

Public Awareness, Perception and Attitude Towards Epilepsy in Greater Chittagong

Monir Ullah^{1*}
Mohammad Musa Meah²
Mohammed Hossain³
Rana Chowdhury⁴
Wahida Akter⁴
Razia Sultana⁵
Mahmood Ahmed Chowdhury⁶

¹Department Paediatrics
Banshkhali Upazila Health Complex
Chattogram, Bangladesh.

²Department of Paediatrics
Chittagong Medical College
Chattogram, Bangladesh.

³Department of Paediatrics
Sitakunda Upazila Health Complex
Chattogram, Bangladesh.

⁴Department of Paediatrics
Chattagram Maa-O-Shishu Hospital Medical College
Chattogram, Bangladesh.

⁵Department of Laboratory Medicine
Chattagram Maa-O-Shishu Hospital Medical College
Chattogram, Bangladesh.

⁶Autism and Child Development Center
Chattagram Maa-O-Shishu Hospital Medical College
Chattogram, Bangladesh.

*Correspondence to:

Dr. Monir Ullah
Junior Consultant
Department Paediatrics
Banshkhali Upazila Health Complex
Chattogram, Bangladesh.
Mobile : +88 01815 69 23 25
Email : monircmsogh@gmail.com

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Abstract

Background: Epilepsy is generally perceived negatively as a lifelong, incurable disorder and is frequently thought of a punishment of evil deeds. To the best of my knowledge no data is yet published in Bangladesh. People should be aware of epilepsy in order to proper management of acute stage and used of antiepileptic drugs and its duration. This study strives to evaluate the public awareness, perception and attitudes toward epilepsy in Chattogram.

Materials and methods: This was a cross sectional descriptive study conducted during the period from November 2012 to October 2013. Initially 474 attendants in Department of Pediatrics and Neonatology of Chattagram Maa Shishu O General Hospital, Chittagong Medical College Hospital & University of Science and Technology Chittagong were included, of them 90 patients did not hear the term epilepsy, so no further question has made. Rests of 384 were selected as sample from study population.

Results: Result of all 384 respondents could be analyzed. About the awareness regarding epilepsy among 384 respondents, 52.1% believed that epilepsy is mental illness, 83.59% witnessed seizure - which reflect that level of awareness is moderate. 47.14% respondents seemed that epilepsy is inherited, 63.54% resolved that epilepsy can be cured- which reflect that level of perception is moderate. 67.19% respondents regarded that medication for seizure should take regularly, 52.08% supposed that epilepsy patients were discriminated 31.25% by School mates, 7.81% by their teachers, 13.02% by their spouse which reflect that level of attitude is moderate.

Conclusion: Awareness, perception and attitude is moderate in level regarding epilepsy in greater Chattogram.

Key words: Awareness; Attitude; Epilepsy; Perception.

INTRODUCTION

A seizure disorder is a sudden transient disturbance of brain function, manifested by involuntary motor, sensory, autonomic or psychic phenomena alone or any combination, other accompanied by alteration or loss of consciousness.¹

Prevalence of epilepsy is 4-8/1000 population. This is western data, but the prevalence may be higher in developing country due to high incidence of neurocysticercosis, CNS infection, birth asphyxia & consanguinity related metabolic disease.²

The factors predicting negative attitudes in the Thai population were low educational level, unfamiliarity with epilepsy and the misconception that epilepsy is a form of insanity. Different from most previous studies worldwide, the attitudes of friends and parents toward people with epilepsy were strongly positive. Social awareness of the public organization Epilepsy Society of Thailand was low, only 4.6% of the respondents knew about it. These data should be considered in a nationwide strategy to alleviate social discrimination against people with epilepsy.³

Epilepsy is generally perceived negatively as a lifelong, incurable disorder and is frequently thought of a punishment of evil deeds. Having a person in the life with Epilepsy is a stigma. This problem is not only happening in Bangladesh but also in communities around the world.⁵⁻⁸ Factors related to awareness, perception and attitude that could negative effect in diagnosis, treatment and outcome of epilepsy: low education level, unfamiliarity with epilepsy, misconception that epilepsy is a form of insanity and lack of proper first aid knowledge.

