Knowledge, Attitude And Practice Of Epilepsy Among Undergraduate Medical Students In Rajasthan

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I. Introduction

Epilepsy is a common, noninfectious neurological disorder that is said to affect around 50 million people worldwide and 80% reside in developing countries. Epilepsy was estimated to account for 0.5% of the global burden of disease. It is estimated that there are more than 10 million persons with epilepsy in India. Its prevalence is about 1% in our population^[1]. The prevalence is higher in the rural (1.9%) compared to urban population (0.6%)^[2,3]. Knowledge, awareness and attitude in relation to epilepsy are better off in developed countries when compared with that of the developing countries. In developing countries like India, lots of superstitions, discriminations, and stigmata are associated with this disease. Community based studies have shown that the negative impression and attitude towards patients suffering from this condition has been reported, which is less in an educated community when compared in the uneducated population. Considering the ways of spreading awareness, students in a medical fraternity would be one of the primary sources of information as doctors in the future. Thus the study was conducted to evaluate the knowledge and attitude on epilepsy amongst first year MBBS and final year students with the aim to assess the level of knowledge and attitudes on epilepsy which may help in planning awareness programme for them.

II. Material And Method

The study was carried out in the department of neurology at Mahatma Gandhi medical college and hospital Jaipur.First year students(n=100) and final year students(n=100) of MBBS were included in study. A questionnaire designed to test the knowledge, attitude and practice regarding epilepsy was used. The questionnaire was distributed to first year student (group A) and final year students of MBBS students(group B), who volunteered to participate in this study. Most of the questions in the instrument have already been used by other researchers. [4,5]

III. Results

 $200~(100~{\rm in~group~A[1~MBBS]}$ and $100~{\rm in~group~B[Final~year~MBBS]}$ individuals participated in the study.

Knowledge: Among both groups most of them had heard about epilepsy. Most of the participants in group A believed that epilepsy is a mental disease(52%) where as in group B believed that epilepsy is a organic brain problem(67%). Epilepsy is known to occur in family (7% to 14%) was the view amongst both the groups. Majority of group B members labelled convulsions as epilepsy(50%) whereas group A members labelled mental attack as epilepsy(27%) (Table 1).

Attitude: Majority (68%) of the members of group B considered epilepsy as a hindrance in life. Among both groups most of them believed that persons with epilepsy could lead a happy married life and they would like to play/study with an epileptic child. Regarding first aid on seeing the epileptic attack majority of members in both groups would take patient to the hospital, 11% in group A members would like to put water or shoe/onion on face(Table 2).

Practice: Majority of the participants thought that epilepsy is curable and can be treated with allopathic medicine. Ayurvedic medicine is accepted by both groups (50%) followed by homeopathic medicines(35%) as alternative mode of treatment. Both groups were of the view that epileptic patients need lifelong treatment (45%). Majority of members in group B thought that drugs used in epilepsy would have many side effects (61%) (Table 3).

IV. Discussion

The study shows knowledge, attitude and practice amongst medical students Ist year MBBS students (Group A) and final year MBBS student (Group B). 120 male and 80 female participated in study. Basic aim of study was to assess the knowledge of students on admission in medical college and change in their knowledge, attitude and practice with studies form Ist year MBBS to final year MBBS and to plan for further improvement.

Knowledge: The medical students around 90% had heard of epilepsy in both groups mostly through way of studies, journals and news papers. In group A 14% of students knew some one with epilepsy (members/ friends) suffering form epilepsy while 46% of students from study (South Nigeria) had witnessed persons with epilepsy. We think that this is probably due to increase in awareness on epilepsy which made them to recognize epilepsy as compared to our studies. Similar studies from Jordon^[6] and Malayasia^[7] showed that around 77.6% of medical students had heard about epilepsy. Studies of health care students from Italy (96.0%)^[8], Canada (91.0%)^[9] and Brazil (91.3%)^[10], Malaysia (86.5%)^[11] had heard about epilepsy.

Around 52% of Ist year medical students (Group A) thought epilepsy to be mental illness, 46% thought it runs in families and 1% student thought that it spreads by direct contact. While final year students (Group B) 29% only thought it to be a mental illness and only 32% thought it to occures in families thus showing that with years of teaching there knowledge had improved.

Attitude : More than 50% of participants were of the view that epilepsy creates hindrance in normal life. And around 60% in our study done earlier in nursing students and facilities^[12]. 4% of medical students thought that they would not marry with a person of epilepsy/they would not have sexual relationship. In contrast to our study done earlier in nursing students and faculties around 40% of students would not marry epileptic person^[12]. A study form southern brazil in health care students around 80% of them would marry epileptics^[13]. Most negative attitude towards person with epilepsy from Jordan where students refused to marry (50.5%) and children with epilepsy would have disability (44.4%)^[14]. Our study shows that more than 80% of participants would like to play/study with epileptic child.

