disease, 15% preferred to place all children in a special classroom, and 36.2% would object to their children to be married to a person with epilepsy. This is a study to determine the awareness, attitude and understanding towards epilepsy among primary school teachers from Medan, Indonesia.

METHODS

This study is based a self-administered questionnaire. The respondents were the primary school teachers who attended the epilepsy symposia at the North Sumatra University School of Medicine, Medan at January 27th 2001. The teachers were from both government and private schools in Medan. Medan is the third largest city in Indonesia. It has a population of 1.9 million, serving as capital of the Sumatera Utara Province. The respondents were asked to complete the questionnaire before the epilepsy presentations began. The questionnaire was modified from that of Radhakrishnan *et al* previously carried out in Kerala, South India.¹² The 15-item questionnaire

included 3 items on awareness, 7 items on attitudes, and 5 items on understanding. Statistical analysis was performed 10 of the items, by using Pearson's correlation coefficient and Spearman's correlation coefficient, and P was set at 0.05 to determine the statistical significance.

RESULTS

A hundred teachers from 50 schools were invited and 84 teachers from 42 schools attended the symposium. Of the 84 teachers who completed the questionnaire, 26 (31%) were males and 58 (69%) were females. Fifty-two respondents (62%)

were teachers at government schools and 32 respondents (38%) were teachers from private schools. The mean age of the respondents was 41 ± 9 years (range: 22-59 years). The mean years of education was 15 years (range 12-17 years). Table 1 lists the responses to the questions related to awareness and familiarity with epilepsy. Table 2 lists the responses to the questions related to attitudes towards epilepsy. Table 3 lists the questions related to understanding of epilepsy. The mean aggregate score based on 12 of the questions (questions 4-12) was 7.0 ± 2.1 . Neither age ($P=0.15$), sex ($P=0.65$) nor years of education ($P=0.94$) correlated with the aggregate scores.

Table 1: Responses to questions related to familiarity with epilepsy

	Questions	Yes (%)	No (%)
1	Have you ever heard a disease called epilepsy ?	100	0
2	Do you think that you are well informed about epilepsy?	14	85
3	How do you get information about epilepsy?		
	a. radio, television	60	
	b. relatives, friends	58	
	c. magazines, newspapers	46	
	d. seminars, symposia	33	
	e. leaflets, books	27	
	f. nurses, doctors	26	

Table 2: Responses to questions related to attitudes towards epilepsy

	Questions	Yes (%)	No (%)
4	Epilepsy is a hindrance to a happy life.	36	64
5	It is not possible for an epilepsy patient to lead a married life.	21	79
6	Epilepsy affects the education of a person.	49	51
7	Epilepsy patients cannot work like other people.	43	57
8	Do you think society discriminates against persons with epilepsy?	63	37
9	Would you allow your child to play with a child with epilepsy?	75	25
10	Would you allow your child to marry a person with epilepsy?	44	56

Table 3: Responses to questions related to understanding of epilepsy

	Questions	Yes (%)	No (%)
11	Epilepsy is a mental disease	57	43
12	Epilepsy is a hereditary disease.	35	65
13	Epilepsy is a contagious disease.	20	80
14	Epilepsy is caused by ancestor's sin.	4	96
15	If you happen to see a person having an epileptic seizure, you would take him to a hospital or to a doctor as soon as possible.	58	42

DISCUSSION

Table 4 is a comparison between the present study and that from Kerala, South India.¹² As shown, the awareness, attitude and knowledge of the respondents is comparable between the two geographical areas. Table 5 is a comparison of the attitude towards epilepsy between the different studies done in Asia. As shown, there was less negative attitude towards epilepsy in studies from Medan, Thailand¹¹, Kelantan in Malaysia¹⁰, Singapore⁹, Chandigarh in India⁷ as compared to Taiwan⁶ and Henan in China.⁵ However, the present study, as well as that from Thailand were

done among school teachers, whereas the other studies were among the public. It is expected that the schoolteachers, being more educated, would have less negative attitude towards epilepsy.^{5-10,13} Furthermore, the study from China was done in the eighties, whereas the other Asian studies were done in the nineties. In fact, when compared to the study among the public from Kerala, South India, 63% of the respondents in the present study thought that the society discriminated against persons with epilepsy, as compared to 37% in Kerala (Table 4).

Nevertheless, this study does show that there is significant proportion of schoolteachers in

Table 4: Comparison with studies from Kerala, India (Percentage with “yes” response)

Questions	Medan N=84	Kerala, India ¹² N=1118
Ever heard of epilepsy.	100	99
Epilepsy is a hindrance to happy life.	36	48
It is not possible for an epilepsy patient to lead a married life	21	29
Epilepsy affects the education of a person.	49	38
Epilepsy patients cannot work like other people (cannot be employed)	43	46
Society discriminates against persons with epilepsy	63	30
Would allow your child to play with a child with epilepsy ?	75	89
Epilepsy is a mental illness	57	27
Epilepsy is a hereditary disease	35	31
Epilepsy is a contagious disease	20	11
Epilepsy is caused by ancestor's sin	4	15
Would send a person with epilepsy attack to hospital	58	80

Table 5: Responses to questions on attitudes towards epilepsy, a comparison between different studies in the region (Percentage with “yes” response)

Questions	Medan, Indonesia	Thailand ¹¹	Kelantan, Malaysia ¹⁰	Chinese, Singapore ⁹	Chandigarh, India ⁷	Taiwan ⁶	Henan, China ⁵
Epilepsy patients can not work like other People.	43	NA	58	38	NA	31	53
Would you allow your child to play with a child with epilepsy?	75	95	80	73	57	66	32
Would you allow your child to marry a person with epilepsy?	44	41	43	52	34	15	3

NA: not available

The Thai study¹¹ as in this study, was done among schoolteachers, the other studies⁵⁻¹⁰ were done among the public.

Medan with negative attitude towards and misunderstanding of epilepsy. Forty-three percent of the respondent thought that patients with epilepsy cannot work like other people, 25% of the respondents would not allow their children to play with a child with epilepsy, 56% objected to their children marrying a person with epilepsy, 57% of respondents thought that epilepsy was a mental illness, and 20% thought that epilepsy was contagious. An earlier study among the nurses, students in nursing, social work and specialist education in Jakarta showed that 58% of the respondents objected to their relatives marrying people with epilepsy, and 22% thought that people with epilepsy could not work like others.¹⁴ Another study in Medan, Indonesia among the publics showed that 17% of the respondents believed that saliva of patients was able to spread the infection.¹⁵ In the earlier study among school teachers in Thailand¹¹, 46.6% believed that epilepsy was a chronic incurable disease, 15% preferred to place all children with epilepsy in a special class.

Misunderstanding of, negative attitudes towards, and prejudice against people with epilepsy is likely to contribute to perceived feeling of stigma or discrimination among the patients. It has been shown that feeling of stigmatization is associated with psychopathology, anxiety, depression and low self-esteem.¹⁶ This calls for greater efforts in epilepsy education to the public as well as strategic groups such as schoolteachers, although the educating process may take more than a single workshop.¹⁷ Eighty-five percent of the respondents in this study admitted to being not well informed about epilepsy. As the responses in this study of how the teachers obtained the information about epilepsy indicated, a multi-prong approach to education is necessary.

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