It is very much concern that public awareness and understanding regarding epilepsy is not well established in our country. People should be aware of epilepsy in order to proper management of acute stage and used of antiepileptic drugs and its duration

MATERIALS AND METHODS

This cross sectional descriptive type of study was conducted in Department of Pediatrics and Department of Neonatology. Chattogram Maa Shishu O General Hospital (CMSOGH) Chittagong Medical College Hospital (CMCH) and University of Science and Technology Chittagong (USTC) from November 2012 to October 2013. Before starting the study, ethical clearance was obtained from the Ethical Review Committee of CMSOGH, CMCH and USTC and informed written consent was taken from the parents of the patients.

Visitors or caregivers aged more than 18 years of admitted patient in different Pediatric and Neonatal wards coming from greater Chattogram were included. Visitors or caregivers who came from places other than greater Chattogram, Hospital staffs and visitors or caregivers who themselves epilepsy patients were excluded from this study.

Grading of awareness (Total questions 11): 3 answer in favor of awareness- Poor. 4 to 8 answer in favor of awareness- Moderate. 9 to 11 answer in favor of awareness- Good.

Grading of perception (Total questions 3): 1 answer in favor of perception- Poor. 2 answer in favor of perception- Moderate. 3 answer in favor of perception- Good.

Grading of attitude (total questions 7): 2 answer in favor of positive attitude- Poor. 3 to 5 answer in favor of positive attitude- Moderate. 6 to 7 answer in favor of positive attitude- Good.

Initially 474 attendants (≥ 18 years old who haven't epilepsy) of patients were included, of them 90 patients did not hear the term epilepsy, so no further question has made. Rest, 384 were selected as sample from study population.

Data collection was done according to survey questionnaire. After completion of data collection, literature review was done. Data was compiled in SPSS 18 version. Then analysis was done in SPSS and thereby various tables and graph was made accordingly. Variables were grouped into four categories: Socio-demographic, Awareness, perception and attitude.

RESULTS

Out of 474 attendants 384 respondents could be analyzed according to inclusion criteria.

Table 1 Frequency and percentage of respondents by Awareness of epilepsy (n=384)

Variable	Frequency	Percentage (%)	
Epilepsy is a-	Brain disease	125	32.6
	Mental illness	200	52.1
	Other disease	59	15.4
Causes of epilepsy-	Supernatural power	95	24.74
	Sins of patients/Ancestors	71	18.49
	Unknown:	218	56.77
Witness of Epilepsy-	Yes	321	83.59
	No	63	16.41
Frequency of witnessing a seizure- Only 1	>1 but not in last 12 months	147	38.3
	>1 in last 12 months	84	21.9
	>1 in last 12 months	153	39.8
Common age of epilepsy:	<5years	112	29.2
	5 yrs to <10yrs	56	14.60
	10 yrs to 15 yrs	28	7.2
	≥ 15 years	188	48.2
Take the patient Hospital-	Yes	250	65.10
	No	13	34.90
Could some name of antiepileptic drugs	Yes	21	5.47
	No	363	94.53
Treatment of epilepsy necessary to-	Get relief	133	34.64
	Minimize damage	154	40.10
	Minimize risk	97	25.26
Treatment modalities	Medical	213	55.4
	Traditional	71	18.49
	Medical & traditional	100	26.04
Side effects of medication	Hyperactivity	29	7.55
	Weight gain	20	5.2
	Others	11	2.86
	No	324	84.37
Duration of treatment	During seizure	91	23.70
	Life long	28	7.29
	As directed by physician	265	69.01

Among 384 respondents most of them thought that epilepsy is a mental illness and it is caused by unknown etiology (56.77%); most have witnessed the event (83.59%) and most of the respondents realized that treatment should be continued as directed by physician.