Practice:It is encouraging to know that more than 75% of participants in both group were of view that allopathic medicines are the major stay of treatment for epilepsy and most of the participants believed that epilepsy could be treated with homeopathic and ayurvedic medicines as alternative. It is surprising in a study from medical community[Northern Nigeria] where majority of respondents(47%) opted for spiritual methods. This was followed by orthodox (34%) and use of traditional herbal medicines (19%) for treating epilepsy^[15]. The use of spiritual healing is even worse in the study, most commonly reported treatment methods were the holy quran (71.4%), medication (71.3%) and herbs (29.3%)^[14].

The response of participants (25 to 35%) was suprising they will not take person to hospital in our study and rather put shoe/onion on face/give bunch of keys/ put powder on face. In study from medical students sourthern nigeria around (47.9%)^[16] would take them to church while some of the health care persons would put object in mouth to protect the tongue. These data suggest there is lack of information about assistance and safe handling of seizures in these health care courses.

V. Conclusion

Our study shows that undergraduates were familiar with epilepsy. And change in their knowledge, attitude and practice with studies form I^{st} year MBBS to final year MBBS were also observed but there are major gaps in their knowledge of this disease. The social stigma is still seen in the perception of epilepsy irrespective to education. Therefore there is need to improve the level of education as they will provide care to the patients .

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Table - 1 Knowledge Of Epilepsy

S.N.	Questions Table - 1 Knowledge	I ST Years MBBS	Final Years MBBS
		(group-A)n=100	(group-B)n=100
		YES	YES
1	Have you ever heard of epilepsy?	87	87
2	Do you know a person suffering from epilepsy?	14	36
3	Is Epilepsy an organic brain problem	48	71
4	Is Epilepsy known to occur in family	46	32
5	Can Epilepsy spread by contact?	1	-
6	What do you think is cause of Epilepsy?		
a	Don't know	23	11
b	Organic brain disease	51	67
c	Mental Illness	52	29
d	Birth defect	1	4
e	Evil spirit	-	-
f	Super natural cause	2	1
gg	Blood disorder	-	-
h	other (please specify')	2	-
7	What do you think an Epilepsy attack is?		
a	Convulsion	36	50
b	Loss of consciousness	25	24
c	Mental attack	27	10
d	Behavioral change	6	8
e	Period of amnesia	3	8
f	other (please specify)	-	-
8	You know about epilepsy from?		
a	Studies	43	38
b	Researched about it	1	-
С	Attended an epilepsy camp	1	-
d	Yourself have it	-	-
e	Some family member or friend has it	14	7
f	Through television / internet ads	22	4

Table – 2 Attitude Towards Epilepsy

S. No	Questions	IST Years MBBS	Final Years MBBS
		(group-A)n=100	(group-B)n=100
		YES	YES
1	Epilepsy creates hindrance in normal life	41	59
2	A person with epilepsy should not marry	4	1
3	A person with epilepsy will not have normal sexual relations	3	
4	A person with epilepsy should not study	1	
5	A person with epilepsy should not work	2	
6	Society should behave differently with a person with epilepsy	4	14
7	Would you like to play/study with an epileptic child?	80	87
8	If you see a person having epileptic attack what will you do?		
a	Put shoe/onion on his face	11	
b	Give bunch of keys in his hand	1	
С	Take him to hospital	63	75
d	Put water on his/her face	12	4
e	Other (please specify)		
9	Have epileptics committed sins in the past life?	6	3

Table -3 Practice In Epilepsy

S	Questions	I ST Years MBBS	Final Years MBBS
no		(group-A)n=100	(group-B)n=100
		YES	YES
1	Can epilepsy be treated with Allopathic medicine?	74	80
2	Can epilepsy be treated with Homeopathic medicine?	45	35
3	Can epilepsy be treated with Ayurvedic medicine?	55	47
4	Is Ayurvedic treatment the only option for epilepsy?	3	10
5	Does an epileptic patient need lifelong treatment?	42	47
6	A person with epilepsy should not miss even a single tablet	44	54
7	Drug used in epilepsy will have many side-effects	38	61
8	Tantric (holy) treatment is good for epilepsy	6	2
9	Priest can treat epilepsy better?	3	
10	Can epilepsy be cured?	62	75

Note- "n" denotes total number of subjects in a particular category and data in "()" represents % out of total number in that category.