Table II Grading of awareness among respondents about epilepsy (n=384)

Level	Number	Percentage (%)
Poor	33	8.49
Moderate	340	88.54
Good	11	2.86

Among 384 respondents, 340(88.54%) showed moderate level of awareness.

Table III Frequency and percentage of respondents by perception regarding epilepsy (n=384)

Variable	Frequency	Percentage (%)
Epilepsy is a contagious disease		
Yes	83	21.61
No	301	78.39
Epilepsy is a inherited disease		
Yes	181	47.14
No	203	52.86
Epilepsy is curable		
Yes	244	63.54
No	140	36.46

Among 384 respondents, most of them 244(63.54%) thought that epilepsy can be cured.

Table IV Grading of perception among respondents about epilepsy (n=384)

Level	Number	Percentage (%)
Poor	113	29.43
Moderate	170	44.27
Good	101	26.30

Among 384 respondents, 170(44.27%) showed moderate level of perception.

Table V Frequency and percentage of respondents by Attitude regarding epilepsy (n=384)

Variable	Frequency	Percentage (%)
Medication		
Regular	258	67.19
When seizure occur	126	32.81
Can study		
Yes	293	76.30
No	91	23.70
Can work		
Yes	286	74.48
No	97	25.52
Can get married		
Yes	315	82.03
No	69	17.97
Should be allowed to smell shoe		
Yes	115	29.95
No	269	70.05

Variable	Frequency	Percentage (%)
Necessary to strict adherence to treatment		
Yes	384	100
No	00	0.0
Epilepsy patients are being discriminated by		
School mates	120	31.25
Teachers	30	7.81
Spouse	50	13.02
None	184	47.9

Among 384 respondents 258(67.19%) thought that epilepsy patient should take regular medicine, 269(70.05%) realized that epilepsy patients should not be allowed to smell shoe and 184(47.92%) felt that epilepsy patients are not being discriminated.

Table VI Grading of attitude among respondents about epilepsy (n=384)

Level	Number	Percentage (%)
Poor	12	3.12
Moderate	211	54.95
Good	161	41.9

Among 384 respondents, 211(54.95%) showed moderate level of attitude.

DISCUSSION

In this study, among 384 respondents 52.6% were male and 47.4% were female. A similar study was done in Indonesia in which 46.3% respondents were male and 53.7% were female, In Pakistan 62.63% were male and 37.37% were female.

A recent publication in Indonesia showed that 42% respondents were secondary school graduate and in India it was 41.4% but in this study it was only 7.3%.

This study found that 32.6% respondents believed that epilepsy is a brain disease, 52.1% thought that it is a mental illness and 15.4% seemed that it is other than disease. In India a similar publication showed that 97% participants recognized that epilepsy is a brain disease. In Pakistan 66.7% respondents consider that epilepsy is a non-infectious disease.

Bhattacharya AK et al in India found that 41.9% participants believed that epilepsy is caused by an infection but Devi MG et al in India showed that 16% respondents supposed that epilepsy is due to supernatural powers and 21% counted that it is due to sins committed by patients or Ancestors.^{9,10} In this study 24.74 % appeared that it is caused by supernatural powers and 18.49% regarded that it is caused by sins of patients or Ancestors and 56.77% nourished that it is caused by unknown etiology. DemirciS et al in Turkey and studies in Kuwait, including one among university students, found a vague knowledge of the causes of epilepsy.¹¹ Misconceptions about, and negative attitudes toward epilepsy were unexpectedly high among university students.¹²

Suryani G et al⁹ found that 84% had witnessed an epileptic seizure. In this study 83.59% had seen epileptic seizure.¹³

In this study among 384 respondents, 34.64% realize that treatment is necessary to get relief from epilepsy, 40.10% felt that treatment is necessary to minimize damage of brain from epilepsy and rest 25.26% considered that treatment is necessary to minimize the risk of seizure occurrence, 5.47% could name of some antiepileptic drugs and 94.53% Couldn't name of some antiepileptic drugs, 55.47% seemed that epilepsy patients should manage by medical measures, 18.49% appeared that epilepsy patients should manage by traditional healers and 26.04% supposed that epilepsy patients should manage by both medical and traditional measures, 23.70% recognized that epilepsy patients should be treated when seizure occur only, 7.29% counted that epilepsy patients should be treated for life long and 69.01% regarded that epilepsy patients should be treated as directed by the physician, 56.25% are accustomed with traditional treatment of epilepsy and 43.75% are not accustomed with traditional treatment of epilepsy, 100% nourished that epilepsy patients should have strict adherence to treatment. Reynolds EH et al. found that although epilepsy is a largely treatable brain disorder and relatively cheap medication is available, between 60% and 98% of individuals with this disorder in developing countries receive no treatment.^{14,15} Meinardi H et al. found that although an effective treatment exists for most people with epilepsy, service utilization is limited and the majority of these people is inadequately and inappropriately treated because of limited health resources, lack of prioritization, gaps in national health policies and distance from health care facilities.¹⁶ Baker GA et al. found that community perceptions and cultural beliefs have been identified as barriers to proper provision of epilepsy care.¹⁷ In many countries of the Region, traditional healers do not consider epilepsy as a medical illness but attribute it to devils or spirits. There are also many challenges related to legislation or regulations, such as driving restrictions and limitations to employment.

In this study 21.61% respondents felt that epilepsy is a contagious disease and in India it was 40.8%. A similar publication in Indonesia found that 82% respondents agreed that epilepsy could be cured and in India it was 91%. In this study it was 63.54%.

Among 384 respondents 67.19% thought that medication for seizure should take regularly and 32.81% seemed that medication should take only when seizure occur. In Indonesia a similar study was done which showed that 85% respondents supposed that person with epilepsy should take antiepileptic drugs regularly.

In this study 76.3% respondents considered that epilepsy patients can do study and 23.7% appeared that epilepsy patients can't study. In Indonesia a similar publication found that 82% respondents resolved that epilepsy patients can study as a

person without epilepsy and in Pakistan 83.1% said epileptics could receive academic education. Devi MG et al. in India found that a positive attitude was observed with respect to allowing a child with epilepsy to study.¹⁰

In this study, 74.48% recognized that epilepsy patients can work like non-epileptics and 25.52% regarded that epileptics can't work like non-epileptics. A similar study was performed in Indonesia which showed that 82% respondents agreed that epileptics could work as a person without epilepsy.

In this current series it was observed that 82.03% respondents believed, epileptics could be married and 17.97% thought that epileptics could be married. A similar study was done in Indonesia which found that 92% participants agreed that a person with epilepsy could be married. Thacker AK et al in India showed that no one was obvious about marriage with an epileptic (86.8%).¹⁸

In this research respondents showed moderate level of awareness, perception and attitude.

LIMITATION

- Short duration of study
- Data collection only from few tertiary care centers

CONCLUSION

Among the respondents, majority believed that epilepsy is a mental illness. A good number of respondents witnessed the events and level of awareness regarding epilepsy is moderate. Regarding perception of epilepsy, most of the participants recognized that epilepsy is an inherited disease and is cured by treatment and level of perception was moderate. Among respondents maximum commented that epilepsy patients should take medication regularly and they can do study, work, marry and level of attitude regarding epilepsy was moderate.

RECOMMENDATIONS

Level of awareness, perception and attitude towards epilepsy in greater Chattogram is not optimum, so mass campaign should be arranged to improve the situation and thereby manage our epilepsy patients more efficiently and ensure a social, economic and culturally a productive life for them. It is noteworthy that this study should also be done nationally. Furthermore adequately powered studies are critically needed to determine the level of awareness, perception and attitude towards epilepsy in Bangladesh which is the basic needs to ensure optimum support for epilepsy patients.

DISCLOSURE

All the authors declared no competing interest.

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